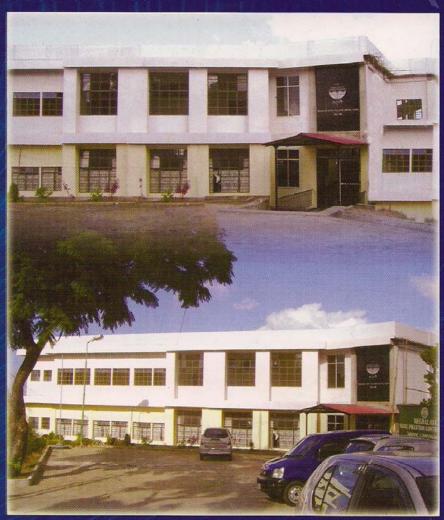
ANNUAL REPORT

CONTROL BOARD

2004-2005



MEGHALAYA STATE POLLUTION CONTROL BOARD

'ARDEN', LUMPYNGNGAD, SHILLONG - 793014









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CONTENTS

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1.	INTRODUCTION
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- 2. CONSTITUTION OF THE BOARD AND CHANGES THEREIN
- 3. MEETINGS OF THE BOARD WITH MAJOR DECISIONS
- 4. COMMITTEES CONSTITUTED BY THE BOARD AND THEIR ACTIVITIES
- 5. MONITORING NETWORK FOR AIR QUALITY WATER QUALITY AND NOISE LEVEL
- 6. ENVIRONMENTAL RESEARCH
- 7. ENVIRONMENTAL TRAINING
- 8. ENVIRONMENTAL AWARENESS AND PUBLIC PARTICIPATION
- 9. ENVIRONMENTAL STANDARDS INCLUDING THE TIME SCHEDULE FOR THEIR ENFORCEMENT
- 10. PROSECUTIONS AND CONVICTIONS FOR ENVIRONMENTAL CONTROL
- 11. FINANCE AND ACCOUNTS OF THE BOARD
- 12. OTHER ACTIVITIES OF THE BOARD
- 13. ANNEXURES

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. The Board was later renamed as Meghalaya State Pollution Control Board in 1988. After the enactment of the Air (Prevention & Control of Pollution) Act, 1981, the enforcing responsibility of the Act was entrusted to the Board. 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 and the Air Act, the Board is also enforcing the following Acts, Rules and Notifications:

- The Water (Prevention and Control of Pollution) Cess Act, 1977, and as amended by Amendment Act in 1991.
- The Water (Prevention and Control of Pollution) Cess Rules, 1978.
- The Hazardous Waste (Management and Handling) Rules, 1989.
- The Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989.
- The Manufacture, Use, Import, Export & Storage of Hazardous Micro organism or Cells Rules, 1989.
- The Public Liability Insurance Act, 1991.
- The Environmental Impact Assessment Notification, 1994.
- The Chemical Accidents (Emergency Planning, Preparedness & Response) Rules, 1996.
- The Bio-Medical Wastes (Management & Handling) Rules, 1998
- The Recycled Plastics Manufacture and Usage Rules, 1999.
- The Fly Ash Notification, 1999.
- The Noise Pollution (Regulation and Control) Rules, 2000.
- The Ozone Depleting substances (Regulation) Rules, 2000.
- The Municipal Solid Wastes (Management & Handling) Rules, 2000.
- The Batteries (Management & Handling) Rules 2001.

The Board has been functioning with 50 (Fifty) Staff as on 31-03-2005 against a sanctioned strength of 97 (Ninety Seven). The details of staff position are given at **Annexure-III**. The organizational chart of the Board is given at **Annexure-II**.

The Central Office of the Board is located at Shillong. At present, the Board does not have any Regional or District Offices. The Central Office is responsible for framing general policies relating to enforcement of the Acts and Rules. It also looks after the general administration and coordination with other agencies. Besides, it takes up public awareness programmes on matters relating to environment protection and pollution control. The Central Laboratory is well–equipped and carries out analysis of samples of water, waste water, stack emission, ambient air, bacteriological tests etc.

The other activities of the Central Office of the Board are:

- Inspection of industries and local bodies.
- Monitoring the quality of water and wastewater.
- Monitoring the quality of ambient air and stack emissions.
- Inspection of sites proposed for setting up of industries to verify the suitability of the same from environmental point of view.
- Water bodies monitoring under National Water Quality Monitoring (NWQM) Programme.
- Ambient air quality monitoring under National Air Monitoring Programme (NAMP).
- Offering guidance to industries and local bodies on statutory provisions.
- Issue of "Consents to Establish" and "Consents to Operate" in respects of industries, mining projects specified developmental projects and municipal bodies.
- Waste Management under E.P. Act:
 - ✓ Hazardous Waste Management
 - ✓ Identification of Sources
 - ✓ Characterization & Quantification of Wastes
 - ✓ Enforcement of provisions of the Rules
 - ✓ Monitoring of compliance to standards
- Bio-Medical Waste Management:
 - ✓ Identification of Sources
 - ✓ Characterization & Quantification of Wastes
 - ✓ Enforcement of Provisions of the Rules
 - ✓ Monitoring of Compliance to Standards
- Municipal Solid Waste Management Act:
 - ✓ Identification of Sources
 - ✓ Characterization & Quantification of Wastes
 - ✓ Enforcement of provisions of the Rules
 - ✓ Monitoring of Compliance to Standards
- Batteries Management:
 - ✓ Identification of Sources
 - ✓ Characterization & Quantification of Wastes
 - ✓ Enforcement of Provisions of the Rules
 - ✓ Monitoring of Compliance to Standards
- Plastic Management:
 - ✓ Identification of Sources
 - ✓ Characterization & Quantification of Wastes
 - ✓ Enforcement of Provisions of the Rules
 - ✓ Monitoring of Compliance to Standards



- Noise Pollution Management:
 - ✓ Identification of Sources in respect of industries
 - ✓ Enforcement of Provisions of the Rules in respect of industries
 - ✓ Monitoring the Compliance of Standards by industries
 - ✓ Monitoring of ambient noise in Industrial/Commercial/Residential areas

2 CONSTITUTION OF THE BOARD AND CHANGES THEREIN

The State Government nominates the Members of Meghalaya State Pollution Control Board. The Board was constituted under Section 4 of the Water (Prevention & Control of Pollution) Act, 1974 vide Notification No. PHE.161/83/1 Dtd. the 16th November, 1983. The last reconstitution was notified out in May 1998 vide Notification No. PHE.161/83/178 Dtd. the 21st May 1998. However, the three Non-officials Members were renotified vide Notification NO.PHE.161/83/187 Dtd. the 24th March, 1999 & NO.PHE.161/83/205 Dtd. the 5th January, 2001.

The Board consists of 17(seventeen) 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 5(five) official Members representing various State Government Departments, 5(five) Members representing Local Authorities, 2(two) Members representing the Co-operatives and Corporations owned, managed or controlled by the State Government and 3(three) Non-official Members. The list of the Members of the Board is appended at **Annexure-I**

During the financial year 2004-2005, Shri H. Datta Roy was the Chairman and Shri A.Biswa was the Member Secretary of the Board.

MEETINGS OF THE BOARD WITH MAJOR DECISIONS

During the year 2004-2005, the Board conducted the following Meetings:

SL NO.	MEETING NO.	DATE	VENUE	NO. OF MEMBERS ATENDING THE MEETING
1.	42 nd Board Meeting	19-11-2004	Office Chamber of the Chairman, MSPCB	7 (Seven)
2.	43 th Board Meeting	25-02-2005	Office Chamber of the Chairman, MSPCB	6 (Six)

The following decisions were taken in the above Meetings:

42nd BOARD MEETING



- ✓ The Analysis of data under the Scheme "Bio-Mapping of Rivers & Streams of Meghalaya" should be completed and the Report be sent to CPCB.
- ✓ Appropriate action should be taken as per the provisions of the Bio-Medical Waste Rules, 1998 to those Hospitals / PHCs / CHCs/ Dispensaries, etc. which have failed to apply for Authorization.
- ✓ Recruitment to the 10(ten) posts sanctioned by the MoEF should be completed by December 2004.
- ✓ The matter of non-payment of water Cess should be taken up with the PHE Deptt. which is the Administrative Deptt. of the Board.

