



**THIRTEENTH KERALA LEGISLATIVE ASSEMBLY**

**COMMITTEE  
ON  
PUBLIC UNDERTAKINGS  
(2014-2016)**

**FIFTY EIGHTH REPORT**  
(Presented on 11th December, 2014)

**SECRETARIAT OF THE KERALA LEGISLATURE  
THIRUVANANTHAPURAM  
2014**

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**COMMITTEE  
ON  
PUBLIC UNDERTAKINGS  
(2014-2016)**

**FIFTY EIGHTH REPORT**

**On**

**The Action Taken by Government on the Recommendations contained in the  
Fifty Third Report of the Committee on Public Undertakings (2006-08)  
relating to Kerala Minerals and Metals Limited based on the  
Report of the Comptroller and Auditor General of India  
for the year ended 31st March, 2000  
(Commercial)**

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COMMITTEE ON PUBLIC UNDERTAKINGS (2014-2016)

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Smt. M. R. Maheswary, Deputy Secretary

Shri P. S. Selvarajan, Under Secretary.

## INTRODUCTION

I, the Chairman, Committee on Public Undertakings having been authorised by the Committee to present the Report on their behalf, present this Fifty Eighth Report on the Action Taken by Government on the recommendations contained in the Fifty Third Report of the Committee on Public Undertakings (2006-08) on the working of the Kerala Minerals and Metals Limited based on the Report of the Comptroller and Auditor General of India for the year ended 31st March, 2000 (Commercial).

The Statement of Action Taken by the Government included in this Report was considered by the Committee constituted for the year (2011-14).

This Report was considered and approved by the Committee at the meeting held on 3-9-2014.

The Committee place on record their appreciation of the assistance rendered to them by the Accountant General (Audit), Kerala in the examination of the statements included in this Report.

Thiruvananthapuram,  
11th December, 2014.

K. N. A. KHADER,  
*Chairman,*  
*Committee on Public Undertakings.*

## REPORT

This report deals with the Action Taken by Government on the recommendations contained in the Fifty Third Report of the Committee on Public Undertakings (2006-08) relating to Kerala Minerals and Metals Limited based on the Report of the Comptroller and Auditor General of India for the year ended 31st March 2000 (Commercial).

The Fifty Third Report of the Committee on Public Undertakings (2006-2008) was presented to the House on 17th July 2008. The report contained 21 recommendations. The Government have furnished replies to all these recommendations. The committee (2011-14) considered the replies at it's meeting held on 12-2-2014.

The Committee accepted the replies to recommendation Nos.1(43), 2(44), 3(45), 4(46), 5(47), 6(48), 7(49), 8(50), 9(51), 10(52), 11(53), 12(54), 13(55), 14(56), 15(57), 16(58), 17(59), 18(60), 19(61), 20(62), 21(63) without any remark. These recommendations and their replies furnished by Government form Chapter 1 of the Report.

CHAPTER I

REPLIES FURNISHED BY GOVERNMENT ON THE RECOMMENDATIONS OF THE COMMITTEE WHICH HAVE BEEN ACCEPTED BY THE COMMITTEE WITHOUT REMARKS

<i>Sl. No.</i>	<i>Para No.</i>	<i>Dept. concerned</i>	<i>Conclusions/ Recommendations</i>	<i>Action Taken by Government</i>
(1)	(2)	(3)	(4)	(5)
1	43	Industries	<p>The Committee finds that the company had constituted three Committees for the purpose of Cost reduction, Product development and Vendor development. The Committee is much displeased to note that these committees have so far not suggested any recommendations or measures. The Committee recommends that these three committees should meet regularly to chart out measures to increase the efficiency of the company. The Committee desires to be informed of the number of meetings held by the three internal committees during the last 3 years, their recommendations</p>	<p>The committee constituted for the purpose of cost reduction and product development was regularly meeting to discuss the cost reduction and product development measures to be taken. As per the decision of the committee a R&amp;D consultant was appointed and he was available during the period 2005-2006. Meetings were held in every month with the consultant to identify the areas where activities are required. The following measures were initiated in view of reducing the cost and the development of new grade of pigment.</p> <p><b>Cost Reduction/New Product Development</b></p> <p>(1) <i>Sodium Chloride as scouring media during oxidation:</i> Plant trials were conducted to explore the use of vacuum salt (free flowing sodium chloride) as scouring media</p>

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and the steps taken by the company for cost reduction, product development and vendor development.

in the U. 300 oxidizer instead of sand after detailed studies in the R&D lab. Initial trials indicate that sodium salt can be effectively employed as the scouring medium for the production of only RC800PG grade pigment. For other grades it is not found successful.

*(2) Charcoal as reductant in the ilmenite beneficiation plant:* A plant trial has been carried out in the Ilmenite Beneficiation Plant (IBP) to check the efficiency of using a mixture of charcoal and petroleum coke (20% charcoal and 80% pet coke) instead of pet coke alone as reductant in the roaster. This study is mainly carried out with the intention to (a) enhance the reduction efficiency and thereby improve the quality of Beneficiated Ilmenite(BI), (b) reduce the roaster outlet temperature and thus increase the life of castables, and (c) Lower the consumption of oil during reduction. A consistent result was observed without any major operational problem during the trial. 3

*(3) Customer Oriented Grades:* Studies aimed at ascertaining our capability in supplying quality RC822 pigment for Dealer Tinting System (DTS) applications to Asian Paints Limited (APL) are underway.



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The pigment used for DTS needs controlled and guaranteed quality parameters and the tolerance limit for the quality specification is very narrow.

*(4) Development of New Grade Pigment:* Nano-technology today is growing very rapidly and has infinite applications in almost everything in life. One of the most important factors in determining the effectiveness of Titanium Dioxide Pigments is their particle size. Laboratory scale studies are being carried out for developing rutile type nano grade pigment. Proper literature survey was done and sufficient information was collected from various sources before initiating the studies. →

The vendor development committee met 17 times during the period as follows: 6-5-04, 3-6-04, 17-7-04, 26-7-04, 11-9-04, 17-9-04, 2-10-04, 4-10-04, 13-11-04, 18-11-04, 27-11-04, 6-12-04, 12-2-05, 26-2-05, 9-3-05, 17-4-06 and 19-4-06. The vendor development committee had recommended enlisting 30 new vendors for the supply of various items during the period. The company had

reviewed the above recommendations given by the vendor development committee and enlisted the parties as new vendors. Materials are being procured from these parties at competitive prices.

