2 0 0 3 - 2 0 0 4





# **Gujarat Narmada Valley Fertilizers Company Limited**

Fertilizers • Chemicals • IT



### 28TH ANNUAL GENERAL MEETING

Date: 16th September, 2004

Day : Thursday Time : 2.30 PM

Place: Near Jan Vikas Temple,

Narmadanagar Township, P.O. Narmadanagar-392 015

District Bharuch

# **BOARD OF DIRECTORS**

(As on 26th July, 2004)

Shri PK Laheri, Chairman

Dr. Manjula Subramaniam

Smt. Sudha Anchlia

Shri AK Luke

Shri NR Ranganathan

Shri SM Jain

Shri Rajnish Aggarwal

Shri Balwant Singh, Managing Director

Contents	Page No.
For Members' Attention	2
Notice	3
Directors' Report & its Annexures	4
Management Discussion & Analysis	10
Report on Corporate Governance	17
Auditors' Report & its Annexure	25
Balance Sheet	28
Profit & Loss Account	29
Cash Flow Statement	30
Schedules to the Balance Sheet (1 to 12)	31
Schedules to the Profit & Loss Account (13 to 19	9) 34
Accounting Policies, Notes on Accounts	35
Additional Information	40
Balance Sheet Abstract & Company's General Business Profile	43
Statement relating to Subsidiary Companies	44
Consolidated Financial Statements	45

# **Executive Directors**

Shri PB Nanavati

Shri DS Taunk

Shri RP Vyas

Shri MD Vaghela

Shri VK Khanna (On Deputation with NCPL)

# **Company Secretary**

Shri RB Panchal

### **Auditors**

M/s CC Chokshi & Company,

Chartered Accountants,

Ahmedabad.

# Registered Office:

P.O. Narmadanagar - 392 015

District : Bharuch

Gujarat, INDIA.



# FOR MEMBERS' ATTENTION

### I SOME IMPORTANT NOTES

- Members desiring information as regards the accounts are requested to send their queries at least fifteen (15) days before the date of the Meeting, so as to enable the Company to make the information available at the Meeting.
- 2. Members holding shares in the Physical Form are requested to promptly notify to the Company, Change in their Address Pin Code Nos., Bank Account details, Nomination, Power of Attorney, etc.

Members holding shares in the Dematerialised Form are requested to send their instructions regarding Change of Address - Pin Code Nos., Bank Account details, Nomination, Power of Attorney, etc. directly to their Depository Participants (DP) with whom Demat Account is maintained.

- 3. Non-Resident Indian Shareholders are requested to inform the Company immediately:
  - a) The change in the Residential status on return to India for permanent settlement.
  - b) The particulars of the Bank Account maintained in India with complete name, branch, account type, account number and address of the Bank, if not furnished earlier.

# II REGARDING ANNUAL REPORT/ ANNUAL GENERAL MEETING

- 1. Kindly bring your copy of this Annual Report along with you for the Annual General Meeting.
- 2. The Central Government has granted exemption pursuant to Section 212 (8) of the Companies Act, 1956 from attaching Subsidiary Companies' documents to the Company's Balance Sheet as at 31st March,2004 and hence the documents of the Subsidiaries have not been attached to the Balance Sheet of the Company. The Annual Accounts of the Subsidiary Companies and the related detailed information will be made available to the investors of the Company and of the Subsidiary Companies, seeking such information, at any point of time. The Annual Accounts of the Subsidiary Companies will be available for inspection by any investor at the Registered Office of the Company and also at the respective Registered Office(s) of the Subsidiary Companies.
- 3. Arrangement for buses from ST Depot, Bharuch to the place of Meeting will be made by the Company on the day of the Meeting.
- 4. Members/Proxies are requested to detach the "Entrance Pass" from this Report and hand over at the Entrance duly signed by them.
- 5. Only Members and in their absence, duly appointed proxies will be allowed for the Meeting. Please avoid bringing non-members / children to the Meeting.

Members are requested to please read the "General Shareholder Information" – Section of the Report on Corporate Governance for useful information.

# NOTICE

NOTICE IS HEREBY given that the **28th Annual General Meeting** of the Members of Gujarat Narmada Valley Fertilizers Company Limited will be held on **Thursday, the 16th September, 2004 at 2.30 P.M.** at the Registered Office of the Company, Near Janvikas Temple, Narmadanagar Township, P.O. Narmadanagar - 392 015 to transact the following business:

### **ORDINARY BUSINESS:**

- 1. To receive, consider and adopt the Audited Balance Sheet as at 31st March, 2004, the Profit & Loss Account for the year ended on that date and the Reports of the Board of Directors and the Auditors thereon.
- 2. To declare a Dividend on Equity Shares.
- 3. To consider and, if thought fit, to pass with or without modification(s), the following Resolution :

### As an Ordinary Resolution:

"RESOLVED that Shri Rajnish Aggarwal, Director of the Company who retires by rotation, be not re-appointed as Director and the resultant vacancy be not filled-up for the time being."

4. To appoint Auditors of the Company to hold office until the conclusion of the next Annual General Meeting and to fix their remuneration and, if thought fit, to pass with or without modification(s), the following Resolution:

# As a Special Resolution:

"RESOLVED that pursuant to the provisions of Section 224A(1) and other applicable provisions, if any, of the Companies Act,1956, the retiring Auditors M/s. C.C. Chokshi & Company, Chartered Accountants be and are hereby re-appointed as Auditors of the Company to hold office from the conclusion of this Meeting until the conclusion of the next Annual General Meeting of the Company, on such remuneration as may be determined by the Board of Directors and reasonable out-of-pocket expenses actually incurred by them in connection with the audit."

