

# ANNUAL REPORT

**1995-1996**



**MEGHALAYA STATE POLLUTION CONTROL BOARD,**

**“ARDEN”, LUMPYNGGAD,**

**SHILLONG - 793014**

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**ANNUAL REPORT FOR THE PERIOD 1<sup>st</sup> APRIL 1995 – 31<sup>st</sup> MARCH 1996**CONTENTS

SL.NO.	TOPICS	PAGE NO.
1.	INTRODUCTION	2-3
2.	CONSTITUTION OF THE BOARD AND CHANGES THEREIN	3-4
3.	MEETINGS OF THE BOARD WITH MAJOR DECISIONS	4
4.	COMMITTEES CONSTITUTED BY THE BOARD AND THEIR ACTIVITIES	5
5.	MONITORING NETWORK FOR AIR AND WATER QUALITY	5-10
6.	PRESENT STATE OF ENVIRONMENTAL PROBLEMS AND COUNTER MEASURES	10-11
7.	ENVIRONMENTAL RESEARCH	12
8.	ENVIRONMENTAL TRAINING	12
9.	ENVIRONMENTAL AWARENESS AND PUBLIC PARTICIPATION	12
10.	ENVIRONMENTAL STANDARDS INCLUDING THE TIME SCHEDULE FOR THEIR ENFORCEMENT	12
11.	PROSECUTIONS AND CONVICTIONS FOR ENVIRONMENTAL CONTROL	13
12.	FINANCE AND ACCOUNTS	13
13.	ANNEXURE	14-25
14.	TABLES	26-30

## 1. INTRODUCTION

The State Board for Prevention and Control of Water Pollution, Meghalaya was constituted by the Government of Meghalaya on the Sixteenth Day of November, Nineteen Eighty –Three in pursuance of the Water (Prevention & Control of Pollution) Act, 1974. After the enactment of the Air (Prevention & Control of Pollution) Act, 1981, the enforcing responsibility of the Act was also entrusted to the above Board. As such, the Board was later renamed as Meghalaya State Pollution Control Board in 1988. The functions of the Board are as laid down under Section 17 of the Water (Prevention and Control of Pollution) Act, 1974 and Section 17 of the Air (Prevention and Control of Pollution) Act, 1981.

Besides the enforcement of the Water (Prevention & Control of Pollution) Act and the Air (Prevention & Control of Pollution) Act, the Board is also enforcing the following Acts , Rules and Notifications:-

- 1) The Water (Prevention and Control of Pollution) Cess Act, 1977, as amended by Amendment Act 1991.
- 2) The Water (Prevention and Control of Pollution) Cess Rules, 1978.
- 3) The Hazardous Waste (Management and Handling) Rules, 1989.
- 4) The Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989.
- 5) The Manufacture, Use, Import, Export & Storage of Hazardous Micro organism or Cells Rules, 1989.
- 6) The Public Liability Insurance Act, 1991.
- 7) The Environmental Impact assessment Notification, 1994.

The Board has been functioning with 27 (Twenty seven) Staffs as on 31-3-1996 against a sanctioned strength of 82 (Eighty two). The details of staff position are given in Annexure-I. The organization chart of the Boards is given in Annexure-II.

The Central Office of the Board is located in Shillong. So far, the Board could not establish a Regional, Divisional or District Offices in the State due to fund constraints. The Central Office is responsible for making general policies relating to enforcement of the Acts and rules. It also looks after general administration and co-ordination with other agencies. Besides, it takes up public awareness programmes on matters relating to environment pollution. The Central

Laboratory is well-equipped and carries out analysis of samples of water, waste water, stack emission, ambient air, vehicular emissions etc.

The other major activities of the Central office of the Board include:-

- (i) Inspection of industries and local bodies.
- (ii) Monitoring of the quality of water and wastewater.
- (iii) Monitoring of the quality of ambient air and stack emissions.
- (iv) Inspection of the sites proposed for setting up of industries to verify the suitability of the same from environmental point of view.
- (v) Water bodies monitoring under MINARS(Monitoring of Indian National Aquatic Resources System) programme.
- (vi) Ambient Air Quality Monitoring under National Ambient Air Quality Monitoring (NAAQM) programme.
- (vii) Offering guidance to industries and local bodies on statutory provisions.
- (viii) Issue of Consents to Establish and Consents to Operate with respect to industries and Municipal Boards.

## **2. CONSTITUTION OF THE BOARD**

The State Government nominates the members of Meghalaya State Pollution Control Board. The Board was originally constituted under Section 4 of the Water (Prevention & Control of Pollution) Act, 1974 vide Notification No. PHE. 161/83/1 dt. 16.11.83. The last reconstitution of the Board was in January 1995 vide Notification No. PHE 161/83/114 dated 16<sup>th</sup> Jan.1995.

The Board consists of 20(twenty) members nominated by the State Government as per Provisions laid down in Sub-Section (2) of Section 4 of the Water (Prevention and Control of Pollution) Act 1974. Besides the Chairman and the Member Secretary, there are 6(six) official members representing various State Government Departments, 4(four) members representing local Authorities, 3(three) Members representing the Co-operatives and Corporations owned, managed or

or controlled by the State Government and 5(five) Non-official Members. The list of the Members of the Board is appended at Annexure-III.