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Industries

The Committee finds that the company had disbursed loans to some other public sector undertakings without specifying rate of interest or repayment terms and to Kerala State Cashew Development Corporation Limited without the prior approval of Government, and the chance of repayment of loans/payment of interest by the above PSU were remote. The Committee therefore recommends that loans to PSU, should be disbursed only with the prior sanction of Government and specifying terms of repayment and rates of interest. The Committee also desires to know the progress in recovery of the loans disbursed to various PSUs.

Company released loans to various PSU as directed by the Government from time to time. After releasing loans to each Companies/Co-operative Societies, Company requested the Government to fix the terms and conditions for repayment, interest etc. Government have fixed the terms and conditions for the loans disbursed by the company and directed to treat the entire loan as interest free and also directed RIAB to realize the amount on behalf of the Company. Company had also requested each loanee company to repay the amount. As recommended by the Committee, company has decided not to release any loans to PSUs without getting prior sanction from Government specifying the term of repayment and rate of interest.

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(1)	(2)	(3)	(4)	(5)
3	45	Industries	<p>The Committee is perturbed to learn that the Company had not paid dividend for the four years from 1998-1999 to 2001-2002 even though it was working on profit. The Committee wish to know the reasons for not declaring a dividend even if there is sufficient profit and the Committee further recommend that the Company should declare the dividend as soon as possible. The Committee finds that though KMML is the sole producer of Rutile Grade Titanium Dioxide Pigment in India and six different Grades of TDP are being manufactured by the company, the performance of the company up to the year 1992-1993 resulted in accumulated loss of ₹ 107.99 crore due to low level of capacity utilization, high cost production, low productivity and insufficient marketing strategy. The Committee recommends that</p>	<p>Company started paying dividend from the year 2002-03. The dividend at the rate of 10% is already declared for the year 2007-08. The following steps have been taken to improve the marketing efficiency:</p> <ul style="list-style-type: none"> <li>➤ Close contact was established with customers and dealers with regular meetings held at various states.</li> <li>➤ New dealers were appointed to cover areas not represented to boost sales.</li> <li>➤ Both dealers and customers were invited to the plant for interaction and to have an insight of the company facilities.</li> <li>➤ Daily monitoring of marketing activities right from orders, dispatch schedule, actual realization, collection debtors, tracking of credit payments due etc. are effectively done.</li> <li>➤ Weekly and monthly review of domestic and international pricing of Titanium Dioxide based on market feed back, reports published by ICIS and import data.</li> </ul>

concrete steps should be taken to improve this and effective marketing strategy should be followed to market the products.

Pricing revisions are made on a monthly basis as against the earlier system of quarterly review/revision to ensure that the products are supplied at market competitive prices.

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The Committee learns that as a result of the failure of the company to declare the actual available installed capacity as 36000 MT. per annum, there is excess in payment of production-linked incentive to employees. The Committee finds that the incentive was fixed as a long-term agreement when capacity was fixed at 22000 MT. per annum and the company has not taken any measure to revise the incentive to tune with the present capacity. The Committee therefore recommends that steps should be taken to declare the actual available installed capacity and renew the agreement regarding production-linked incentives.

The Board of Directors of the company in their meeting held on 15-4-2004 considered the Production Incentive Scheme and decided to suspend the scheme pending finalization and approval of a revised incentive scheme. Accordingly the production incentive scheme was suspended during August 2004. It was not prudent for the Management to discontinue the payment of incentive, as the employees were in receipt of incentive for the past several years and the production has also increased with the co-operation of the employees. As such full withdrawal of payment of incentive would have created an adverse impact on the workmen of the company leading to major Industrial relation problems. In view of the above position it was decided to continue payment of incentive on ad hoc basis subject to a maximum of ₹ 2900 pm, subject to achieve certain level of production. Management and the

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recognized trade unions representing the workmen of the Titanium Dioxide Pigment Unit of the Company had conducted bilateral discussions for evolving a production incentive scheme for the unit. Finally at the meeting held on 18-8-2008 an understanding has been arrived at and accordingly agreement was entered into on 18-8-2008. As per the agreement, the employees are eligible for production incentive only if a minimum of 87% capacity utilization is achieved, i.e. 2900 MT. of pigment production per month. The installed capacity has been revised as 40000 MT. per annum from 1st October, 2005 due to the modification in the plant. The Board of Directors at their 189th meeting held on 20-9-2008 considered the Incentive Scheme and approved the same subject to Government approval. Accordingly, the company on 6-10-2008 sought Government approval for the revised incentive scheme to the employees of KMML with effect from 1-1-2008. As such, the Government approved the proposal as per G.O. (Rt.) 590/10/ID dated 7-5-2010 (copy enclosed) Annexure I.

5 47 Industries The Committee expresses its displeasure over the company's reply of machinery failure for not attaining 100% ilmenite production capacity, that too 3 years after modernization of the plant and desires to be informed of the Company's achievement during 2004-2005, 2005-2006 and 2006-2007.

The production details for the years 2004-2005, 2005-2006 and 2006-2007 are as follows :

Year	Installed capacity	Ilmenite (MT.) (Actual Prdn.)	% of capacity utilization
2004-2005	51600	47650	92.34
2005-2006	51600	51430	99.67
2006-2007	51600	52500	101.74

6 48 „ The Committee finds that as a result of globalization, the Company is facing stiff competition from other countries especially China as their products are cheaper. The Committee recommends that the company should reduce the cost of production and improve the production capacity by coal substitution and implementation of Digital Control System. The Committee also finds that at present it has only six varieties of products. The Committee recommends that the Company must strengthen its Research and

In view of strengthening the R & D department and initiated the activities, five R&D scientific officers were appointed in 2005, having M.Sc. and Ph.D. qualifications. Company installed Distributed Control System in U400 plant, where the finishing process of the TiO<sub>2</sub> is taking place for ensuring the quality standards. A DCS for the entire operation of the plant is planned along with the proposed capacity expansion from 40000 MT. to 60000 MT. TiO<sub>2</sub>.