# NOTES:

- 1. A MEMBER ENTITLED TO ATTEND AND VOTE AT THE MEETING IS ENTITLED TO APPOINT A PROXY TO ATTEND AND VOTE INSTEAD OF HIMSELF AND SUCH A PROXY NEED NOT BE A MEMBER OF THE COMPANY.
- 2. THE INSTRUMENT APPOINTING PROXY SHOULD BE DEPOSITED AT THE REGISTERED OFFICE OF THE COMPANY NOT LESS THAN FORTYEIGHT HOURS BEFORE THE COMMENCEMENT OF THE MEETING.
- 3. The holding of Gujarat State Investments Ltd., a Government of Gujarat undertaking and of the Public Financial Institutions, Nationalized Banks and Insurance Companies is more than 25% of the subscribed share capital of the Company, in aggregate, and hence, the re-appointment of M/s. C.C. Chokshi & Co, Chartered Accountants, as Auditors of the Company, is required to be made by a Special Resolution, as contemplated under Section 224A (1) of the Companies Act, 1956.
- 4. All documents referred to in this Notice are open for inspection at the Registered Office of the Company between 9:30 A.M. and 11:30 A.M. during working days of the Company.

By Order of the Board of Directors, For Gujarat Narmada Valley Fertilizers Co. Ltd

Registered Office : P.O. Narmadanagar

Dist. Bharuch: 392 015 Dated: 7th August, 2004 R B Panchal Company Secretary



# **DIRECTORS' REPORT**

Tο

The Members.

Your Directors have pleasure in presenting this 28th Annual Report and Audited Statements of Accounts of the Company for the financial year ended 31st March, 2004.

The year 2003-04 was the year of outstanding performance for your Company. Despite the disruption in the Nitrophosphate Group of Plants due to an explosion and the resultant loss of production, the Company achieved the highest ever sales turn-over, the highest ever profit before tax and the highest ever profit after tax. A series of initiatives taken to reduce cost and increase productivity helped the Company in posting the excellent performance for the year 2003-04. As a sequel to the Company's constant search for excellence, many new records have been established in terms of production, marketing and energy savings. The Company also took several steps for more safe and secure operations during the year.

## 1. FINANCIAL HIGHLIGHTS

The Company posted excellent financial results for the year under review. Net Profit for the year was higher by Rs.32.19 Crores in comparison to the last year, which represents an increase of 38%.

Following are the Financial Highlights:

	(Rs.	n Crores)
	2003-04	2002-03
Sales Turnover	1,552.87	1,464.14
Other Income	49.42	22.83
Gross profit before interest, depreciation and tax	305.32	276.04
Interest (Net)	33.50	57.01
Depreciation	87.04	82.65
Profit before tax	184.78	136.38
Less: Provision for current taxation	73.62	48.15
Profit after current taxation	111.16	88.23
Add ()/Less: Provision for deferred taxation	(5.75)	3.51
Net Profit	116.91	84.72
Add : Balance brought forward		
from previous year	141.52	113.11
Amount available for appropriation	258.43	197.83
Appropriations :		
a. General Reserve	11.69	15.00
b. Proposed Dividend	43.94	36.62
c. Tax on Dividend	5.63	4.69
Balance carried to Balance Sheet	197.17	141.52

### 2. DIVIDEND

Your Company has maintained the uninterrupted record of rewarding its shareholders by declaring dividends for the last 20 years. In view of the excellent performance achieved by the Company for the year 2003-04, your Directors have pleasure in recommending payment of a higher dividend of Rs. 3/- per equity share of Rs. 10/- each on 14,64,76,214 equity shares as against the dividend of Rs.2.50 per equity share paid last year. The dividend, subject to approval at the forthcoming Annual General Meeting, will be paid to - (i) all those equity shareholders whose names appear in the Register of Members as on 14th August, 2004 and (ii) to those, whose names as Beneficial Owners are furnished by the Depositories viz. National Securities Depository Ltd. (NSDL) and Central Depository Services (I) Ltd. (CDSL).

# 3. PERFORMANCE HIGHLIGHTS & FERTILIZER POLICY

"Management Discussion & Analysis" forming part of this Report deals with the operational and marketing highlights (including the interruption in the business due to an explosion in a section of the Plants on 14th October, 2003) as also the status of various projects completed during the year, projects under execution and projects on anvil, in a very comprehensive manner. The performance highlights, however, in brief are mentioned hereunder:

The Company achieved the highest ever sales turnover during the year. The sales turnover was up by 6.06% in comparison to the last year, which would have been still higher but for the lower product availability due to interruption in a part of the plant operations due to an explosion.

The Company achieved the highest ever yearly production in the Methanol - I and II Plants, the Formic Acid Plant and the Acetic Acid Plant. New records have been established for continuous operation of Steam and Power Generation Units for 326 days and 389 days respectively. The production of Ammonia was slightly lower in comparison to the last year. The restrictions imposed by the Government of India on production of Urea at 100% of the installed capacity continued this year too. Accordingly, only 6,36,750 MTs of Urea was produced during the year.

The production of AN Melt, ANP, CAN, CNA and WNA was adversely affected due to explosion in the Nitrophosphate Complex. The operation of PCB Plant was discontinued with effect from 1st August, 2003.

The Government of India has announced a long term policy for the existing non-gas based Ammonia-Urea Units converting to NG/ LNG for feed stock/ fuel. The feed-stock for Company's Ammonia Plant is fuel Oil/ LSHS. The Company is, therefore, examining the Techno-Economic feasibility for Ammonia Plant feed-stock conversion from LSHS to R-LNG.

