

**Report of the
Comptroller and Auditor General
of India**


for the year ended March 1998

**Union Government (Commercial)
Paradeep Phosphates Limited
No. 5 of 1999**

Papers to be laid on the Table of Rajya Sabha
Authenticated

New Delhi :

Dated : 26-10-99


(SURESH PRABHAKAR PRABHU)

Minister of chemicals and
Fertilizers .



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PREFACE

Audit Boards are set up under the supervision and control of the Comptroller & Auditor General of India to undertake the comprehensive appraisals of the performance of Government Companies and Corporations.

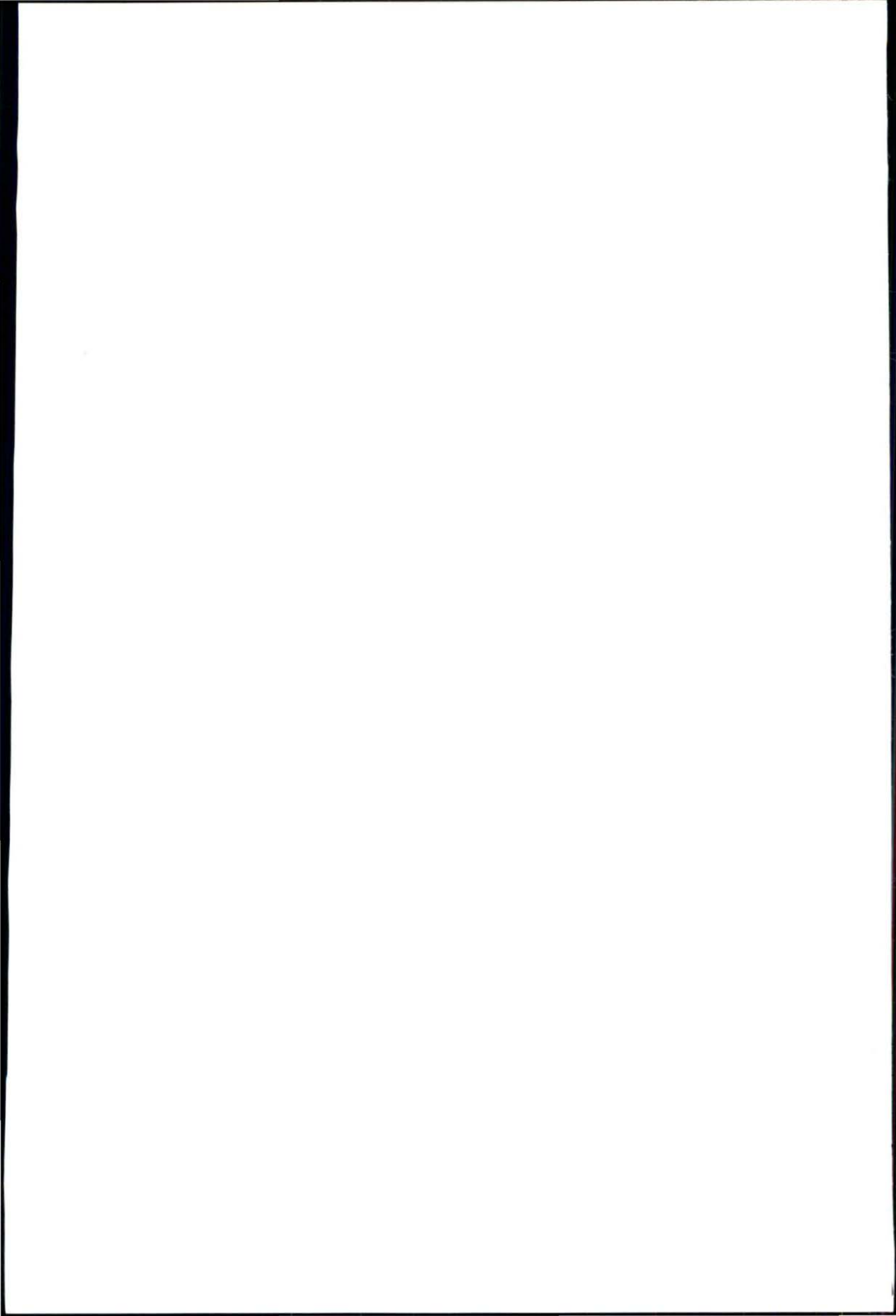
2. The report on Paradeep Phosphates Limited was finalised by the Audit Board consisting of the following members:

- | | |
|-------------------------|--|
| 1. Shri A.K.Chakrabarti | Chairman, Audit Board and Deputy Comptroller & Auditor General (From January 1998) |
| 2. Shri B.B.Pandit | Principal Director (Commercial) & Ex-Officio Member Secretary, Audit Board |
| 3. Shri A.Ganguly | Principal Director of Commercial Audit & Ex-Officio Member Audit Board-II, Calcutta |
| 4. Shri A.K.Awasthi | Principal Director of Commercial Audit & Ex-Officio Member Audit Board-II, New Delhi |
| 5. Shri D.N.Bhowmik | Part-time Member |
| 6. Shri K.V.Menon | Part-time Member |

3. The part-time members were appointed by the Government of India (in the Ministry of Fertilizers & Chemicals, Department of Fertilizers) with the concurrence of the Comptroller & Auditor General of India.

4. This report as set out in the succeeding chapters is based on studies, made by the Audit Board, of various aspects of the functioning of the Company and the discussions held with the Management of the Company.

5. The report was finalised by the Audit Board after taking into consideration the discussions held with the Secretary, Department of Fertilizers on 16 December 1998.



OVERVIEW

1. Introduction

a) Paradeep Phosphates Ltd. (PPL) was registered as a Public Sector Company in December 1981 with an authorised capital of Rs.120 crore with the main object of developing additional capacity of phosphatic Fertilizers to cope with the increased demand in the country. The project was approved by the Government of India in January 1982 at an estimated cost of Rs.183.64 crore, but it was completed at a cost of Rs.625.36 crore i.e. an increase of 240 per cent over the estimated cost.

[Paragraph 1]

b) The project was divided into two phases. Phase I was completed as per schedule but Phase II of the project was completed on 1 October 1990 against the scheduled date of 1 November 1987.

[Paragraph 1.2]

c) Raw materials required by the plant include Ammonia and Rock Phosphate which are totally imported. The Company is also engaged in trading activities of imported DAP, Urea, Muriate of Potash, Calcium Ammonium Nitrate and complex Nitrogenous fertiliser (NPK).

[Paragraphs 1.3,1.4 & 1.5 (ii)]

d) The project had incurred a cumulative loss of Rs.256.48 crore upto 31 March 1998 despite an advantageous location with port facilities because of certain deficiencies at the planning and implementation stage which had lasting impact on it's viability.

[Paragraphs 1.5(i) and 1.5(iv)]

e) The project depends heavily on imported raw material making it very susceptible to international price and foreign exchange fluctuation. Thus even at 110 per cent capacity utilisation of the DAP plant during 1997-98 the Company faced a loss of Rs.105.53 crore.

[Para 1.5 (ii)]

f) Due to low capacity utilisation in most of the years, the very objective of establishing the Company to meet the progressive increase in demand of phosphatic Fertilizers in the country, has remained frustrated so far. Company's share in the market continued to be very low ranging from 7.74 per cent (1990-91) to 19.60 per cent (1994-95).

[Paragraph 1.5]

2. Capital Structure

a) The authorised capital of the Company was enhanced to Rs.467.65 crore by Government of India in April 1996. The paid up capital was Rs.331.65 crore as on 31 March 1998.

[Paragraph 2.01]

b) As a part of restructuring of Company's Capital, the Government of India approved (April 1994), inter alia, partial conversion of Government Loan and interest accrued and due on such loans into equity thereby reducing the liability of the Company from Rs.549.02 crore to Rs.230.28 crore. Besides, the Government waived off penal interest and interest on interest to the tune of Rs.130.16 crore and initial moratorium of 3 years for payment.

[Paragraph 2.02 & 2.03]

c) While approving capital re-structuring, Government of India directed the Company to ensure (i) greater utilisation of production capacity of all the plants (ii) diversification of activities to produce NPK (iii) gainful utilisation of surplus capacity of captive berth, unloading facilities, Ammonia storage etc. and (iv) maximum economy in operation. However, there was shortfall in all the areas during last four years except in 1997-98 when Di-Ammonium Phosphate Plant (DAP) was utilised to the extent of 110 per cent.

[Paragraphs 2.03 & 5.01]

d) In May 1997, the Company forwarded a proposal for re-structuring of capital to the Government of India for the second time. The proposal has not yet been approved by the Government of India (December 1998).

[Paragraph 2.05]

3. Implementation of Project

a) The project was initially approved by Government of India in January 1982 with an annual capacity of production of 6.52 lakh MT DAP per annum at a total cost of Rs.183.64 crore. The project cost was finally enhanced to Rs.630.82 crore. The scheduled date of commissioning for the DAP was March 1986 and that of Sulphuric Acid Plant (SAP) and Phosphoric Acid Plant (PAP) was November 1987, as against this DAP was commissioned in August 1986 and SAP & PAP in June 1992.

[Paragraph 3.01 & 3.05]

b) Cost overrun of Rs.447.18 crore was mainly due to (i) variation in exchange rate (ii) change in scope of work (iii) escalation in cost (iv) inadequate provision and (v) increase in financing charges. Out of total cost

overrun of Rs.447.18 crore Rs.103.78 crore was identified as controllable.

[Paragraph 3.03]

c) Time overrun was due to (i) delay in getting approval of revised project report by Government of India (ii) fund constraint (iii) delay in mechanical completion of various plants and (iv) delay in commissioning activity of different plants. The Ministry admitted (December 1998) that there were deficiencies in the planning as well as implementation stage which led to time overrun and consequent cost overrun.

[Paragraphs 3.04 & 3.05]

4. Execution of Di-Ammonium Phosphate Plant (DAP)

Feasibility Report prepared by Madras Fertilisers Limited in 1980 envisaged a product-mix of DAP & NPK based on agronomic study and market demand. But, production of NPK was not taken up till 1994, reasons for which were not on record. However, according to the Board of Director's decision in February 1994 project of NPK modification was taken up and completed in July 1995 at a cost of Rs.2.58 crore. Production of NPK was only 1.67 lakh MT as against 4 to 6 lakh MT envisaged. The production of NPK was kept restricted in view of lower demand and unremunerative prices which led to investment of Rs.2.58 crore lying idle since July 1995.

[Paragraph 4.01]

5. Execution of Phosphoric Acid Plant (PAP)

a) The plant was mechanically completed in June 1988 against the scheduled date June 1987.

b) Main reason for delay in execution of PAP was delay in issuing import licence by Director General of Trade & Development (DGTD) which resulted in cost escalation of US \$ 57240 and French Franc 770772 on imported equipment and Rs.73.45 lakh on indigenous equipment.

c) Though, the plant was mechanically completed in June 1988, the same was commissioned in October 1990 due to non-availability of Sulphuric Acid from the captive SAP which could not be commissioned in time. Due to this delay the Company had to incur an avoidable expenditure of Rs.84.22 lakh towards commissioning personnel.

[Paragraph 4.02]

6. Execution of Sulphuric Acid Plant (SAP)

- a) Mechanical completion of SAP was abnormally delayed by 3 years out of which 1 year could be attributed to delay in issue of import clearance by Government of India resulting in escalation of cost by Rs.90.62 lakh. Commissioning of the plant was further delayed due to delay in finalisation of drawings for which the Company was responsible.
- b) Delay in completion of SAP resulted in (i) additional expenditure of Rs.44 lakh incurred towards cost of maintaining commissioning staff of contractors (ii) blocking of working capital of Rs.13.05 crore due to holding of imported raw materials for more than one year (iii) import of large quantities of phosphoric acid resulting in outflow of additional foreign exchange to the extent of Rs.325.98 crore.
- c) A consultant firm suggested (February 1998) some long term and short term measures for improvement in performance of the plant at a cost of Rs.28.70 crore which have not yet been introduced..

[Paragraph 4.03]

7. Execution of other Plants / Facilities

- a) There was delay of about 20 months on the part of Bharat Heavy Electrical Limited in erecting captive power plant.

[Paragraph 4.04(A)]

- b) Owing to inordinate delay in finalising type of mechanical ship unloader, cost of the equipment was escalated by Rs.3.82 crore and by further about Rs.5 crore due to exchange rate variation. Though, the unloader was commissioned in March 1992, the same remained unutilised for most of the time during 1992-93 and 1993-94 due to prolonged shut down of both SAP & PAP.

[Paragraph 4.05]

- c) Additional storage capacity for ammonia created at a cost of Rs. 24.67 crore remained idle.

[Paragraph 4.06]

- d) In view of Government of India's directives to fuel oil consumers to switch over to Low Sulphur Heavy Stock (LSHS) fuel, the Company changed the design of fuel storage and handling facility with consequential increase in cost by Rs.1.66 crore. Oil companies were, however, not supplying LSHS

since 1990-91. As a result the Company had to dismantle the abandoned work resulting in loss of Rs.1.45 crore.

[Paragraph 4.07]

e) Material Handling system constructed at a cost of Rs.7.44 crore remained unutilised during 1993-94 and under-utilised thereafter due to poor performance of SAP & PAP. Even the additional capacity created at a cost of Rs.4.66 crore remained virtually unutilised.

[Paragraph 4.08]

f) In constructing Gypsum (waste of PAP) Disposal System, the Company had the liability to pay Rs.30.95 lakh extra to the contractor as per an arbitration award.

[Paragraph 4.09]

g) Automatic Wagon/ Truck Loader system could not be commissioned and had been lying in stores since April 1987 due to resistance from the labour force of the contractors. Non-commissioning of the machine resulted in, (i) idle investment of Rs.1.25 crore for eleven years and (ii) payment of demurrage charges of Rs.3.29 crore to the Railways on account of excess loading time.

[Paragraph 4.10]

8. Production Performance

(a) Di-Ammonium Phosphate

The capacity of DAP was fixed at 7.20 lakh MT per annum on the basis of use of urea, filler etc. After commissioning of SAP directly in pre-neutraliser, total running hours of the plant increased by 10 per cent, thus enhancing the installed capacity to 7.92 lakh MT per annum. Capacity utilisation was moderate (68.96 per cent on an average during the last nine years ending 31 March 1998).

During the last nine years loss of production due to non-availability of imported raw materials was 4.17 lakh MT and loss due to marketing constraint was 2.64 lakh MT.

NPK modification was undertaken by the Company in the expectation of higher contribution. While justifying the scheme of NPK modification, it was indicated that with a sale of 1 lakh MT NPK per annum, capital cost (Rs.2.58 crore) would be recovered in a year. It was, however, seen that only 1.55 lakh

MT of NPK had been sold during last four years against projected sale of 4 lakh MT.

[Paragraph 5.01]

(b) Sulphuric Acid Plant (SAP)

Capacity utilisation of SAP never reached even 50 per cent since its commissioning. One of the main problems for low production was malfunctioning of boilers. In spite of major repair work at a cost of Rs.2.66 crore in May 1994, performance of the plant remained erratic.

[Paragraphs 4.03 & 5.02]

(c) Phosphoric Acid Plant (PAP)

Actual production of PAP ranged from 14 per cent of its capacity in 1992-93 to 40 per cent in 1997-98. Major maintenance and shortage of Sulphuric Acid were the main reasons of loss of production. Despite Board's decision for deferment of procurement of the third concentration unit of PAP one hot well and cold well pump for the proposed unit was purchased along with spare parts at a cost of Rs.99.45 lakh in September 1995 on a single tender basis.

[Paragraph 5.03]

9. Sales Performance and Credit Control

The Company sells its product through Marketing Division located at New Delhi. After decontrol of DAP in August 1992, percentage of loss (after considering subsidy) per MT of DAP was 27.10 per cent of average realisation per MT in 1993-94. Though, the position improved significantly in 1994-95 and 1995-96 (3.32 per cent and 9.55 per cent respectively), the position deteriorated in 1997-98 when percentage of loss to average realisation was 14.78 per cent.

[Paragraphs 6.01 & 6.02]

10. Material Management and Inventory Control

Inventory (stores & spares) holding of the Company was very high in all the years varying from 24.31 months' consumption in 1995-96 to 79.38 months' consumption in 1989-90.