(1)	(2)	(3)	(4)	(5)
			Development wing, so as to develop new varieties in keeping with present market trends. The Committee desires to be informed of the steps taken in this regard.	
7	49	Industries	The Committee finds that the Company's effort for cost reduction and vendor development when a condenser in the Brine Chilling Plant is faulty resulted not only in loss of ₹ 24.77 lakh for replacement through various suppliers without contacting the original supplier, Kirloskar Pneumatic Company Limited (KPC), Chennai, but also production loss valued at ₹ 2.46 crore. The Committee expressed strong dissatisfaction at the loss of such a huge amount of money due to the failure on the part of the Company in contacting the original supplier. The Committee strongly criticizes the action of the company in trying for vendor	KMML has all the fabrication drawings of the condenser and decided to get the same fabricated from the company's approved vendors exactly as per drawing since M/s. Kirloskar Pneumatic also outsource the condenser from elsewhere only. Vendor development was taken up much earlier to the failure of the equipment. Company was ensured that the equipment will be procured only from OEM and necessary instructions were already issued. The vendor development initiatives were carried out with good intention of over all cost reduction. However, the failure noted by the Audit in the case of condensers for Brine Chilling Plant has been enquired for fixing up the responsibility. The failure pointed out by the Committee in the case of condensers is noted with great concern and proper steps

development without considering production loss. Vendor development and the subsequent cost reduction are good, but this should be done when the machinery is in working condition. The spares should be purchased before hand and kept ready to be used when faults develop. Trying for vendor development after machinery has become faulty will lead to huge production loss. The Committee therefore recommends that responsibility for the loss be fixed, and steps should be taken to prevent such occurrence in future. The Committee desires to be informed of the action taken in this regard.

have already been taken to avoid such situations in future. Now KMML is keeping sufficient stocks of such critical items to prevent occurrence of production loss. The Managing Director, KMML informed that the responsibility could not be fixed as directed by the CoPU due to the intricate nature of the issues involved and the company entrusted an external agency M/s. RGN Price and Co., Chartered Accountants to look into the aspects involved. A copy of the report is enclosed (Annexure II). On the basis of the explanation from the Managing Director and the report from the external agency further action in the matter may be dropped.

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The Committee learns that even though the plant was modified with increased capacity, the

KMML has implemented predictive and preventive maintenance for all critical equipments of oxidation plant to reduce the



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shutdown due to critical equipment, failure and process problems could not be controlled by the company and this adversely affected overall production efficiency of this plant. The company could have avoided such failure by proper and periodical maintenance. The Committee expresses displeasure over the lethargic attitude of the maintenance personnel of the company who should have proper presumption to see that necessary spares were available. The Committee recommends predictive maintenance to avoid shutdowns in future. The Committee desires to know whether the Oxidation Unit has been shutdown since March 2004.

down time. Down time and finished pigment produced during the years are given below:

<i>Year</i>	<i>Down time Hours</i>	<i>Finished pigment Produced in MT</i>
2004-2005	2445 hrs.	30662
2005-2006	2922 hrs.	33191
2006-2007	2448 hrs.	34373

Down time % during the years 2004-2005, 2005-2006 and 2006-2007 was in the range of 29 to 34% as mentioned. It may be noted that replacement of Critical Equipments are done based on targeted production yielded by each. Since the production rate has increased during these years it is clear that equipments attains its targeted production faster and rate of replacement of critical equipments on yielding targeted production/ life will increase. If such equipments are not replaced on yielding its specified life, there is

possibility of failure of these equipments. The consequence of such failures will be high due to higher maintenance time because of unplanned maintenance and damaging quality of product by production of off grade pigment. It may also be noted that production of off-specification product during the subsequent years has considerably reduced due to this predictive and preventive maintenance of critical equipments.

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Industries

The Committee concludes that lack of proper maintenance was leading to production of large quantities of off grade Titanium Dioxide Pigment, resulting in loss of crores of rupees. The Committee recommends that norms should be fixed for offgrade production and it should be strictly ensured. The Committee wishes to know the quantity of off grade Titanium Dioxide Pigment produced by the Company during the years 2004-05 to 2006-07.

The off grade/NCP production for the three financial years and the percentage is tabulated below:

<i>Year</i>	<i>Off-grade production (in MT.)</i>	<i>Annual production (in MT.)</i>	<i>% of total Annual production</i>
2004-2005	1005.57	30662	3.28
2005-2006	1083.00	33191	3.26
2006-2007	1987.40	34373	5.78

Action taken to control generation of off grade:

- (1) Installed a Recovery Cyclone in Finishing Unit during 2007-2008.

(2) Action initiated to install a polishing filter for further control.

Targeted reduction in generation of off grade for the year 2007-2008 } 0.5% reduction from the previous year.

It may be noted that the Off grade product generated during the subsequent year has substantially reduced as detailed below:

Year	Off grade production (in MT.)	Annual production (in MT.)	% of total Annual production
2007-2008	805	35512	2.27

10            52            Industries

The Committee understands that major reason attributed for off grade production was deviation from colour specification fixed for the production and that colour changes during the process were caused mainly on account of leakage of water in certain critical equipments.

Following actions were taken to improve the quality of pigments:

- (1) Quality improvements in the reducing strength at least by 2% in comparison with earlier RC813 pigment with lesser functions of alumina and silica.
- (2) Replacement of indigenous silica sand with Zirconium beads to improve the Oil Absorption(OA), a major quality parameter.

- (3) We could ensure accurate feeding of potassium chloride by introduction of volumetric feeders to improve the quality parameter(CBU) in oxidation section.
- (4) The organic % in finished pigment (except for the grade of RC813) could be maintained within the level by the introduction of DCS controlled automatic control valves in the organic feeding lines.