# 4. DIRECTORS' RESPONSIBILITY STATEMENT

As required under Section 217(2AA) of the Companies Act, 1956, your Directors confirm that :

- \* in the preparation of the annual accounts, the applicable accounting standards have been followed and that no material departures have been made from the same;
- \* appropriate accounting policies have been selected and applied consistently and judgements and estimates have been made that are reasonable and prudent so as to give a true and fair view of the state of affairs of the Company as on 31st March, 2004 and of the profit of the Company for the year ended on that date;
- \* proper and sufficient care has been taken for the maintenance of adequate accounting records in accordance with the provisions of the Companies Act, 1956 for safeguarding the assets of the Company and for preventing and detecting fraud and other irregularities; and
- \* the annual accounts have been prepared on a going concern basis.

# 5. CORPORATE GOVERNANCE

The Company has complied with the mandatory provisions of Corporate Governance as prescribed under the Listing Agreement of the Stock Exchanges, with which the Company's shares have been enlisted, except non-attendance, at the last Annual General Meeting, by the Chairman of the Audit Committee on account of his being out of the Country.

A separate Report on Corporate Governance forming part of the Annual Report is enclosed along with the Auditors' Certificate as to compliance of the conditions of Corporate Governance.

# 6. SUBSIDIARY COMPANIES

The Company has two subsidiaries viz. Narmada Chematur Petrochemicals Ltd. and ING Satcom Ltd. A new company in the name of ING Satcom Ltd., was incorporated during the year to undertake IT related activities including providing V-SAT services via Satellite Systems, Internet Gateways, Internet Service provider, etc. ING Satcom Ltd., is the wholly owned subsidiary of the Company.

In pursuance of Section 212 (8) of the Companies Act, 1956, the Company has made an application to the Central Government, seeking exemption from attaching copies of the Balance Sheet, Profit & Loss Account/ Statement of Incidental Expenditure, Report of the Board of Directors and the Report of the Auditors of the Subsidiary Companies viz. Narmada Chematur Petrochemicals Ltd. and TNG Satcom Ltd., to the Company's Balance Sheet as at 31st March, 2004. If the exemption as applied will be received before the mailing of Annual Reports to the shareholders commences, the documents as aforesaid of the subsidiaries shall not be attached to the Balance sheet of the Company. The said documents/ details shall, however, be made available, upon a request by any member of the Company interested in obtaining the same. The Company shall also comply with the conditions, if any, laid by the Central Government, while granting the exemption.

If the exemption under Section 212 (8) of the Companies Act, 1956 as applied is not received, the provisions of Section 212 (1) of the Companies Act, 1956 shall be complied with.

## 7. CONSOLIDATED FINANCIAL STATÉMENTS

In accordance with the Accounting Standard AS - 21 on Consolidated Financial Statements read with Accounting Standard AS - 23 on Accounting for Investments in Associates, your Directors have pleasure in attaching the Consolidated Financial Statements in respect of the Company and its subsidiaries viz. NCPL and ING Satcom Ltd., which form part of the Annual Report.

# 8. FIXED DEPOSITS

The number of depositors as on 31st March, 2004, who had not claimed their deposits and accordingly could not be paid by the Company after the due date for repayment, was 553 and the amount due to them aggregated to Rs.51.83 Lacs. The Company sent reminders to the depositors for complying with the formalities for claiming these deposits. Subsequently, the deposits for an aggregate amount of Rs.30.21 Lacs were claimed by 277 depositors and paid by the Company. This on-going process is continuously carried out by the Company.

# 9. DIRECTORS

Shri Manu Shroff who was due to retire by rotation at the last Annual General Meeting and who was eligible for re-appointment, expressed his unwillingness



to be reappointed. As such, he ceased to be a Director of the Company effective from 25th September, 2003.

The Board places on record its sincere appreciation for the valuable advice and guidance given by Shri Manu Shroff during his tenure of Directorship with the Company.

In pursuance of the provisions of the Articles of Association of the Company as also of the provisions of the Companies Act, 1956, Shri Rajnish Aggarwal retires by rotation at the ensuing Annual General Meeting.

# 10. VOLUNTARY DELISTING OF EQUITY SHARES

As resolved in the last Annual General Meeting, the Company has got its equity shares delisted from the Stock Exchange, Ahmedabad (ASE) and the Delhi Stock Exchange Association Ltd., New Delhi (DSE). The confirmation as to delisting of equity shares from the Calcutta Stock Exchange Association Ltd., Kolkata (CSE) and Vadodara Stock Exchange Ltd., Vadodara (VSE) are awaited.

The Company's equity shares continue to remain listed with the Stock Exchange, Mumbai (BSE), and the National Stock Exchange of India Ltd. (NSE), which have the nation wide network for trading. The Company has already made the payment of Listing Fees to BSE and NSE for the year 2004-05.

# 11. INFORMATION REGARDING CONSERVATION OF ENERGY, ETC., AND PARTICULARS OF EMPLOYEES

Information required under Section 217(1) (e) of the Companies Act, 1956, read with Rule (2) of the Companies (Disclosure of Particulars in the Report of Board of Directors) Rules, 1988 and information as per Section 217 (2A) of the Companies Act, 1956 read with the Companies (Particulars of Employees) Rules, 1975, as amended from time to time, are given in Annexures - "A" & "B" respectively forming part of this report.

# 12. AUDITORS & AUDITORS' REPORT

M/s C. C. Chokshi & Co, Chartered Accountants, the Statutory Auditors of the Company, hold office until the conclusion of the forthcoming Annual General Meeting and are eligible for re-appointment.