Shri B.N.Mishra took over as Chairman of the Board on 10.10.1995 and continued as Chairman during the financial year.

Shri Subikash Chakravorty took over as Member Secretary of the Board on 10.10.1995 and continued as Member Secretary during the financial year.

### 3. MEETING OF THE BOARD WITH MAJOR DECISIONS

During the year 1995-1996 the following Board Meeting was held :-

<i>Name of the Meeting</i>	The 23 <sup>rd</sup> Meeting of the Meghalaya State Pollution Control Board.
<i>Date of the 23<sup>rd</sup> Board Meeting</i>	12 <sup>th</sup> May 1995
<i>Venue</i>	Conference Room of the Meghalaya State Pollution Control Board, Lumpyngngad, Shillong.
<i>No. of Members present in the Meeting</i>	8(eight).

The major decision taken in the Meeting was :

- It was resolved that the North Eastern Council may be approached for sanctioning financial assistance for the construction of an RCC building for the Central Laboratory of the Board.

#### **4. COMMITTEES CONSTITUTED BY THE BOARD AND THEIR ACTIVITIES**

The Purchase Committee was constituted vide Government Notification NO. PHE: 96/95/3 Dated 29<sup>th</sup> September 1995 for scrutinizing the offers and approving the rates for purchase of scientific instruments/equipments for the Board's laboratory. The members of the Committee are as enlisted at Annexure - IV (A).

The Consent Committee was reconstituted vide Notification No. PHE: 346/87/Pt/73 Dated 10<sup>th</sup> July 1995 .The members of the Committee are as indicated at Annexure -IV (B).

#### **5. MONITORING NETWORK FOR AIR, WATER AND SOIL QUALITY**

##### **5.1 MONITORING OF AIR QUALITY IN THE STATE**

##### **5.1.1. NATIONAL AMBIENT AIR QUALITY MONITORING**

There are 2(two) National Ambient Air Quality Monitoring (NAAQM) stations in the state. Both the stations are located in Shillong City. One Station is located at the State Central Library Building, which is in the heart of the City. The other Station is located at Lumpyngngad inside the Board's Office premises. These stations have been functioning since March 1989. The major pollutants monitored at these stations are Suspended Particulate Matter (SPM), Sulfur Dioxide (SO<sub>2</sub>) and Oxides of Nitrogen (NO<sub>x</sub>). Meteorological parameters viz. wind speed, wind direction are also recorded during the ambient air quality sampling.

The ambient air quality data recorded from the two stations are as shown in the following Tables.

**STATION-I : THE STATE CENTRAL LIBRARY BUILDING, SHILLONG**

SL.NO	MONTH	SPM( $\mu\text{g}/\text{m}^3$ )	SO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	NO <sub>x</sub> ( $\mu\text{g}/\text{m}^3$ )
1	APRIL,1995	37.90	BDL	BDL
2	MAY,1995	33.00	BDL	BDL
3	JUNE,1995	29.15	BDL	BDL
4	JULY,1995	25.70	BDL	BDL
5	AUGUST,1995	25.55	BDL	BDL
6	SEPTEMBER,1995	26.55	BDL	BDL
7	OCTOBER,1995	27.60	3.50	6.70
8	NOVEMBER,1995	35.55	4.50	7.00
9	DECEMBER,1995	50.35	2.30	6.50
10	JANUARY,1996	59.45	3.10	7.00
11	FEBRUARY,1996	47.00	3.90	7.50
12	MARCH,1996	42.70	3.85	3.60

BDL = Below Detectable Limits

**STATION-II:BOARD'S OFFICE PREMISES, LUMPYNGGAD, SHILLONG**

SL.NO	MONTH	SPM( $\mu\text{g}/\text{m}^3$ )	SO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	NOx( $\mu\text{g}/\text{m}^3$ )
1	APRIL,1995	29.65	BDL	BDL
2	MAY,1995	26.10	BDL	BDL
3	JUNE,1995	22.85	BDL	BDL
4	JULY,1995	23.20	BDL	BDL
5	AUGUST,1995	27.15	BDL	BDL
6	SEPTEMBER,1995	26.56	BDL	BDL
7	OCTOBER,1995	28.90	BDL	BDL
8	NOVEMBER,1995	28.20	BDL	BDL
9	DECEMBER,1995	37.65	BDL	BDL
10	JANUARY,1996	41.60	BDL	BDL
11	FEBRUARY,1996	38.00	BDL	3.5
12	MARCH,1996	33.30	BDL	BDL

BDL : Below Detectable Limits

### 5.1.2. MONITORING IN INDUSTRIAL AREAS-BARAPANI INDUSTRIAL ESTATE

Name of Industry :: M/s. RKB CEMENT FACTORY, Umiam,Ri-Bhoi District.