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The Committee learns that there is excess consumption of raw materials and chemicals, especially of make-up acid. The Committee also noticed that pond water was not being utilized for process operations in Ilminite Beneficiation Plant (IBP) and Acid Regeneration Plant (ARP) as envisaged in the chloride recovery project. This resulted in heavy loss of chlorides and led to excess consumption of make-up acid. The Committee is not satisfied with the reason stated by the company and therefore recommends that the exact

(1) *Acid Consumption*: The leaching operations were done using acid having 20.5% concentration. The average strength of ARP recovered acid will be in the range of 17.5%. Therefore it should be mixed with the make-up acid to increase the concentration to 20.5 in order to get proper leaching. The ratio specification of make-up acid with respect to BI produced was fixed as 0.65. The deviations observed and reasons for the deviation are tabulated below:

<i>Year</i>	<i>Average ratio</i>	<i>Reasons for deviation</i>
(1)	(2)	(3)
2004-2005	0.794	Low concentration of recovered acid

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(1)	(2)	(3)	(4)	(5)		
			<p>reasons for excess consumption should be identified and steps be taken to avoid this. The Committee desires to be informed of the steps taken and also of the consumption of make-up acid and liquid chlorine from 2004-2005 to 2006-2007.</p>	(1)	(2)	(3)
				2005-2006	0.704	<p>Low quantity of U-200 acid Reduction variation in roaster Draining and cleaning of tanks</p>
				2006-2007	0.685	<p>Low concentration of recovered acid Leaching problem in digester Low concentration of recovered acid</p>

Necessary steps were taken to reduce the deviation and the narrowing of deviation was observed in the 2005-06 and 2006-07.

(2) *Liquid Chlorine Consumption*: The standard consumption ratio for liquid chlorine is 0.102. The liquid chlorine consumption for the past three years is tabulated below:

<i>Year</i>	<i>Average ratio</i>	<i>Reasons for deviation</i>
2004-2005	0.113	High iron content in BI Wet BI used as feed in chlorinator

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Industries

The Committee finds that the Company had not fixed any standard for consumption of utility items like air, water and steam required for the operation of the TDP plants and further added that flow meters were also not installed to assess the exact quantity of air consumed by each production center. The Committee also informed that major loss occurs to steam, which still demands improvement. The Committee therefore recommends that the flow meters for steam and water should be installed. Regarding the consumption of utilities, the Committee recommends that norms should be fixed for their consumption in order to avoid loss due to excess consumption.

2005-2006 0.111 High iron content in BI  
Increased Tickle sale

2006-2007 0.108 High iron content in BI  
Increased Tickle sale

Company has noted the recommendation of the Committee and has taken immediate steps for re-fixing the standards for the various utilities consumed for the production of  $TiO_2$ . Accordingly the new standards are fixed which are given below:

<i>Sl. No.</i>	<i>Items</i>	<i>Re-fixed Standards</i>
1	Power (kWh/MT of Pigment)	2050
2	Air (NM <sup>3</sup> /MT of pigment)	2100
3	Steam (MT/MT of pigment)	6.8
4	Furnace Oil (KL/MT of pigment)	0.8

The actual value during 2007-2008 were as follows:

<i>Sl. No.</i>	<i>Items</i>	<i>Actual for 2007-2008</i>
(1)	(2)	(3)
1	Power (kWh/MT of Pigment)	1954

(1)	(2)	(3)	(4)	(5)
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(1)	(2)	(3)
2	Air (NM3/MT of pigment)	1945
3	Steam (MT/MT of pigment)	6.37
4	Furnace Oil (KL/MT of pigment)	0.74

The consumption of various utilities are within the standards. The company is targeting on continuous improvement in the consumption of various utility items. Consumption norm for water is fixed as 65 M3 per tone of TiO<sub>2</sub> without recovery. However, KMML have a project for supernatant water recovery. Once implemented, the standard will be re-fixed at lower level. Flow meters for air, water and steam have been installed in individual plants.

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13	55	Industries	<p>The Committee is shocked to find that selection of stainless steel plates required for the conveyor in the tunnel drier was wrong and the company couldn't find out the mistake in design and the mistake was found only when they started fitting the plates.</p>	<p>KMML required the S.S. plates and placed orders for correct specification. However the party supplied small size S.S. plates which doesn't suit to the company equipment. The matter was taken up with M/s Proctor &amp; Schwarz, the OEM and they replaced the items free of cost. This doesn't result in any production loss as KMML was</p>
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The Committee is not at all convinced by the arguments of the witness that the supplier was not to meet the loss on account of the faulty design because it was technically and legally impossible. The Committee expresses displeasure over the lethargic attitude of the Company in the matter. The Committee therefore recommends that duties and responsibilities of all supervisory staff should be fixed and strict action taken to recover loss to the Company in case of dereliction of duty.

procuring the conveyor for improving the efficiency only. Company is in the process of ascertaining the facts and circumstances which lead to the loss as pointed out by Audit and appropriate action will be taken to fix the responsibility on the concerned supervisory staff and has requested to allow more time for the purpose. The duties and responsibilities of the supervisory staff in each user department have been fixed and in future as suggested by the Committee strict action will be taken against the person responsible for such wrong selection of spares.

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The Committee expresses anger over the fact that the management took over 4 years to decide to purchase a Centrifugal Air Compressor costing ₹ 1.63 crore which would help the company to save ₹ 1.34 crore per annum by way of power consumption, maintenance cost and holding of inventory of spares even though the company itself had huge

Noted for future guidance. The compressor is working properly and the savings in power cost is ₹ 119 lakh p.a.



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surplus funds. At a time when technology is advancing at great speed, such delay is imprudent and disastrous to the company. The committee recommends that such instances should be avoided in future and proper evaluation of the necessity and utility of new machinery should be undertaken. The Committee wishes to be informed of the functioning of the new compressor and of the savings obtained during the last 3 years. The Committee is displeased over the Company's unpardonable lethargic attitude and delay in installing new compressor and recommends that in future such delay in decision making, approval and installation should be avoided.