The Company has received a letter from them to the effect that their appointment if made, would be within

the prescribed limits under Section 224 (1-B) of the Companies Act, 1956 and also that they are not otherwise disqualified within the meaning of subsection (3) of Section 226 of the Companies Act, 1956, for such appointment.

The notes to the accounts referred to in the Auditors' Report are self explanatory and therefore, do not call for any further comments.

# 13. COST AUDITOR

In pursuance of the directives received from the Central Government for the appointment of Cost Auditors, your Directors have appointed Shri BC Desai, Cost Accountant, as the Cost Auditor to conduct the cost audit of fertilizer products in respect of financial year 2004-05 under the Cost Accounting Records (Fertilizers) Rules, 1993.

# 14. PERSONNEL

During the year under review, the Industrial Relations have remained extremely cordial and harmonious. But for the spirit of team work and dedication displayed by the Employees at all levels, it would not have been possible to complete the reconstruction of ANP and CAN Plants in a period of less than four months, following the explosion in the Nitrophosphate Group of Plants on 14th October, 2003. Employees at all levels deserve appreciation for the same. Your Directors compliment the employees for their ceaseless and untiring efforts for enhancing the productivity and achieving a higher level of performance.

During the period under review, a fresh Long Term Wage Settlement was entered into with the Employees' Union for the period from 1st July, 2002 to 30th June, 2006, on the expiry of the previous settlement.

### 15. ACKNOWLEDGMENT

Your Directors would like to place on record their gratitude for all the guidance and support received from the Government of India and the Government of Gujarat. Your Directors would also like to take this opportunity for expressing their sincere appreciation to the valued Consumers of Fertilizers and Chemicals, Customers of our IT Services, Dealers, Banks, Business Associates and valued Investors for the continued support to the Company.

For and on behalf of the Board of Directors,

Place: Ahmedabad Date: 26th July, 2004 P K Laheri Chairman

# ANNEXURES TO DIRECTORS' REPORT

# ANNEXURE - "A"

PARTICULARS UNDER COMPANIES (DISCLOSURE OF PARTICULARS IN THE REPORT OF BOARD OF DIRECTORS ) RULES, 1988 FOR THE YEAR ENDED ON 31ST MARCH, 2004.

# A. CONSERVATION OF ENERGY

# (a) Energy Conservation measures taken.

Following schemes were implemented during the year and some energy saving was achieved.

- Installation of Isothermal synthesis reactor in Methanol-I plant is completed and commissioned.
- To increase the Methanol-II plant distillation section capacity, the column trays are replaced with high capacity trays.
- At high load of WNA plant, excess HP steam generated from plant was required to be vented. A scheme is developed and commissioned wherein 2-2.5 TPH steam is recovered during high load operation of WNA plant.
- 4. A scheme of using concentrated effluent in wet scrubbing section of ANP/CAN plant is worked out thereby avoiding dilution of 60% AN solution. The scheme is commissioned successfully and has helped to achieve steam saving ~ 2 TPH in AN evaporation unit.
- Service water supply pump of capacity 300 m3/hr was operated with discharge valve in throttled condition during higher demand in daytime. Pump discharge pressure remains higher than header pressure. The original pump impeller diameter was trimmed.
- Electrical lighting energy saving: By changing the tap position of the existing transformers and by adopting energy conservation techniques, electrical energy saving is achieved by reducing lighting voltage. Installation and erection of one number of lighting transformer is completed.
- Steam trap management: In-house steam trap audit/ survey is carried out in all plants and defective/wrong type, improperly installed traps were identified and corrective actions are initiated.
- 8. Energy Audit of Fans / Blowers : For Energy Audit various fans having higher power requirement were selected and phase-wise performance testing is being carried out. Also retrofit of three FD Fans of BHEL Boilers carried out and power saving is achieved. Similar retrofit has been planned for other such 3 nos. of Fans.
- Energy Audit of Cooling water pumps: Detailed study of Ammonia, Urea and CPP cooling water pumps was carried out for efficiency improvement

- through retrofit of impellors. Actions are identified and phase wise implementation is planned.
- 10. Cooling tower audits: Detailed study was undertaken for Urea, CPP and Formic acid cooling towers to improve cooling water supply temperature. Factors related to poor performance were established and are being attended.

# (b) Additional Investment and proposals being implemented for reduction of consumption of energy and to improve productivity.

Following schemes are under advanced stage of implementation. This will improve productivity of plants.

## Ammonia plant

Certain improvements have been implemented during April-2004 shutdown :

- (i) Replacement of Ammonia synthesis catalyst.
- (ii) Revamp of water spray tower in Air Separation Unit.
- (iii) Installation of new Methanol water separation tower with modified trays.
- (iv) Replacement of old insulation in Rectisol section by PUF.

# Formic Acid plant

Formic acid capacity enhancement scheme is developed in-house and is under mechanical erection stage. Additional methyl format train scheme's engineering work completed in-house and is under procurement stage.

### Methanol synthesis unit

For new methanol synthesis unit, basic engineering is completed in-house and detailed engineering is under progress.

# Conversion of control system from pneumatic to DCS

The pneumatic control system has become obsolete. Conversion of urea and boiler plant operations to DCS is under consideration.

# (c) Impact of measures at (a) & (b) above for reduction of energy consumption and consequent impact on cost of production of goods.

With implementation of energy conservation measures at (a) above, there has been some energy saving. However, it is difficult to quantify as various factors including plant operation parameters, load influence the same. With implementation of measures at (b) above, there will be some energy saving and reliability of the plants will be maintained. Formic acid and Methanol production capacity will be enhanced with above schemes.