TYPE OF MONITORING	SPM ( $\mu\text{g}/\text{m}^3$ )	SO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	NO <sub>x</sub> ( $\mu\text{g}/\text{m}^3$ )
Ambient Air Monitoring	367.8	BDL*	BDL
Stack Emission Monitoring	215.0	BDL	BDL

\* **BDL: Below Detectable Limits**

### 5.1.3. ASSESSMENT OF VEHICULAR POLLUTION

Vehicular exhaust emissions are the main source of air pollution because of the fact that the per capita vehicular density in the urban areas of the State is very high. The Meghalaya Pollution Control Board has been conducting vehicular emissions tests & surveys in collaboration with the Office of the Commissioner of Transport, Meghalaya. The Board has a Vehicle Emission-testing Centre inside its office premises at Lumpyngngad, Shillong which has been functioning since January 1994. This Centre caters to the exhaust testing needs of the commercial petrol - driven light vehicles only.

As per arrangement with the Office of the Commissioner of Transport, Meghalaya, the periodical renewals of permits of taxis are subject to submission of "Green Certificates" issued from the Office of the Board. During the Year 1995-96, the number of vehicles tested at the Centre is as follows:-

<i>Year</i>	<i>No of Vehicles tested for Vehicular Emission</i>	<i>No. of Vehicles complying with the Standards</i>	<i>No. of Vehicles not complying with the Standards</i>	<i>% Non-Complying Vehicles</i>
From 01.04.95-31.03.96	2056	1209	847	41%

## **5.2 MONITORING OF WATER QUALITY IN THE STATE**

One of the major objectives of the Meghalaya Pollution Control Board as per the Water (Prevention and Control of Pollution) Act 1974 is to promote cleanliness of Water bodies in the State. To achieve this objective, the Board is undertaking monitoring of major rivers/lakes and springs of the state under the following programmes:

### **5.2.1. MONITORING OF NATURAL WATER BODIES UNDER MINARS PROGRAMME**

Under the Monitoring of Indian National Aquatic Resources Programme (MINARS) the Board has 1 (one) monitoring station in each of the five water bodies namely, Ward's Lake, Umiam Lake, Umtrew River, Thadlaskein Lake and Kyrhuhkhla River. The water quality of these water-bodies was being monitored on quarterly basis since 1990. The analysis results obtained during 1995-96 are as seen in Table - 1,2,3,4,5 respectively.

From the above-mentioned tables, it may be noted that River Umtrew and Thadlaskein Lake reflect the pristine status of water quality. River Kyrhuhkhla which flows through the coal mining areas of Jaintia Hills District show remarkably less pH values, which is indicative of the water pollution by coal mining activities. Wards Lake and Umiam Lake receive most of the waste water and solid wastes generated in the Shillong city. The water quality of these water bodies shows the

shows the presence of high amount of total and faecal coliforms, which is clear sign of organic and bacterial pollution.

### **5.2.2. ANALYSIS OF WATER SAMPLES SENT TO THE BOARD'S LABORATORY**

The Board also analysed the water samples received from various Govt. and Semi-Govt. organizations of the State. During the year 1995-1996, the Board analysed 296 such water samples. There were 221 samples received from the P.H.E. Department and 55 samples from private parties and other Government Departments. There were 20 samples analysed under the MINARS Programme.

As most of these water samples are received from the Public Health Engineering Department, Meghalaya, the Board could collect data of the drinking water quality of various drinking water sources in the State.

## **6. PRESENT STATE OF ENVIRONMENTAL PROBLEMS AND COUNTER MEASURES**

Meghalaya is a hill State located in the North-Eastern region of the Country. It covers an area of about 22,429 sq.kms. and its population as per 1991 census is 17,74,778. Due to certain factors, the industrial development in the State has been slow and as such, the environmental pollution from industrial sources is not that significant. In the recent past, the State has been experiencing rapid population growth and fast urbanization. It is estimated that about 80% of the pollution resulted from indiscriminate discharge or disposal of domestic sewage, trade effluents, urban solid wastes, bio-medical wastes, domestic fuel burning and vehicular exhaust emissions. However, exhaust emission from vehicles is a major contributor to air pollution since road transport is the only mean of transport in the State. The State is rich in mineral resources and the main minerals are coal and limestone which are found in almost the entire southern belt. Mining activities are mostly in private hands and minerals are being exploited in an unscientific and

unplanned manner without any measures for unplanned manner without any measures for reclamation of the already mined areas. This has been causing severe water pollution and environmental degradation.

As per information from the Directorate of Industries, Meghalaya there are 2,533 industrial units/establishments in the State. Many of these are small and tiny units, which are non-polluting in nature. However, around 250 of these are regarded as polluting units and one of them is a cement plant under large-scale industrial sector, which also falls under the 17 category of highly-polluting industries. The others are medium and small-scale cement plants, lime calcinations plants, stone crushing units and auto workshop and servicing units. Most of the lime calcinations units are coal fired traditional type kilns which do not have even hood and chimney for venting out the smoke. So far, no cost effective pollution control system could be suggested for such units due to peculiar nature of the kiln structures.