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Industries

The Committee finds that there was inordinate delay in the installation of product packaging system and that the system was

Noted for future guidance.

installed after shutdown of the plant for 555 hours which resulted in avoidable production loss of 1338 MT valued at ₹ 7.32 crore. The Committee feels that the incident depicts the lack of planning in procurement and installation of the packaging system. The Company should have planned to procure and install the packaging system as well as the Recycles Gas Blower during the annual shutdown to avoid production loss.

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The Committee is astonished to find that the company floated a purchase enquiry to import the expansion bellows only when the reorder level was reached and no further steps were taken for procurement. This caused a stock out situation for bellows resulting in loss of production of 82 MT of raw pigment valued at ₹ 46.57 lakh. The Committee expresses displeasure over the Company's action of blaming system failure of the computer, for not signaling the lack of response

In this case though the enquiry was floated to the original supplier in time, the non response of the supplier had gone unnoticed leading to stock out situation. To avoid the occurrence of similar situation, a Committee was formed to suggest corrective steps to be taken. The Committee's recommendations have been implemented and various mechanisms are in place to detect such lapses in time.

The Managing Director, KMML informed that the responsibility could not be fixed as directed by the CoPU due to the intricate

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(1)	(2)	(3)	(4)	(5)
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of the supplier instead of the personnel in charge. The Committee also expresses strong displeasure over the management's stand that responsibility for the lapse could not be fixed as this was not intentional. The Committee recommends that responsibility for this lapse should be fixed and action taken intimated to the Committee.

nature of the issues involved and the company entrusted an external agency M/s.RGN Price & Co., Chartered Accountants to look into the aspects involved. A copy of the report is enclosed. On the basis of the explanation from the Managing Director and the report from the external agency further action in the matter may be dropped.

17            59            Industries

The Committee learns that the Company is the sole producer of Rutile grade Titanium Dioxide Pigment (TDP) in India and has been selling six grades of pigment in the domestic as well as foreign market under the brand name "KEMOX", but quality wise its products rank only third in the Indian market due to low quality, weight variations, non-development of new grades etc. The Committee therefore recommends that steps should be

The volume of domestic sales from 2003-04 to 2006-07 is as follows:

- 2003-04 —20180 MT
- 2004-05 —20283 MT
- 2005-06 —19902 MT
- 2006-07 —19371 MT

**BENEFITS FROM R&D DEPARTMENT TO THE COMPANY**

**New Product Development**

(1) A new grade (RC 804) has been developed which is applicable in the production of engineering plastics.

taken to improve efficiency, to develop new grades of pigment and to increase domestic sales in order to get higher profit margins. The Committee wishes to be informed of the steps taken and of volumes of domestic sales during the years 2003-2004 to 2006-2007. The Committee may also be informed of the benefits from research and development in the R&D wing of the company.

(2) Laboratory preparation of nano sized TiO<sub>2</sub> pigment is underway.

#### **Cost Reduction Measures**

*Charcoal was mixed with petroleum coke as reluctant in roaster* : Plant trials were conducted to use vacuum salt (free flowing sodium chloride) as scouring media in the U.300 oxidizer instead of silica sand. Initial trials indicate that sodium salt can be effectively employed as the scouring medium for the production of RC800PG grade pigment.

*Attending Customer Complaints*: All the customer complaints received were attended by the company and the complaint samples were checked. If the party requires any technical help, it has been extended.

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The Committee understands that the Company had not availed of any benefits under DEPB (Duty Entitlement Passbook) Scheme during 2001-2004 as SION (standard input-output norm) for Rutile grade Titanium Dioxide Pigment had not been got fixed by the Director General of

The Company was vigorously trying to get Export incentives such as DEPB or Duty Drawback on its export, since it started its export business in 2001-2002. Its drawback claim was rejected due to negligible value of import component. Then the company tried to get DEPB incentive and its SION rate was fixed in 2005 only. Subsequently it could get DEPB benefit @1% FOB initially which

(1)	(2)	(3)	(4)	(5)
			<p>Foreign Trade. The company's failure to avail of the benefits of the scheme during the period 2001-2004 resulted in a loss of entitlement to the extent of ₹ 11.98 crore. The Committee recommends that responsibility be fixed for the lapse and action taken to prevent recurrence in future. The Committee may be informed of the benefits obtained under the scheme since 2003-2004.</p>	<p>was enhanced to 4%. The DEPB availed since 2003-04 is ₹ 2,20,45,950.</p>
19	61	Industries	<p>The Committee expresses displeasure over the company's delay in implementing the major cost saving schemes, recommended by the Central Power Research Institute(CPRI) after energy audit which would result in overall cost saving of ₹1.07 crore per annum in the Electrical Section and ₹10.30 crore in the mechanical portion against a total capital investment of</p>	<p>A detailed Energy Audit was conducted in February 2008 by M/s Central Power Research Institute in succession to the earlier recommendation. Based on the report, following cost saving energy conservation measures has been implemented.</p> <ol style="list-style-type: none"> <li>(1) Insulation of DM water tank, which resulted in a saving of 173 KL of Furnace oil/annum.</li> <li>(2) Lighting level management, which has a projected saving of 0.70 lakh per annum.</li> </ol>

₹ 3.34 crore. The Committee therefore recommends that the company should implement the schemes without any further delay.

The Committee finds total irresponsibility and malafide intentions on the company's part in not making the change over from furnace oil to coal even though the Central Power Research Institute had recommended it as it would help the company to save ₹ 8.75 crore per annum. The Directors Report on the account of 2001-2002 had also envisaged a saving of ₹ 9 crore by substituting furnace oil with coal. The Committee finds that the estimated capital cost for the switching over to coal was only ₹ 2 crore and operating cost ₹ 20 lakh per annum with a pay back period of three months. By this laxity the company has caused loss of more than ₹40 crore on this

A project of coal fired boiler is included in the cost reduction project being taken up. Other costs saving measures with respect to AC VFD installation in Fans Blowers are planned for execution in the coming months.