# (d) Total energy consumption and energy consumption per unit of production.

The required details are furnished in Form "A" annexed.



B. TECHNOLOGY ABSO			2 <b>Urea</b> Electricity
Efforts made in Technol Form 'B' annexed.	LIBORIORY LSHS (fuel) Coal		
C. FOREIGN EXCHANGE	EARNINGS AND OL	JTGO	Natural Gas
(a) Exports			3 Methanol (I+II) Electricity
With the national ec domestic manufactur			4 Formic Acid Electricity
chemicals is inadequate the gap being filled by			5 Acetic Acid Electricity
capacity of the Compacould be absorbed by		nufacture	6 Ammonium Nitro Electricity
Export of commodity checompared to the dome			7 Calcium Ammon Electricity
no exports of chemical			8 Weak Nitric Acid Electricity
b) Total Foreign Exchan	•	In Lacs)	9 Concentrated Nit Electricity
Particulars	2003-04	2002-03	FORM - B
Foreign Exchange Used		9,742.66	DISCLOSURE OF P
Foreign Exchange Earned	8.90	18.77	(A) RESEARCH & DE
FORM - 'A'			1. Specific Areas i
DISCLOSURE OF PARTIC	ULARS WITH RESP	ECT TO	Company  a) Development
CONSERVATION OF ENERG		201 10	removal from so
Sr. Particulars	Unit 2003-04	2002-03	dry bed.
lo.			b) Process Studie Process Param
) POWER AND FUEL CONS	LIMPTION		
	OME HOL		<ul> <li>c) Special Studies</li> </ul>
1. Electricity	JONIE 11014		c) Special Studies understanding o
Electricity     a) Purchased	'000 Kwh <b>6905</b>	9905	understanding of waste strea
a) Purchased Total Amount	'000 Kwh <b>6905</b> Rs. /lacs <b>1,102.73</b>	1,187.31	understanding of waste streating of waste streating of waste processing the control of the contr
a) Purchased Total Amount Rate / Unit	'000 Kwh 6905 Rs. /lacs 1,102.73 Rs. / Kwh 15.97		understanding of waste streat valuable produced by the control of
a) Purchased Total Amount Rate / Unit b) Own generation (net)	'000 Kwh 6905 Rs. /lacs 1,102.73 Rs. / Kwh 15.97	1,187.31	understanding of waste strea valuable prod development o d) Process impro
a) Purchased Total Amount Rate / Unit	'000 Kwh 6905 Rs. /lacs 1,102.73 Rs. / Kwh 15.97 '000 Kwh 371269	1,187.31 11.99	understanding of waste streated valuable produced development of the process improprocess for hygases.
a) Purchased Total Amount Rate / Unit b) Own generation (net) thro Steam Turbine Unit/SM3 of N.Gas E Variable Cost/Unit (Excl. Power Gen Du	'000 Kwh 6905 Rs. /lacs 1,102.73 Rs. / Kwh 15.97 '000 Kwh 371269 q. Kwh/SM^3 2.38	1,187.31 11.99 354652	understanding of waste streat valuable produced development of the process for hygases.  2. Benefits derived
a) Purchased Total Amount Rate / Unit b) Own generation (net) thro' Steam Turbine Unit/SM3 of N.Gas E Variable Cost/Unit (Excl. Power Gen Du  2. Coal	'000 Kwh 6905 Rs. /lacs 1,102.73 Rs. / Kwh 15.97 '000 Kwh 371269 q. Kwh/SM^3 2.38 ty) Rs. /Kwh 1.82	1,187.31 11.99 354652 2.72 1.89	understanding of waste streat valuable production development of the process for hygases.  2. Benefits derived a) The Dry Bed
a) Purchased Total Amount Rate / Unit b) Own generation (net) thro' Steam Turbine Unit/SM3 of N.Gas E Variable Cost/Unit (Excl. Power Gen Du	'000 Kwh 6905 Rs. /lacs 1,102.73 Rs. / Kwh 15.97 '000 Kwh 371269 q. Kwh/SM^3 2.38	1,187.31 11.99 354652 2.72 1.89 618861	understanding of waste streat valuable production development of the process for hygases.  2. Benefits derived a) The Dry Bed been demonst
a) Purchased Total Amount Rate / Unit b) Own generation (net) thro' Steam Turbine Unit/SM3 of N.Gas E Variable Cost/Unit (Excl. Power Gen Du  2. Coal Quantity	'000 Kwh 6905 Rs. /lacs 1,102.73 Rs. / Kwh 15.97  '000 Kwh 371269 q. Kwh/SM^3 2.38 ty) Rs. /Kwh 1.82	1,187.31 11.99 354652 2.72 1.89 618861 14,772.86	understanding of waste streat valuable produced development of the process improprocess for hygases.  2. Benefits derived a) The Dry Bed been demonst implement the