43rd BOARD MEETING

- ✓ The Board endorsed the action taken in advertising of the posts of Asstt. Environmental Engineer. Junior Law Officer, Junior Scientific Assistant, Data Entry Operator and Field Assistant.
- ✓ The Board ratified the Minutes of the Promotion Committee held on 08-02-2005.
- ✓ The Board endorsed the action taken in serving Directions under Section 5 to the DHS (MI) for payment of Authorization fees under the Bio-Medical Waste Rules, 1998.
- ✓ The Board ratified the action taken in serving Closure Notice to industries for operating without the Consent to Operate / non-compliance to the terms and conditions stipulated in the Consent Order.
- ✓ The Board approved the proposal for constitution of the Selection Committee for recruitment of staff under the Project "Spatial Environment Planning."

4 COMMITTEES CONSTITUTED BY THE BOARD AND THEIR ACTIVITIES

The "Consent Committee" and the "Purchase Committee" of the Board are the ones which were last reconstituted on the 20th November, 1998 and the 16th November, 2000 respectively. The Selection Committees for recruitment to various posts under the Board through direct recruitment or promotion were constituted during July 2003.

The Compositions of the Consent Committee, the Purchase Committee, the Selection Committee and the Promotion Committee are as given below:

MEMBERS OF THE CONSENT COMMITTEE FOR THE PERIOD 2004-2005

- Chairman : Chairman
 Meghalaya State Pollution Control Board,
 Shillong.
- Senior Inspector of Boilers & Factories,
 Inspectorate of Boilers & Factories,
 Meghalaya, Shillong.
 : Member



3. Conservator of Forests,

Meghalaya, Shillong. : Member

4. Deputy Director,

Directorate of Industries,

Meghalaya, Shillong. : Member

5. Director of Mineral Resources,

Meghalaya, Shillong. : Member

6. Member Secretary,

Meghalaya State Pollution Control Board, :Member

Shillong. Convener

MEMBERS OF THE PURCHASE COMMITTEE DURING THE YEAR 2004-2005

1. Chairman : Chairman

Meghalaya State Pollution Control Board, Shillong.

2. Director of Industries *or* his nominee. : Member

3. Chief Engineer P.H.E Deptt. Meghalaya *or* his : Member

nominee

4. The Director.

Regional Sophisticated Instrument Centre,

Bijni Complex, N.E.H.U, Shillong. : Member

5. Senior Scientist, Indian Council of Agricultural

Research(I.C.A.R), Umiam : Member

6. Member Secretary,

Meghalaya State Pollution Control Board, : Convener

Shillong.

MEMBERS OF THE SELECTION COMMITTEE FOR THE PERIOD 2004-2005 [FOR GRADE – 'A' POSTS]

Commissioner & Secretary,
 Cout of Moghalaya, P.H.F. Dontt, S.

Govt. of Meghalaya, P.H.E.Deptt., Shillong : Chairman



2. Chairman

Meghalaya State Pollution Control Board, : Member

Shillong

3. Under Secretary,

Govt. of Meghalaya, P.H.E. Deptt. Shillong. : Member

4. Environmental Engineer,

I/C North Eastern Zonal Office,

Central Pollution Control Board, Shillong. : Member

5. Member Secretary,

Meghalaya State Pollution Control Board, :Member

Shillong. Convener

MEMBERS OF THE SELECTION COMMITTEE FOR THE PERIOD 2004-2005 [FOR GRADE - 'B', 'C' & 'D' POSTS]

1. Chairman

Meghalaya State Pollution Control Board, : Chairman

Shillong.

2. Chief Administrative Officer,

O/o the C.E., P.H.E. Deptt. Shillong. : Member

3. Environmental Engineer,

I/C North Eastern Zonal Office,

Central Pollution Control Board, Shillong. : Member

4. Member Secretary,

Meghalaya State Pollution Control Board, : Member

Shillong.

5. Administrative Officer/E.O. Meghalaya State

Pollution Control Board, Shillong.

:Member Convener

MEMBERS OF THE ASSESSMENT-CUM- PROMOTION COMMITTEE FOR THE PERIOD 2004-2005 [FOR GRADE - 'A' POSTS]

Chairman : Chairman Meghalaya State Pollution Control Board,

Shillong.



 Member Secretary, Meghalaya State Pollution Control Board, Shillong. : Member

3. Senior Scientist/Scientist 'C'

: Member

4. Sr. Environmental Engineer/ Environmental Engineer

: Member

5. Chief Administrative Officer, O/o the C.E., P.H.E. Deptt., Meghalaya, Shillong : Member

 Administrative Officer/Establishment Officer Meghalaya State Pollution Control Board, Shillong. :Member Convener

MEMBERS OF THE ASSESSMENT-CUM- PROMOTION COMMITTEE FOR THE PERIOD 2004-2005 [FOR GRADE – 'B', 'C' & 'D' POSTS]

 Member Secretary, Meghalaya State Pollution Control Board, Shillong

: Chairman

Chief Administrative Officer, : Member O/o the C.E., P.H.E. Deptt., Meghalaya, Shillong

3. Senior Scientist/Scientist 'C' : Member

4. Sr. Environmental Engineer/ Environmental : Member Engineer

5. Administrative Officer/Establishment Officer : Member Meghalaya State Pollution Control Board, Convener Shillong

5

MONITORING NETWORK FOR AIR QUALITY, WATER QUALITY, AND NOISE LEVEL

5.1 MONITORING OF AIR QUALITY

(A) NATIONAL AIR QUALITY MONITORING



There are 2(two) National Air Quality Monitoring Programme (NAMP) stations in the state and both are located in Shillong City. One station is located in the Office premises of the Board at Lumpyngngad, Shillong (Table 1.0) and the other station is located at the State Tuberculosis office building at Khyndailad, Police Bazar, Shillong (Table 2.0).

Suspended Particulate Matter (SPM), Sulfur Dioxide (SO₂), Oxides of Nitrogen (NOx) and meteorological parameters viz. wind speed, wind direction, ambient air temperature, humidity, etc. were monitored at these NAMP stations and the observations are as given below:-

TABLE: 1.0 STATION AT BOARD'S OFFICE PREMISES, LUMPYNGNGAD, SHILLONG

MONTH & YEAR PARAMETERS TESTED (MONTHLY AVERAGES)				
2004	SPM (µg/m³)	RSPM (µg/m³)	SO ₂ (μg/m³)	NOx (µg/m³)
JANUARY	69.8	59.7	1.5	1.6
FEBRUARY	57.7	47.7	0.5	0.8
MARCH	53.0	48.3	1.7	2.0
APRIL	45.6	42.1	BDL	BDL
MAY	43.6	39.8	BDL	BDL
JUNE	41.4	39.8	BDL	BDL
JULY	39.9	37.3	BDL	BDL
AUGUST	37.1	34.7	BDL	BDL
SEPTEMBER	36.6	34.5	BDL	BDL
OCTOBER	40.3	37.7	BDL	BDL
NOVEMBER	38.3	34.9	BDL	BDL
DECEMBER	62.0	57.9	BDL	BDL

^{*} BDL: Below Detectable Limits

TABLE 2.0 STATION AT STATE TUBERCULOSIS BUILDING, POLICE BAZAR, SHILLONG

MONTH & VEAD	PARAMETERS TESTED (MONTHLY AVERAGES)				
MONTH & YEAR 2004	SPM (µg/m³)	RSPM (µg/m³)	SO₂ (µg/m³)	NOx (μg/m³)	
JANUARY	158.1	122.5	4.8	22.4	



FEBRUARY	57.58	47.4	3.21	28.8
MARCH	130.5	94.9	5.2	19.8
APRIL	78.6	62.4	3.7	14.6
MAY	100.1	66.2	3.5	18.1
JUNE	73.2	57.1	3.3	18.3
JULY	66.3	52.3	1.1	19.1
AUGUST	71.7	55.0	6.6	14.7
SEPTEMBER	74.1	57.8	3.1	16.5

(B) AIR QUALITY MONITORING FOR SOME INDUSTRIES

The Board carried out ambient air (Table 1.0) and source emission (Table 2.0) quality monitoring for some industrial units operating in the state. The following results were obtained during the monitoring: -