The recommendation of conversion of Furnace Oil based boiler to coal-based boiler has since been approved by the Government for implementation. The amount spent for the purchase of Furnace oil is given below:

<i>Year</i>	<i>Quantity</i>	<i>Value (Rs.)</i>
2006-07	28597.38	43,22,26,707
2005-06	28203.59	39,40,82,729
2004-05	30246.33	36,39,45,167

(a) The matter was placed in the 207th meeting of the Board of Directors of the company held on 21st December, 2011. The Board noted that there was only one bidder left over after withdrawal of M/s Thermodyne Technologies Private Limited who declined to extend the validity period of the tender. As there was only one party it was decided to re-tender. Board also observed that while re-tendering oil and gas base system should be considered instead of coal based system,

(1)

(2)

(3)

(4)

(5)

count alone. The company had not placed the matter before the Board even in December 2006 and Government sanction had not been sought. The Committee feels that there was no need to engage the Engineering consultant MECON to study what has already been studied by the CPRI, and that the delay is unjustified as well as purposeful. The Committee recommends that responsibility be fixed and action taken for the lapse. The Committee desires to be informed of the present stage of switch-over, of the firms from which furnace oil is purchased and of the amounts spent on the purchase of furnace oil during the years 2004-2005, 2005-2006 and 2006-2007.

in view of the protests and objections against coal based plant in Kerala and also to minimize environmental impact.

Accordingly the company is exploring the possibility of using gas base system as an alternative to coal base system as suggested by the board.

(b) Company is in the process of ascertaining the facts and circumstances, which led to the incurrence of loss as pointed out by the Audit and appropriate action is being taken to fix the responsibility.

The Managing Director, KMML informed that the responsibility could not be fixed as directed by the CoPU due to the intricate nature of the issues involved and the company entrusted an external agency M/s RGN Price & Co., Chartered Accountants to look into the aspects involved. A copy of the report is enclosed. On the basis of the explanation from the Managing Director and the report from the external agency further action in the matter may be dropped.

The Committee finds that the Company has now implemented a system of inventory control and internal monitoring fresh purchases and consumption audit systems in the company of stores and spares and thereby reduced need to be strengthened and the inventory of stores and spares recommends that action be taken considerably. Stock as on 20-6-2008 was for the same. The Committee ₹ 50.484 crore and now as on 7-10-2008 it is also suggests that steps should 46.48 crore. During the year company be taken to make the finance appointed a Chartered Accountant firm for wing of the company more conducting internal audit on a quarterly efficient. basis. Company also strengthened the finance wing by appointing a new General Manager (Finance) and Manager (Accounts) during the current year.

Thiruvananthapuram,  
11th December, 2014.

K. N. A. KHADER,  
*Chairman,*  
*Committee on Public Undertakings.*





Annexure I

**GOVERNMENT OF KERALA**  
**Abstract**

*Industries Department – Public Sector Undertakings - Kerala Minerals and Metals Limited (KMML): Kollam – Implementation of the New Production Incentive Scheme to the Workmen, Executives and Casual Workers of the Pigment Unit of the KMML w.e.f 1.1.2008 - Sanction Accorded - Orders issued.*

**INDUSTRIES (H) DEPARTMENT**

G.O. (Rt) No.590/2010/ID

Dated, Thiruvananthapuram, 7.5.2010

- Read:- (1) G.O. (Rt) No.756/95/ID dated 30.8.1995  
(2) G.O. (Rt) No.175/96/ID dated 19.2.1996  
(3) G.O. (Rt) No.1193/96/ID dated 31.12.1996  
(4) Letter No. TP/PD/WA-29/2008 dt 6.10.2008 from the Chairman and Managing Director, Kerala Minerals and Metals Limited, Chavara, Kollam

**ORDER**

As per G.O. read as 1<sup>st</sup> paper above and amended by the GO read as 2<sup>nd</sup> and 3<sup>rd</sup> papers above Government had approved a Production Incentive scheme for the employees in the category of Workmen, Executives and Casual Workers of the Pigment Unit of the Kerala Minerals and Metals Limited (KMML), Chavara, Kollam. The MD, KMML as per letter read as 4<sup>th</sup> paper above has reported that the scheme was formulated and implemented taking into account the then existing installed capacity of 22000.MT of pigment production. From 1<sup>st</sup> October 2005, the capacity of the plant has been enhanced to 40000 MT per year and accordingly the company formulated a new Production Incentive Scheme. The management had discussions with the trade unions of the pigment unit of the company regarding the revision of incentive scheme, and an agreement was arrived at on 18.8.2008. As per the new scheme, the maximum amount of incentive payable has been limited to Rs.3900 P.M. and the incentive amount payable from January, 2008 to December, 2008 is Rs. 286 lakh. Further a total incentive amount of Rs. 299 lakh have already been paid for the said period by limiting the maximum admissible amount to Rs. 2,990/- per month as per the earlier scheme. The excess amount paid will be recovered/adjusted on introduction of the new incentive scheme. As such on implementing the new scheme w.e.f 1.1.2008 there is no additional financial commitment. The Board of Directors of the company in their 189<sup>th</sup> meeting held on 20.9.2008 approved the scheme subject to Government approval. Accordingly the CMD, KMML has requested Government to approve the new Production Incentive Scheme signed by the management and trade unions for implementation.

Having examined the matter in detail, Government are pleased to accord sanction for the implementation of the New Production Incentive Scheme (As Appended) to the Workmen, Executives and Casual Workers in the Pigment Unit of the Kerala Minerals and Metals Limited, Chavara, Kollam w.e.f 1.1.2008, signed by the Management and Trade Unions of the company on 18.8.2008.