a) Purchased Total Amount Rate / Unit b) Own generation (net) thro' Steam Turbine Unit/SM3 of N.Gas E Variable Cost/Unit (Excl. Power Gen Du Coal Quantity Total Cost Average Rate  LSHS	'000 Kwh 6905 Rs. /lacs 1,102.73 Rs. / Kwh 15.97 '000 Kwh 371269 q. Kwh/SM^3 2.38 ty) Rs. /Kwh 1.82 MT 569305 Rs. /lacs 13,849.04 Rs. /MT 2,432.62	1,187.31 11.99 354652 2.72 1.89 618861 14,772.86 2,387.10	understanding of waste streat valuable produced process improduced process for hygases.  2. Benefits derived a) The Dry Bed been demonstratinglement the b) CATSOL® cate
a) Purchased Total Amount Rate / Unit b) Own generation (net) thro' Steam Turbine Unit/SM3 of N.Gas E Variable Cost/Unit (Excl. Power Gen Du  2. Coal Quantity Total Cost Average Rate  3. LSHS Quantity	'000 Kwh 6905 Rs. /lacs 1,102.73 Rs. / Kwh 15.97  '000 Kwh 371269 q. Kwh/SM^3 2.38 ty) Rs. /Kwh 1.82  MT 569305 Rs. /lacs 13,849.04 Rs. /MT 2,432.62  KL 58976	1,187.31 11.99 354652 2.72 1.89 618861 14,772.86 2,387.10 42620	understanding of waste streat valuable produced development of the process improprocess for hygases.  2. Benefits derived a) The Dry Bed been demonst implement the
a) Purchased Total Amount Rate / Unit b) Own generation (net) thro' Steam Turbine Unit/SM3 of N.Gas E Variable Cost/Unit (Excl. Power Gen Du  2. Coal Quantity Total Cost Average Rate  3. LSHS	'000 Kwh 6905 Rs. /lacs 1,102.73 Rs. / Kwh 15.97 '000 Kwh 371269 q. Kwh/SM^3 2.38 ty) Rs. /Kwh 1.82 MT 569305 Rs. /lacs 13,849.04 Rs. /MT 2,432.62	1,187.31 11.99 354652 2.72 1.89 618861 14,772.86 2,387.10 42620 3,656.57	understanding of waste streat valuable produced process improduced process for hygases.  2. Benefits derived a) The Dry Bed been demonstrating be care sulphide removed.
a) Purchased Total Amount Rate / Unit b) Own generation (net) thro' Steam Turbine Unit/SM3 of N.Gas E Variable Cost/Unit (Excl. Power Gen Du 2. Coal Quantity Total Cost Average Rate 3. LSHS Quantity Total Cost	'000 Kwh 6905 Rs. /lacs 1,102.73 Rs. / Kwh 15.97 '000 Kwh 371269 q. Kwh/SM^3 2.38 ty) Rs. /Kwh 1.82  MT 569305 Rs. /lacs 13,849.04 Rs. /MT 2,432.62  KL 58976 Rs. /lacs 4,947.75 Rs. /KL 8,389.43	1,187.31 11.99 354652 2.72 1.89 618861 14,772.86 2,387.10 42620 3,656.57 8,579.47	understanding of waste streat valuable produced development of development development of develo
a) Purchased Total Amount Rate / Unit b) Own generation (net thro' Steam Turbine Unit/SM3 of N.Gas E Variable Cost/Unit (Excl. Power Gen Du 2. Coal Quantity Total Cost Average Rate 3. LSHS Quantity Total Cost Average Rate 4. Natural Gas Quantity	'000 Kwh 6905 Rs. /lacs 1,102.73 Rs. / Kwh 15.97 '000 Kwh 371269 q. Kwh/SM^3 2.38 ty) Rs. /Kwh 1.82  MT 569305 Rs. /lacs 13,849.04 Rs. /MT 2,432.62  KL 58976 Rs. /lacs 4,947.75 Rs. /KL 8,389.43 '000 SM^3 29308	1,187.31 11.99 354652 2,72 1.89 618861 14,772.86 2,387.10 42620 3,656.57 8,579.47	understanding of waste streat valuable produced development of displaying process for hygases.  2. Benefits derived  a) The Dry Bed been demonst implement the b) CATSOL® catasulphide remove Hazira complex existing sulphut as well as technic to existing use
a) Purchased Total Amount Rate / Unit b) Own generation (net) thro' Steam Turbine Unit/SM3 of N.Gas E Variable Cost/Unit (Excl. Power Gen Du 2. Coal Quantity Total Cost Average Rate 3. LSHS Quantity Total Cost Average Rate 4. Natural Gas	'000 Kwh 6905 Rs. /lacs 1,102.73 Rs. / Kwh 15.97 '000 Kwh 371269 q. Kwh/SM^3 2.38 ty) Rs. /Kwh 1.82  MT 569305 Rs. /lacs 13,849.04 Rs. /MT 2,432.62  KL 58976 Rs. /lacs 4,947.75 Rs. /KL 8,389.43	1,187.31 11.99 354652 2,72 1.89 618861 14,772.86 2,387.10 42620 3,656.57 8,579.47	understanding of waste streat valuable produced development of development development of develo
a) Purchased Total Amount Rate / Unit b) Own generation (net; thro' Steam Turbine Unit/SM3 of N.Gas E Variable Cost/Unit (Excl. Power Gen Du 2. Coal Quantity Total Cost Average Rate 3. LSHS Quantity Total Cost Average Rate 4. Natural Gas Quantity Total Cost Average Rate 5. CONSUMPTION PER UNIT	'000 Kwh 6905 Rs. /lacs 1,102.73 Rs. / Kwh 15.97 '000 Kwh 371269 q. Kwh/SM^3 2.38 ty) Rs. /Kwh 1.82  MT 569305 Rs. /lacs 13,849.04 Rs. /MT 2,432.62  KL 58976 Rs. /lacs 4,947.75 Rs. /KL 8,389.43 '000 SM^3 Rs. /lacs 1,369.67 Rs. /KL 4.67	1,187.31 11.99 354652 2,72 1.89 618861 14,772.86 2,387.10 42620 3,656.57 8,579.47 28057 1,016.54	understanding of waste streat valuable produced development of the valuable produced and the valuable process for hygases.  2. Benefits derived  a) The Dry Bed been demonstrated been demonstrated been demonstrated by CATSOL® cates sulphide remove Hazira complex existing sulphut as well as technological as technological process.  c) Based on R&I