TABLE 1.0 AMBIENT AIR QUALITY DATA OF SOME INDUSTRIAL UNITS

	NAME OF THE INDUSTRY		PAF	RAMETERS T	ESTED	
DATE	& LOCATION	RSPM (μg/m³)	SPM (µg/m³)	SO2 (μg/m³)	NOX (μg/m³)	Remarks
06.01.2004	R.K.B. Cement Pvt. Ltd, Umiam	482.9	807.2	27.9	32.5	Levels of RSPM & SPM are above permissible limits
06.01.2004	R.K.B. Cement Pvt. Ltd, Umiam	269.2	748.7	BDL	75.0	Above permissibl e limits
06.01.2004	MEDC Complex, Umiam	52.6	147.2	BDL	12.8	Within permissibl e limits
06.01.2004	MeSEB, (Store), Umiam	53.2	91.9	BDL	10.4	Within permissibl e limits
22.01.2004	Dorbar Hall, Mawsmai, Cherrapunjee	125.4	138.2	19.9	12.2	Levels of RSPM are above permissible limits
22.01.2004	Kiln site, Mawsmai, Cherrapunjee	164.3	203.5	25.0	53.1	Above permissibl



						e limits
22.01.2004	M/S Komorrah Limestone, Mining Limited, Bholaganj	145.4	343.0	BDL	12.7	Within permissibl e limits
22.01.2004	M/S Komorrah Limestone, Mining Limited, Bholaganj	29.4	62.1	BDL	BDL	Within permissibl e limits
22.01.2004	M/S Komorrah Limestone, Mining Corporation, Bholaganj	21.5	47.8	BDL	BDL	Within permissibl e limits
01.07.2004	MEDC Complex, Umiam	15.5	20.2	BDL	10.3	Within permissibl e limits
01.07.2004	R.K.B. Cement Pvt. Ltd, Umiam	112.4	144.4	BDL	18.6	Within permissibl e limits
01.07.2004	R.K.B. Cement Pvt. Ltd, Umiam	20.0	88.6	BDL	11.7	Within permissibl e limits
01.07.2004	MeSEB Store, Umiam	31.0	41.5	BDL		Within permissibl e limits

TABLE 2.0 STACK MONITORING DATA OF SOME INDUSTRIAL UNITS

DATE	NAME OF THE INDUSTRY & LOCATION	Parameter Tested	Observed value (mg/Nm³)	Remarks
06.01.2004	M/S RKB Cements, Umiam	PM	1380	Above permissible limits
29.01.2004	NEIGRIHMS, Lawmali, Shillong	SPM HCL VOC	77.085 BDL 0.008%	Within permissible limits
28.01.2004	M/S H.M Cements Ltd, Upper Balijan, Umtru Road, Byrnihat	PM	27.1	Within permissible limits
01.07.2004	M/S Premier Slow Mill, Umiam Industrial Area	PM	276.19	
17.08.2004	M/S Ganpati Rolling Mills, Pvt. Ltd, Harlibazar	PM	111.1	Within permissible limits
17.08.2004	M/S Meghalaya Coals & Alloys, Byrnihat	PM	133.3	Within permissible limits
17.08.2004	M/S Pawan Ispat Pvt. Ltd., Harlibazar, Byrnihat	PM	88.0	Within permissible limits
17.08.2004	M/S Bimla Ispat & Alloys Pvt. Ltd., Tamulkuchi	PM	129.0	Within permissible limits
08.09.2004	M/S Satya Megha Ispat (P) Ltd. 13 th Mile, Byrnihat, M/S Ignots	PM	33.0	Within permissible limits
08.09.2004	M/S Satya Megha Ispat (P) Ltd. (Ferro Silicon) 13 th Mile,	PM	147.1	Within permissible limits



	Byrnihat,			
08.09.2004	M/S Trishul Hi – Tech, Industries EPIP, Byrnihat, (M/S Ignite & Steel Re-rolling mills)	PM	250	Above permissible limits
29.09.2004	M/S RKB Cements, Umiam Industries Estate	PM	150	Permissible limits
15.10.2004	M/S Trishul Hi-Tech Industry, EPIP, Byrnihat (M/S Ignite)	PM	142.0	Permissible limits
15.10.2004	M/S Trishul Hi-Tech, Industries, EPIP Byrnihat (Re-rolling mills)	PM	500.0	Above permissible limits
03.11.2004	M/S Gita Ferro Alloys (P) Ltd. EPIP, Byrnihat	PM	138.9	Within permissible limits
07.12.2004	M/S Jaintia Ferro Alloys (P) Ltd., Tamulkuchi, Byrnihat	PM	150.0	Within permissible limits
07.12.2004	M/S Gita Ferro Alloys (P) Ltd, EPIP, Byrnihat	PM	125.0	Within permissible limits
07.12.2004	M/S Trishul Hi-Tech Industries EPIP (steel rolling mill), Byrnihat	PM	143.0	Within permissible limits
07.12.2004	M/S Satya Megha Ispat (P) Ltd.	PM	500	Above permissible limits

(C) ASSESSMENT OF VEHICULAR POLLUTION

The main sources of air pollution in the state are the vehicular exhaust emissions simply because the per capita vehicular density in the urban areas is very high. The Board has an Auto-emission-testing centre in its office premises at Lumpyngngad, Shillong which has been functioning since January 1994. This Centre caters to the exhaust testing needs for 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 2004-2005 the number of vehicles tested at the Centre is as follows:-

PERIOD	TYPE OF VEHICLES	TOTAL NO. OF VEHICLES TESTED	PERCENTAGE OF VEHICLES COMPLYING TO EMISSION STANDARDS	PERCENTAGE NOT COMPLYING TO EMISSION STANDARDS
01.04.2004 to 31.03.2005	Petrol- Driven LMV	1820	76.5%	23.5%

5.2 MONITORING OF WATER QUALITY

(1) MONITORING OF WATER QUALITY UNDER NATIONAL WATER QUALITY MONITORING PROGRAMME (NWMP)



One of the main functions of the Board is to monitor the water quality of water bodies so that a comprehensive programme for prevention and control on abatement of water pollution can be planned. Keeping this in view the Meghalaya State Pollution Control Board is monitoring the water quality of the following 8(eight) surface water bodies and 5(five) ground water bodies in the state, under the National Water Monitoring Programme (NWMP), sponsored by CPCB. The monitoring is done on quarterly basis in surface water and half yearly in case of ground water.

The detail regarding the monitoring stations is stated below:

Table -1.0: Monitoring Stations under National Water Quality Monitoring Programme (NWMP)

	Programme	(INVVIVIE)	_	_
SI. No.	Name of monitoring stations	Location	Parameters analysed on regular basis	Parameters analysed (Once in a Year)
Surfa	ce Water			
	Umtrew river	Byrnihat	i.Field Observation:	
	Kyrhuhkhla river	Khliehriat	i. Weather, Colour	Turbidity, Alkalinity,
	Umiam lake	Umiam	& Intensity, Odor,	Total Hardness,
	Ward's lake	Shillong	Visible effluent	NH3-N, Kjeldahl-N,
	Thadlaskein lake	Thadlaskein	discharge,	Calcium,
	Myntdu river	Jowai	human.	Magnesium,
	Ganol river	Tura		Potassium, Sodium,
Crow	Simsang river	Williamnagar	ii.Physico- chemical & bacteriological parameters: Dissolved Oxygen ,pH, Conductivity, Biological Oxygen Demand, Nitrate Nitrogen, Nitrite Nitrogen, Total Coliform and Fecal Coliform iii. Biomonitoring: Saprobity Index, Diversity Index	Sulphates, Phosphates, COD, As*, Zn*, Cu*, Cr*, Cd*, Pb*, Fe*, Ni*, Flouride* and
Grou	nd Water	Clattlana		
	Police Bazar	Shillong		
	spring Mawpdang spring Wah U Dkhar	Shillong		
	I Wall U DKIIdi	Sohra		



	Umsahep spring	Shangpung	
13	Narbong well	Byrnihat	

5.2.1: Water Quality of the monitored water bodies

5.2.1.1: Physico-chemical & bacteriological parameters of Surface Water Quality

I. Umiam Lake: The major sources of pollution of this water body are the discharge of municipal solid and liquid water, dumping of spoils and garbages, deforestation in the catchment area, agricultural activities. Other human activities which interfere with the aquatic irrigation are boating; wasting; fishing, bathing, recreational activities, and being a tourist spot it attract a large number of tourists which also contribute substantially towards pollution.

The monitoring result obtained during the year 2004, indicate that the Dissolved Oxygen value is meeting the desired class. The Biochemical Oxygen Demand value is above the desired class value which is 3mg/L ranges from 8.5mg/L to 10.5mg/L.

The organic pollution examined in terms of Biochemical Oxygen Demand & Coliform count indicates the extent of water quality degradation. Similarly Total and Feacal Coliform which indicate presence of pathogens in water are also of major concern. As per the Primary Water Quality Criteria, the water body falls under 'D' class (Table -2.0). The concentrations of Dissolved Oxygen, Biochemical Oxygen Demand, Total and Feacal Coliform of the monitoring station are depicted in Figs 1.0 - 4.0.

II. **Ward'Lake:** The main sources of pollution of this water body are the dumping of solid waste, waste water discharge from the commercial and government buildings located around it. Human activities such as boating, tourism also affect the aquatic ecosystem.