The Board is regulating the discharge of effluents and air emissions from industries through the issuance of Consents under Water & Air Acts. While issuing Consents, conditions are being imposed with regard to the effluent standards and the emission standards to which industries have to comply with. Conditions are also stipulated for setting up of an effluent treatment plant and/or installation of air pollution control system whenever there is a necessity. The Officials of the Board are engaged in periodical collection and analysis of samples for verification of the industries' compliance to Consent conditions. The industrial firms are also instructed to ensure that pollution control systems, whenever necessary, are installed and commissioned within a stipulated time. In respect of new Projects, Consents to Establish are issued only after examining the suitability of the sites and scrutiny of the pollution control proposals. Besides, the Board is encouraging the industries to adopt cleaner production techniques based on re-cycle, re-use, and recover concepts.

The names of industries/firms which applied for Consent to Establish during the year 1995-1996 are as given at Annexure-V. Those industries which were granted Consent to Establish during the year are as indicated at Annexure-VI. The industries which were granted the Consent to Operate are as mentioned at Annexure VII. Further, the industries which were granted the Renewal of the Consent to Operate are as indicated at Annexure-VIII.

## **7. ENVIRONMENTAL RESEARCH**

During the year 1995-1996 the Board did not take up any study project due to financial limitations.

## **8. ENVIRONMENTAL TRAINING**

During the year 1995-96, the Board's officials attended various training programmes. The names of the officials who attended these training programmes is appended as Annexure-IX.

## **9. ENVIRONMENTAL AWARENESS AND PUBLIC PARTICIPATION.**

The Board participated in a Seminar on Environment and Pollution organized by the Nongkrem College Students Association in collaboration with the Planning Department, Govt. of Meghalaya.

## **10. ENVIRONMENTAL STANDARDS INCLUDING THE TIME SCHEDULE FOR THEIR ENFORCEMENT**

The Board adopts the standards prescribed by the Central Pollution Control Board and the Ministry of Environment and Forests, Govt. of India. In case, where the standards of the said organizations are not available, the Board follows the standards prescribed by the Indian Standards Institutions. The Board maintains the enforcement Schedule as prescribed by the Central Pollution Control Board and the Ministry of Environment and Forests, Govt. of India, for 17 categories of industries. It has its own enforcement schedule for the remaining industries which is specified at the time of granting of "Consent to Establish" and "Consent to Operate".

## **11. PROSECUTIONS AND CONVICTIONS FOR ENVIRONMENTAL CONTROL**

### **(a) PROSECUTIONS:**

No prosecutions were launched against any industry/unit for non-compliance of the standards during the year 1995-1996.

### **(b) CLOSURE OF INDUSTRIAL POLLUTING UNITS**

The Board did not issue closure notices to any industry/unit during the year 1995-1996.

## **12. FINANCE AND ACCOUNTS FOR THE MEGHALAYA STATE POLLUTION CONTROL BOARD**

The Annual Accounts for Receipts and Expenditure of the Board during the year 1995-96 are appended at Annexure-X(A) and X(B).

**ANNEXURE - I**

**STAFF POSITION OF THE MEGHALAYA STATE POLLUTION CONTROL BOARD  
AS ON 31<sup>ST</sup> MARCH, 1996**

<b>SL. NO.</b>	<b>ADMINISTRATIVE &amp; ACCOUNTS STAFF</b>	<b>SANCTIONED STRENGTH</b>	<b>WORKING STRENGTH</b>	<b>VACANCY</b>
1.	Administrative Officer	1	-	1
2.	Private Secretary to Chairman	1	-	1
3.	Scientist 'B'(Economics & Statistic)	1	-	1
4.	Legal Officer	1	-	1
5.	Senior Accountant	1	1	-
6.	Establishment officer	1	-	1
7.	Stenographer Grade II	1	-	1
8.	Statistical Assistant	1	-	1
9.	U.D.A	4	2	2
10.	L.D.A.	7	1	6
11.	L.D.A. Cum-Typist	5	2	3
12.	Typist	4	1	3
13.	Library Asstt.	1	-	1
14.	Driver	4	3	1
15.	Duftry	1	1	-
16.	Peon/Plumber/Mali	14	4	10
17.	Chowkidar	3	2	1
	<b>TECHNICAL STAFF</b>			
1.	Environmental Engineer	2	1	1
2.	Asstt.Environmental Engr.	4	1	3
3.	Senior Draftman	1	-	1
4.	Junior Draftman	2	-	2
5.	Tracer	2	-	2
	<b>SCIENTIFIC STAFF</b>			
1.	Chief Chemist	1	1	-
2.	Scientist "B"	3	2	1
3.	Senior Scientific Assistant	1	-	1
4.	Junior Scientific Asstt.	5	2	3
5.	Junior Laboratory Asstt.	2	-	2
6.	Store Keeper	1	-	1
7.	Sample Collector	5	1	4
8.	Laboratory Attendant (Peon)	2	2	-
	<b>TOTAL</b>	<b>82</b>	<b>27</b>	<b>55</b>