[Paragraphs 7.01 & 7.02]

11. Costing System and Analysis of Costs

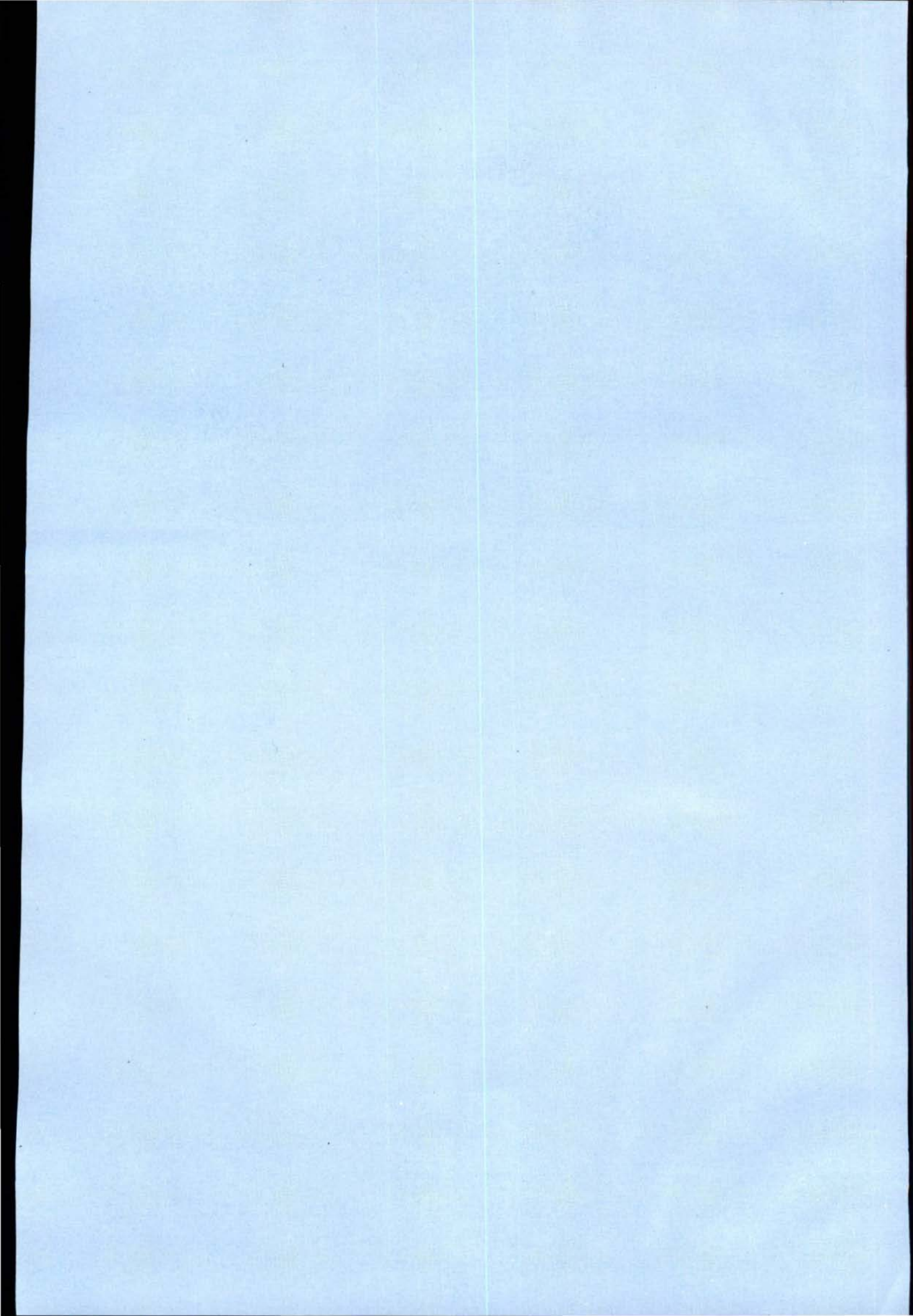
The Company has not introduced standard costing system so far, though advised by Ministry in 1984. The Ministry stated (December 1998) that the matter of non-introduction of standard costing would be examined.

[Paragraph 8.01]

12. Manpower

Deployment of 1500 contract labourers over and above 1068 regular sanctioned employees is not justified as the total sanctioned strength of the company is 1386, including executives and non-executives. The Company had incurred an expenditure of Rs .5.88 crore on the contract labour during 1997-98.

[Paragraph 9]



CHAPTER 1 : INTRODUCTION

Paradeep Phosphates Limited (PPL) was registered as a Public Sector Company in December 1981 with an authorised capital of Rs.120 crore with the object to develop additional capacity of phosphatic Fertilizers in order to meet the progressive increase in demand of the product throughout the country.

THE PROJECT

- Estimated Cost:
Rs.183.64 crore
- Actual
Expenditure:
Rs.625.36 crore
- An increase of
240 per cent

1.1 The project was approved by the Government of India in January 1982 at an estimated cost of Rs.183.64 crore. The final expenditure on the project worked out to be Rs.625.36 crore i.e. an increase of 240 per cent over the estimated cost.

1.2 The project was divided into two phases. Progress of Phase-I construction was as per schedule and was completed by 31 December 1985. Phase-II of the project was started in January 1985 and was completed on 1 October 1990 against the scheduled date of 1 November 1987.

1.3 Presently, the Company is producing Di-Ammonium Phosphate (DAP) and Complex Nitrogenous fertiliser (NPK) as final product with phosphoric acid and ammonia as raw materials for both DAP and NPK and imported Potash for NPK only. The Company is also engaged in trading activities of imported DAP, Urea, Muriate of Potash, Calcium, Ammonium Nitrate and NPK. The Company is largely dependent on import of raw materials as well as finished product.

1.4 Raw materials required by the plant include ammonia and rock phosphate which are totally imported, phosphoric acid which is partially produced in the captive Phosphoric Acid plant (PAP) and partly imported, and sulphuric acid, which is fully produced in the captive "Sulphuric Acid Plant" (SAP) but from imported sulphur.

Process flow charts for DAP, PAP and SAP are appended in Annexure I.

Macro objectives of the Company, inter alia, are:

- a) to produce and market Fertilizers and chemicals efficiently and economically in an environmentally sound manner.
- b) to maintain optimum levels of efficiency and productivity in the use of resources and to strive for optimum return on investment
- c) to strive for corporate growth by expansion / diversification and to obtain 100 per cent overall capacity utilisation.

While the Company is yet to lay down it's micro objectives it has failed to achieve even the macro objectives, as would be evident from the subsequent chapters.

1.5 Scope of Audit and main audit findings:

This Comprehensive Appraisal on the working of the Company from the date of inception upto the year ended 31 March 1998 covers, inter alia, implementation of the project and performance of the project, covering both physical and financial parameters. The main findings of this study, discussed in detail in the subsequent paras, are listed below:

- Accumulated Loss Rs.256.48 crore as on 31 March 1998
- Loss for the year 1997-98 Rs.105.53 crore

(i) Despite an advantageous location with port facilities the project has incurred a cumulative loss of Rs.256.48 crore upto 31 March 1998 because of certain deficiencies at the project planning and implementation stage which had lasting impact on its viability. Cost and time over run in implementation of the project have burdened the Company with very heavy interest and depreciation costs.

(ii) The project depends heavily on imported raw material making it very susceptible to international price and foreign exchange fluctuations. Thus, even at 110 per cent capacity utilisation of the DAP plant during 1997-98 the Company faced a loss of Rs.105.53 crore.

(iii) The Company's share in the market continued to be very low ranging from 7.74 per cent (1990-91) to 19.60 per cent (1994-95) primarily because upto 1996-97 capacity utilisation of all the plants was very poor.

(iv) Poor functioning of the SAP has acted as a major bottleneck because the SAP had structural defects which resulted in inordinate delay in completion of the plant and its frequent breakdown ever since.

(v) As a part of restructuring of Company's capital, the Government approved (April 1994), inter alia, partial conversion of Government loan and interest accrued and due on such loans into equity thereby reducing the liability of the Company from Rs.549.02 crore to Rs.230.28 crore. Besides the Government approved waiver of penal interest and interest on interest to the tune of Rs.130.16 crore and initial moratorium of 3 years upto March 1997. *Although, the Company earned marginal profit during the years following restructuring i.e., 1993 to 1996, in the year 1996-97, the Company once again incurred heavy losses indicating the fact that capital restructuring was not enough to turn around the project unless it was accompanied by creation of balancing facilities and removal of structural bottlenecks.*

The Ministry stated (December 1998) that as regards the issues raised in Chapters-3 (Implementation of project), 4 (Execution of various plants/facilities), 5 (Production performance) and 6 (Sales performance and Credit Control) of this report, prima facie there appeared to be managerial deficiencies on the part of the Company. The Department also proposed to examine these in detail.

1.6. Organisational Structure

PPL has one single operating unit located at Paradeep in Orissa. The corporate office of the Company is at Bhubaneswar (Orissa).

The Company is under the administrative control of the Ministry of Chemicals & Fertilisers. The Company is managed by the Board of Directors headed by a Chairman-cum-Managing Director (CMD), assisted by two functional Directors viz. Director (Finance) and Director (Marketing), three Executive Directors, two group General Managers and a Secretary.

Detailed Organisational Structure of the Company is given in Annexure - II.

CHAPTER 2 : CAPITAL AND LOANS

2.01 The Company was registered with an authorised capital of Rs.120 crore. In April 1994, Government of India approved capital restructuring of the Company with effect from 31 March 1994 and raised authorised capital from Rs.120 crore to Rs.350 crore. The same was enhanced in April 1996 by Government to Rs.467.65 crore (including preference share of Rs.117.65 crore). The paid up capital of the Company as on 31 March 1998 was Rs.331.65 crore consisting of equity share capital of Rs.214 crore and preference share capital of Rs.117.65 crore.

2.02 As on 31 March 1994, the liability of the Company towards principal amount and interest accrued and due on loan from Government of India was Rs.549.02 crore. The Government approved conversion of some portion of both loan and interest accrued and due into equity/preference shares and rest of the interest was waived as detailed below :-

(Rs. in crore)

	Liability as on 31 March 1994 before conversion	Government approval	Liabilities after capital restructuring as on 31 March 1994
a) Loan received from Government	284.98	54.70 converted into equity	230.28
b) Interest accrued and due on such loan	264.04	117.65 converted into 7 per cent non-cumulative preference shares and Rs.146.39 crore written off by the Government.	NIL
Total	549.02		230.28

As a result of such capital restructuring, annual relief to the Company in the shape of saving of interest and penal interest was as follows:-

(Rs. in crore)

	1994-95	1995-96	1996-97	1997-98
Interest	41.30	41.30	41.30	7.66
Penal Interest	7.13	7.13	7.13	1.37
Total saving of Interest	48.43	48.43	48.43	9.03

2.03 Besides the above, Government of India approved (29 April 1994):

Capital Restructuring

- W.e.f 31 March 1994
- Authorised Capital increased
- Some portion of loans and interest converted into shares
- Some interest waived of
- Penal interest waived of
- Interest on interest waived of
- Moratorium of three years

1) Waiver of the amount of penal interest and interest on interest to the tune of Rs.130.16 crore.

2) The balance amount of loan of Rs.230.28 crore was repayable by the Company after an initial moratorium of 3 years up to 31 March 1997. From April 1997 the loan was repayable in 10 equal annual instalments. However, the Government approved (December 1997) deferment of repayment of loan and interest due in 1997-98 by one year.

While approving the Capital restructuring Government of India directed the Company to ensure the following in order to make it viable-

i) The average capacity utilisation should be 100 per cent with immediate effect.

It was seen that the capacity utilisation of DAP Plant during 1994-95, 1995-96, 1996-97 and 1997-98 was 98 per cent, 85 per cent, 65 per cent and 110 per cent respectively.

ii) The Sulphuric Acid Plant and Phosphoric Acid Plant should be utilised at not less than 65 per cent of capacity. As against this actual capacity utilisation of SAP and PAP was as follows.

Year	Capacity Utilisation (Per cent)	
	SAP	PAP
1994-95	38.79	34.67
1995-96	27.27	23.11
1996-97	20.91	16.44
1997-98	45.76	40.00

iii) Diversification of activities to produce NPK Fertilizers. Efforts towards diversification were negligible as would be evident from the following.

Year	Production (In lakh/MT)		Percentage of NPK production to total production
	DAP	NPK	
1994-95	7.03	0.02	0.28
1995-96	5.73	0.68	10.61
1996-97	4.20	0.73	14.81
1997-98	7.76	0.24	3.00

iv) The surplus capacity of the captive berth/ unloading facility, ammonia storages etc. should be gainfully utilised. This could not be utilised so far (Para 4.05 to para 4.08 refer)

v) The Company should take all possible steps to effect maximum economy in its operation. Maximum economy was not exercised as there were many cases of extravagance/wasteful expenditure etc. as discussed in subsequent paragraphs.

2.04 The Company availed of cash credit facilities from different banks in India and foreign exchange loan from a bank of Switzerland, balance of which as on 31 March 1998 was Rs.102.19 crore and Rs.3.01 crore respectively. During 1997-98 fresh loan of Rs.15 crore was received from the Government.

2.05 In May 1997, the Company forwarded a proposal for restructuring of capital to the Government for the second time. This included proposals to :

i) convert existing loan of Rs.230.28 crore into equity with a view to increase the capital base and reduce interest burden on the Company.

ii) charge interest on plan loan disbursed during the post-restructuring period from 2001-2002.

iii) grant plan loan for short term and long term investment to be made available by Government at a concessional rate.

The proposal has, not been approved by the Government so far (December 1998).

2.06 In the meantime, the Ministry observed (March 1998) that *despite considerable improved capacity utilisation of the Phase I and Phase II Plants, the financial position of PPL had suffered a set back during the current year (1997-98) because of adverse evaluation of external environment.* The Government advised the Company to undertake in-depth analysis of the prospect of PPL during 1998-99 and in the next few years and formulate their proposal for a package of relief designed to restore the financial health of PPL.

Accordingly, Crisil Advisory Services (CAS) , an advisory service division of Credit Rating Information Services of India Ltd (CRISIL), was appointed to undertake a review of Company's operation and financial health and recommend suitable restructuring solution for effecting an all round turn around.

The Report of CAS was considered by the Board of Directors in its 81st meeting held on 20 May 1998 and Capital restructuring proposal was forwarded to Government on 28 July 1998.

Second Capital Restructuring proposed (May 1997) although none of the conditions laid down by the Government while approving first capital restructuring fulfilled

Salient features of the proposal are summarised below:

- a) Writing down the face value of existing equity of Rs.1000/- each to the face value of Rs.10/- per equity share thereby reducing the present equity of the Company from Rs.214 crore to Rs.2.14 crore. Reduction in equity by Rs.211.86 crore shall be adjusted against the accumulated loss of the Company.
- b) Waiver of interest on Government loan accrued till 31 March 1998 to the extent of Rs.42.55 crore. In addition grant of interest holiday on Rs.37 crore of Government loan (new) for the year 1998-99 (the year of sanction of financial restructuring).
- c) Conversion of Government of India loan (old) to the extent of Rs.230.28 crore into fresh equity share of the face value of Rs.10/- per equity share.
- d) Sanction of a bridge loan of Rs.135 crore so structured as to treat Rs.60 crore as loan and Rs.75 crore as preferential share capital redeemable in ten years to meet the working capital need as well as for revamping of SAP and PAP etc.

**Economic Viability
of PPL**

- Mere Capital restructuring not enough
- Required:
- Additional Balancing Facilities
- Removal of Structural bottlenecks
- Strong Economy measures

The Company had assured the Government that this capital restructuring would substantially reduce the cost of sales and the Company would be in a position to earn a nominal profit of Rs.9.52 crore in 1998-99 itself which would increase to Rs.19.28 crore in the subsequent year.

It is, however, observed that mere restructuring of Capital would not be enough to turn around the project. Statistics reveal that the impact of the first Capital restructuring was only temporary. While the Company made marginal profit of Rs.27.68 crore and Rs.2.22 crore in the years 1994-95 and 1995-96 respectively the position was reversed in the year 1996-97 and 1997-98 when the loss amounted to Rs.60.63 crore and Rs.105.53 crore respectively. Thus, it is clear that if the Company wants to become economically viable in the long run it will have to create additional balancing facilities, remove structural bottlenecks and effect strong economy measures. The nature of these measures is discussed in subsequent paragraphs.

CHAPTER 3 : IMPLEMENTATION OF PROJECT

3.01 Initiation of the Project

The project of fertiliser complex at Paradeep (Orissa) was approved (January 1982) by the Government with an annual capacity of production of 6.52 lakh MT of Di-Ammonium Phosphate (DAP) at a total cost of Rs.183.64 crore. The scope of the work was, however, revised in July 1984 to a projected cost of Rs.386.77 crore enhancing the capacity of the DAP Plant to 7.20 lakh MT per annum. The capacity of Captive Phosphoric Acid Plant (PAP) and Sulphuric Acid Plant (SAP) was also increased (1.80 lakh MT to 2.25 lakh MT of PAP and from 5.61 lakh MT to 6.60 lakh MT of SAP) by importing larger quantity of Rock Phosphate and Sulphur. The estimated project cost was further enhanced to Rs.630.82 crore which was approved by the Government in February 1991.

3.02 Revision of Project Cost

The table below indicates the initial sanctioned cost and comparison of actual cost there against as on 31 March 1998.

(Rs. in crore)

	Item	Initial approved cost as on 5 January 1982	Actual Project Cost	Cost Overrun Excess/ (Savings)
I	Plant cost including cost of equipment, design, engineering for DAP, PAP, CPP, SAP, Material Handling & utilities.	139.77	394.63	254.86
II	Township	8.80	15.54	6.74
III	Land & Land Development	2.97	17.71	14.74
IV	Project Management	3.03	21.38	18.35
V	Working Capital	21.50	40.58	19.08
VI	Commissioning Expenses	2.90	1.62	(1.28)
VII	Financing Charges	4.67	133.90	129.23
	Total	183.64	625.36	441.72

3.03 Cost Overrun

The estimate of the project cost had to be revised from time to time due to variations/changes in factors like change in scope, variation in statutory levies, exchange rates, cost escalation etc. There was a total enhancement of Rs.447.18 crore in the project cost as detailed below :

(Rs. in crore)

Sl.No	Factors	Extent of Variations		
		1 st Revision	2 nd Revision	Total
1.	Statutory levies including customs duty etc.	6.80	5.76	12.56
2.	Variation in exchange rate	9.87	10.32	20.19
3.	Additional scope, change in scope and new scope etc.	58.70	27.20	85.90
4.	Escalation in cost including committed forward escalation	28.52	74.31	102.83
5.	Inadequate provision	67.39	(-)0.18	67.21
6.	Working capital margin	-	13.06	13.06
7.	Financing charges	12.14	105.84	117.98
8.	Addition due to cyclonic conditions	17.50	-	17.50
9.	Contingency & others	2.21	7.74	9.95
	TOTAL	203.13	244.05	447.18

From the above figures it may be seen that there were certain items of costs which could have been avoided /controlled and certain items which were non-controllable. Besides, there were certain items which arose out of Management decisions taken from time to time.