The monitoring results obtained during the year 2004, revealed that the Dissolved Oxygen concentration is meeting the desired class. The value ranges from 6.0mg/l to 7.5mg/l. The data also indicates that organic and bacterial contaminations are the main critical pollutant in the water body. The Biochemical Oxygen Demand value is above the desired class, it ranges from 8.0mg/l to 13.0mg/l. The Total and Feacal Coliform are high indicating the deteriorating condition of the lake. As per the Primary Water Quality Criteria, the lake falls under 'D' class (Table -2.0). The concentrations with respect to Dissolved Oxygen, Biochemical Oxygen Demand, Total and Feacal Coliform are presented in Figs 1.0 to 4.0.

III. **Umtrew River:** The sources of pollution of the water body at the monitored location discharge of untreated solid and liquid waste from the residential areas, open defecation, dumping of solid waste etc. (Photo 1.0) Industrial estate is located in the upstream of the monitored location may also perhaps contribute to pollution of the river. Other activities which disturb the aquatic



ecosystem are the sand dredging and recovery, boating, washing, bathing and cattle wading.

The monitoring results indicate the Biochemical Oxygen Demand is above the limit for the desired class, it ranges from 5.7 mg/l. to 8.05mg/l.. The Total and Fecal Coliforms are also detected although their numbers are within the limit for the desired class.

As per the Primary Water Quality Criteria, the river water falls under 'C' class (Table -2.0). The concentration with respect to Dissolved Oxygen, Biochemical Oxygen Demand, Total and Feacal Coliform are presented in Figs 1.0 to 4.0

IV. **Kyrhuhkhla River:** Located in the coal mining area of Jaintia Hills District, the river is highly acidic due to acid mine drainage. Apart from coal mining activities, the river is also polluted due to solid and waste water discharge from coal labour settlement, open defecation etc.

The monitoring result revealed that the pH value is as low as 3.0. The Biochemical Oxygen Demand value is above the limit for the desired class (3mg/L) and ranges from 4.8mg/l. to 8.0mg/l. The concentration with respect to Dissolved Oxygen, Biochemical Oxygen Demand, Total and Feacal Coliform are presented in Figs 1.0 to 4.0.

V. **Thadlaskein Lake:** The water quality of the lake is affected by surface run off from surrounding areas, and agricultural activities. Other activities which may contribute towards pollution are tourist activity, fishing, washing etc.

The results show the presence of organic pollutants such as Biochemical Oxygen Demand. Total and Fecal Coliform are also detected. The lake water falls under 'C' class as per Primary Water Quality Criteria (Table -2.0). The concentration with respect to Dissolved Oxygen, Biochemical Oxygen Demand, Total and Feacal Coliform of the monitoring station is depicted in Fig 1.0 to Fig 4.0.

VI. **Myntdu River:** The main sources of pollution of this river are the solid and waste water discharge from the residential areas, dumping of solid waste, spoil and garbage, agricultural activities. Other activities which affect the water quality are sand recovery and dredging, fishing washing, bathing and cattle wading.

The monitoring results indicate that the presence of Total and Feacal Coliform. As per the Primary Water Quality Criteria, the river water falls under 'C' class (Table -2.0). The concentration with respect to Dissolved Oxygen, Biochemical Oxygen Demand, Total and Feacal Coliform are depicted in Fig 1.0 to Fig 4.0.

VII. **Ganol River**: The main sources of pollution of the water body are untreated and waste water discharge from the residential areas, agricultural activities,



and open defecation, dumping of solid waste, spoils and garbage on the bank of the river. Other activities which may disturb the aquatic ecosystem are cattle wading, quarrying, fishing, sand recovery, stone crushing, and construction work at upstream, washing, bathing.

The monitoring results show the contamination of water body by Total & Feacal Coliform. As per Primary Water Quality Criteria, the river water falls under 'B' class (Table -2.0). The concentration with respect to Dissolved Oxygen, Biochemical Oxygen Demand, Total and Feacal Coliform are depicted in Figs 1.0 to 4.0

VIII. **Simsang River**: The main sources of pollution of this water body are the discharge of untreated solid & waste water from municipal areas, open defecation, dumping of solid waste, spoils and garbage. Other activities likely to disturb the aquatic ecosystem are construction work at the upstream, fishing, bathing, sand recovery & dredging.

The monitoring results indicate the contamination of river water by Total and Feacal Coliform. As per the Primary Water Quality Criteria, the river water falls under 'B' class (Table -2.0). The concentration with respect to Dissolved Oxygen, Biochemical Oxygen Demand, Total and Feacal Coliform are depicted in Figs 1.0 to 4.0

5.2.1.2: Physico-chemical & bacteriological parameters of Ground Water Quality:

The monitoring results revealed the presence of Total and Feacal Coliform .Presence of Coliform in all monitored ground water indicate the possibility of ground water contamination.

The concentrations of Dissolved Oxygen, Biochemical Oxygen Demand, Total and Feacal Coliform are depicted in Fig 1.0 to Fig 4.0





Photo: 1.0 Solid Waste Disposal on the Bank of Umtrew River

Table -2.0: Primary water quality criteria for various uses of fresh waters, as laid down by the Central Pollution Control Board

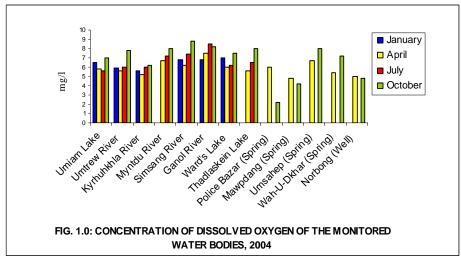
SI.No.	Characteristics	A *	B*	C*	D*	E*
1.	Dissolved Oxygen (DO),mg/l,Min	6	5	4	4	-
2.	Biochemical Oxygen Demand(BOD),mg/l,Max	2	3	3	-	-
3.	Total Coliform organism** MPN/100ml, Max.	50	500	5,000	-	-
4.	pH value	6.5-8.5	6.5-8.5	6.0-9.0	6.5-8.5	6.5-8.5
5.	Free ammonia (as N), mg/I,Max	-	-	-	1.2	-
6.	Electrical conductivity, micromhos/cm,Max.	-	-	-	-	2,250
7/	Sodium adsorption ratio,Max	-	-	-	-	26.0
8.	Boron,mg/l,Max	-	-	-	-	2.0

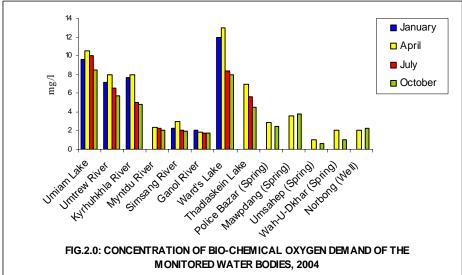
Source: CPCB Publication

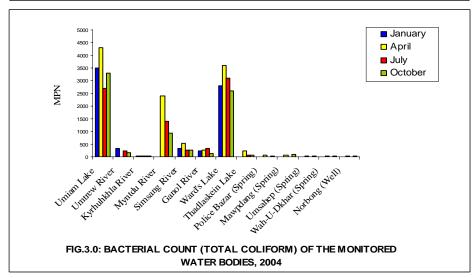
Use class: (A) drinking water source without conventional treatment but after disinfection, (B) outdoor bathing organized, (C) drinking water source with conventional treatment followed by disinfection, (D) propagation of wildlife, fisheries, (E) irrigation, industrial cooling controlled waste disposal.**If coliforms are found to be more than the prescribed tolerance limits the criteria for coliforms shall



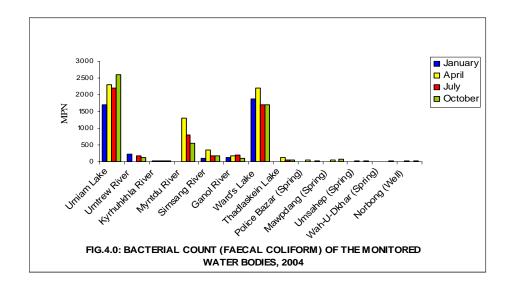
be satisfied if not more than 20% of samples show more than the tolerance limits specified, and not more than 5% of samples show value more than 4 times the tolerance limits. There should be no visible discharge of domestic and industrial wastes into Class A waters. In case of Class B and C the discharge shall be so regulated /treated as to ensure maintenance of the stream standards.