**ANNEXURE-III****LIST OF MEMBERS FOR THE PERIOD 1995-1996**

1. Chairman Meghalaya state Pollution Control Board, Shillong	Chairman
2. Chief Engineer Public Health Engineering, Meghalaya or his nominee	Member
3. Director General of Police, Meghalaya or his nominee	Member
4. Director of Industries, Meghalaya or his nominee	Member
5. Director of Health Services (Research, etc), Meghalaya or his nominee	Member
6. Director, Urban Affairs, Meghalaya or his nominee	Member
7. Chief Conservator of Forests (Social Forestry & Environment), Meghalaya or his nominee	Member
8. Chief Executive Member, Khasi Hills Autonomous District Council Or his nominee	Member
9. Chief Executive Member, Jaintia Hills Autonomous District Council Or his nominee	Member
10. Chief Executive Member, Garo Hills Autonomous District Council Or his nominee	Member
11. Chairman, Shillong Municipal Board or his nominee	Member
12. Managing Director, Meghalaya Industrial Development Corporation or his nominee	Member
13. Managing Director, Meghalaya Mineral Development Corporation or his nominee	Member
14. Managing Director, Meghalaya Forest Development Corporation, or his nominee	Member
15. Shri Friday Lyngdoh, Ex-MLA, Mawkhar, Shillong	Member
16. Shri Diverland Lyngdoh, Mawkyrwat, West Khasi Hills District	Member
17. Shri Winseng Sangma, MDC, Bajengdoba, East Garo Hills District	Member
18. Shri Robin Marak, Tura, West Garo Hills District	Member
19. Shri Herbert Suchiang, Ex-MLA, Risa Colony, Shillong	Member
20. Member Secretary, Meghalaya State Pollution Control Board	Member Secretary

**ANNEXURE – IV (A)****MEMBERS OF THE PURCHASE COMMITTEE DURING THE YEAR –1995-1996**

1. Chairman, Meghalaya State Pollution Control Board - Chairman
2. Director, Regional Sophisticated Instrumentation Centre,  
Shillong - Member
3. Chief Engineer, P.H.E., Meghalaya or his nominee - Member
4. Director of Industries, Meghalaya or his nominee - Member
5. Senior Scientist (PP), Indian Council of Agricultural Research,  
Umiam - Member
6. Senior Accountant, Meghalaya State Pollution Control Board - Member
7. Member Secretary, Meghalaya State Pollution Control Board - Convener

**MEMBERS OF THE CONSENT COMMITTEE**

1. Chief Conservator of Forests, Social Forestry & Environment, Meghalaya, Shillong. - Chairman
2. Director, Forensic Science Laboratory, Meghalaya, Shillong or his nominee - Member
3. Director, Mineral Resources, Meghalaya, Shillong or his nominee - Member
4. Director, Urban Affairs, Meghalaya, Shillong or his nominee - Member
5. Director, Soil Conservation, Meghalaya, Shillong, or his nominee - Member
6. Director of Industries, Meghalaya, Shillong or his nominee. - Member
7. Zonal Officer, NEZO, CPCB, Shillong - Member
9. Shri.H.G.D.Sanderson - Member
8. Member Secretary, MSPCB, Shillong. - Member Convenor

**ANNEXURE-V****INDUSTRIAL UNITS/FIRMS WHICH APPLIED FOR CONSENT TO ESTABLISH  
DURING THE YEAR 1995-1996**

1	M/S Shullai Lime Industry	24	M/S Dyna Lime and Chemicals
2	M/S Eastern Petro Chemicals	25	M/S Bol's Bakes
3	M/S Garo Hills Tea Co.	26	M/S G.D.Kharkongor Lime
4	M/S Sohkhlet Enterprise Lime	27	M/S Laisent Mining Co. (P)Ltd.
5	M/S North East Fuels	28	M/S Anderson Minerals Co. (P)Ltd.
6	M/S Wankhar Lime	29	M/S F.S. Enterprise Lime
7	M/S Malngiang Lime Industry	30	M/S M.S.K.Lime Products
8	M/S Santlet Enterprise Lime	31	M/S S.Suiting Lime
9	M/S H.Ksanlah Lime Works	32	M/S P.Suting Lime
10	M/S S.Laitmon Lime Works	33	M/S D.S.Lime Industry
11	M/S W.Sohkhlet Lime Kiln	34	M/S Jaintia Fuels (P)Ltd
12	M/S S.M.Lime Industry	35	M/S Gregory Chyne Lime Works
13	M/S Wann Lime Industry	36	M/S P.O.Tiewmon Enterprise
14	M/S K.L.D. Lime Products	37	M/S D.Chyne Lime Works
15	M/S Tourquet Lime Industry	38	M/S S.Chyne Lime Works
16	M/S L.Suiting Lime Enterprise	39	M/S J.K.Dkhar Lime Kiln
17	M/S Chyne Lime Products	40	M/S Torial Rani Service
18	M/S Rymbai Lime Industry	41	M/S Diorty Laitmon Lime Kiln
19	M/S Shrieh Lime Products	42	M/S R.S.Hynniewta Lime
20	M/S Eastern Mining Ltd	43	M/S Kishondro Lime Kiln
21	M/S E.R.Mawrong and Co. Lime	44	M/S J.K.Enterprise
22	M/S Nehlang Lyngdoh Lime Kiln	45	M/S W.Mawa Lime Kiln
23	M/S A.M.S.Cement		

**ANNEXURE – VI****INDUSTRIAL UNITS/FIRMS WHICH WERE GRANTED CONSENT TO ESTABLISH  
DURING THE YEAR 1995-1996**

1. M/S Megha Ferro Alloys (P)Ltd.
2. M/S Eastern Stones(P)Ltd.
3. M/S Devorah Lime Industry
4. M/S Garo Hills Tea Co.
5. M/S Sohkhlet Enterprise Charra Lime Products
6. M/S Wankhar Lime
7. M/S Malngiang Lime Industry
8. M/S A.M.S. Cements (P)Ltd.
9. M/S Bol's Bakes
10. M/S F.S.Enterprise
11. M/S D.S.Lime Industry
12. M/S Gregory Chyne Lime Works
13. M/S P.O. Tiewmon Enterprise
14. M/S D.Chyne Lime Works
15. M/S S.Chyne Lime Works
16. M/S Torial Rani Service Station.