(Rs. in crore)

1. Controllable (due to time overrun):	
i) Variation in Statutory Levies	5.36
ii) Variation in exchange rate	4.04
iii) Escalation cost	42.08
iv) Financing charges	52.30
Total	103.78
2. Non-controllable:	
i) Addition due to cyclonic condition	17.50
ii) Variation in Statutory Duty	7.20
iii) Variation in exchange rate	16.15
iv) Escalation in cost	60.75
v) Financing charges	65.68
Total	167.28

(Rs. in crore)	
3. Managerial decision.	
i) Change in scope	85.90
ii) Inadequate provision	67.21
iii) Working capital Margin	13.06
Total	166.17
4. Unascertained factors	9.95
Grand Total	447.18

3.04 Reasons for delay in completion of project

Ministry admitted that there were deficiencies at planning as well as implementation stage which led to time overrun and consequent cost overrun.

Progress of Phase-I construction was as per schedule and it was completed by 31 December 1985 and Phase-II of the project was started in January 1985 and it was completed on 1 October 1990 against scheduled date of 1 November 1987.

Total delay in executing the project, as compared to schedule is 35 months which comprised of :

a) Delay in start up of Phase-II project due to delay in Government's approval for the construction of PAP & SAP	6 months
b) Delay due to fund constraint	6 months
c) Delay in mechanical completion of Sulphuric Acid Plant, Material Handling System (MHS), Captive Power Plant (CPP) and Gypsum Handling System	20 months
d) Delay in commissioning	3 months
TOTAL	35 months

3.05. Analysis of delay

a) Delay in start up of Phase-II

Fresh Project Report incorporating detailed cost estimate was submitted to Government on 27 August 1982 while approval was accorded only in July 1984 (after 22 months). As a result, project implementation could only be started in January 1985 resulting in initial delay of 6 months. While confirming (December 1998) the facts the Ministry did not throw any light upon the reasons for delay.

b) Delay due to fund constraint

No fund was available for first 6 months of the financial year 1987-88. Out of the total outlay of Rs.90 crore, only Rs.25 crore were received till December 1987. This resulted in delay of 6 months.

c) Delay in Mechanical Completion

- i) SAP- There was delay in supply of indigenous equipment by prime contractor.
- ii) MHS - There was delay in supply of indigenous equipment due to contractor's inability to make payment to the suppliers.
- iii) CPP- There was delay in supply of indigenous equipment and erection work by prime contractor.
- iv) Gypsum Pond - Delay occurred in finalising detailed drawing and due to dispute with contractor.
- v) Imported ship unloader - There was inordinate delay in placement of order.

d) Delay in Commissioning

Commissioning activity of SAP was delayed due to delay in arrival of Fact Engineering and Design Organisation (FEDO)'s commissioning team, problem in waste heat boiler and instrumentation work. Commissioning of CPP was delayed due to delay in arrival of Bharat Heavy Electrical Ltd. (BHEL)'s commissioning team and synchronisation problem. Commissioning of PAP was delayed due to delay in commissioning of SAP. Delay in commissioning of PAP and SAP resulted in extra cost of Rs.84.22 lakh (para 4.02) and Rs.134.62 lakh (para 4.03) respectively.

During discussions the Ministry admitted that there were deficiencies at planning as well as implementation stage which led to time overrun and consequent cost overrun. The Ministry further added that it appeared that PPL management approached the Government for funds in a hurry in the initial stage of the project, without taking into consideration all factors.

CHAPTER 4 : EXECUTION OF VARIOUS PLANTS/FACILITIES

In the preceding chapter over all cost overrun and time overrun in implementing the project have been discussed. The following paragraphs give a plant-wise analysis of execution of the project and highlight incidences of time and cost overrun separately for each of these plants/facilities. The analysis also covers incidences of infructuous, avoidable and wasteful expenditure incurred during the course of commissioning of each plant of the project.

4.01 Di-Ammonium Phosphate (DAP) Plant

The contract for commissioning of DAP plant was awarded to M/s. Hindustan Dorr Oliver on 9 July 1982 for Rs.27.02 crore. Extent of delay in completion of the job by the contractor is exhibited below :

	Scheduled Date of completion	Actual Date of completion	Delay in Months
Stage – I	23.01.1985	31.12.1985	11
Stage – II	03.04.1985	31.12.1985	9

The plant was actually commissioned on 26 February 1986 and commercial production started in August 1986. The main reason for this was delay in handing over of site by the Company by 8 months. This delay occurred because of rejection of previous site of the project due to:

- i) delay by State Govt. in providing approach road;
- ii) objection by Fishing Trawler owners who were using the creek as a passage to sea;
- iii) flood and cyclone in 1982, which were heaviest in the century.

The change in site was taken into account by Government while approving the cost estimate in July 1984, in which scheduled date of completion was 1 January 1986 and scheduled date of commissioning was 1 March 1986. The plant was, however, commissioned (26 February 1986) ahead of this revised schedule.

Investment of Rs.2.58 crore on modernisation scheme for NPK production has remained idle since July 1995.

Based on the agronomic study and market demand analysis, feasibility report prepared by Madras Fertilisers Limited in 1980 envisaged a product-mix of P₂O₅ (NPK) content urea free grades like DAP 18-46-0, NPK 12-32-16 and NPK 10-26-26. But NPK production was not taken up by the Company till 1993-94, reasons for which were not available on record. In February 1994 in view of expected higher contribution of NPK in comparison to DAP, the Board of Directors approved the proposal for modification in Train 'A' & 'B' of DAP plant for manufacture of NPK at an estimated cost of Rs.3.25 crore. The market demand in Eastern India was assessed to be 1 to 1.5 lakh MT in a year. The work was awarded to different contractors and was scheduled to be completed in December 1994. Against this, the scheme was completed on 11 July 1995 at a cost of Rs.2.58 crore and production started in July 1995. Production of NPK during the period from 1994-95 to 1997-98 was only 1.67 lakh MT as against 4 to 6 lakh MT envisaged.

The Ministry replied (December 1998) that the production of NPK was kept restricted in view of lower demand and unremunerative prices. However, production of NPK would be increased depending on the future subsidy level.

But the fact remains that investment of Rs.2.58 crore on modification scheme for NPK production has not borne any fruit since July 1995.

4.02 PHOSPHORIC ACID PLANT (PAP)

- Mechanical completion in June 1988 against scheduled date of June 1987
- Commissioned in October 1990
- Commercial production in June 1992

On receipt of approval from Government in December 1984 the contract for PAP was finalised with Jacob International Inc. (JII) for know how, basic design and engineering, supply of imported equipment, erection, testing and commissioning of the plant at a total cost of US \$ 6100,000 and French Franc 256,92,400 and also with M/s. Hindustan Dorr Oliver (HDO) for supply of indigenous equipment and services at Rs.16.71 crore. The plant was mechanically completed in June 1988 against the schedule date of June 1987.

Various reasons for delayed execution of the project can be summarised as follows:-

a) **Delay in floating global tender-** In accordance with provision under para 117(2) of Import Export Procedure, PPL, being a PSU was exempted from following advertisement procedure. But Director General of Trade and Development (DGTD) insisted on following the procedure inspite of Administrative Ministry's recommendation vide letter No. 181/15/84 FS II dated 17 November 1984. This resulted in delay of 6 months when PPL went for global tender in June 1985.

b) **Delay in issue of import licence -** The contract calls for DGTD clearance of all imported equipment. The Company had to submit application

for import of equipment afresh in July 1985 though the same was submitted as a part of composite proposal in September 1984, resulting in delay of 10 months. Further, issue of import licence for first lot of equipment was delayed by 163 days and second lot by 206 days. Correspondence made with DGTD in this regard was not available.

c) Delay due to change in design - Change was made in design of Gypsum Handling System and sea water cooling system due to pollution control requirement.

d) Delay in plant inside battery limit - There was delay of 12 months in basic engineering relating to different areas in the main plant inside the battery limit due to delay in placing of orders for imported equipment and change in design of cooling water system and Gypsum Handling System.

e) Delay in handing over of site - There was initial delay of about six months in starting the work due to delay in handing over of site after completion of piling work by Civil Sub-contractor. Hindustan Dorr Oliver (HDO), however, confirmed that delay in civil work did not affect the erection schedule.

Owing to delay in issue of import clearance, PPL had to pay escalation on equipment amounting to US \$ 57240 and French Franc 770,772 to Jacob International Inc. Consequential escalation of Rs.73.45 lakh was also paid to Hindustan Dorr Oliver (HDO) for indigenous equipment and services.

Though, the plant was mechanically completed in June 1988 it could be commissioned only in October 1990 due to non-completion of SAP, Material Handling System and gypsum pond (para 4.03, 4.08 & 4.09 refer). In terms of the provisions of the contract PPL was to provide raw materials, utilities and operational personnel within 365 days of mechanical completion of the plant which the Company failed to provide.

Commissioning activities started in June 1990 with the personnel deputed by both the contractors and PPL. The Company had to incur avoidable expenditure of Rs.84.22 lakh towards commissioning personnel in terms of the contract provision and mutual agreement due to non-completion of SAP and Material Handling System.

Commercial production of the plant commenced in June 1992 i.e. after 20 months from the commissioning of the plant mainly due to non-availability of Sulphuric Acid. In reply, the Management stated (23 November 1992) that it was not practicable or economical to run PAP of this capacity with purchased Sulphuric Acid.

4.03 SULPHURIC ACID PLANT (SAP)

- Mechanical completion in September 1990 against schedule date of November 1987
- Shut down during 1993-94

The contract for two streams of SAP (2 X 1000 MT per day capacity) was awarded (April 1985) to M/s. Lurgi, Germany for process, know-how, design, engineering, supply of imported equipment, erection and commissioning of the plant at fixed cost of DM 18186000 and to M/s. Fact Engineering and Design Organisation (FEDO) for indigenous equipment and services at a cost of Rs.17.06 crore. The plant was scheduled to be completed by November 1987. There was delay of about 3 years, in mechanical completion (September 1990) of the plant, the reasons for which are analysed below:-

- (1) The Company applied for import licence through the Ministry in January 1985 and the licence was received in January 1986. Owing to delay in issue of import clearance on the part of the Government, the Company had to pay escalation of Rs.90.62 lakh to the contractors on the value of equipment.
- (2) There was delay of nine months in completion of the piling due to delay in finalisation of drawings by FEDO.
- (3) The civil work was delayed for 5 months due to failure of the Company to settle the bills of the contractors in time.
- (4) There was delay of 3 months due to power interruption.
- (5) Delay in commencement of erection work of Waste Heat Boiler system by 7 months for 'A' stream (June 1988 against scheduled date of November 1987) and 1 year for 'B' stream (January 1989 against scheduled date of January 1988).

Since the contractor could not complete the work due to the above reasons within the scheduled date, the Company recovered Rs.88.14 lakh as penalty till May 1990. But at the request of the contractor the Company refunded the amount in May 1990 against a Bank Guarantee. The contractor, however, promised to pay the penalty if the same was not finally waived by PPL Board. It was, however, seen that although the PPL Board did not waive of the penalty M/s. FEDO neither paid the same nor renewed the Bank Guarantee (March 1998). As a result, Company's claim on the contractor remained unprotected.

The Ministry stated (December 1998) that the matter regarding revalidation of Bank Guarantee would be taken up suitably with M/s. FEDO and the Company by the Department.

The plant was commissioned in September 1990. The delay was attributable to:-

- (1) Problems in Waste Heat Boiler System.

(2) Limited storage space of SAP.

(3) Failure of the Company to provide raw materials and utilities in time.

In reply the Management stated that there was no delay on their part in supplying raw materials and services required for commissioning. They, however, agreed that storage limitation was their responsibility.

Owing to delay in 'start up' of the plant, the Company had to pay additional Rs.44 lakh towards cost of maintaining commissioning staff of the contractors.

The Company could not get trouble-free service since commissioning in September 1990 due to various defects in the Waste Heat Boiler, as deliberated in the following paragraph.

When plant load in stream 'A' was increased to 100 per cent on 2 March 1991, a hot spot was observed near by-pass duct of Waste Heat Boiler. Inspection revealed various deficiencies in inlet-box, by-pass duct and super heater. Again in May 1991 a hot spot was observed in the by-pass duct when stream 'B' was taken to 100 per cent load.

A high level meeting was held with M/s.FEDO and as a follow up repair work was taken up in September 1991 which was completed in January 1992. When stream 'A' was run on 100 per cent load for about five hours in March 1992, it had to be shut down due to mechanical failure in sulphur burner.

The plant was shut down since March 1993 due to leakage in boilers. Experts during site inspection pointed out design snags in the boilers. Responsibility was not fixed by the Management in this regard on the supplier of the boiler (M/s. IJT), since this was part of the turn key contract with M/s. FEDO.

The Ministry, inter alia, desired the Company to substantiate design deficiencies in the Waste Heat Boiler with proof and also added that M/s. FEDO should have penalised the vendor for non-performance of the equipment.

In this connection, following points deserve mention:-

(1) Owing to frequent failure of the existing Waste Heat Boilers, the Company decided to purchase two new Boilers at an estimated cost of Rs.5.50 crore. Accordingly, purchase order was placed on a foreign firm in October 1995 at FOB price of US \$ 1217400 (Rs.4.26 crore).

As per schedule the boilers were to be supplied by April 1996. These were received by the Company in February/March 1998 at a cost of Rs.5.58 crore. Reason for delayed supply was delay in submitting the right documents at the right time by the supplier. The Company recovered Rs.24.55 lakh (\$ 60,870) from the supplier for such delay. Major repair work of the Boilers along with

Heat Exchangers had to be undertaken and completed in May 1994 at a cost of Rs.2.66 crore . Even after repair, the performance of the boilers was erratic. (Refer para 5.02)

(2) Out of the 4 economisers of the plant, two economisers had been replaced by two small economisers at a cost of Rs.1.53 crore in February 1995/January 1996. One big economiser has been purchased in 1997-98 at a cost of Rs.2.34 crore (estimated), erection of which is underway.

(3) There was abnormal rejection of catalyst due to frequent and long shut down of the plant leading to procurement of new catalyst at Rs.2.46 crore.

(4) Working capital valuing Rs. 13.05 crore was locked up for more than 1 year due to holding of imported rock phosphate and sulphur.

(5) Due to non-availability of required quantity of Sulphuric acid from the SAP, the capacity of PAP remained unutilised to the extent of 8.68 lakh MT during the period from 1993-94 to 1997-98. This resulted in import of phosphoric acid instead of import of matching quantity of sulphur and rock phosphate resulting in outflow of foreign exchange to the extent of Rs.325.98 crore over the period.

(6) As a result of poor performance of the plant the Company had to appoint a firm in August 1997 for a diagnostic study of SAP at a fee of Rs.2.95 lakh. This indicates that the investment on repair of Boiler, change of economiser etc. did not yield the desired results. Report of the firm containing proposal for short and long term measures, was considered by the Board of Directors in its 79th Meeting held on 9 February 1998 and implementation of the short and long term measures was approved at an estimated cost of Rs.28.70 crore. Details of short term and long term measures are given in Annexure III. Discussion had been held with the standing Finance Committee of Ministry of Fertiliser on 17 August 1998 for approving and releasing funds towards revamping of one stream of SAP.

The Ministry sanctioned (June 1998) Rs.5.80 crore for revamping of SAP. Revamping of one stream of SAP is scheduled to be completed by May 1999.

4.04(A) Captive Power Plant (CPP)

The Project Report envisaged installation of two sets of 12.5 MW Turbo Generators - one was to be based on steam from SAP and other on service boiler capacity 110 Te/hr. The second set was to be a standby one to be used in the event of prolonged power cut imposed by the State Electricity Board. As against this the Company issued a Letter of Intent (LOI) (October 1984) on M/s. BHEL for supply, erection and commissioning of two Turbo Generator sets of 16 MW each and one service boiler of 110 Te/hr capacity.

The factual position of execution of the CPP is indicated below :-

Equipment	Scheduled date of installation	Actual date of completion	Delay (in months)
Boiler	December 1986	April 1989	27
1 st T.G.	December 1986	August 1989	31
2 nd T.G.	March 1987	December 1990	44

Though LOI for the work was issued to M/s. BHEL in October 1984, site for erection was progressively handed over between March 1986 to March 1987. Reasons for delay in handing over site were not on record.

Even if CPP erection had started on 1 April 1987, that is the final date of handing over of site, it should have been completed by December 1987 as per erection schedule of BHEL. Thus, delay of about 20 months and 36 months for installation of first T.G and Second T.G. respectively is attributable to BHEL, out of which delay of one year (12 months) was admitted by BHEL.

Delay in civil works was caused due to a combination of reasons e.g., delay in completion of piling work, heavy rain, paucity of fund, shortage of cement and steel and also additional time required for increase in quantity of work.

Civil work was awarded to M/s. Simplex Concrete Piles (I) Private Limited. Details are given below :-

(Rs. in lakh)

Contract value	Actual expenditure	Increase in Cost	Date of completion	
			Scheduled	Actual
95.58	148.28	52.70 (55%)	18.01.1987	30.09.1987

Increase in cost of construction was due to change in scope of work, design, drawings and specifications. This is indicative of the fact that the work was awarded without proper assessment of the nature and scope of the work.

4.04(B) Demineralisation Water Plant (DMP)

The contract for supply, erection, testing and commissioning of Demineralisation Water Plant was awarded (October 1985) to M/s. Watco Technics Pvt. Ltd. Bombay at a cost of Rs.2.77 crore. The plant was scheduled to be completed by August 1986. There was abnormal delay in mechanical completion of the plant. The dates of completion, without automation which was a part of the contract, were as follows:-

1st stream	23.5.1988
2nd stream	10.6.1990
3rd stream	30.9.1991

The contractor, left the site because of several problems faced at their end leaving the job incomplete in respect of automation though out of total contract value of Rs.2.77 crore the Company had already paid an amount of Rs.2.64 crore. Even though the plant was not handed over by the contractor the same was being operated manually at rated capacity. The Company, however, closed the contract unilaterally after recovering a sum of Rs.31.62 lakh towards penalty (Rs.27.68 lakh) at the maximum rate (10 per cent) of contract value and further deduction (Rs.3.94 lakh) for non-execution of some items.