5.2.1.3: Concentration of Heavy metals in Surface Water Bodies

The Board is monitoring the concentration of Heavy metals of the following 8(eight) surface water bodies in the state, under the National Water Monitoring Programme (NWMP), sponsored by CPCB. The monitoring is done once in a year. Table-3.0 presents the data on concentration of Heavy Metals in Surface Water Bodies.

Table-3.0: Concentration of Heavy Metals in Surface Water Bodies, 2005.

SI.	Surface				P	ARAME	TERS		
No.	Water Bodies	lron (μ/l)	Nickel (µ/l)	Copper (µ/l)	Zinc (µ/l)	Lead (µ/l)	Chromium (µ/I)	Cadmium (µ/I)	Arsenic (µ/l)
1.	Umiam lake	0.18	BDL	BDL	BDL	BDL	BDL	BDL	Nil
2.	Ward's Lake	0.17	BDL	BDL	0.025	BDL	BDL	BDL	Nil
3.	Umtrew river	0.16	BDL	BDL	0.008	BDL	BDL	BDL	Nil
4.	Kyrhuhkhla river	2.3	BDL	0.001	0.015	BDL	BDL	BDL	Nil
5.	Thadlaskein	0.34	BDL	BDL	0.053	BDL	BDL	BDL	Nil
6.	Myntdu river	0.60	BDL	BDL	0.030	BDL	BDL	BDL	Nil
7.	Ganol river	0.13	BDL	BDL	0.012	BDL	BDL	BDL	Nil
8.	Simsang river	0.13	BDL	BDL	0.006	BDL	BDL	BDL	Nil

5.2.1.4: Bio-monitoring of Surface Water Bodies, 2005

Bio-monitoring of the following 8(eight) surface water bodies in the state, under the National Water Monitoring Programme (NWMP), sponsored by CPCB has been monitored by the Board since 2002 on half yearly basis (Photo.2.0). The monitoring of the study helps in the classification and zoning of water bodies according to their



ecological sustenance and degradation. The data generated are being analyzed computing the respective biological indices are presented in Table 4.0.

Table-4.0: Bio-Monitoring of Surface Water Bodies, 2005.

SI. No.	Surface Water Bodies	Saprobic Score	Diversity Score	Biological Water Quality Class	Biological Water Quality
1.	Umtrew river	5.0-5.5	0.5-	С	Moderate Pollution
2.	Kyrhuhkhla river	4.8-	0.4-	С	Moderate Pollution
3.	Umiam lake	4.8-5.0	0.35-0.40	С	Moderate Pollution
4.	Ward's lake	2.8-3.0	0.3-0.35	D	Heavy Pollution
5.	Thadlaskein lake	5.7-	0.5-	С	Moderate Pollution
6.	Myntdu river	5.8-	0.5-	С	Moderate Pollution
7.	Ganol river	5.4-5.8	0.5-	С	Moderate Pollution
8.	Simsang river	6.0-6.2	0.5-0.57	В	Slight Pollution



Photo 2.0: Bio-Monitoring Sampling of Surface Water Bodies

5.2(B) Analysis of water samples received from government departments and private agencies

In addition to the regular programme, the Board is also analyzing the water quality of water samples used for drinking, construction, etc received from government departments and private agencies. A total of 232 (two hundred thirty two) such samples were tested during the year.

5.3 Monitoring of the Quality of Leachates from Solid Waste Dumping Site at Mawiong



The Board is monitoring the quality of Leachates from the solid waste dumping ground at Mawiong. The result presented in Table 5.0 indicates that the concentrations of Total Dissolved Solids, Total Suspended Solid, , Biochemical Oxygen Demand, Chloride were found to be above the prescribed standards. Also the concentrations of Chemical Oxygen Demand and zinc were found to be high.

Table 5.0: LEACHATE QUALITY OF SHILLONG MUNICIPAL DUMPING GROUND, MAWIONG

SI No.	Parameters	Standards for Disposal on Land	Results
1.	рН	5.5 – 9.0	11.0
2.	Total Dissolved Solids (mg/l)	2100.0	9614.0
3.	Total Suspended Solids (mg/l0	200.0	1075.4
4.	Chemical Oxygen Demand (mg/l)	-	1950.0
5.	Bio-Chemical Oxygen Demand (mg/l)	100.0	1240.5
6.	Ammonia Nitrogen (mg/l)	-	55.3
7.	Total Kjeldahl Nitrogen (mg/l)	-	90.0
8.	Chloride (mg/l)	600.0	1142.2
9.	Cadmium (mg/l)	-	0.36
10.	Chromium (mg/l)	-	8.2
11.	Copper (mg/l)	-	1.6
12.	Lead (mg/l)	-	5.2
13.	Nickel (mg/l)	-	14.0
14.	Zinc (mg/l)	-	261.7

5.3.1 MONITORING OF THE QUALITY OF COMPOST FROM SOLID WASTE DUMPING SITE AT MAWIONG

The Board is monitoring the quality of compost from the solid waste dumping ground at Mawiong with respect to heavy metals concentration. The result presented in Table 6.0 shows that the concentration of Chromium is found to be above the prescribed standards. Other parameters tested were within the prescribed standards.

Table 6.0: QUALITY OF COMPOST OF SHILLONG MUNICIPAL DUMPING GROUND, MAWIONG

SI. No	Parameters	Standards	Results
1.	Cadmium (mg/kg)	5.0	1.0
2.	Chromium (mg/kg)	50.0	71.0
3.	Copper (mg/kg)	300.0	133.0
4.	Lead (mg/kg)	100.0	41.0
5.	Nickel (mg/kg)	50.0	31.0
6.	Zinc (mg/kg)	1000.0	373.0



5.4 NOISE LEVEL MONITORING

5.4.1 NOISE LEVEL MONITORING DURING DIWALI FESTIVAL

Monitoring of noise levels was conducted in Shillong on the 9th November 2004 before Diwali and on Diwali Day i.e. the 12th November 2004 to compare the noise levels during day time and night time before and on the Festival day. The monitoring was conducted in compliance with the Govt. of India Notification NO. G.S.R. 682 (E) dated 5th October, 1999 and the interim directions of the Honorable Supreme Court.

Ambient Noise levels before and on Diwali day during day time monitoring (Table-1) indicates that before Diwali day almost all of the residential areas monitored have exceeded the prescribed standard, mainly due to vehicular noise. The readings taken in the commercial areas are also on the higher side due to the same reason. All the Silence Zones are in gross violation of the prescribed standard basically due to their close proximity to busy roads and intersections. On Diwali day, readings taken in all locations are higher than the prescribed standards. However, the celebrations this year seem to be subdued as there are no readings grossly violating the standards.

Ambient Noise levels before and on Diwali day during night time monitoring (Table-2) also indicates that the ambient noise levels before Diwali day have exceeded the prescribed standard in almost all the residential areas, commercial areas and Silence Zones. On Diwali Day, the ambient night noise in all locations observed to be slightly higher than that recorded before Diwali.

It may be noted that the ambient noise level before and after Diwali 2004 at some of the monitored places are lower as compared to the values recorded during Diwali 2003.

The monitoring programme conducted shows that the noise levels in Shillong are above the standards particularly in areas near busy roads and intersections but Diwali celebrations have definitely further added to the increased noise levels all over the city and this might have lead to detrimental effect on human health.