**ANNEXURE-VII****INDUSTRIAL UNITS/FIRMS WHICH WERE GRANTED CONSENT TO OPERATE  
DURING THE YEAR 1995-1996**

1. M/S Santlet Enterprise
2. M/S Laitmon Lime Works
3. M/S L.Suiting Lime Enterprise
4. M/S W.Sohkhlet Lime Kiln
5. M/S Rymbai Lime Industry
6. M/S G.D.Kharkongor Lime Industry
7. M/S S.Suiting Lime
8. M/S S.Chyne Enterprise
9. M/S J.K.Dkhar Lime Kiln
10. M/S J.K.Enterprise
11. M/S P.Suiting Lime

**ANNEXURE – VIII**

**INDUSTRIAL UNITS/FIRMS GRANTED RENEWAL OF THE CONSENT TO OPERATE  
DURING THE YEAR 1995-1996**

1. M/S Meghalaya Electronic Development Corporation
2. M/S Meghalaya Industrial Development Corporation

**ANNEXURE -IX**

**TRAININGS/WORKSHOPS/SEMINARS ATTENDED BY THE OFFICIALS OF THE  
BOARD DURING THE YEAR 1995-1996**

<i>SL. No.</i>	<i>NAME &amp; DESIGNATION</i>	<i>NAME OF TRAINING</i>	<i>PLACE OF TRAINING</i>	<i>PERIOD OF TRAINING</i>
1.	Shri K.Sen, Chairman	“Good Health” - 95	Chandigarh	5 <sup>th</sup> -8 <sup>th</sup> Oct. 1995
2.	Shri S.Charkraborty, Member Secretary	“Fourth Course on Environmental Management”	Hyderabad	4 <sup>th</sup> -9 <sup>th</sup> Dec. 1995
3.	Ms. B.Nongbri, Scientist ‘B’	Risk Assessment and Health Impact	Bhopal	12 <sup>th</sup> -16 <sup>th</sup> Feb. 96
4.	Shri W.R.Kharkrang, Asstt. Environmental Engr.	Workshop on Environment Epideoepidemiology	Calcutta	25 <sup>th</sup> -29 <sup>th</sup> Sept. 95
5.	Shri W.R.Kharkrang, Asstt. Environmental Engr.	Environment and Development Policy Issue	Shillong	15 <sup>th</sup> -21 <sup>st</sup> Jan. 96
6.	Ms. N.Deka, J.S.A.	Bio-Monitoring of water quality	New Delhi	20 <sup>th</sup> -24 <sup>th</sup> , Nov.95
7.	Shri. S.C.Katityar, Scientist ‘C’	Environment Impact Assessment and Audit.	Bradford University, United Kingdom	Sept.18 – Dec.8, 1995

**RECEIPTS AND PAYMENT ACCOUNT FOR THE YEAR 1995 - 1996****RECEIPTS****Opening Balances of :**

• Cash in hand	:	3595.26	
• Cash at bank	:		
In Savings bank Account			
With Indian Overseas Bank,			
Shillong,(3488)	:	64997.55	
Indian Overseas Bank,			
Shillong(6757)	:	2184383.83	
Indian Bank ,Shillong	:	299252.40	
Bank of India,			
Shillong	:	2586131.36	
State Bank of India, Laituumkhrah			
Shillong	:	683.29	
Vijaya Bank, Laitumkhrah, Shillong	:	10297.00	
Bank of Baroda, Shillong	:	128313.65	
• <b>In Fixed Deposit:</b>			
With Indian Overseas Bank,Shillong	:	1000000.00	
Bank of Baroda, Shillong	:	300000.00	
State Bank of India, shillong	:	<u>1825000.00</u>	84,02,654.34
• Grant received from	:		
Ministry of Environment and Forests, Govt. Of India,	:	800000.00	
Department of Health Engineering,			
Govt. Of Meghalaya	:	1500000.00	23,00,000.00
Fees	:	206735.10	
• Interest on investments	:	245615.00	
• Miscellaneous Receipts	:	18163.00	
• Miscellaneous advances	:	83263.00	
• Deposits	:	<u>4000.00</u>	5,93,776.10
<b>TOTAL</b>	<b>Rupees:</b>		<u>1,12,96,430.44</u>

*N.B : The Accounts of Receipts and Payments for the year 1995-1996 are unaudited.*