In addition, the civil work of the D.M.Plant was awarded to M/s. Simplex Concrete Piles (I) Pvt. Ltd. The details of which are given below :-

Scheduled date of completion	14.12.1986
Actual date of completion	30.09.1987
Delay in completion	9 months
Contract Value	Rs.62.20 lakh
Actual expenditure	Rs.1.73 crore
Percentage of increase in cost	179 per cent

The delay in completion and increase in cost were mainly due to enhancement of scope of work and extra work in respect of earth, structural and acid proof brick lining work.

4.05 Mechanical Ship Unloader

Project Report provided installation of a mechanical ship unloader to facilitate unloading of imported rock phosphate and sulphur. Although, proposal for purchase of ship unloader was approved by the Board of Directors in October 1984, there had been inordinate delay in selection of type of ship unloader as well as the supplier from whom the unloader was to be procured as indicated below :-

In July 1986, the Company proposed to import one grab type ship unloader, though it was not recommended by the Consultant (Development Consultant Private Limited; DCPL) of the Company. The Government, however, instructed (March 1987) the Company to procure a grab type ship unloader from indigenous supplier (Jessop & Company)

In July 1987, the Board decided to procure a bucket elevator type ship unloader as per advice of Engineers India Limited (EIL), another consultant appointed by the Company. Accordingly, tenders were invited and indigenous offers were found technically suitable, particularly the offer of M/s. Elecon Engineering Company Limited (Negotiated price Rs.7.66 crore).

- Avoidable extra expenditure of Rs.8.82 crore on procurement
- Grossly underutilised
- Unsuitable design

Based on study of technical team which visited various installation sites abroad (July 1988 to September 1988) and recommendation of the consultant (DCPL), PPL Board changed the decision and awarded the contract to M/s. Buhler Brothers of Switzerland in January 1989 for supply of a chain type of ship unloader at a value of 72.50 lakh Swiss franc (Rs.7.09 crore). The contract was, approved by Government in July 1990.

The Government advised (May 1989) the Company to readvertise on the ground that the indigenous offers for bucket elevator type were already found technically suitable.

The Company approached the Ministry in July 1989 to accept the procurement of a chain type ship unloader on the ground that it was technically superior and ideally suited to PPL's requirement compared to a bucket elevator type ship unloader. In October 1990, the Government granted import clearance for procurement of chain type ship unloader. The contract was amended with revised value of 80.69 lakh Swiss franc (Rs.10.91 crore) and delivery schedule of 18 months. The ship unloader was delivered in January 1992 and commissioned in April 1992.

Thus, owing to lack of a firm and timely decision, there was avoidable delay in placement of order of the ship unloader which resulted in (1) increase in contract value by 8.19 lakh Swiss franc (Rs.3.82 crore at the exchange rate of February 1989), (2) increased liability by about Rs.5 crore due to variation in exchange rate. As on 31 March 1992 the liability of the Company towards repayment of loan taken from the Swiss supplier's credit stood at Rs.15.92 crore against Rs.7.09 crore in February 1989 and (3) The Company had to procure a temporary ship unloader at a cost of Rs.65.43 lakh for unloading raw materials as a contingency measure. This unloader was subsequently dismantled.

The contention of the Company that the ship unloader attracts concessional customs duty like other imported equipment for the project had not been accepted by the customs authorities and they had claimed customs duty of Rs.10.27 crore on ship unloader. The Company had preferred appeal to the 'Committee of Secretaries' and also in Central Excise and Gold Appellate Tribunal (CEGAT) against the order of Collector Customs (Appeals). However, on 22 March 1996 the Committee of Secretaries advised the Company to be guided by the order of CEGAT. The matter was still pending (December 1998).

The ship unloader remained unutilised most of the time during 1992-93 and 1993-94 due to prolonged shut down of both SAP and PAP. In 1994-95 the machine could be put to use for unloading 3 lakh MT of rock phosphate and sulphur against capacity of about 1 million MT. During 1994-95 various problems started developing in the hydraulic system, chains of the main marine leg, other chains and casing leading to an unusually long time in unloading the

shipment and consequential heavy demurrage charges (4.51 lakh US \$). A committee set up by the Managing Director recommended to buy a grab type shore crane for additional unloading facility particularly for sulphur and MOP. The Board approved the proposal in August 1995 at an estimated cost of Rs.4.73 crore which was revised to Rs.8.60 crore.(August 1997). However, the revised cost estimate of the same was not approved by the Board.

Problems faced in the chains, hydraulic system and other instrumentation work of the existing ship unloader are attributed to (i) corrosion of the pins and links of the chain by acid leaching from the unloaded sulphur and (ii) lack of sufficient experience of operating and maintenance staff of the Company. During discussion management admitted that procurement of chain type unloader was a wrong decision as such an unloader was good for rock phosphate and fertilisers but not for corrosive materials like sulphur. It is, therefore, apparent that the investment of Rs.15.92 crore (31 March 1992) on the ship unloader did not yield the desired results.

4.06 Ammonia Storage Tanks

Additional Storage Capacity created at a cost of Rs.24.67 crore remained idle

For the purpose of rated production of DAP, monthly requirement of Ammonia was assessed as 15,000 to 16,000 MT. Keeping stock of Ammonia equivalent to two months' consumption, production at the DAP plant could be maintained with the availability of 3 Ammonia tanks with capacity of 10,000 MT each. The Company, however, decided to construct two additional tanks (10,000 MT each) in order to avail of the freight/price advantage on import of 35,000 MT of Ammonia in a single ship. The work was completed at a total cost of Rs.24.67 crore.

In this connection it deserves mention that during the four years (1990-91 to 1993-94), the Company could import 35,000 MT of Ammonia in a single ship only on two occasions (January 1994 and March 1994). The capacity of the storage tanks remained unutilised most of the time. Loss in freight due to smaller consignments as assessed by the Management (1995) was Rs.2 crore to Rs.2.40 crore per annum.

The Ministry advised (April 1994) that capacity of the ammonia storage tanks should be gainfully utilised. The Board approved in principle (December 1994) hiring out one tank for setting up LPG terminal in order to derive additional income. Negotiations were held with the parties selected on open tender basis. This, however, did not materialise as the Board subsequently decided (May 1995) not to lease out any of the storage tanks on the following grounds :-

- (i) PPL would lose its flexibility of operation specially in the event of shortage of ammonia in the international market.

- (ii) One of the tanks should be kept as a stand-by to meet any emergency arising on account of leakage in other tanks.

The surplus storage capacity of the ammonia tanks remained unutilised (December 1998).

4.07 Fuel Storage and Handling Facility

Infructuous expenditure of Rs.1.45 crore on creation of facility for LSHS storage

The original estimate for the work was Rs.9.50 lakh. There had been radical change in the estimated cost and it increased to Rs.1.75 crore in 1984. The increase in cost was due to change in Company's plan to use Low Sulphur Heavy Stock (LSHS) in place of furnace oil in view of Government's directive to fuel oil consumers to switch over to LSHS as fuel. This necessitated additional facilities as follows :-

- (1) Change in capacity of storage from 600 KL to 3000 KL as LSHS was to be supplied in special wagons in full rake.
- (2) Fresh induction of rail wagon unloading facility and extension of line from unloading point to storage tanks with construction of additional length (2.9 KM) of railway siding.

The major work order was awarded to M/s. Techno Electric and Engineering Company Ltd. in September 1984/March 1986. The present status of the work is indicated below :-

Item of work	Date of work order	Schedule date of completion	Actual date of completion
1. PART-A Fuel Oil Storage and handling system for DAP plant	September 1984	January 1985	February 1986
PART-B Facility for wagon unloading system	September 1984	January 1985	The contractor stopped the work at the end of 1987.
2. Fuel oil handling system for CPP	March 1986	November 1986	The contractor stopped the work at the end of 1987.

The contractor stopped the work (item 1 B and 2 above) at the end of 1987 due to non-settlement of claims of extra supplies etc. No attempt had been made by the Company till October 1994 to get the job completed despite the fact that major portion of the work of item (2) was executed by the contractor before leaving the job.

For item 1A the contractor was paid Rs.29.44 lakh. The expenditure incurred for the incomplete work (Item 1B and 2) upto March 1994 was Rs.2.06 crore including interest and other common expenditure of Rs.85.08 lakh. Besides, the Company incurred an expenditure of Rs.1.80 crore on construction of 2.9 Km railway siding. Thus, the Company had been suffering loss of interest on blocking of funds to the tune of Rs.3.86 crore for the incomplete work for the a prolonged period.

Since 1990-91 the Oil Companies were not accepting any requisition for supply of LSHS from the new consumers.

Subsequently, LSHS Storage and Handling System shown as Capital Work-in-Progress for Rs.2.06 crore was dismantled (1995-96) and serviceable material at book value of Rs.50.87 lakh and unserviceable materials at 50 per cent of book value of Rs.10.03 lakh was taken into Inventory during the year 1996-97. Thus, the Company suffered loss of Rs.1.45 crore in dismantling the LSHS Storage and Handling System.

Thus, it is evident that the decision to create storage facility for LSHS without taking a firm commitment from the Oil Companies/Ministry for the supply of the same was not prudent and led to infructuous expenditure of Rs.1.45 crore.

4.08 Material Handling System

Injudicious expenditure of Rs.4.66 crore on creation of additional capacity when the existing capacity remained grossly underutilised

The contract for design, supply erection and commissioning of Material Handling System (MHS) for imported sulphur and rock phosphate was awarded to Aluminium Industries Limited (ALLIND) in July 1986 at a total value of Rs.7.97 crore (subsequently revised to Rs.7.44 crore due to reduction in scope of work). The contract stipulated that MHS should be completed by December 1987.

The work could not be completed within the scheduled time and was commissioned only in November 1990. The reasons for delay of about three years were as follows :-

- (1) There was delay by PPL in handing over the site to civil contractor and consequential delay in handing over the fronts for MHS. The last front was made available to the contractor only in February 1989 i.e. more than one year after scheduled completion date.
- (2) Initial delay in payment of bills by PPL (October 1986 to March 1987).
- (3) Delay in preparation of layout/other engineering drawing due to change in scope by PPL.
- (4) Delay in obtaining import licence.

In a meeting of the Company, consultant and the contractor (April 1991) it was decided to extend the completion schedule to June 1989 and PPL was to pay escalation on erection and variance in Joint Pricing Committee (JPC) price/statutory levies upto that date. The escalation bill submitted by contractor amounting to Rs.1.18 crore was yet (March 1998) to be settled. The MHS remained almost unutilised till 1993-94 and under-utilised thereafter due to poor performance of SAP and PAP, as shown below :-

Year	Percentage utilisation
1994-95	35.47
1995-96	38.26
1996-97	14.37
1997-98	29.78

Despite gross under utilisation the existing MHS was proposed to be extended to utilise surplus capacity of captive berth. Scope of extension included construction of silo of about 40000 MT storage, conveyor, transfer point, electrical work etc. at an estimated cost of Rs.5 crore. It was envisaged that the Company would be able to handle about 3 lakh MT of imported Fertilizers through this system and would be able to save Rs.300 PMT i.e. Rs.9 crore per annum in shape of reduction in port handling charges and freight. The proposal was approved in January 1994.

Additional MHS was commissioned in December 1995 at a cost of Rs.4.66 crore. However, approval of the drawings of the job was received from the Inspector of Factories and Boilers(HQ) only in January 1998.

Utilisation of additional MHS till 31 March 1998 is tabulated below :-

Year	Installed capacity (MT)	Actual Cargo handled (MT)	Percentage utilisation	Nature of Cargo
1995-96 (3 months)	75,000	24382	32.50	Urea
1996-97	3,00,000	25700	8.5	MOP
1997-98	3,00,000	67252	22.4	MOP

Due to poor utilisation the very purpose of construction of additional MHS at a cost of Rs.4.66 crore had been defeated.

4.09 Disposal of Gypsum

For disposal of waste of Phosphoric Acid Plant, the consultant of the Company recommended (August 1986) construction of a Gypsum disposal system. The work order was issued in February 1987 to a contractor at a total cost of Rs.2.06 crore with scheduled date of completion as January 1988. There had been revision of scheduled date of completion from time to time as mentioned below :-

- | | |
|--------------------------------------|--|
| a) First extension upto June 1988 | Due to delay in finalisation of detailed drawing, site clearance etc. |
| b) Second extension upto June 1990 | The Civil contractor left the job demanding increase in rates after completing 50 per cent of the job and took up the matter with Arbitrator. New contractor (M/s. Spectra Engineering Corp.) was appointed in June 1989 with scheduled date of completion as June 1990. |
| c) Third extension upto January 1992 | Due to monsoon and also increase in quantum of work in respect of clay liner. |

The entire work was completed in June 1993.

Against the estimated cost of Rs.3.98 crore the Company incurred an expenditure of Rs.4.35 crore (Rs.1.80 crore to first contractor against 50 per cent of the work and Rs.2.55 crore to the second contractor for the remaining portion of work.)

Apart from the excess expenditure of Rs.37.18 lakh over and above the estimate as indicated above, the Company has the liability of Rs.30.95 lakh being increase in rates along with interest @ 13 per cent according to the award given by the Arbitrator.

In this connection it deserves mention that the use of phospho-gypsum as a substitute for mineral gypsum has been experimented throughout the world and it is reported that this by-product can be used as building material or cement retarder of international standard after purifying it through a calcination plant. This also solves the problem of disposal and pollution from the waste. During discussion, the Management stated, that in order to explore the possibility of using gypsum in cement plants, it was in touch with a party and a deal was likely to be finalised soon.

During the period from 1992-93 to 1997-98, 41623 MT of Gypsum valuing Rs.78.22 lakh was disposed of.

4.10 Automatic Wagon/Truck Loader System

Automatic Wagon/Truck Loader System procured at a cost of Rs.1.25 crore remained idle while the Company paid Rs.3.29 crore towards demurrage charges

In July 1985, the Company awarded a work order on M/S Elecon Engineering Company Limited which included, inter alia, supply, erection and commissioning of an Automatic Wagon/Truck loader in order to reduce the manual labour cost and also period of loading of DAP to save demurrage charges. The work was scheduled to be completed by November 1985. The site for erection of rail for the loader was, however, made available to the contractor only in April 1986 i.e. after commissioning of DAP plant. The first consignment of equipment reached the site in January 1987 and the final supply was completed in April 1987. No liquidated damages were recovered from M/s. Elecon for delay in supply of the machine. The automatic bag loading machine had not been commissioned as yet (March 1998) and was lying in store due to resistance from the labour force of contractors already engaged (February 1986) for manual handling of DAP.

Non-commissioning of the loader for a prolonged period had resulted in :-

- (i) Blocking up of capital of Rs.1.25 crore for 11 years being the value of the loader.
- (ii) Payment of demurrage charges of Rs.3.29 crore up to March 1998 to Railways on account of excess loading time.

It is observed in audit that the labour problem perhaps could have been avoided by the Management by commissioning the loader within the scheduled time (November 1985).

The Management admitted that the automatic truck loader was lying unutilised since procurement due to resistance from contract labourers. It was further informed that following an agreement with the contract labourers, the automatic loader is going to be installed after its repairs at an estimated cost of Rs.15 lakh.

The Ministry stated (December 1998) that the Company would be advised to accelerate the pace of mechanisation.

CHAPTER 5 : PRODUCTION PERFORMANCE

5.01 Di-Ammonium Phosphate (DAP) Plant

- Loss even at 110 per cent capacity utilisation of DAP plant
- Meets less than 15 per cent of all India consumption of DAP

Commercial production of DAP started in August 1986 with installed capacity of 7.20 lakh MT. The plant comprised of four streams. Annual capacity of the plant was worked out on the basis of design capacity of 30 MT per hour per stream and total 6000 working hours in a year.

This capacity was worked out on the basis of use of Urea, Filler etc. Production of DAP continued with the use of Urea and Filler till June 1992. Subsequently, after commissioning of SAP directly in pre-neutraliser, the problem of plant operation was smoothened resulting in greater availability of equipment for continuous production. As a result of this, total running hours of the plant increased by about 10 per cent resulting in enhancement of installed capacity of the plant to 7.92 lakh MT per annum. The Company is, however, continuing to show the installed capacity of the plant at 7.20 lakh MT.

Against the Country-wide consumption of DAP for the period from 1990-91 to 1997-98, production of the Company is exhibited below:

Year	All India consumption of DAP (In Lakh MT)	Annual production of the Company excluding equivalent NPK (In Lakh MT)	Percentage of market share
1990-91	42.48	3.29	7.74
1991-92	45.18	6.41	14.19
1992-93	40.52	5.23	12.91
1993-94	34.80	3.85	11.06
1994-95	35.86	7.03	19.60
1995-96	34.51	5.73	16.60
1996-97	36.24	4.20	11.59
1997-98	53.92	7.76	14.39

Thus, due to low capacity utilisation in most of the years, the very objective of establishing the Company (with annual capacity of 7.20 lakh tonnes) to meet the progressive increase in demand of phosphatic Fertilizers in the country, remained frustrated.

Capacity utilisation of the plant in comparison with both the installed capacity and enhanced capacity is tabulated below :

(Lakh/MT)

Year	Actual Production		Equivalent DAP Production (including nutrient content of NPK @ 69 Per cent)	Percentage of capacity utilisation with respect to	
	DAP	NPK		7.20 lakh MT	7.92 lakh MT (w.e.f 94-95)
1989-90	2.47	-	2.47	34.31	-
1990-91	3.29	-	3.29	45.69	-
1991-92	6.41	-	6.41	89.03	-
1992-93	5.23	-	5.23	72.64	-
1993-94	3.85	-	3.85	53.47	-
1994-95	7.03	0.02	7.04	97.78	88.89
1995-96	5.73	0.68	6.20	86.11	78.28
1996-97	4.20	0.73	4.70	65.28	59.34
1997-98	7.76	0.24	7.93	110.14	100.13

A detailed scrutiny of reasons for low capacity utilisation revealed that non-availability of imported Phosphoric Acid was the single major constraint for capacity utilisation. In fact during the period from 1989-90 to 1997-98, 10,728 hours were lost on account of this factor resulting in loss of production to the extent of 3.22 lakh MT (@ 30 MT per hour per train) valuing Rs.189.63 crore (on the basis of average realisable value). Non-availability of another input material namely Ammonia, caused loss of 3168 working hours during the same period with consequential loss of production of 0.95 lakh MT valuing Rs.51.19 crore (Annexure-IV).