TABLE 1.0 AMBIENT NOISE LEVELS BEFORE AND ON DIWALI FESTIVAL DURING DAY TIME MONITORING

			AMBIENT	NOISE MONITORED				
SL.	PLACE		NOISE STANDARDS [dB (A) Leq]	BEFORE	DIWALI	ON DIWA	LI DAY	
NO.		CATEGORY		9 th NOVEN	MBER, 2004	12 th NOVEMBER, 2004		
				TIME	READING [dB (A) Leq]	TIME	READING [dB (A) Leq]	
1.	Laitumkhrah (Lummawrie)	Residential	55	2:40P.M.	67.5	2:50 P.M.	77.0	
2.	Lachumiere	Residential	55	3:26 P.M.	62.7	3:37 P.M.	63.2	
3.	Jaiaw Main Road	Residential	55	3:05 P.M.	68.9	4:55 P.M.	64.6	
4.	Upper Mawprem	Residential	55	4:17 P.M.	60.1	4:30 P.M.	70.6	
5.	Rilbong	Residential	55	3:55 P.M.	47.8	4:20 P.M.	57.4	
6.	Lumpyngngad	Residential	55	2:10 P.M.	56.6	2:25 P.M.	57.2	
7.	New Colony	Residential	55	2:54 P.M.	58.4	3:25 P.M.	56.2	
8.	Laitumkhrah Main Road	Commercial	65	2:45 P.M.	71.7	3:00 P.M.	71.4	
9.	Laitumkhrah Bazaar	Commercial	65	2:47 P.M.	60.3	2:55 P.M.	68.7	
10.	Laitumkhrah Police Point	Commercial	65	2:48 P.M.	74.1	3:27 P.M.	67.3	
11.	Dhankheti	Commercial	65	3:20 P.M.	79.6	3:33 P.M.	78.2	
12.	Motphran	Commercial	65	6:25 P.M.	68.9	6:10 P.M.	76.3	
13.	Paltan Bazaar	Commercial	65	4:50 P.M.	74.4	6:15 P.M.	73.9	
14.	Mawprem Taxi Stand	Commercial	65	4:20 P.M.	67.7	4:35 P.M.	61.9	
15.	Barapathar Bazaar	Commercial	65	4:15 P.M.	68.8	4:25 P.M.	70.9	
16.	Jhalupara	Commercial	65	4:10 P.M.	63.9	4:23 P.M.	69.9	
17.	lew Dak (Laban)	Commercial	65	3:35 P.M.	59.0	3:55 P.M.	66.8	
18.	Last Stop	Commercial	65	3:43 P.M.	74.6	3:57 P.M.	66.4	
19.	Bishnupur	Commercial	65	3:45 P.M.	67.4	4:03 P.M.	67.9	
20.	Malki Point	Commercial	65	3:24 P.M.	72.2	3:35 P.M.	71.7	
21.	Rynjah Bazaar	Commercial	65	2:24 P.M.	70.2	2:40 P.M.	69.1	
22.	Polo Bazaar	Commercial	65	5:25 P.M.	74.9	5:15 P.M.	73.5	



23.	Keating Road	Commercial	65	5:35 P.M.	64.0	5:25 P.M.	88.4
24.	Police Bazaar (Police Point)	Commercial	65	6:00 P.M.	70.4	5:55 P.M.	68.6
25.	Police Bazaar (R.B. Store)	Commercial	65	6:10 P.M.	68.8	5:50 P.M.	68.5
26.	Police Bazaar (Payal	Commercial	65	6:15 P.M.	57.2	5:45 P.M.	93.2
	Cinema)						
27.	Jail Road	Commercial	65	5:40 P.M.	70.5	5:35 P.M.	87.8
28.	Nazareth Hospital	Silence Zone	50	2:50 P.M.	50.8	3:03 P.M.	51.2
29.	Don Bosco Square	Silence Zone	50	3:05 P.M.	79.1	3:30 P.M.	72.6
30.	Civil Hospital	Silence Zone	50	3:30 P.M.	62.2	3:50 P.M.	64.3
31.	K.J.P. Hospital	Silence Zone	50	5:02 P.M.	53.5	4:57 P.M.	61.6
32.	District Council	Silence Zone	50	4:44 P.M.	80.7	4:40 P.M.	71.6
33.	Bethany Hospital	Silence Zone	50	2:16 P.M.	68.9	2:35 P.M.	67.0
34.	Ganesh Das Hospital	Silence Zone	50	5:20 P.M.	49.6	5:05 P.M.	44.9
35.	Main Secretariat	Silence Zone	50	5:32 P.M.	69.4	3:40 P.M.	67.8

<u>NOTE:</u> Ambient Noise Standards are taken from the Noise Pollution (Regulation & Control) Rules, 2000.



TABLE 2.0 AMBIENT NOISE LEVELS BEFORE AND ON DIWALI FESTIVAL DURING NIGHT TIME MONITORING

			AMBIENT - NOISE		NOISE MO	ONITORED	
SL.	PLACE			BEFORE DIWALI		ON DIWALI DAY	
NO.		CATEGORY	STANDARDS	9 th NOVEN	MBER, 2004	12 th NOVEMBER, 2004	
			[dB (A) Leq]	TIME	READING [dB (A) Leq]	TIME	READING [dB (A) Leq]
1.	Laitumkhrah (Lummawrie)	Residential	45	12:23 P.M.	48.4	12:07 P.M.	57.8
2.	Lachumiere	Residential	45	10:45 P.M.	50.8	10:15 P.M.	61.6
3.	Jaiaw Main Road	Residential	45	11:30 P.M.	55.2	11:00 P.M.	68.5
4.	Upper Mawprem	Residential	45	11:15 P.M.	49.5	10:42 P.M.	81.9
5.	Rilbong	Residential	45	11:02 P.M.	42.0	10:30 P.M.	70.3
6.	Lumpyngngad	Residential	45	12:28 P.M.	42.3	12:13 P.M.	50.7
7.	New Colony	Residential	45	12:15 P.M.	44.9	11:57 P.M.	50.7
8.	Laitumkhrah Main Road	Commercial	55	12:22 P.M.	60.5	12:04 P.M.	62.3
9.	Laitumkhrah Bazaar	Commercial	55	12:20 P.M.	60.0	12:05 P.M.	52.9
10.	Laitumkhrah Police Point	Commercial	55	12:17 P.M.	52.7	11:55 P.M.	61.4
11.	Dhankheti	Commercial	55	12:07 P.M.	75.3	11:47 P.M.	72.2
12.	Motphran	Commercial	55	11:25 P.M.	58.7	10:56 P.M.	75.2
13.	Paltan Bazaar	Commercial	55	11:22 P.M.	48.7	10:55 P.M.	77.5
14.	Mawprem Taxi Stand	Commercial	55	11:17 P.M.	53.8	10:50 P.M.	66.5
15.	Barapathar Bazaar	Commercial	55	11:12 P.M.	55.0	10:41 P.M.	78.1
16.	Jhalupara	Commercial	55	11:10 P.M.	48.2	10:40 P.M.	75.6
17.	lew Dak (Laban)	Commercial	55	10:53 P.M.	45.0	10:22 P.M.	75.2
18.	Last Stop	Commercial	55	10:55 P.M.	48.8	10:25 P.M.	82.1
19.	Bishnupur	Commercial	55	11:00 P.M.	41.8	10:27 P.M.	76.9
20.	Malki Point	Commercial	55	10:47 P.M.	70.2	11:45 P.M.	69.9



21.	Rynjah Bazaar	Commercial	55	12:36 P.M.	48.3	12:20 P.M.	46.8
22.	Polo Bazaar	Commercial	55	11:55 P.M.	50.9	11:40 P.M.	66.5
23.	Keating Road	Commercial	55	10:35 P.M.	53.2	10:10 P.M.	76.9
24.	Police Bazaar (Police Point)	Commercial	55	10:05 P.M.	69.0	10:07 P.M.	78.4
25.	Police Bazaar (R.B. Store)	Commercial	55	10:15 P.M.	58.8	10:00 P.M.	93.1
26.	Police Bazaar (Payal Cinema)	Commercial	55	10:10 P.M.	59.8	10:02 P.M.	74.3
27.	Jail Road	Commercial	55	10:25 P.M.	54.7	10:05 P.M.	87.1
28.	Nazareth Hospital	Silence Zone	40	12:18 P.M.	44.2	12:00 P.M.	54.9
29.	Don Bosco Square	Silence Zone	40	12:12 P.M.	61.4	11:52 P.M.	61.8
30.	Civil Hospital	Silence Zone	40	10:50 P.M.	62.4	10:20 P.M.	66.1
31.	K.J.P. Hospital	Silence Zone	40	11:30 P.M.	46.6	11:02 P.M.	68.1
32.	District Council	Silence Zone	40	11:20 P.M.	54.2	10:51 P.M.	80.1
33.	Bethany Hospital	Silence Zone	40	12:31 P.M.	47.7	12:15 P.M.	49.8
34.	Ganesh Das Hospital	Silence Zone	40	12:00 P.M.	45.0	11:15 P.M.	63.8
35.	Main Secretariat	Silence Zone	40	10:40 P.M.	65.8	10:12 P.M.	67.8

NOTE: Ambient Noise Standards are taken from the Noise Pollution (Regulation & Control) Rules, 2000.



5.4.2 AMBIENT AIR QUALITY MONITORING BEFORE AND DURING DIWALI FESTIVAL

The ambient air quality monitoring was carried out before and during Diwali festival at the Board's Premises (Table: 1.0) and at MUDA Complex, Police Bazar (Table: 2.0), Shillong. On 9th & 12th November, 2004. The data indicates that the Suspended Particulate Matter (SPM), Respirable Particulate Matter (RSPM) concentrations were above the permissible limits of Ambient Air Quality Standards (National) at MUDA Complex, Police Bazar (Table.2) as per EPA notification: GSA 176(E), April 2002, 1996.