**ANNEXURE- X(B)****RECEIPTS AND PAYMENT ACCOUNT FOR THE YEAR 1995-1996****EXPENDITURE**

• Fixed Assets	:	NIL	
• Other Assets	:		
Scientific Instruments and Office Appliances	:	1341692.00	
Tools and Plants	:	<u>1420.00</u>	13,43,112.00
• Revenue Expenditure:			
Administration:			
Pay & Allowances to Officers and Staff Contribution	:	1612142.00	
• Leave Salary and Pension	:	4918.00	
• Contingent Expenditure	:	<u>389081.00</u>	20,06,141.65
• Board Laboratory	:		78,741.00
• Running and Maintenance of vehicles	:		1,70,234.00
• Consultancy fee	:		2,000.00
• Repairs and maintenance	:		41,284.00
• Legal Charges	:		20,892.00
• Miscellaneous	:		---
• Advances	:		13,223.85
• Deposits	:		20,000.00
<b>CLOSING BALANCES OF:</b>			
• Cash in hand	:	8751.26	
• Cash at Bank:			
In Savings Bank Account	:		
With Indian Overseas Bank, Shillong(3488)	:	1643640.55	
Indian Overseas bank, Shillong(6757)	:	1815463.83	
Indian Bank Shillong	:	(14076.40)	
Bank of India, Shillong on	:	563306.96	
State Bank of India, Laitumkhrah, Shillong	:	683.29	
• <b>In Fixed Deposit Account:</b>			
With Indian Overseas Bank, Shillong	:	1458032.45	
Bank of Baroda, Shillong	:	300000.00	
State Bank of India, Shillong	:	<u>1825000.00</u>	76,00,801.94
<b>TOTAL Rupees:</b>			<u>1,12,96,430.44</u>

*N.B : The Accounts of Receipts and Payments for the year 1995-1996 are unaudited.*

**TABLE - 1**  
**WATER QUALITY OF WARDS LAKE**

<b>SL. NO.</b>	<b>PARAMETERS</b>	<b>JUNE '95</b>	<b>SEPT. ' 95</b>	<b>DEC. '95</b>	<b>MAR. '96</b>
1.	pH	7.4	7.7	7.4	7.0
2.	Conductivity ( $\mu\text{mho}/\text{cm}^2$ )	175.0	162.5	167.5	160.0
3.	Turbidity (NTU)	25.6	8.0	6.0	8.0
4.	Total Dissolved Solids (mg/l)	140.0	130.3	134.0	104.0
5.	Chloride (mg/l)	32.6	30.0	33.5	30.0
6.	Hardness (mg/l)	34.0	40.0	35.0	25.5
7.	Alkalinity (mg / l)	26.0	27.5	28.5	26.0
8.	Calcium (mg/l)	11.5	13.0	12.0	11.0
9.	Sulphate (mg / l)	2.8	3.5	3.0	3.0
10.	Phosphate (mg/l)	BDL	BDL	BDL	BDL
11.	Nitrite (mg/l)	BDL	BDL	BDL	BDL
12.	Ammonical Nitrogen (mg/l)	2.0	1.6	1.7	2.8
13.	Kjeldahl Nitrogen (mg/l)	3.0	3.0	3.2	4.8
14.	Dissolved Oxygen (mg / l)	8.4	9.7	10.0	8.5
15.	Biochemical Oxygen Demand (mg / l)	12.8	9.2	10.4	11.0
16.	Chemical Oxygen Demand (mg / l)	14.0	11.5	12.5	16.0
17.	Total Coliform (MPN / 100 ml)	>2400	>2400	>2400	>2400
18.	Faecal Coliform (MPN/100 ml)	1600	1600	1600	920

TABLE - 2

## WATER QUALITY OF UMIAM LAKE

SL. NO.	PARAMETERS	JUNE '95	SEPT. ' 95	DEC. '95	MAR. '96
1.	pH	7.4	7.4	7.3	7.6
2.	Conductivity ( $\mu\text{mho}/\text{cm}^2$ )	128.5	125.6	132.1	130.5
3.	Turbidity (NTU)	12.5	10.4	5.4	25.0
4.	Total Dissolved Solids (mg/l)	102.5	100.5	105.0	105.0
5.	Chloride (mg/l)	17.0	20.5	18.0	17.0
6.	Hardness (mg/l)	28.0	20.5	25.0	21.0
7.	Alkalinity (mg / l)	25.9	25.0	26.5	35.0
8.	Calcium (mg/l)	6.8	7.0	6.5	7.0
9.	Sulphate (mg / l)	1.6	1.5	1.8	2.5
10.	Phosphate (mg/l)	BDL	BDL	BDL	BDL
11.	Nitrite (mg/l)	0.05	0.03	0.04	0.08
12.	Ammonical Nitrogen (mg/l)	2.9	2.8	2.7	3.0
13.	Kjeldahl Nitrogen (mg/l)	4.5	3.5	3.2	4.5
14.	Dissolved Oxygen (mg / l)	6.5	9.5	10.0	9.0
15.	Biochemical Oxygen Demand (mg / l)	8.5	8.9	10.0	12.0
16.	Chemical Oxygen Demand (mg / l)	10.0	11.2	12.5	15.5
17.	Total Coliform (MPN / 100 ml)	>2400	>2400	>2400	>2400
18.	Faecal Coliform (MPN/100 ml)	1600	1600	1600	920