It is observed from the above table that capacity utilisation was significantly low in the years 1989-90, 1990-91, 1993-94 and 1996-97. While in the first two years raw material limitation played the most significant role for low production, in 1993-94 it was the market constraint. Records revealed that plants were totally stopped from April to July 1993 due to marketing problem after price decontrol and withdrawal of subsidy in Phosphatic Fertilizers. Main reasons for low production during 1996-97 are summarised below: -

- a) Cut-down of production during April 1996 to July 1996 due to poor sale, leading to inventory build up.
- b) Contract labour problem in DAP Plant during July 1996 and in Bagging Plant during September to November 1996.
- c) Low capacity utilisation of SAP/PAP.

In fact, during the years 1992-93 to 1996-97, 8784 hours were lost mainly due to lack of demand in the market leading to loss of production to the extent of 2.64 lakh MT.

Other reasons for loss of production were labour unrest, wagon shortage, Silo limitation, shortage in space in Bagging Plant etc.

Due to poor performance of PAP, DAP Plant was mostly dependent on imported materials. Due to change in the exchange rate of Rupee to US \$, all the imported materials became costlier. As projected by the Company in April 1998, landed cost of imported Phosphoric Acid compared adversely with the variable cost of captive acid production by Rs.3938/- per MT. This has given rise to a peculiar phenomenon - when capacity utilisation of DAP plant increases, more of imported acid is consumed and as a consequence, per unit material cost increases. Because of this phenomenon even at 110 per cent capacity utilisation of the DAP the Company incurred heavy losses during 1997-98. *Thus, due to extreme dependence on imported raw material which is subject to vagaries of international price and exchange rate fluctuation, the Company has reached an ironic stage where the more it produces the more it stands to loose.*

To combat the situation the Company has fixed the target of production at 100 per cent for 1998-99, though 110 per cent capacity utilisation was achieved in 1997-98.

NPK modification scheme was undertaken by the Company with the expectation that NPK would give higher contribution than DAP. Commercial production of NPK started in July 1995. While justifying the project of NPK production, it was mentioned before the Board of Directors that with a sale of 1 lakh MT of NPK per year, capital cost incurred on the project would be recovered in about a year. It is, however, seen that only 1.55 lakh MT of NPK had been sold during the last four years ending 31 March 1998 against the projected sale of 4 lakh MT.

5.02 SULPHURIC ACID PLANT (SAP)

- No production during 1993-94
- Capacity utilisation ranged from 20.91 per cent to 45.76 per cent during 1994-98

Commercial production of the plant started on 1 June 1992. Immediately thereafter, the plant started experiencing technical difficulties as a result of which only 0.92 lakh MT could be produced in 1992-93 (10 months) and there was no production during the whole year 1993-94. Reasons are given below:-

In stream 'A', there was no production for about 2 months (June 1992 to August 1992) due to various technical defects. In stream 'B', there was no production for 37 days (24 July to 30 July 1992 and September 1992) due to mechanical defects and for 30 days (June 1992) due to major maintenance.

In 1993-94, the plant was shut down throughout the year due to serious problems with respect to leakage in the waste heat boiler, the repair work of which could not be completed during the year.

Capacity utilisation of the plant during the period from 1994-95 to 1997-98 is exhibited below: -

(Figure in lakh/MT)

	1994-95	1995-96	1996-97	1997-98
Capacity per annum	6.60	6.60	6.60	6.60
Actual Production	2.57	1.80	1.38	3.02
Percentage of utilisation	38.94	27.27	20.91	45.76

It would be seen from the above that performance of the plant remained poor even after major repair works undertaken in 1994-95. The main problems in SAP were: -

- (i) Failure of refractories in the inlet gas box of the Waste Heat Boiler.
- (ii) Failure of refractory in Super Heater.
- (iii) Frequent leakage in Waste Heat Boiler.
- (iv) Failure of refractory in Absorption Tower.
- (v) Leakage in the Economiser and Heat Exchanger.
- (vi) Leakage in double duct.
- (vii) Consequential damages of catalyst due to frequent leakage in heat recovery system.
- (viii) Excessive corrosion due to frequent shutdown.
- (ix) Frequent grid power failure.

Due to above problems the plant could not run on a sustained basis. Interrupted running of the plant had aggravated the problem of corrosion. Frequent shut down of the plant was on account of preventive maintenance due to frequent breakdown.

Remedial measures had been taken for replacement of Waste Heat Boiler, Economiser, Heat Exchanger and repair of the other equipment etc. Some steps had already been implemented fully and some are yet (December 1998) to be implemented fully (vide para-4.03). The result of such actions would be available in subsequent year i.e., 1998-99 onwards. During discussion the Management admitted that SAP had acted as a major bottleneck in the past years. The Management also accepted the fact that frequent breakdown of SAP was attributable to inherent structural defects for which no action could be taken against the contractor as the installation of the plant was inordinately delayed and by the time operational problems came to light the warranty period of the plant was already over. The Management has realised that SAP revamping is long overdue and has prepared an estimate of Rs.28.70 crore for the same.

5.03 Phosphoric Acid Plant(PAP)

The following table gives the actual production of phosphoric acid during the period from 1992-93 to 1997-98 as against the installed capacity:

Commercial Run

(Figures in lakh MT)

	1992-93 (June 92 to March 1993)	1993-94	1994-95	1995-96	1996-97	1997-98
Capacity per annum	1.87	2.25	2.25	2.25	2.25	2.25
Actual production	0.27	-	0.78	0.52	0.37	0.90
Achievement (%)	14	-	34.67	23.11	16.44	40.00

- No production during 1993-94
- Capacity utilisation ranged from 16.44 per cent to 40 per cent during 1994-98

Major maintenance and shortage of Sulphuric Acid were main reasons of loss of production. Sulphuric Acid is the main input for phosphoric acid production. As SAP was closed, no production of phosphoric Acid could be achieved by the Company during 1993-94. During 1994-95 and 1995-96 the production of phosphoric acid was unsatisfactory due to non-availability of adequate sulphuric acid. The same constraint persisted during 1996-97 and 1997-98 as well.

Phosphoric Acid manufacturing facility set up in phase - II included concentration facility in two streams in order to concentrate 29 per cent P₂O₅ acid to 52 per cent P₂O₅. It was envisaged to concentrate 90 thousand Tonne per annum (TPA) out of 2.25 lakh TPA produced in main plant and the balance 1.35 lakh TPA would be used directly by blending with imported phosphoric acid. Although the production of phosphoric acid was far below the existing capacity, the Board of Directors of the Company approved (July 1994) installation of one additional concentration unit at an estimated cost of Rs.10.45 crore. The Board, however, deferred the procurement of 3rd concentration unit in July 1997 considering under utilisation of the existing two units. Despite the decision of the Board, one Hot well and Cold well pump for the proposed new unit was procured along with spare parts in September 1995 at a cost of Rs.99.45 lakh. In connection with this deal, the following points deserve mention :-

- (i) Order was awarded on a single tender basis for the pumps on M/s. Hazleton Pumps Inc. USA in February 1995 based on verbal commitment made by the Managing Director during his visit to USA for attending a seminar.
- (ii) No committee was constituted to evaluate the technical as well as commercial bids submitted by M/s. Hazelton.

The Management replied that as earlier imported pumps supplied by Hazleton had given proven service under similar service conditions in the PAP, action was taken to procure pumps from M/s. Hazleton, on propriety basis instead of going for another trial. The Management's contention is not tenable as in placing order on Hazleton without floating any tender, the Management had lost the opportunity of getting the price advantage in the global market, apart from violating the due procedure for procurement of imported equipment.

5.04 It is observed that even at 100 per cent capacity utilisation of both SAP and PAP under ideal conditions, PAP would be able to meet only about 67.16 per cent requirement of the DAP plant. Thus, the DAP plant would continue to depend on imported phosphoric acid partially, apart from 100 per cent dependence on imported ammonia rendering it vulnerable to foreign exchange related risks.

During discussions, the Ministry stated (December 1998) that all DAP units were dependent on import of raw materials or intermediaries as the country was not endowed with the natural resources which went into the production of DAP.

CHAPTER 6 : SALES PERFORMANCE AND CREDIT CONTROL

6.01 Marketing set up

All the Regional offices incurred loss during 1997-98

The Company sells its product through Marketing Division located at New Delhi.

Under Marketing Division there are nine Regional Offices located at the following places to market its product in the country :-

(a) Hyderabad, (b) Patna, (c) Chandigarh, (d) Bhopal, (e) Bombay, (f) Bhubaneswar, (g) Jaipur, (h) Lucknow and (i) Calcutta.

Besides, the Company has appointed private dealers.

The following table indicates the profitability in respect of the Regional Sales Offices during 1997-98:

Sl.No	Name of Region	Quantity sold (MT)	Cost of Sales (Rs./MT)	Average Selling Price (including subsidy) (Rs./MT)	Net Profit/(Loss) (Rs/MT)
1.	Andhra Pradesh	27211	12185	11675	(510)
2.	Bihar	33699	11918	11609	(309)
3.	Haryana	56519	12029	11745	(284)
4.	Madhya Pradesh	138189	11956	11690	(266)
5.	Maharashtra	85150	12021	11686	(335)
6.	Orissa	40540	11783	11750	(33)
7.	Punjab and J&K	77216	12046	11739	(307)
8.	Rajasthan	13525	12387	11545	(842)
9.	Uttar Pradesh	173192	11784	11727	(57)
10.	West Bengal	70423	11724	11720	(4)
	Total/Average	715664	11932	11691	(241)

*Note :- 1. Interest and Head Office expenses not allocated to cost of sales.
2. Sales of items other than DAP being seasonal, not considered.*

6.02 Pricing Policy

- Price of DAP denotified w.e.f August 1992
- Sharp decline in sales following withdrawal of subsidy
- Significant increase in loss as percentage of average realisation

Prior to August 1992, (before decontrol) price of DAP fertiliser was fixed by the Ministry of Agriculture, Government of India from time to time. This price was uniform all over India and all Fertiliser Companies had to sell at this notified price. Central Government also used to allocate the quantity of fertiliser to be sold by each company in each state.

In August 1992, the Government denotified Phosphatic and Potassic Fertilizers. After denotification, sale price was fixed by Company based on recommendation of the Regional Marketing Offices. The price was not uniform and varied from state to state.

Before denotification selling price was lower as the manufacturing company was getting subsidy on price and freight from the Government. As these subsidies were withdrawn, the sale price of DAP increased abruptly resulting in decrease of sale. To boost up the use of DAP fertiliser, Government announced subsidy of Rs.1000 per MT of DAP to the consuming farmers with effect from 1 October 1992. This subsidy was enhanced to Rs.3000 per MT of DAP with effect from 6 July 1996. Along with this announcement of subsidy Central Government instructed all State Governments to fix up the selling price of DAP (for Khariff season and Rabi season separately) after obtaining cost data and further negotiation with the manufacturing companies while keeping in view interest of the farmers. Consumers pay the price of DAP to the Company after deducting the allowable subsidy. Company recovers the subsidy from the Central Government after certification of sales by the Director of Agriculture and Food Production of respective State Governments. After decontrol Government had withdrawn the system of allocation of quantity of Fertilizers to be sold in each state by each company. There was no sale of DAP for 3/4 months after decontrol. Subsequently, the Government allowed subsidy of Rs.1000/- per MT with effect from 1 October 1992, Rs.3000 per MT with effect from 1 July 1996, Rs.3750/- per MT with effect from 1 April 1997 and Rs.3500 with effect from 1 October 1997 as subsidy for the quantity of DAP sold to consumers through State Governments. In December 1998 the subsidy on indigenously produced DAP was raised to Rs. 4400 PMT while the subsidy on imported DAP was fixed at Rs. 3400 PMT.

The average realisation on sale of DAP vis-à-vis cost of sales after decontrol is indicated below :-

(Rs. per MT)					
Year	Average realisation	Cost of Sales	Loss	Net Loss after considering subsidy	Percentage of Net loss to average realisation
1993-94	6813	9660	2847	1847	27.10
1994-95	7640	8896	1254	254	3.32
1995-96	9146	11019	1873	873	9.55
1996-97	8184	12607	4423	1423	17.39
1997-98	8000	12789	4789	1182	14.78

It would be evident from the above table that the Company continued to suffer loss on sale of DAP after decontrol even after availing of special subsidy allowed by the Government. During the Audit Board Meeting the Ministry explained that the scheme of retention price was introduced in 1979 and as DAP was considered a significant fertilizer it was brought under the ambit of this scheme. Subsequently, in order to reduce the burden of subsidy on the national exchequer and to make the companies more cost conscious phosphorous and potash based fertilizers were taken out of the purview of retention price. This led to a sharp decline in the use of such fertilizers. In order to rectify the imbalance in the consumption pattern of phosphorous and potash based fertilizers as against urea based fertilizers, monetary assistance for such fertilizers was introduced. The Ministry admitted that there was a strong case for increase in the price of urea which would not only go a long way in rectifying the imbalance but would also reduce the burden on the exchequer.

During the Audit Board Meeting (16 December 1998) the Ministry informed that the Government had recently entrusted the job of fixing the price of DAP to the Bureau of Industrial Cost & Pricing (BICP) on the basis of cost of production taking into consideration, inter alia, fluctuation in prices of imported raw material.

It is evident from the above that even after decontrol, Company is not in a position to fix up selling price independently based on factors like cost of sale and margin vis-à-vis market conditions. It is also clear that the present pricing policy of the Government is affecting the economic viability of the Companies like PPL on the one hand and creating imbalance in the use of different kinds of fertilizers on the other hand. When it was pointed out by audit during the Audit Board Meeting that the present pricing policy was likely to lead to closure of DAP producing plants like PPL the Ministry responded by saying that the pricing policy of the Government was unlikely to change and that all such units including PPL would have to strengthen their management to survive. It was further stated that retention pricing would not be re-introduced and if the need

arose units unable to face the market would be referred to the Disinvestment Board.

6.03 Sales Activities

Sales activities of the Company may be categorised as follows :-

- 1) Sale of DAP and NPK fertiliser produced by the Company.
- 2) Sale of imported DAP Fertilizers.
- 3) Sale of fertiliser products by purchasing from outside sources :- a) Urea, (b) Calcium Ammonium Nitrate, (c) Muriate of Potash, and (d) NPK. (Refer Annexure V)

Sale of DAP fertiliser produced by the Company and sale of imported DAP fertiliser during the years 1989-90 to 1997-98 were as follows :-

Year	Sale of DAP produced by the Company (MT)	Sale of imported DAP (MT)	Total Sale of DAP (MT)	Budgeted (Manufactured & imported) (MT)
1989-90	206103.94	73056.30	279160.24	NA
1990-91	403051.93	136823.66	539875.59	NA
1991-92	579414.87	445638.88	1025053.75	NA
1992-93	484340.55	231023.26	715363.81	NA
1993-94	362092.00	72424.00	434516.00	430000.00
1994-95	628098.00	4417.00	632515.00	725000.00
1995-96	549593.00	195.00	549788.00	700000.00
1996-97	574021.00	1.00	574022.00	600000.00
1997-98	715590.00	107861.00	823451.00	740000.00

It would be evident from the above table that :-

- (i) In the year 1989-90, 1990-91, 1993-94, 1995-96 and 1996-97 quantity sold by the Company was low. There was large shortfall in sales as compared to budgeted sales in 1994-95 and 1995-96.
- (ii) The Company was selling imported DAP whereas the capacity of the plant remained under-utilised to a considerable extent during 1989-90 to 1993-94. (Para 5.01 refers).

In this connection, it was stated by the Ministry that during 1989-90 to 1992-93, the Government of India imported DAP and quantity was allotted to the Company for sale and the Company had no choice in the matter.

After decontrol of Phosphatic Fertilisers in August 1992, the Company imported 52669 MT of DAP directly through global tender for the first time in 1993-94. Thereafter, 112801 MT had been imported in 1997-98 also through global tender out of which 109485 MT had been sold during the year at a loss of Rs.1.48 crore against projected profit of Rs.300 per MT.

The Ministry put forward following reasons for losses incurred on account of imported DAP in 1997-98.

- i) Heavy foreign exchange fluctuation due to sharp fall in rupee value since October 1997.
- ii) Cut in subsidy by Rs.250 per MT effected by Government with effect from 1 October 1997.

The working results of import activities are shown below:-

(Rs. in Lakh)

Year	Profit/(Loss) on sale of imported material
1994-95	901.19
1995-96	292.04
1996-97	17.82
1997-98	(656.07)

6.04 Trading of NPK

The comparative position of purchases and sales and closing stock of imported NPK during the years 1992-93 to 1997-98 is as follows :-

	Opening Stock (MT)	Purchase (MT)	Sales (MT)	Closing Stock (MT)
1992-93	-	50398	18698	31498
1993-94	31498	-	28378	2883
1994-95	2883	-	2196	679
1995-96	679	-	94	577
1996-97	577	-	5	572
1997-98	572	-	-	572

The following observations are made in this connection:-

The Company purchased a quantity of 50398 MT in the year 1992-93 but could not sell the full quantity till the end of 1997-98. At the end of 1997-98 the Company was holding 572 MT of NPK after adjustment of shortage of 455 MT. This attracted high inventory carrying cost.