TABLE: 1.0: AMBIENT AIR QUALITY MONITORING BEFORE & DURING DIWALI FESTIVAL

PARAMETERS TESTED (AVERAGE)	BEFORE DIWALI Festival	DURING DIWALI Festival
SPM (µg/m³)	71.7	80.6
RSPM (µg/m³)	57.8	63.7
SO ₂ (µg/m³)	BDL	BDL
NOx (μg/m³)	2.5	3.9

(9thNovember 12thNovember) 2004, AT BOARD'S PREMISES

TABLE: 2.0: AMBIENT AIR QUALITY MONITORING BEFORE AND DURING DIWALI

PARAMETERS TESTED (AVERAGE)	BEFORE DIWALI Festival	DURING DIWALI Festival
SPM (µg/m³)	191.0	412.3
RSPM (µg/m³)	153.7	292.2
SO ₂ (μg/m³)	BDL	2.0
NOx (µg/m³)	15.4	21.6

FESTIVAL (9thNovember 12thNovember) 2004, AT MUDA COMPLEX, POLICE BAZAR

6 ENVIRONMENTAL RESEARCH

During the year 2004-2005, the Board continued with the following study projects:

A. "Bio-mapping of some important perennial rivers of Meghalaya"

The Board has obtained the sanction from the Central Pollution Control Board for the proposed study project entitled "Bio-Mapping of Perennial Rivers of Meghalaya". The report of the one year data has already been prepared by Central Pollution Control Board, Delhi and Meghalaya State pollution Control Board. The Board has undertaken additional field work during 2003-2004 to support the findings and the final report of the data generated under the study has been



published by CPCB, Delhi during the year 2004-2005 in consultation with MSPCB. The rivers monitored under the study include Umkhrah, Umshyrpi, Umiam Mawphlang, Nongstoin, Myntdu, Lubha, Umngot, Kynshi, Simsang & Ganol.

B. "Studies and Evaluation of Environmental and Socio-Impact of Coal Mining Impact in Jaintia Hills."

The aims of study were to evaluate the quality of ambient air, workroom environment ground water, surface water etc. The analysis of major and trace elements was also the part of the study. The scope of the project was to evolve environmentally friendly technologies and planning for reclamation of the mined degraded land together and the study the socio economic impact of these activities.

The Board initiated the Programme during 2000-2001. Under the study, two years data were generated to get the seasonal variations and trends. The preliminary report of the work done has been submitted to CPCB The study works is continuing during the current year.

C. "Study of Water Quality of Umkhrah River"

The Board has undertaken the study Programme entitled "Assessment of Water Quality of Umkhrah River" in collaboration with center for Environmental studies, NEHU, Shillong during 2001-2002. The main objective of the study was to assess the pollution load in terms of physico-chemical and bacteriological parameters of the river water and to identify the sources of pollution so as to suggest/recommend suitable mitigating measures for improvement of the river water quality. Monitoring works have been started in the last part of the year 2001 and continued during the year 2002-2003. The final report of the study has been submitted to the concerned Govt. Deptts. for implementation of its findings.

7 ENVIRONMENTAL TRAINING

The Officers& Staff of the Board attended several training courses, workshops & seminars sponsored by the Ministry of Environment and Forests, Government of India, the Central Pollution Control Board, Delhi and other agencies. The list of the Official, who attended the training programmes during the year, is given in **Annexure-VII**.

8 ENVIRONMENTAL AWARENESS AND PUBLIC PARTICIPATION

The Board was represented in a Mass Awareness Programme organized by the Office of the Deputy Commissioner, East Khasi Hills District in June 2004. The programme was organized to celebrate the Year of Scientific Awareness – 2004.

The Board has been assisting the PHE Department, the Shillong Municipal Board, etc. in monitoring water quality of Water Supply Schemes to ensure supply of safe drinking water to the public in the State. Based on the Board's reports on water



quality status, some NGOs have launched the cleaning drives of rivers in Shillong like Umshyrpi, Umkhrah and others.

ENVIRONMENTAL STANDARDS INCLUDING THE TIME SCHEDULE FOR THEIR ENFORCEMENT

The Board is adopting the standards prescribed by the Central Pollution Control Board and Ministry of Environment and Forests, Government of India. In case, the Standards of the said organizations are not available the Board follows the standards prescribed by the Indian Standards Institution. The Board is maintaining the enforcement Schedule prescribed by the Central pollution Control Board and Ministry of Environment and Forests, Government of India in respects of 17 categories of industries. However, in case of other industries, it has its own enforcement schedule, which is specified at the time of granting of "Consent to Establish" and "Consent to Operate".

10 PROSECUTIONS AND CONVICTIONS FOR ENVIRONMENTAL CONTROL

11.1 SHOWCAUSE NOTICES ISSUED TO DEFAULTING INDUSTRIES

During the year, 61(Sixty one) Show Cause Notices were issued to defaulting industrial units. List is placed as **Annexure-VI (A)**

11.2 CLOSURE OF INDUSTRIAL POLLUTING UNIT

During the year, 70 (Seventy) Closure Notices were issued to defaulting industrial units. List is appended as **Annexure – VI (B)**



FINANCE AND ACCOUNTS OF THE BOARD

The Receipt and Payment of the Board for the financial year 2004-2005 is as shown below:

RECEIPT A/C		PAYMENT A/C				
Opening Balance		<u> </u>				
Cash in hand	753.26	Fixed Assets	: 888535.00			
Cash at Bank:						
In saving Bank Account:		Other Assets:				
		Scientific Instruments				
With Indian Overseas Bank		and				
Shillong on:		Office appliances	: 5160231.00			
Account No 3488	(22123.36)	Tools and Plants	: 6048766.00			
Account No 425	2560.00					
Account No 6757	1909011.53					
Indian Bank Shillong	(14076.40)	Revenue Expenditure:				
Bank of India,		Administration:				
Shillong on:		Pay & allowances to				
Account No.3518	:	Officers & staff	: 6794612.00			
Account No.544	(14902.50)	Contribution to P.F.	: 873606.00			
Account No.1242	6086582.68	Contingents Expenditure	<u>554946.70</u> 8223164.70			
Account No.1090	326978.60					
Account No.1987	1130205.11	Board Laboratory	: 98274.00			
		Running and				
Account No.3006	191650.54	Maintenance				
		of vehicle	: 166608.77			
		Repair and				
Account No.3100	3370947.14	Maintenance	: 12805.00			
Account No.3226	80259.00	Advances	: 72100.00			
Vijaya Bank on:		Deposits	: 1061436.00			
Account No 7658	4604564.00	Other Expenditure	: 5560.00			
In Fixed Deposited						
Account:		Water cess remittance	: 1017069.00			



With Indian Overseas Bank Shillong Bank of India, Shillong	:	7482421.00 2682133.00	<u>27816963.60</u>	Forest Royalty House Rent Income Tax Professional Tax Sales tax deducted at	: : :		69787.00 552.00 51073.00 32355.00
Grant Received from:				source	:		5551.00
Ministry of Environment & Forests, Govt. of India Department of Public	:	513500.00		Closing Balance:			
Health &	:	8074000.00		Cash in hand	:	1162.26	
Engineering				Cash at Bank:			
Central Pollution Control	:	<u>779370.00</u>	9366870.00	In saving Bank Account: With Indian Overseas			
Board, Govt. of India				Bank			
				Shillong on:			
Grant in aid received from:				Account No 3488	:	(22123.36)	
Other Agencies	:			Account No 425			
				Account No 6757	:	1947347.38	
Fees	:	3095559.00		Indian Bank Shillong		(14076.40)	
Interest on Investment	:	613658.00		Bank of India,			
Miscellaneous receipt	:	65409.00		Shillong on:			
Miscellaneous advances	:	166670.00		Account No.3518	:	137138.50	
Deposits	:	<u>1250396.00</u>	<u>5191692.00</u>	Account No.544	:	(14902.50)	
				Account No.1242	:	7676862.47	
<u>Staff</u>							
Recoveries/Deductions:				Account No.1090	:	737442.60	
House Rent	:		552.00	Account No.1987	:	1633609.15	
Income Tax	:		51073.00	Account No.3006	:	160297.78	
Professional Tax	:		32355.00	Account No.3100	:	3976258.25	
EPF	:		390599.00		:	83479.00	
GPF	:		110000.00	Vijaya Bank on:			
				Account No 7658 In Fixed Deposited	:	4393985.00	
Other Recoveries:				Account:			



With Indian Overseas

Forest Royalties : 13999.00 Bank : 3872233.00

Sale Tax deducted at

source : 1844.00 Shillong

Bank of India, Shillong : 1542133.00 26110846.13

Total Rupees _____

42975947.60 42975947.60



OTHER ACTIVITIES OF THE BOARD

- 1. Functions and Activities of the Board under Rules notified under the E (P) Act, 1986 are as follows:
- a. Hazardous Waste (Management & Handling) Rules, 1989
- Issue of authorization for handling of hazardous waste to occupier and operators in the State.
- Preparation of inventory of hazardous waste generation in the State.
- Assisting the State Govt. in inventory of disposal sites and conduct of Environmental Impact studies.
- Monitoring of facilities/infrastructure/technical capabilities in hazardous wastes handling units.