By order of the Governor,  
T. BALAKRISHNAN,  
Additional Chief Secretary

To

1. Managing Director, Kerala Minerals and Metals Limited, Chavara, Kollam
2. The Accountant General (A&E/Audit), Kerala, Thiruvananthapuram.
3. The General Administration (SC) Department (Vide item no: 4553 dt. 28.4.2010)
4. The Finance Department
5. The Planning and Economic Affairs (BPE) Department
6. Stock file/Office copy

R.G.N.PRICE & CO.  
CHARTERED ACCOUNTANTS

Phone	: 2752502	Flat No. C-2, 1 Floor
E-Mail	: priceqln@vsnl.net	Peylakada Flats,
Head Office	: Chennai	Behind District Eye Hospital
Offices at	: Mumbai, Bangalore, New Delhi, Cochin & Calicut	Vadakkumbhagam
Ref.	: KMML/COPU/1	Quilch- 691 001.
		3 <sup>rd</sup> December 2011

To  
Managing Director  
The Kerala Minerals and Metals Ltd  
Chavara,  
Kollam

Dear Sir,  
Subject: KMML COPU (Committee of Public Undertakings) (2006-08) 53<sup>rd</sup> report  
Ref: Letter dt 7<sup>th</sup> June 2011 from the Company.

The honourable Committee of Public Undertakings in their 53<sup>rd</sup> report had made some adverse observations regarding certain activities undertaken by the company during the period of their inspection. The company provided replies to these observations based on which some of the adverse comments were dropped. However the following three observations of the honourable committee are persisting:

- 1) Para 49: procurement of condenser in Brine Chilling plant without contacting Kirloskar Pneumatic Company Limited, the original supplier.
- 2) Para 58: expansion bellow stock-out situation resulting in loss of production.
- 3) Para 62: Delay in change over from furnace oil to coal fuel for boiler resulting in avoidable cost to the company.

In this back ground the company vide their letter dated 7<sup>th</sup> June 2011 requested us to peruse the relevant records and documents and offer a response to the issues at hand.

Para 49; procurement of condenser in Brine Chilling plant without contacting Kirloskar Pneumatic Company Limited, the original supplier.

The main thrust of the observations was regarding loss caused due to not contacting the Original Equipment Manufacturer (OEM) but placing order for the condensers on others which lead to stoppage in production and consequent production loss of Rs. 2.46 crores apart from loss of Rs. 24.77 lakhs spent on purchase of condensers from other vendors



which had ultimately been replaced due to sub-normal performance. We have carried out a detailed discussion with the senior executives of the company on this particular issue. Based on the details /documents made available to us and information provided by them, we have ascertained that Brine Chilling plant is a composite machinery consisting of several parts of which condenser was one such part. The plant is used to deliver chilled methanol (brine ) for cooling of Titanium Tetra chloride vapours in chlorination and oxidation plants. The plant was installed on turnkey basis by Kirloskar Pneumatic Company Limited, Pune. The plant had three refrigeration compressors along with the required number of condensers, pumps, storage tanks and necessary piping, valves and control units. The turnkey contractor was the manufacturer of compressors and pumps whereas the other components like -condensers, valves control units etc were bought out items which were sourced from other manufacturers. The refrigeration plants generally had a higher requirement of maintenance and so one compressor along with its accessories was designed to act as a standby unit while the remaining two were meant for continuous operations. The company had a schedule of preventive maintenance service for the compressors after completion of the stipulated number of hours. During such preventive maintenance schedule, parts which were worn out were replaced and some were serviced and kept ready for re-use. The company as a matter of policy, had decided to broad base the list of vendors who were supplying some components or parts by undertaking an exercise in vendor development. It was explained that the condenser for the manufacture of Brine Chilling Plant was procured by the OEM - Kirloskar Pneumatics Company Private Limited from independent vendors. As a result of this and with the knowledge that the condenser was not a part manufactured by the OEM - the company decided to approach the manufacturer of the condenser directly. It may also be noted as per the information provided by the company, the company already had stock of one spare condenser supplied by Kirloskar Pneumatics Private Limited the OEM which was kept as a stand by in case of need. However, when the new condenser supplied by an alternate vendor was installed it was presumed that the Brine Chilling plant would run optimally. But, due to some snag the plant could not be operated effectively. The OEM was intimated about this and they deputed their engineer to the plant who was at the station for about 10 days from 26th July 2003 to 5th August 2003. Even then the exact cause of the snag could not be detected. On further request , Kirloskar Pneumatics Company Private Limited , deputed their senior technical expert who was in the company from 20th to 22nd October 2003. This senior representative, on detailed inspection of the plant detected that the snag was caused because the condenser did not have adequate cooling capacity. The problem was solved by replacing the condenser with the spare condenser supplied by the OEM which was available in the company. The production loss had occurred consequent to this defect to the plant which in turn was caused by inadequate cooling by the condenser fixed in the compressor.



On an overall appreciation of facts it appears that the exercise undertaken by the company with an intention to broad base the vendor list was a genuine one. It is reasonably apparent that the company did not intend to exclude the OEM altogether. The fact that the OEM had finally to be called in to set right the defect is a pointer to this. The defect in drawing and consequent scrapping of the condenser due to suboptimal performance was only an incidental corollary to the activity of the company in making an attempt at vendor development. The loss in production could have been reduced had the technical defect been identified in time in which case the replacement of defective condenser could have been easily done since the company was already having a service condenser supplied by OEM themselves. This could not be done only due to the highly technical nature of the plant as it was a composite machinery and even the technical representatives deputed by the OEM themselves could not identify the problem at the initial stage. In other words the quantum of production loss was not only due the defective condenser per-se, but also due the technical personnel being not able to detect the nature of the snag due to the composite nature of the plant. Hence in our opinion, the intention of the company in venturing out and making an earnest attempt to broaden the vendor list was genuine through ultimately the attempt did not succeed due to technical defects which could not be detected initially even by the representatives of the OEM.

**Para 58: Undue delay in procuring expansion bellow resulting in disruption in production and consequent loss.**

In two streams of oxidisation units of the company two duct expansion bellows were in operation. The purchase inquiry was floated to an US based supplier named Badger Industries for the procurement of two expansion bellows.

As per the details made available, it was observed that at the time the purchase requisition was initiated on 21st December 2002 by the stores the stock level of bellows was two numbers. According to inventory control parameters fixed the minimum stock level of item was one, maximum level was four and the reorder level was two.