In the changed circumstances arising out of decontrol of Phosphatic and Potassic Fertilizers, it was not possible to liquidate the stock of NPK and in turn PPL had to incur a loss of Rs.9.59 crore (approx.). The Company applied to the Government for reimbursement, which had not been received by the Company. In reply, the Ministry stated (December 1998) that the steps have already been initiated to liquidate the stock through public auction.

6.05 Credit Control

The Company generally categorises the customers as follows:-

- (a) **Institutional Parties:** 30 to 45 days credit is allowed by the Company.
- (b) **Private Parties:** no credit is normally allowed. However, in some cases 30 days credit is allowed.

The table below shows the volume of sales during the years and position of debtors as on closing date of each year during last nine years: -

Year	Sales excluding subsidies	Debtors as on 31 March			Sundry Debtors in comparison to month's sales
		Less than 6 months	Exceeding 6 months	Total	
1989-90	9505.47	596.79	519.92	1116.71	1.41
1990-91	22403.96	1565.82	244.59	1810.41	0.97
1991-92	50009.97	1602.53	210.67	1813.20	0.44
1992-93	44889.28	5748.69	488.07	6236.76	1.67
1993-94	36484.89	1839.35	526.19	2365.54	0.78
1994-95	79724.72	5822.33	322.48	6144.81	0.92
1995-96	70543.88	6613.89	609.48	7223.37	1.23
1996-97	57579.22	8300.75	1775.21	10075.96	2.10
1997-98	85026.07	9443.59	1432.70	10876.29	1.54

(Rs. in lakh)

Though, the Company is allowing credit for maximum 45 days considerable debts were lying outstanding for more than 6 months at the end of each year. Position, however, improved in 1997-98.

The Company had to make provision of Rs.2.75 crore for bad and doubtful debts upto 31 March 1998.

The Ministry stated (December 1998) that most of the bad and doubtful debts related to Institutional Agencies (in the co-operative sector) and the matter pertaining to their realisation/adjustment was being taken up.

CHAPTER 7 : MATERIAL MANAGEMENT AND INVENTORY CONTROL

7.01 Position of inventory holding

The comparative position of inventory holding at the end of last nine years ending 31 March 1998 is tabulated in Annexure-VI. It would be evident that there was significant holding of stores and spares. Inventory holding under stores & spares varied from 79.38 months' consumption in 1989-90 to 24.31 months' consumption in 1995-96, 31.35 months in 1996-97 and 27.14 months in 1997-98. The Company declared stores & spares valuing Rs.66.30 lakh as surplus on 31 March 1998. No surplus inventory has been disposed of (December 1998).

7.02 Non-moving Inventory

Age-wise non-moving inventory of stores and spares as on 31 March 1998 was as follows:-

Stores & Spares	(Rs. in crore)
1. Above 3 years but below 4 years.	1.59
2. Above 4 years but below 5 years	2.33
3. Above 5 years	8.05
Total	11.97

This had resulted in blocking up of capital and had further worsened liquidity position of the Company.

In reply, the Management stated (March 1993) that in the fertiliser industry due to the need of keeping insurance spares to avoid costly shut downs, large quantities of spares had to be stocked. The stock also included construction surplus material, which were being processed for disposal. Moreover several original equipment were imported due to high lead-time for procurement.

The contention of the Management is not acceptable as out of total closing stock of stores and spares of Rs.31.82 crore at the end of 1997-98, the value of insurance spare was only Rs.3.23 crore and balance Rs.28.59 crore represented non-insurance stores and spares. Comparative value of insurance and non-insurance spares indicated that the Company had not taken adequate steps to minimise the non-moving stores & spares and surplus stores. ABC analysis as a

measure of efficient and effective control of inventory holding had been introduced only in 1991-92.

7.03 Analysis of non-moving stores and spares lying idle for more than 5 years

PPL was maintaining stores and spares worth Rs.8.05 crore which are non-moving out of which Rs.2.89 crore was the value of insurance spares and rest Rs.5.16 crore was the value of general spares. Scrutiny of records revealed that:-

- i) Non-moving stores including surplus stores worth Rs.67 lakh which were under process of disposal through Metal Scrap Trading Corporation (MSTC).
- ii) Non-moving stores also included oil pumps, valves, pipes, and gears worth Rs.60.90 lakh which became unserviceable and unusable due to long storage in idle condition.
- iii) Spares worth Rs.33.85 lakh were imported for utilisation in UCEGO filter of PAP. But the same had not been utilised and were lying in stores since 1992.

CHAPTER 8 : COSTING SYSTEM AND ANALYSIS OF COSTS

8.01 Costing System

The Committee on Public Undertakings in its 15th Report recommended introduction of Standard Costing System in the Public Sector Enterprises after laying down physical consumption norms. Bureau of Public Enterprises reiterated (July 1984) the need for introducing Standard Costing System in the Public Enterprises wherever repetitive production processes are involved and also for implementation of Value Analysis System. Accordingly, the Ministry asked (September 1984) the Company to review the position in this regard. *The Company had not introduced Standard Costing System and no value analysis was being done (December 1998).*

However, the Company prepared monthly performance reports incorporating budgeted norms and actual consumption of inputs and cost per unit of production showing variances. It was observed that the actual cost in most of the cases exceeded the budgeted cost and the budgeted norms were not fixed independently; rather they were fixed as per norms set by Fertiliser Industries Co-ordination Committee (FICC).

The Ministry replied that the matter of non-introduction of Standard Costing System would be examined.

8.02 Analysis of Costs

8.02.1 The contribution which was 56.35 per cent of the value of production in 1991-92 declined abruptly to 4.5 per cent in 1992-93. After a little improvement in 1993-94 and 1994-95 it again declined to 5.38 per cent in 1995-96, 8.34 per cent in 1996-97 and 6.64 per cent in 1997-98.

8.02.2 Employees' cost and value addition as worked out by audit during the last six years ending 31 March 1998 are exhibited in the following table :-

(Rs. in Lakh)

	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98
1. Sales including Subsidy and trading activities.	50992	38241	87207	77107	76852	116803
2. Increase/decrease (-) in the stock of finished and intermediate goods.	3462	575	10950	11304	(18594)	8499
3. Value of Mfg./ Trading activities (1+2)	54454	38816	98157	88411	58258	125302
4. Other income including interest written off, prior period and other adjustments (credit)	4765	15082	1183	311	278	332
Total	59219	53898	99340	88722	58536	125634
5. Less: Value of raw materials and other materials, stores & spares, power & fuel consumed and purchase of finished goods	50886	31793	76069	72136	48619	111023
6. Net: Value Added	8333	22105	23271	16586	9917	14611
7. Expenditure contribution to Net Value added:-						
a) Salary (including Bonus, Gratuity, contribution to PF, FPS etc.)	632	712	1059	1021	1028	1277
b) Workmen & staff welfare expenses	100	165	177	210	197	245
c) Depreciation	3260	2714	2623	2635	2692	2623
d) Interest	5648	5205	1161	1673	2539	5794
e) Other Expenses and charges after prior period adjustments (debit)	6784	8573	15483	10825	9525	15225
8. Total expenditure	16424	17369	20503	16364	15981	25164
9. Profit/(Loss) after prior period adjustment	(8091)	4736	2768	222	(6064)	(10553)
10. Net Value Added	8333	22105	23271	16586	9917	14611
11. No. of Employees	1008	1072	1064	1065	1031	1068
12. Percentage of Value added to the total expenditure contributing to Net Value Added	50.74	127.27	113.50	101.36	62.05	58.06
13. Employees' cost per employee (including Staff Welfare expenses) (Rs. in Lakh)	0.73	0.82	1.16	1.16	1.19	1.43
14. Employees' cost as a percentage of total expenditure.	4.46	5.05	6.03	7.52	7.67	6.05
15. Net Value Added per Employee (Rs. in Lakh)	8.27	20.62	21.87	15.57	9.62	13.68

Net Value Added per employee was showing decreasing trend in 1995-96 and 1996-97, the decline being quite significant in the year 1996-97, but showed a little improvement in 1997-98.

In the absence of internal generation of funds, the Company resorted to borrowings from Government and Banks for meeting expenditure with consequential increasing financial burden of interest.

8.03 Cost Control

Even though the Company was having a separate costing section only reporting of variance was done annually but no analysis for such variances was made for initiating corrective actions. In modern costing system a number of ratios are used for reporting to the Management but in PPL nothing was being done except preparation and reporting of monthly cost statements of the product. As a result the Management was not in a position to monitor and control consumption of raw materials and power which erratically fluctuated from month to month.

8.04 Cost Audit

There was no system of cost audit prior to the Government directives dated 14 March 1995. As per this directive a Cost Auditor was appointed for the first time in 1995-96.

The following were some of the comments included in the Cost Audit Report for 1996-97 :-

- a) The consumption rate of raw materials per unit of production of DAP, SAP, PAP, NPK etc. was substantially high which was attributed to frequent power supply interruption and low production.
- b) Consumption of power and fuel for production of NPK was very high.
- c) Direct labour cost per unit of DAP/NPK had increased to Rs.54.52 in 1996-97 from Rs.36.77 in 1994-95. This was mainly due to variation of volume of output and implementation of wage revision.
- d) The Company held non-moving stores and spares worth Rs.23.46 crore as on 31 March 1997, which represented 84 per cent of total Inventory.

The Ministry in its reply stated (December 1998) that the observations and comments of Cost Auditors were being looked into and corrective actions at plant level were being initiated to improve the performance.

CHAPTER 9 : MANPOWER

The main weaknesses of manpower planning in PPL had been :

- Failure to induct technical experts at the right time
 - i) Absence of induction of technical experts at the right time as experts had to be borrowed from other companies even as the plant came into operation;
 - Failure to tackle the problem of surplus contract labour (1500 workers)
 - ii) PPL failed to tackle the problem of surplus contract labour consisting of 1500 workers.
- Actual manpower of the Company against sanctioned strength is exhibited below :-

Category	Sanctioned strength	Actual Strength				
		1993-94	1994-95	1995-96	1996-97	1997-98
Executive	592	400	408	400	371	399
Non-Executive	794	672	656	665	660	669
Total	1386	1072	1064	1065	1031	1068

Further, in addition to permanent work force, the Company has a contract labour force of 1500 engaged for manual handling of DAP. Such contract labour force had been there since inception and project construction days. Measures taken to reduce the contract labour force by introducing greater automation in functioning of PPL had been futile so far. The following table indicates expenditure incurred for contract labour including bagging :-

Year	Amount (Rs. in crore)
1993-94	1.78
1994-95	3.11
1995-96	3.28
1996-97	3.67
1997-98	5.88

Scrutiny of records revealed that overtime payment in the Company was very high, as indicated in the following table :-

Year	Employees Remuneration (Rs. in lakh)	Overtime (Rs. In lakh)	Percentage of Over Time to employees remuneration
1993-94	712	35.38	4.97
1994-95	1059	94.71	8.94
1995-96	1021	115.43	11.31
1996-97	1028	95.82	9.32
1997-98	1277	192.65	15.09

The Management stated (August 1998) that total manpower was low in comparison to other companies in the industry.

Deployment of 1500 contract labourers over and above 1068 regular employees is not justified as the total sanctioned strength of the Company is 1386 including executives and non-executives. Assuming that 318 (1386-1068) out of the 1500 contract labourers were profitably utilised, the balance 1182 employees were surplus to the requirement and the idle wages paid to these surplus labourers during 1993-94 to 1997-98 were as follows:

(Rs. in crore)

Year	Wages paid to surplus labourers
1993-94	1.40
1994-95	2.45
1995-96	2.58
1996-97	2.89
1997-98	4.63

During discussion the Management admitted that the Company did not really require such a large contract labour force but was forced to maintain it because of historical reasons. The Company was forced to absorb the entire labour force engaged at construction stage, which was not a sound decision. During the Audit Board Meeting (December 1998) the Ministry admitted that the 1500 contract labourers were absorbed by PPL irrationally due to unexplainable reasons. The Ministry outlined the strategy for rationalisation of manpower in the Company as follows:

- i) CMD of PPL to continue with the automation endeavour and to identify the surplus labourers.
- ii) Introduction of a special separation packet for the labourers identified as surplus.
- iii) Induction of technical experts to fill up any void that exists on account of lack of expertise.

CHAPTER 10 : WORKING RESULTS AND PROFITABILITY ANALYSIS

10.01 Financial Results

Financial Results of the Company for the last six years ending 31 March 1998 are indicated below :-

(Rs. in lakh)

	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98
Liabilities :						
a) Paid up capital	15530.00	33165.00	33165.00	33165.00	33165.00	33165.00
b) Reserve & Surplus						
i) Free Reserve	-	-	-	-	-	-
ii) Committed Reserve	2531.78	2532.81	2523.95	2522.20	0.69	-
c) Borrowings						
i) From Govt. of India	28498.00	23028.00	23628.00	25228.00	25228.00	26728.00
ii) Foreign Exchange Loans	1462.26	1289.35	1256.50	996.32	574.53	301.10
iii) From Others	8187.05	5060.97	5581.87	8945.55	9397.81	10664.07
iv) Interest Accrued and due	19695.32	-	-	96.00	448.00	4276.56
d) Current Liabilities & Provisions	25905.56	28542.55	38234.69	42933.61	41267.20	52379.69
Total	101809.97	93618.68	104390.01	113886.68	110081.23	127514.42
Assets:						
e) Gross Block	57365.78	57450.01	57915.35	59338.80	59556.94	59886.01
f) Less, Depreciation	11834.50	14551.01	17172.99	19785.73	22536.71	25035.74
g) Net Block	45531.28	42899.00	40742.36	39553.07	37020.23	34850.27
h) Capital Work-in-progress	1100.03	1126.94	1644.74	1161.97	939.81	1515.17
i) Current Assets, Loans & Advances	35889.70	35038.71	50225.25	61617.92	57025.51	65500.85
j) Accumulated Loss	19288.96	14554.03	11777.66	11553.72	15095.68	25648.13
Total	101809.97	93618.68	104390.01	113886.68	110081.23	127514.42
k) Working Capital	9711.18	6496.16	12158.80	18814.89	15465.17	9011.84
l) Capital Employed	35820.10	49394.16	52901.16	58367.96	52485.40	43862.11
m) Net Worth	(3758.96)	18610.97	23911.29	24133.48	18070.01	7516.87
n) Net Worth per Rupee of paid up capital (Re.)	(0.24)	0.56	0.72	0.73	0.54	0.23

The Company's negative Net Worth in the year 1992-93 was mainly due to the following factors:-

- i) The Company was fully dependent on imported raw materials upto the commissioning of Phase-II (June 1992). Upto this stage, the Company

had to receive raw materials through Government's canalising agent (MMTC Limited), but due to shortage of Government's foreign exchange there was short supplies of raw materials during the previous 4 - 5 years which resulted in low capacity utilisation and huge accumulated loss.

- ii) Initial project cost of Rs.183.64 crore was finally revised to Rs.630.82 crore in March 1991 due to change in scope and huge escalation. But Company's Debt Equity Ratio had not been revised by increasing equity base, therefore, the Company had been forced to maintain Debt Equity Ratio at 4.25 : 1 as against projected ratio of 2.5 : 1 causing huge interest burden on the Company.

However, the Net Worth improved from the year 1993-94 after expanding the equity base and receiving interest holiday on loans from the Government.

10.02 Working Results

The working results of the Company during the last six years ending 31 March 1998 are as under :

	(Rs. in lakh)					
	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98
A. Sales	50991.89	38241.45	87206.92	77107.06	76851.96	116802.60
B. Profit/(Loss) after prior period adjustments	(8094.03)	4734.93	2767.51	222.19	(6063.47)	(10553.14)
C. Profitability Ratios:	Due to loss				Due to loss during these years profitability ratio does not arise.	
-Percentage of Profit to:	during this year					
i) Capital employed	profitability ratio	9.59	5.23	0.38		
ii) Net worth	does not	25.44	11.57	0.93		
iii) Sales	arise.	12.38	3.17	0.29		

The Company made profit during the year 1993-94, 1994-95 and 1995-96 mainly due to waiver of interest on loan by Government to the extent of Rs.146.39 crore and the interest holiday in 1994-95 and 1995-96 resulting in deferment of interest payable to the tune of Rs.33.39 crore. In 1996-97, even though the Company enjoyed interest holiday as before, it sustained a loss of Rs.60.63 crore mainly due to lower trading activities and foreign exchange fluctuations.

During 1997-98, though the Company operated at 110 per cent of its capacity, it incurred a loss of Rs.105.52 crore, reasons for which are given below:-

	Rs. in crore
i) Exchange rate fluctuation	61.11
ii) Cut in subsidy @ Rs.250 PMT	16.57
iii) Interest on Government loan	33.39
Total	111.07
Less: Operating Profit	5.55
Loss	105.52

10.03 Loss and low profitability of the Company were mainly due to following reasons :-

- i) Low capacity utilisation of DAP plant and consumption of costly imported Phosphoric Acid in DAP due to poor capacity utilisation of PAP.
- ii) Profit and Sales had been affected (1992-93 & 1993-94) due to decontrol of phosphatic fertilizers and decanalisation of imported DAP.
- iii) Lower capacity utilisation due to limitation in availability of Ammonia (1994-95).
- iv) Higher cost of production due to increase in raw materials price without corresponding increase in selling price (1994-95).
- v) Lower capacity utilisation of plants and heavy fluctuation in foreign exchange (1995-96).
- vi) Lower capacity utilisation of DAP plant and Acid Plant, increase in input prices of imported raw materials, depreciation of Rupee against US \$ and stagnant sales realisation (1996-97).
- vii) The consumption of raw material during the period 1994-95 to 1997-98 was well above the norm as can be seen from the details at Annexure-VII. The Company incurred an avoidable expenditure on this account to the tune of Rs.2.46 crore, Rs.3.36 crore and Rs.22.76 crore on consumption of Sulphur, Rock Phosphate and Ammonia respectively.