a) Purchased Total Amount Rate / Unit b) Own generation (net) thro' Steam Turbine Unit/SM3 of N.Gas E Variable Cost/Unit (Excl. Power Gen Du 2. Coal Quantity Total Cost Average Rate 3. LSHS Quantity Total Cost Average Rate 4. Natural Gas Quantity Total Cost Average Rate 5. CONSUMPTION PER UNIT	'000 Kwh 6905 Rs. /lacs 1,102.73 Rs. / Kwh 15.97 '000 Kwh 371269 q. Kwh/SM^3 2.38 ty) Rs. /Kwh 1.82  MT 569305 Rs. /lacs 13,849.04 Rs. /MT 2,432.62  KL 58976 Rs. /lacs 4,947.75 Rs. /KL 8,389.43 '000 SM^3 29308 Rs. /lacs 1,369.67 Rs. /KL 4.67	1,187.31 11.99 354652 2.72 1.89 618861 14,772.86 2,387.10 42620 3,656.57 8,579.47 28057 1,016.54 3.62	understanding of waste streat valuable produced development of the process of the process for hygases.  2. Benefits derived  a) The Dry Bed been demonstrated been demonstrated been demonstrated by CATSOL® cates sulphide remove the process of the
a) Purchased Total Amount Rate / Unit b) Own generation (net) thro' Steam Turbine Unit/SM3 of N.Gas E Variable Cost/Unit (Excl. Power Gen Du 2. Coal Quantity Total Cost Average Rate 3. LSHS Quantity Total Cost Average Rate 4. Natural Gas Quantity Total Cost Average Rate 5. CONSUMPTION PER UNIT 1 Ammonia Electricity	'000 Kwh 6905 Rs. /lacs 1,102.73 Rs. / Kwh 15.97  '000 Kwh 371269 q. Kwh/SM^3 2.38 ty) Rs. /Kwh 1.82  MT 569305 Rs. /lacs 13,849.04 Rs. /MT 2,432.62  KL 58976 Rs. /lacs 4,947.75 Rs. /KL 4,947.75 Rs. /KL 8,389.43  '000 SM^3 29308 Rs. /lacs 1,369.67 Rs. /KL 4.67  OF PRODUCTION  Kwh/MT 376.505	1,187.31 11.99 354652 2.72 1.89 618861 14,772.86 2,387.10 42620 3,656.57 8,579.47 28057 1,016.54 3.62	understanding of waste streat valuable produced development of the process improprocess for hygases.  2. Benefits derived  a) The Dry Bed been demonstrated been demonstrated been demonstrated by CATSOL® cates sulphide removed Hazira complex existing sulphuras well as technoto existing use c) Based on R&I capacity margicapacity has been deviced by Savings have from the specific capacity sulphides as well as technotographic capacity margicapacity has been deviced by the specific capacity capacity has been development of the specific capacity and capacity has been development of the specific capacity and capacity has been development of the specific capacity marginal capacity has been development of the specific capacity and capacity has been development of the specific capacity and capacity has been development of the specific capacity and capacity has been development of the capacity and
a) Purchased Total Amount Rate / Unit b) Own generation (net) thro' Steam Turbine Unit/SM3 of N.Gas E Variable Cost/Unit (Excl. Power Gen Du 2. Coal Quantity Total Cost Average Rate 3. LSHS Quantity Total Cost Average Rate 4. Natural Gas Quantity Total Cost Average Rate 5. Cost Average Rate 6. Natural Gas Quantity Total Cost Average Rate 7. Natural Gas Quantity Total Cost Average Rate 8. CONSUMPTION PER UNIT	'000 Kwh 6905 Rs. /lacs 1,102.73 Rs. / Kwh 15.97 '000 Kwh 371269 q. Kwh/SM^3 2.38 ty) Rs. /Kwh 1.82  MT 569305 Rs. /lacs 13,849.04 Rs. /MT 2,432.62  KL 58976 Rs. /lacs 4,947.75 Rs. /KL 8,389.43 '000 SM^3 29308 Rs. /lacs 1,369.67 Rs. /KL 4.67	1,187.31 11.99 354652 2.72 1.89 618861 14,772.86 2,387.10 42620 3,656.57 8,579.47 28057 1,016.54 3.62	understanding of waste streat valuable produced development of the process of the process for hygases.  2. Benefits derived  a) The Dry Bed been demonstrated been demonstrated been demonstrated by CATSOL® cates sulphide remove the process of the