As per the copy of purchase requisition made available to us the consumption of bellow during the three years prior to 2002-03 was as follows:

1999-2000	2000-2001	2001-2002
3 No.s	2 No.s	1 No.s

Thus as is apparent from above figures that, the consumption of bellows was declining over the earlier three year period and during 2001-02 only one bellow was consumed. From the records available it is seen that, the requisition by stores was initiated on 21<sup>st</sup> December 2002 and the purchase enquiry was forwarded to overseas



supplier on 8<sup>th</sup> January 2003. At the time of requisition as well as placement of inquiry the stock was at minimum level and the procedure for purchase was initiated when the stock was at the reorder level. Going by the past trend of consumption of bellows during the FY 2001-02 only one bellow was consumed during the whole year. The two numbers in stock should have normally sufficed for two years. However, during September 2003 the company faced a stock out situation of bellows resulting in loss of production. It appears that the stock out was caused because of unforeseen circumstances arising out of bellows becoming defective earlier than the expected time.

However as per explanation provided, the Purchase Assistant and the Assistant Purchase Officer who were manning the purchase department and handling the concerned file were shifted and new incumbents were posted in their place during the relevant time. As a direct consequence of this change the lack of response from the overseas supplier went unnoticed, consequent to which no follow up action on such lack of response was initiated.

Considering the issue from a larger commercial perspective, the lapse in not following up the lack of response from the overseas supplier appears to be caused due to a human error which arose mainly out of the fact that a new incumbent was handling the relevant file, consequent to which, there was slight lack of continuity in the steps initiated by the predecessor in office. The company however initiated emergency measures by connecting with spool of inconel. Thus in our opinion, as the steps for sourcing the item had been initiated at the right time as per reorder levels fixed, it may not be possible to conclude that, there was a wilful lapse on the part of the concerned personnel in placement of the order in time.

#### **Para 62: Non usage of coal in the boiler plant.**

As per the observations of the honourable committee the fuel for boiler should have been changed from furnace oil to coal which would have resulted in a cost saving of Rs 8.75 crores per annum. The capital cost estimated for switching over to coal was only Rs 2 crores and operating cost was estimated at Rs 20 lakhs a month.

As per the discussion held with the executives of company and details furnished it has been ascertained that during 2001 the company had proposed to embark on a major expansion drive as per which the capacity of TiO<sub>2</sub> plant was proposed to be increased to 100,000 MT per annum from 40,000 MT per annum. The task of preparation of project report for this expansion project was entrusted to MECON. As a part this assignment the consultants were also asked to give their specific recommendations on the fuel for production of steam as well as requirement of power for the enhanced facilities to be installed. Due to subsequent events, the proposed expansion project was abandoned by the Government of Kerala as a result of which, the project report submitted by MECON had become infructuous. The delay in replacing the existing boiler with coal fired boiler was explained to be due to following reasons:



As mentioned in the paragraph above, the study on the requirement of steam and other utilities in the light of the proposed expansion in capacity of TIO2 plant from 40,000 MT to 100,000 MT was entrusted to MECON. Even though a detailed project report by the consultant was submitted, the expansion project itself was later abandoned in entirety by the Government of Kerala.

Subsequently, it was decided to convert the existing boiler to a coal fired one. But then, it was known that the existing boiler could not be converted to fluidized bed boiler by using coal directly. Conversion of the boiler in use to a fluid bed boiler was expected to take about a year during which time the production in the plant would have been badly disrupted. Considering this, the board authorised Sri P. Radhakrishnan, director and Sri N.P.Sukumaran, observer to jointly study and explore the possibility of going for co-generation considering the expected power requirements of the company. It was around this time that the LNG terminal at Cochin was sanctioned and so the possibility of using LNG as fuel for the boiler was then considered. The matter could not be finalised as the feasibility of transporting LNG from Kayamkulam to Chavara was uncertain. The matter was placed before the Board on 16.09.2009.

In the meanwhile, Mr K Rajagopal, director of the company, submitted a detailed report regarding the fuel conversion system project. The 196<sup>th</sup> meeting of the board based on the report submitted by Mr Rajagopal, authorised the Managing Director of the company to take steps to set up a new boiler plant without co-generation. Later 197<sup>th</sup> Meeting of the board, held on 17<sup>th</sup> March 2010, decided to go for a fresh open tender for 53TPH coal fired boiler including civil work and coal and ash handling on a turn key basis.

Based on this an open tender was floated on 16<sup>th</sup> April 2010. M/s Thermodyne Technologies Private Limited, was the only technically and commercially acceptable vendor. On the opening of the tender documents, it was observed that the price quoted by the only eligible vendor was much higher than the estimated capital expenditure for the project. It was hence recommended to the board to negotiate with the vendor before finalising the order. The 203<sup>rd</sup> board held on 3<sup>rd</sup> November 2010 decided to split the work into two packages as below and retender it:

- a) AFBC boiler with coal and ash handling system on turn key basis and
- b) all civil and foundation including building and connected work.

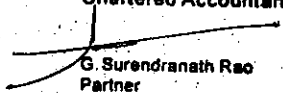
As per the fresh tender floated, three parties submitted their offers. Out of this only two parties were qualified. The validity of the offer was only 180 days from the date on which the tender was opened which was 10<sup>th</sup> February 2011. Out of the two eligible parties, one party M/s Thermodyne Technologies Private Limited, has not extended the validity period of the offer. The second party M/s Enmas had agreed to extend the validity of the offer upto 10<sup>th</sup> November 2011. This proposal was put up before the 206<sup>th</sup> meeting of the board held on 28<sup>th</sup> September 2011. The matter is yet to be considered by the board.




Thus it appears that the technology to be followed and the fuel to be used was reconsidered from time to time depending on the economic scenario and availability of alternate fuel like LNG. The company had also considered the possibility of co-generation of power taking into account the economies of scale though subsequently this proposal was also dropped. These proposals and changes have taken substantial time due to procedural compliances and the matter is yet to attain finality.

Yours faithfully,

For R.G.N. PRICE & CO.  
Chartered Accountants



G. Surendranath Rao  
Partner  
M.No. 022693  
FR.No. 002765S



JAPABALAN OLIVER  
Additional Secretary to Govt.  
Industries Department  
Govt. Secretariat, Tvm.