10.04 To tide over the immediate problem of cash crunch, the Company requested the Government to consider deferment of repayment of loan and payment of interest by one year, which was agreed to by the Government in December 1997. Other proposal regarding grant of interest holiday has, however, not been approved so far (December 1998).

CHAPTER 11 : OTHER TOPICS OF INTEREST

11.01 (a) Defalcation of 2850 MT of DAP valuing Rs.2.59 crore at Buffer Stockist's Godown at Muzaffarpur

In December 1990, Paradeep Phosphates Limited hired buffer godown at Muzaffarpur of M/s. Vijoy Kumar (a private party) for a quantity of 3000 MT against nominal Bank Guarantee of Rs.100 per MT. In November 1994, when the buffer stockist failed to honour the delivery order issued by the Marketing office of PPL, the stock of the godown was physically verified by the Management and shortage of 2850 MT of DAP valuing Rs.2.59 crore was found. Initially, the buffer stockist agreed to make good the loss, but later on absconded. A claim of Rs.2.59 crore was lodged against the New India Assurance Company, which was turned down due to absence of fidelity insurance. The Board of Directors of the Company directed to file a civil suit and to pinpoint the responsibility by constituting an Internal Enquiry Board. However, no investigation was conducted as the case was referred to CBI. In May 1995, the Company filed a money suit in the court of First Subjudge, Patna for Rs.2.59 crore plus Rs.21.86 lakh for interest. The case was still pending (December 1998).

11.01 (b) Alleged defalcation of 1297.45 MT of DAP at Buffer Stockist's godown at Chhapra, Bihar

In September 1996, Company issued some Invoice-cum-Delivery Challans totalling 1350.90 MT to various parties. Stocks were to be delivered to the parties from the godown of private buffer stockist of Chhapra, Bihar. Out of the said quantity, the buffer stockist could not deliver 423.90 MT. It revealed from the records that on 6 October 1996 the said buffer stockist had lodged F.I.R with town police station, Chhapra indicating that the stock to the extent of 1297.45 MT DAP had been defalcated in the godown due to which delivery of the balance stock of 423.90 MT could not be made. Subsequently, the matter was enquired into by the vigilance department of the Company and finally on 22 October 1996 the case was handed over to the CBI, Patna for a detailed investigation. The CBI is yet (December 1998) to register a case for investigation.

In the meantime though the Company made attempts to encash three bank guarantees totalling Rs.11 lakh but could encash only one bank guarantee valuing Rs.2 lakh. Remaining 2 bank guarantees valued at Rs.9 lakh could not be encashed because of an interim injunction obtained by the buffer stockist from the court.

The Company decided to file a legal suit against Punjab National Bank, Chhapra before the Hon'ble High Court, Patna for recovery of bank guarantees amount with interest.

The Company had taken fidelity insurance policy with National Insurance Company for Rs.1.66 crore. In response to the claim by the Company for loss, Insurance Company appointed a Surveyor and report of the Surveyor was awaited (December 1998).

The Company in its reply stated that they had not filed the suit against the buffer stockist as the matter was under investigation by the CBI.

In this context, the following points deserve mention:-

- (i) The repeated defalcations highlight lack of supervision/inspection at regular interval to ensure proper custody of stock.
- (ii) Instead of Central Warehousing Corporation/State Warehousing Corporation godowns the Company had gone for hiring private godowns where security for stock was found to be inadequate. According to the Board of Directors' decision taken in its 74th Meeting held on 26 October 1996, hiring of private godowns had been discontinued.
- (iii) In case of Muzaffarpur, hiring of private godown without obtaining adequate bank guarantee and insurance coverage revealed the failure of the Management.

11.02 Fire in Sulphur Silo and Conveyor System of Material Handling

An incident of fire in Sulphur Silo and Conveyor system occurred on 19 May 1996. Stock of 3970 MT of sulphur together with the conveyor system were damaged. Though notice of the incident was issued to the Inspector of Factories and Boilers, Cuttack Zone and also to Insurance Company on the day of occurrence, no FIR was filed with the police. FIR was lodged only on 27 July 1996 on the advice of Board of Directors. The value of the sulphur destroyed and conveyor system damaged was assessed at Rs.1.37 crore and Rs.1.90 crore respectively. The assessment was revised in September 1996 which amounted to Rs.4.46 crore (Sulphur Rs.1.37 crore and Conveyor System Rs.3.09 crore). Formal claim was lodged with the Insurance Company. As per the Survey Report accepted by the Company (February and July 1997) the final claim stood at Rs.1.08 crore for loss of sulphur and Rs.84.30 lakh for damage of Conveyor system, which was lower than the claim lodged by the Company due to (i) under insurance (ii) claim for higher quantity and higher rate.

A three member Committee (two experts from outside under the chairmanship of General Manager, Corporate Planning of the Company) was constituted and the report submitted by them was under implementation by the Management. The Chairman of the Committee explained to the Board that the probable reason for fire accident was either auto-ignition of sulphur or man-made. He also opined that the second reason seemed to be more probable. Meanwhile three officials were suspended by the Management.

New Delhi
Dated

5 JUL 1999

A.K. Chakrabarti

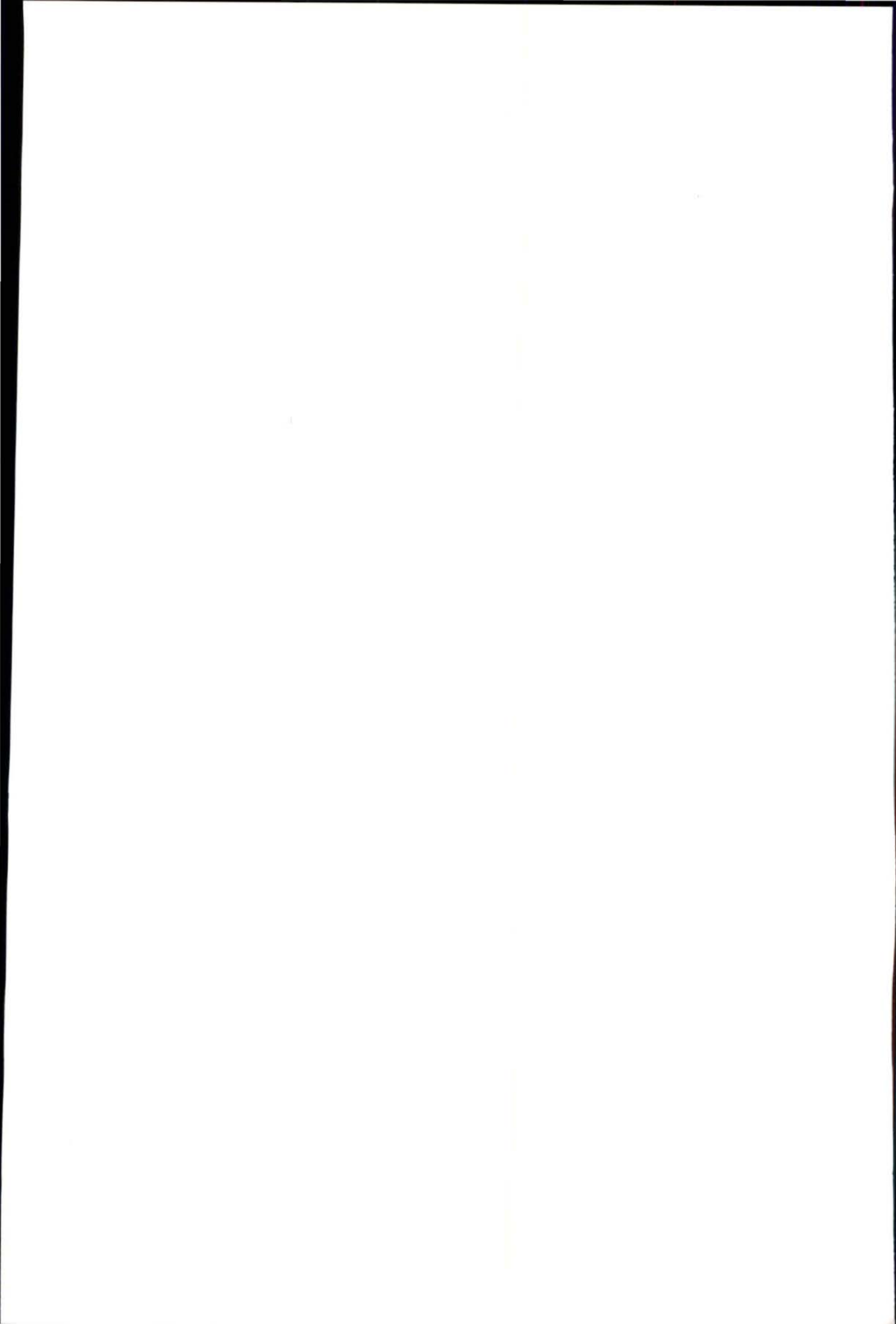
(A.K. CHAKRABARTI)
Deputy Comptroller and Auditor General
cum Chairman, Audit Board

Countersigned

New Delhi
Dated 5 July 1999

V.K. Shunglu

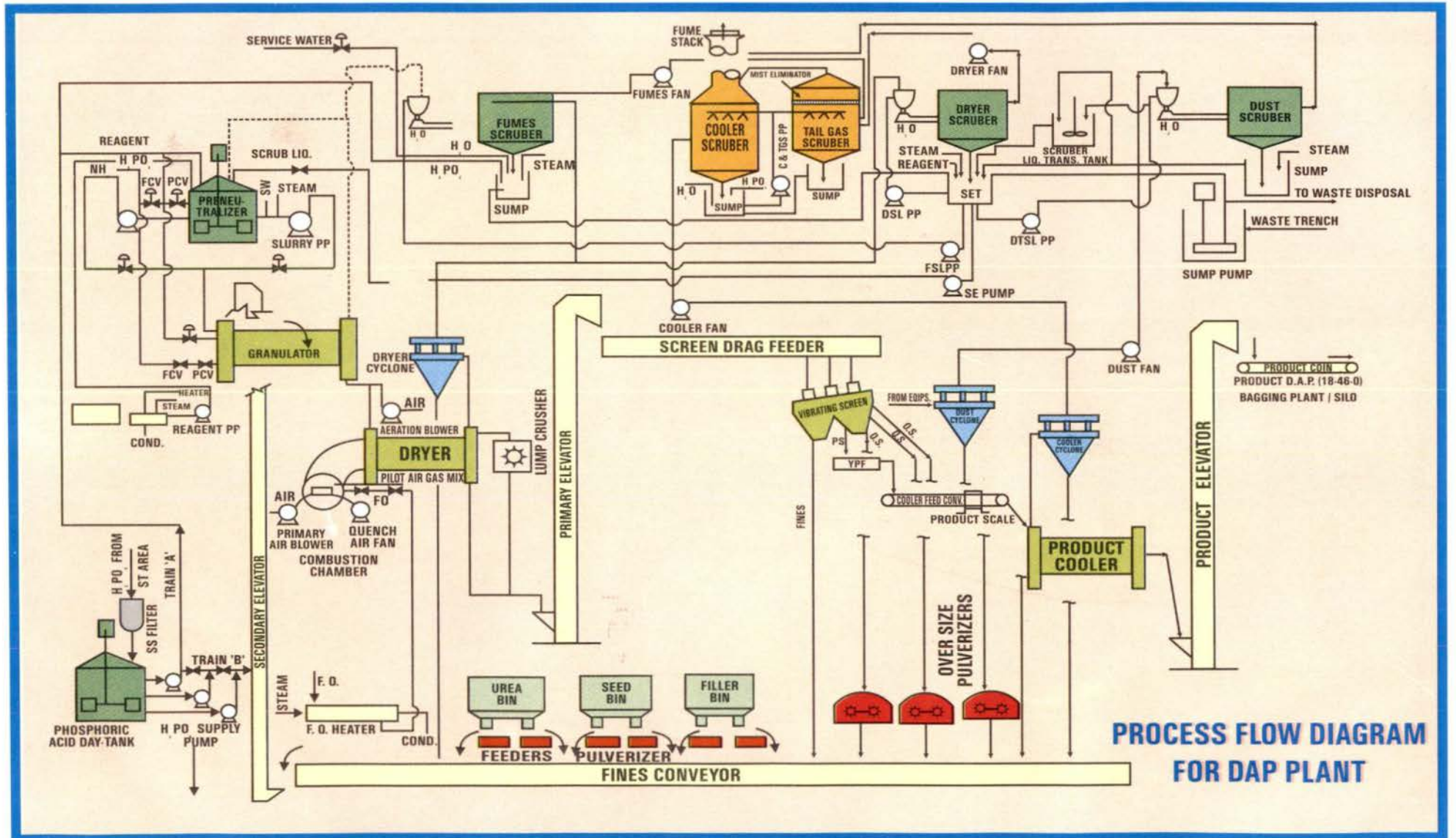
(V.K. SHUNGLU)
Comptroller and Auditor General of India



ABBREVIATIONS AND GLOSSARY

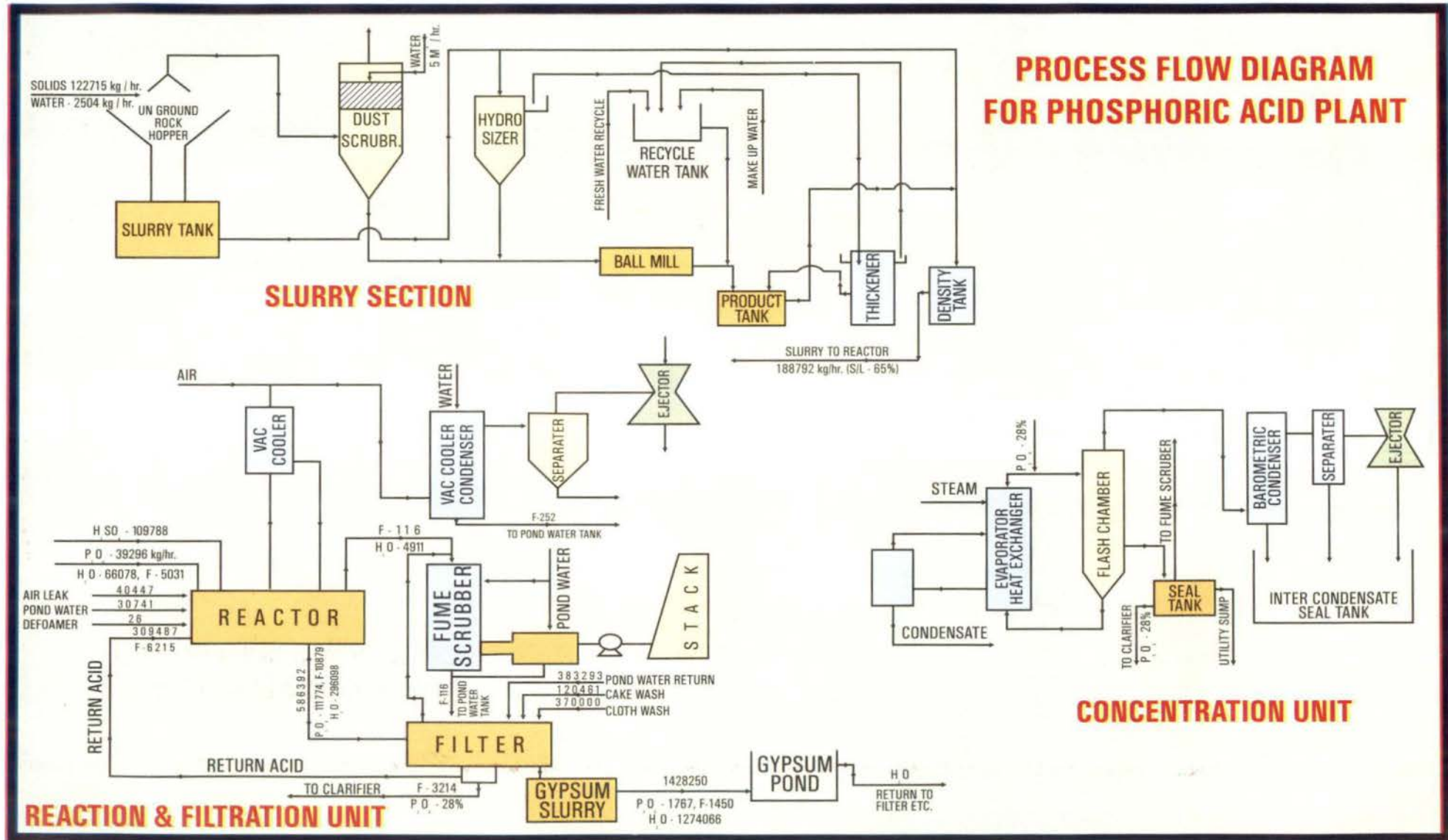
1. NPK	Complex fertilisers containing Nitrogen, Phosphate & Potash
2. DAP	Di-Ammonium Phosphate
3. PAP	Phosphoric Acid Plant
4. SAP	Sulphuric Acid Plant
5. DGTD	Director General of Trade & Development
6. GOI	Government of India
7. LSHS	Low Sulphur High Speed Fuel
8. CPP	Captive Power Plant
9. PSU	Public Sector Undertaking
10. MH System	Material Handling System
11. Heat Exchanger	Equipment used to exchange the heat from one medium to other medium
12. Economiser	Equipment used to get the boiler water heated up.
13. LOI	Letter of Intent
14. Filler	It is one kind of material used to make granules of DAP
15. Front	Site clearance
16. Battery Limit	The boundary area of a particular plant
17. P_2O_5	Phosphorous Pentoxide
18. Te	Tonne
19. MOP	Muriate of Potash

Annexure - I(A)