2	Urea			
	Electricity	Kwh/MT	64.438	62.876
11	LSHS (fuel)	KL/MT	0.010	0.007
	Coal	MT/MT	0.131	0.135
	Natural Gas	SM^3/MT	4.780	4.683
3	Methanol (I+II)			
- 4	Electricity	Kwh/MT	318.913	331.302
4	Formic Acid			
	Electricity	Kwh/MT	837. 89	790.256
5	Acetic Acid			
	Electricity	Kwh/MT	197.992	250.304
6	Ammonium Nitro Phosphal	e		
	Electricity	Kwh/MT	228.577	209.050
7	Calcium Ammonium Nitrate	•		
	Electricity	Kwh/MT	65.958	60.230
8	Weak Nitric Acid			
	Electricity	Kwh/MT	47.754	43.509
9	Concentrated Nitric Acid (I	& 11)		
	Electricity	Kwh/MT	39.424	37.064

# ARTICULARS WITH RESPECT TO RPTION

# VELOPMENT

- n which R&D carried out by the
  - of Process for Hydrogen Sulphide ur gas streams using a regeneratable
  - s for Optimisation of Conditions and eters for various plants.
  - for improvement of plant performance, f byproducts, their disposal, treatment ms, recovery of water, recovery of ucts from waste streams and corrosion inhibitors.
  - vement for CATSOL liquid redox drogen sulphide removal from sour

### as a result of the above R&D

- process for hydrogen sulphide has ated for in-house use. Proposal to same being considered.
- lyst and chemicals for hydrogen al process have been sold to ONGC's and HPCL's Visakh complex for their recovery units. Sales of chemicals ology to new users and catalyst sale s are being negotiated.
- Process studies to establish the ns in formic acid plant, the plant een augmented.
- also been derived for the company ial studies being carried out for I recovery of waste products and process improvements.

 e) The company was awarded Golden Peacock Eco-Innovation Award 2003 for R&D work on Hydrogen Sulphide Removal Process.

#### 3. Future Plan of Action

The R&D efforts in the above areas are proposed to be strengthened and new areas of work are being identified which can benefit the Company.

4. Expenditure on R&D

(Rs. In Lacs)

			•
Sr. No.	Nature of Expenditure	2003-04	2002-03
1.	Capital Expenditure	24.30	0
2.	Recurring Expenditure	34.83	40.94
3.	Salaries to R&D Personnel	56.17	56.31
	Total	115.30	97.25
4.	Total R&D Expenditure as a percentage of total turnover	0.0742%	0.0664%

# (B) TECHNOLOGY ABSORPTION, ADAPTATION AND INNOVATION

- Efforts in brief, made towards technology absorption, adaptation and innovation
  - During the current year, technology absorption is achieved in professionally excellent manner in two areas, namely (a) operation of isothermal reactor in Methanol-I plant (b) operation of Acetic Acid with newly acquired CATIVA process.
  - ii) The Company has further enhanced its process design capability and successfully implemented important major technical revamp schemes using inhouse resources. The modifications are carried out in plants for safe and reliable operations, improving

- machine/equipment performance, energy saving by reducing utility consumption.
- iii) The Company also interacts with know how supplier/ consultant for plant problems, and reliability study to sustain productivity and improving plant performance.

# 2. Benefits derived as a result of above efforts

As a result of above measures, there has been improvement in plant performance.

# 3. Information regarding Technology Imported during the last five years

Technology Imported .	Year of Import	Has Tech. been fully absorbed?	if Techno. not fully absorbed, reasons thereof.
M/s. KRUPP UHDE Germany for Revamp of WNA plant from 630 to 750 MTPD	1999	Yes	
M/s. BASF for Wet Scrubbing System in Nitro phosphate Plant	1999	Yes	
M/s. Linde for CO-II cold box in Acetic Acid Plant expansion	1999	Yes	· . –
M/s. BP chemicals for Acetic Acid expansion	1999	Yes	•, •, <u>—</u>
M/s. Linde for Methanol isothermal reactor	2002	Yes	. —
M/s. Linde for ASU revamp in Ammonia Plant	2003	Under Impleme	 entation

# ANNEXURE: "B"

STATEMENT SHOWING THE PARTICULARS OF EMPLOYEES OF THE COMPANY AS REQUIRED UNDER SECTION 217 (2A) OF THE COMPANIES ACT, 1956 READ WITH THE COMPANIES (PARTICULARS OF EMPLOYEES) RULES, 1975 AND FORMING PART OF THE REPORT OF THE BOARD OF DIRECTORS FOR THE YEAR ENDED ON 31ST MARCH, 2004.

Sr. No.	Name (S/Shri)	Age (In Yrs.)	Qualification	Total Exp. (Yrs.)	Designation	Remuneration Received (Rs.)		Last Employment held
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)

A. Employees who were employed throughout the financial year and were in receipt of remuneration for the year which in the aggregate, was not less than Rs. 24,00,000/-

Employees who were employed for a part of the financial year and were in receipt of remuneration for any part of that year at the rate which in the aggregate was not less than Rs. 2,00,000/- per month.

1.	M M BHATT	60	BE (Chem.)	37	GENERAL MANAGER	22,75,822	16/12/1978	Training Officer, IPCL
2.	R D DHANAK	60	BE (Mech.)	35	EXECUTIVE DIRECTOR	25,97,251	04/04/1977	Engineer, GSFC Ltd.
3.	S K GOGIA	60	B.Sc., Dip. in Purchase & Stock Control, Cert. in Indl. Mgt., MBA	39	ADDITIONAL GENERAL MANAGER	19,29,311	05/05/1978	Asstt. Purchase Officer, Hindustan Papers Corp. Ltd.
4.	L R SUTHAR (Late Shri)	47	B.Sc.	24	SR SHIFT ENGINEER	5,95,804	01/11/1980	Chemical Plant Optr. Trainee, GNFC Ltd.
5.	A D PATEL (Late Shri)	43	B.Sc. (Agri.)	20	ASSTT. MKTG. MGR.	4,79,511	16/02/1984	Field Representative Trainee, GNFC Ltd.
6.	J B GOSWAMI	40	Dip. In Petro-Chem	18	SR. OPERATOR	3,66,819	16/01/1986	Jr. Operator Trainee, GNFC Ltd.

# NOTES :

- 1. The total remuneration includes Salaries, Allowances, Special Pay, Company's contribution to PF, Leave Encashment, Leave Travel Concession and Medical aids, where applicable, etc. The perguisites have been evaluated in accordance with the Income-tax Rules.
- None of the above employees is a relative of any Director of the Company.