TABLE – 3

## WATER QUALITY OF UMTREW RIVER

SL. NO.	PARAMETERS	JUNE '95	SEPT. ' 95	DEC. '95	MAR. '96
1.	pH	7.3	8.2	7.6	7.8
2.	Conductivity ( $\mu\text{mho}/\text{cm}^2$ )	100.6	98.0	100.2	103.0
3.	Turbidity (NTU)	49.3	12.5	20.0	22.0
4.	Total Dissolved Solids (mg/l)	80.5	78.3	80.2	83.5
5.	Chloride (mg/l)	15.3	16.5	17.0	18.0
6.	Hardness (mg/l)	10.0	12.0	10.5	11.0
7.	Alkalinity (mg / l)	20.6	18.5	22.5	23.0
8.	Calcium (mg/l)	7.0	7.0	7.2	7.0
9.	Sulphate (mg / l)	9.0	8.5	8.2	7.5
10.	Phosphate (mg/l)	BDL	BDL	BDL	BDL
11.	Nitrite (mg/l)	BDL	BDL	BDL	BDL
12.	Ammonical Nitrogen (mg/l)	1.6	1.5	1.8	1.8
13.	Kjeldahl Nitrogen (mg/l)	3.0	3.0	3.2	2.4
14.	Dissolved Oxygen (mg / l)	8.0	10.0	10.5	8.4
15.	Biochemical Oxygen Demand (mg / l)	5.4	5.6	5.2	5.2
16.	Chemical Oxygen Demand (mg / l)	6.5	7.0	6.5	7.8
17.	Total Coliform (MPN / 100 ml)	9	11	12	21
18.	Faecal Coliform (MPN/100 ml)	2	4	4	11

TABLE - 4

## WATER QUALITY OF THADLASKEIN LAKE

SL. NO.	PARAMETERS	JUNE '95	SEPT. ' 95	DEC. '95	MAR. '96
1.	pH	7.3	7.4	7.2	7.0
2.	Conductivity ( $\mu\text{mho}/\text{cm}^2$ )	79.3	78.7	90.0	77.0
3.	Turbidity (NTU)	10.5	6.5	2.5	4.0
4.	Total Dissolved Solids (mg/l)	63.5	63.0	72.0	45.0
5.	Chloride (mg/l)	17.5	18.0	20.4	19.3
6.	Hardness (mg/l)	6.5	8.0	10.0	6.5
7.	Alkalinity (mg / l)	17.4	14.0	13.5	15.0
8.	Calcium (mg/l)	1.8	1.5	2.0	2.0
9.	Sulphate (mg / l)	BDL	BDL	BDL	BDL
10.	Phosphate (mg/l)	0.012	BDL	BDL	BDL
11.	Nitrite (mg/l)	BDL	BDL	BDL	BDL
12.	Ammonical Nitrogen (mg/l)	1.0	0.5	0.9	0.5
13.	Kjeldahl Nitrogen (mg/l)	1.4	1.2	1.8	0.8
14.	Dissolved Oxygen (mg / l)	7.0	8.5	9.2	9.0
15.	Biochemical Oxygen Demand (mg / l)	6.0	6.2	5.2	5.0
16.	Chemical Oxygen Demand (mg / l)	7.8	7.9	7.5	7.0
17.	Total Coliform (MPN / 100 ml)	9	8	11	22
18.	Faecal Coliform (MPN/100 ml)	2	4	2	14

TABLE - 5

## WATER QUALITY OF KYRHUHKHLA RIVER

SL. NO.	PARAMETERS	JUNE '95	SEPT. '95	DEC. '95	MAR. '96
1.	pH	3.5	3.7	3.5	4.0
2.	Conductivity ( $\mu\text{mho}/\text{cm}^2$ )	223.2	230.5	235.6	166.5
3.	Turbidity (NTU)	20.5	8.0	6.5	3.0
4.	Total Dissolved Solids (mg/l)	102.8	100.5	105.0	150.0
5.	Chloride (mg/l)	13.6	15.0	14.0	25.0
6.	Hardness (mg/l)	14.6	12.5	12.0	14.0
7.	Acidity (mg / l)	45.0	48.0	45.5	58.0
8.	Calcium (mg/l)	4.5	4.6	5.0	5.5
9.	Sulphate (mg / l)	80.5	78.0	90.0	75.0
10.	Phosphate (mg/l)	BDL	BDL	BDL	1.2
11.	Nitrite (mg/l)	NIL	NIL	NIL	NIL
12.	Ammonical Nitrogen (mg/l)	0.7	0.25	0.45	0.4
13.	Kjeldahl Nitrogen (mg/l)	1.5	1.3	1.4	1.6
14.	Dissolved Oxygen (mg / l)	5.8	7.2	7.5	7.5
15.	Biochemical Oxygen Demand (mg / l)	8.6	11.6	8.4	9.0
16.	Chemical Oxygen Demand (mg / l)	9.5	12.5	10.5	11.5
17.	Total Coliform (MPN / 100 ml)	NIL	NIL	NIL	2
18.	Faecal Coliform (MPN/100 ml)	NIL	NIL	NIL	0