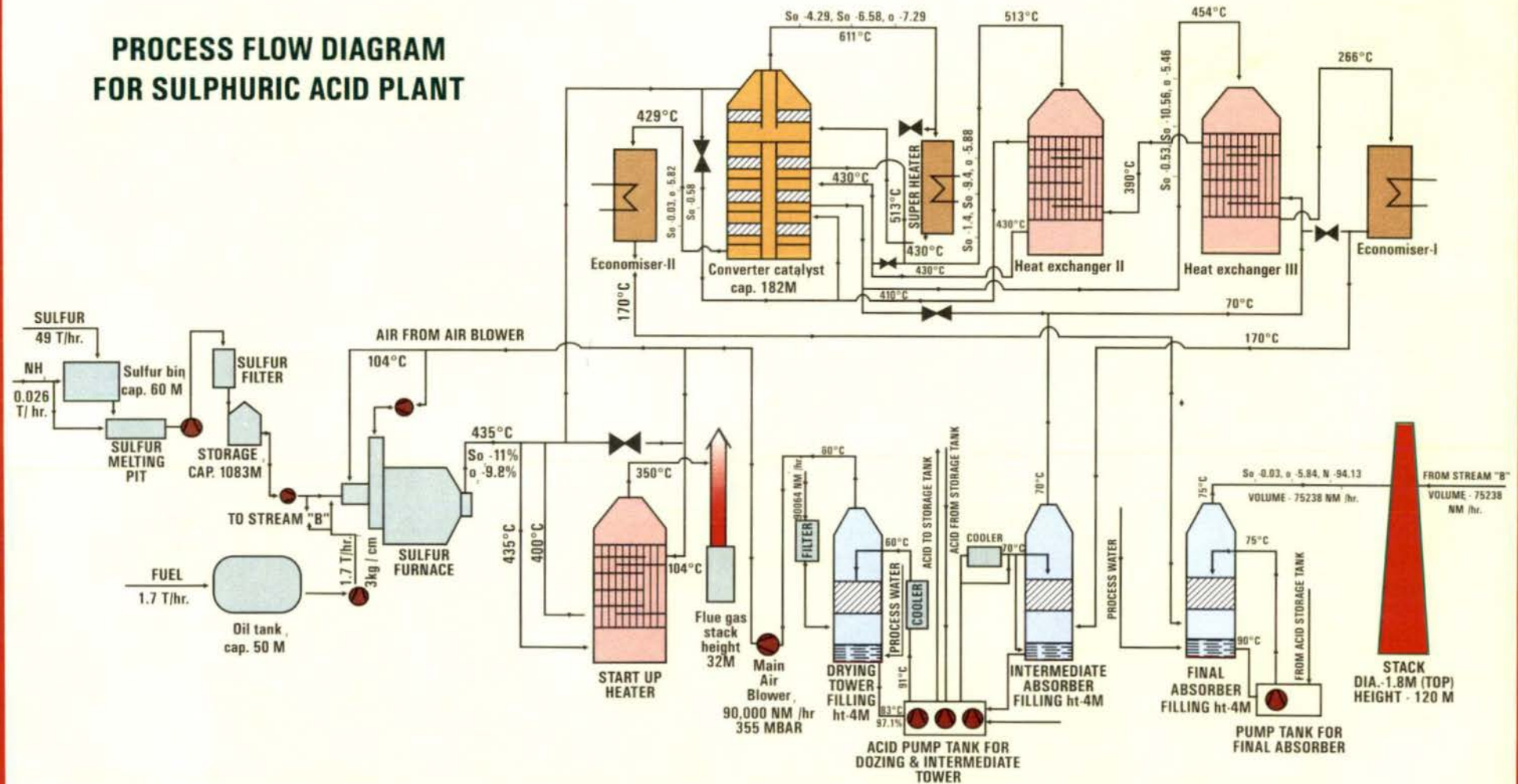
PROCESS FLOW DIAGRAM FOR DAP PLANT

Annexure - I(B)



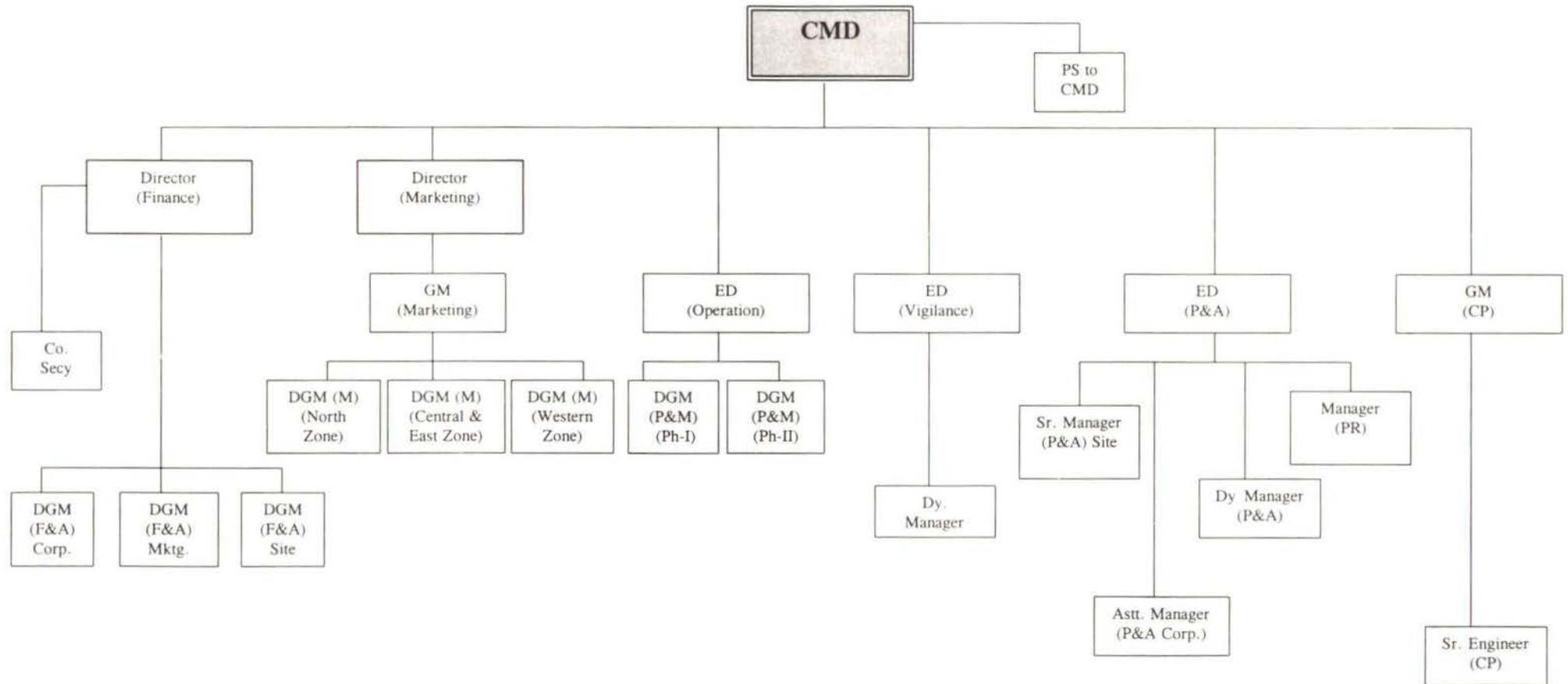
Annexure - I(C)

**PROCESS FLOW DIAGRAM
FOR SULPHURIC ACID PLANT**



Annexure - II

Organisational Chart of Paradeep Phosphates Limited



ANNEXURE - III

Statement showing Short Term and Long Term measures for revamping of SAP, by Dharamji Morarji Chemicals Company Limited.

A. Short term measures.

1. IAT modification.
2. HE-III replacement.
3. Catalyst screening, make-up and sampling.
4. Superheater casing change.

B. Long term measures.

1. New Economisers-2 for both streams.
2. Replacement and rectification of leaking gas ducts and expansion bellows.
3. Modification of Sulphur pit by provision of overflow battle wall and new agitator.
4. Replacement/Addition of catalysts as per catalyst manufacturer recommendations to achieve 99.7 per cent conversion efficiency at 100 per cent plant capacity.
5. New alloy trough and down comer type acid distributor for drying tower to improve drying efficiency.
6. Replacement of existing acid circulation pumps (320 M/hr) acid pumps.
7. Modification of hot gas by-pass valve.
8. New wasteheat boiler for both streams.
9. New Superheaters for both streams as an optional.

ANNEXURE - IV

Calculation showing value of Loss of Production due to shortage of imported Phosphoric Acid and Ammonia

	Year	Days Lost	Production Loss (MT)	Average Realisation Price (Rs.)	Total Loss (Rs. in lakh)
i) Non-availability of imported Phosphoric Acid	1989-90	110	79,200	3,396	2,689.63
	1990-91	74	53,280	3,398	1,810.45
	1991-92	15	10,800	4,137	446.80
	1992-93	32	23,040	6,012	1,385.16
	1993-94	13	9,360	6,813	637.70
	1994-95	-	-	-	-
	1995-96	25	18,000	9,146	1,646.28
	1996-97	71	51,120	8,184	4,183.66
	1997-98	107	77,040	8,000	6,163.20
		447	3,21,840		18,962.88

	Year	Days Lost	Production Loss (MT)	Average Realisation Price (Rs.)	Total Loss (Rs. in Lakh)
ii) Non-availability of imported Ammonia -	1989-90	33	23,760	3,396	806.89
	1990-91	13	9,360	3,398	318.05
	1991-92	-	-	-	-
	1992-93	39	28,080	6,012	1,688.17
	1993-94	47	33,840	6,813	2,305.52
	1994-95	-	-	-	-
	1995-96	-	-	-	-
	1996-97	-	-	-	-
	1997-98	-	-	-	-
		132	95,040		5,118.63

ANNEXURE - V
Statement showing Trading Activities except DAP (quantity in MT)

	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98
1) Imported Urea	-	-	-	25022	141313	922572	496104	133481	356877
2) Indigenous Urea	-	179192	284768	13330	10836	964	103	-	-
3) Imported NPK	-	-	-	18698	28378	2196	94	5	-
4) Indigenous NPK	-	-	-	-	-	347	30139	71524	53427
5 Calcium Ammonium Nitrate (CAN)	-	1442	-	-	-	-	-	-	-
6) Imported Muriate of Potash (MOP)	-	-	-	-	37875	41458	44368	24622	79294

Annexure- VI
Inventory Position

(Rs. in lakh)

	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98
A. Annual Consumption									
1. Raw Material	11273.82	16073.27	48397.28	33913.42	21617.63	47387.80	52453.35	43287.82	75189.10
2. Stores & Spares	188.90	390.32	517.04	447.18	601.44	1205.48	1472.53	1186.17	1406.73
3. Packing Materials	364.49	525.58	2541.23	1454.83	1111.29	3171.82	2065.30	1146.00	2835.80
B. Sales (Including subsidy)	14274.46	31830.34	80542.43	50447.02	38241.45	87206.92	77107.06	76851.96	116803.00
C. Year End Inventory									
1. Raw Material	2775.39	3567.05	5809.44	2843.75	4912.50	1840.41	4213.14	7478.51	2557.13
2. Stores & Spares	1250.21	1483.14	1687.17	1853.39	2698.80	2641.25	2983.62	3099.18	3182.10
3. Packing Materials	305.15	450.76	280.17	93.78	142.97	170.21	190.96	168.86	451.19
4. Finished Goods	7032.56	5204.72	11866.97	14831.09	15827.67	25942.45	37792.56	18376.60	26338.50
D. Inventory Holding (Month's consumption /sales)	(Fig. in months)								
1. Raw Material	2.95	2.66	1.40	1.01	2.73	0.47	0.96	2.07	0.41
2. Stores & Spares	79.38	45.72	39.16	49.74	53.85	26.29	24.31	31.35	27.14
3. Packing Materials	10.05	10.29	2.64	0.77	1.54	0.64	1.11	1.77	1.91
4. Finished Goods	5.91	1.96	1.76	3.53	4.97	3.57	5.88	2.87	2.71
E. Percentage of Finished Goods to Sales	49.27	16.35	14.73	29.40	41.39	29.75	49.01	23.91	22.55

Annexure - VII.A
Usage Variance of Imported Sulphur in SAP

Year	Design Norms	Actual Consumption	Excess consumption per MT of Sulphuric Acid prod.	Actual production of sulphuric acid	Total excess Consumption	Average cost of Import	Excess expenditure
	MT	MT	MT	MT	MT	Rs.	Rs. in lakh
1994-95	0.3288	0.3300	0.0012	2,57,400	308.88	2481.36	7.66
1995-96	0.3288	0.3442	0.0154	1,79,687	2767.18	3202.08	88.61
1996-97	0.3288	0.3316	0.0028	1,38,041	386.51	2366.03	9.14
1997-98	0.3288	0.3500	0.0212	3,02,440	6411.73	2197.87	140.92
						Total	246.33

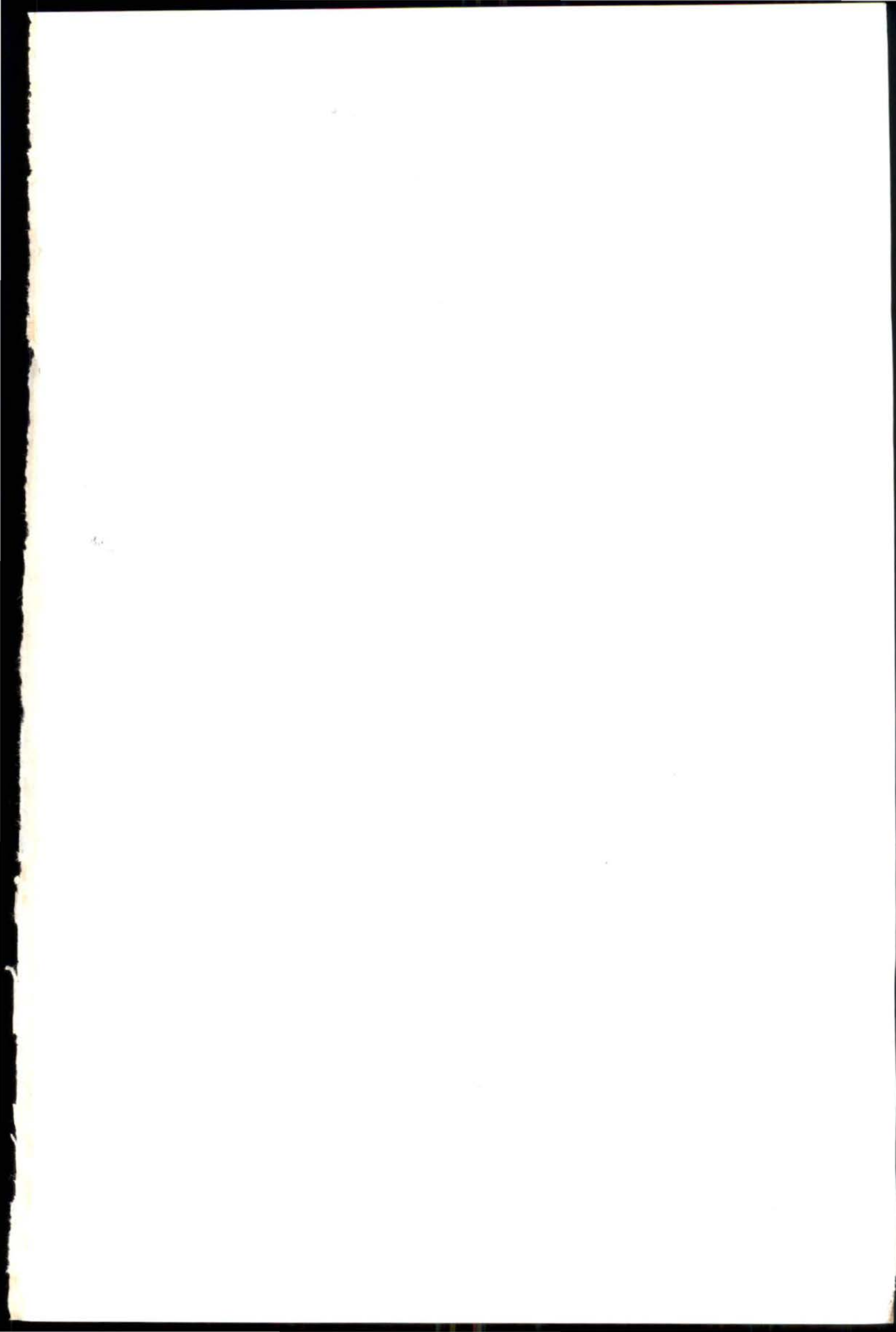
ANNEXURE - VII.B
Statement showing Excess Expenditure due to Adverse
usage of imported Rock Phosphate in PAP

Year	Design Norms	Actual Consumption	Excess consumption per MT of phosphoric Acid prod.	Actual production of phosphoric acid	Total excess Consumption	Average cost of Import	excess expenditure	
	MT	MT	MT	MT	MT	Rs.	Rs. in lakh	
1994-95	3.3333	3.3924	0.0591	78,020	4610.98	1764.18	81.34	
1995-96	3.3333	3.4485	0.1152	52,292	6024.04	2070.76	124.74	
1996-97	3.3333	3.4488	0.1155	37,222	4299.14	2128.77	91.52	
1997-98	3.3333	3.3511	0.0178	90,006	1602.11	2376.84	38.08	
Total								335.68

ANNEXURE - VII.C

Statement showing Excess Expenditure due to Adverse usage variance of imported Ammonia in DAP Plant

Year	Design Norms	Actual Consumption	Excess consumption per MT of DAP prod.	Actual production of DAP	Total excess Consumption	Average cost of Import	Excess expenditure	
	MT	MT	MT	MT	MT	Rs.	Rs. in lakh	
1994-95	0.2234	0.2372	0.0138	7,02,590	9695.74	6779.42	657.31	
1995-96	0.2234	0.2356	0.0122	5,73,295	6994.20	8094.11	566.12	
1996-97	0.2234	0.2383	0.0149	4,20,080	6259.19	8248.25	516.27	
1997-98	0.2234	0.2328	0.0094	7,76,105	7295.39	7349.47	536.17	
Total								2275.37



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