As a follow-up to the Hon'ble Supreme Court Direction dated 14-10-1995 in Writ Petition (C) No.657 of 1995, the Board issued Directions to the 2(two) units, which were granted Authorization viz. M/S Matiz Metals (P) Ltd. E.P.I.P., Byrnihat and M/S Hindustan Coca Cola Beverages (P) Ltd, Byrnihat; to prominently display on a board/hoarding outside their gate all the relevant information on quantity and nature of the hazardous wastes being generated in the plant. Verification of compliance to the Directions was carried out and the two units were subsequently granted renewal of their Authorizations for a further period of one year.

b. Bio-Medical Waste (Management & Handling) Rules, 1998.

The Board, as the prescribed authority for implementation of the Rules, has to perform the following functions & activities:-

- Inventorisation of sources generating bio-medical waste.
- Issuance of authorization to institutions generating bio-medical waste.
- Monitoring of compliance to the prescribed norms and standards for handling and management of bio-medical waste by the concerned institutions.
- Advice the Government for setting up of common facility for treatment and disposal of bio-medical waste.
- Enforcement of the provisions of the Rules in the State.
- Submission of Annual Status Report on management of bio-medical waste in the State.

As the prescribed authority, the Board has undertaken the following activities in implementing the provision of the Rules:-

As on 31-3-2005, the Board has identified 130 Health Care Facilities (HCF) generating bio-medical wastes which include Hospitals, Nursing Homes, Pathological Clinics, CHCs, PHCs, Dispensaries, and Veterinary Hospitals, etc. Of these, 129 HCFs has applied for authorization and 23 authorizations have



been issued. The authorizations to 105 HCFs run by State Government have been withheld due to non-payment of the prescribed authorization fees.

- Annual Status Report for the year 2004-05 prepared on the basis of the Annual Reports submitted by the HCFs on handling and management of biomedical wastes in the State has been submitted to the CPCB as required under the Rules.
- The Board has issued Directions to 2(two) defaulting Government hospitals and the Director of Health Services (MI) for failing to comply with provisions of the Rules.
- The Board has also taken up with the Urban Affairs Department for setting up of common Bio-medical waste treatment and disposal facility.

(c) Municipal Solid Wastes (Management & Handling) Rules, 2000

The functions of the Board under the Rules include:-

- Issuance of Authorization to the municipal authorities or the operator of a facility for setting up of waste processing and disposal facility and landfills.
- Monitoring the performance of waste processing and disposal facility including compliance with the standards in terms of ground water, ambient air, leachate quality, compost quality, etc.
- Submission of Annual Status Report on management of MSW in the State to the Central Pollution Control Board.

Under the Rules, the Board has issued authorization to Shillong Municipal Board (SMB) for setting and operation of the compost plant at Mawiong and regularly monitors its performance and compliance to the prescribed standards. The Board wrote to other Municipal Boards to apply for Authorization under the Rules and has also to the SMB to apply for renewal of its Authorization. All the Municipal Boards were also requested to prepare time bound Action Plan for management of municipal waste in accordance with the provisions of the Rules.

Under the Order of the Hon'ble Supreme Court of India dated 26-07-2004, with respect to Writ Petition (Civil) No.888/1996 on the matter of implementation of the Rules, the Board wrote to the Urban Affairs Department and the Under Secretary to the Government of Meghalaya, Revenue Department informing about the Order and suggesting to take necessary action in identifying landfill sites for all municipal bodies in the state and to constitute a Task Force comprising the State Pollution Control Board, Urban Affairs Department, Revenue Department and Municipal Authorities and to submit quarterly report to the Hon'ble Supreme Court in compliance with the Order.

Under the Order of the Hon'ble Supreme Court of India dated 04-10-2004, whereby action plan for management of municipal solid waste in metro cities and state capitals were to be prepared, the Shillong Municipal Board submitted its action plan which was forwarded by the Board to the Central Pollution Control Board, Delhi.



An application for authorization in Form 1 was received from the Williamnagar Municipal Board and after thorough consideration, the Authorization was granted by the Board.

Under the Order of the Hon'ble Supreme Court of India dated 26-07-2004, officials of the Board visited all the Municipal Boards in the state to help in filling up Form – 2 for submission of Annual Report on Municipal Solid Wastes management. The Annual Reports for the year 2003-04 were compiled and the consolidated Annual Status Report was submitted to CPCB as required under the Rules.

(d) Batteries (Management & Handling) Rules, 2001.

Under the Rules, the functions of the Board includes:-

- Preparation of inventory of Batteries Manufacturer, Importer, Re-conditioner, Assembler, Dealer, Re-cycler, Re-smelter & Auctioneer.
- Receipt of half-yearly returns of sales/buy back from manufacturer, importer, assembler and re-conditioner.
- Receipt of annual returns of recycling from the recyclers.
- Receipt of half-yearly returns from bulk consumers & auctioneer.
- Preparation and submission of annual compliance status report to CPCB.

The Board wrote to the identified bulk consumers asking them to submit half-yearly returns for bulk consumers in prescribed Form – VIII and for auctioneer of used batteries in prescribed Form – IX. Response from several bulk consumers was received.

(e) Recycled Plastics Manufacture and Usage Rules, 1999

Under the Rules, the Board is a prescribed authority for implementation of the Rules relating to manufacture and recycling of Plastics.

The activities of the Board includes:-

- Inventorisation of industrial units manufacturing carry bags and containers made of plastics.
- Grant of registration for manufacturing carry bags or containers made of virgin or recycled plastics.
- Monitoring the industrial units for compliance to the provision of the Rules.

The following units engaged in manufacture of bags or containers made of virgin plastics submitted their application for Registration with the Board as per Rules:

- M/S Megha Polycon Pvt. Ltd.
- Kakarania Innovative Systems Pvt. Ltd.

Both the units were granted Registration under the Rules.



A Show Cause Notice was issued to M/S Meghalaya Polythene Industries (P) Ltd. for failing to apply for Registration in the stipulated time.

2. Functions and Activities under Water (Prevention & Control of Pollution) Cess Act, 1977.

The function of the Board under the Act and Rules made there under is to assess and collect a cess from Local authorities/bodies and Industries consuming water for domestic and industrial purposes.

During the year (2004-05), the amount of cess assessment is Rs. 94, 556.00 (Rupees Ninety four thousand five hundred fifty six) only and cess collection is Rs. 9, 03, 817.00 (Rupees Nine lakhs three thousand eight hundred seventeen) only.

The cess collected is remitted to the consolidated fund of India through Ministry of Environment & Forests, Government of India.



ANNEXURES

ANNEXURE-I

LIST OF BOARD MEMBERS FOR THE PERIOD 2004-2005

1. Chairman

> Meghalaya State Pollution Control Board, Shillong. : Chairman

2. Member Secretary, : Member Convener

Meghalaya State Pollution Control Board

OFFICIAL MEMBERS

Chief Engineer 3.

Public Health Engineering, Meghalaya, Shillong or his: Member

nominee

The Director of Industries. 4.

> Meghalaya, Shillong or his nominee : Member

The Director of Health Services (Research, etc), 5.

Meghalaya, Shillong or his nominee : Member

6. The Director, Urban affairs,

> Meghalaya, Shillong or his nominee : Member

7. Chief Conservator of Forests (Social Forestry & : Member

Environment) Meghalaya, Shillong or his nominee

MEMBERS FROM LOCAL AUTHORITIES

The Chief Executive Member, 8. Khasi Hills Autonomous District Council or his nominee

: Member

9.

The Chief Executive Member, Jaintia Hills Autonomous District Council or his nominee

: Member

10. The Chief Executive Member,

Garo Hills Autonomous District Council or his nominee

: Member

11. The Chairman,

Shillong Municipal Board or his nominee

: Member

12. The Chairman,

Tura Municipal Board or his nominee

: Member

REPRESENTATIVES FROM CORPORATIONS

The Managing Director, Meghalaya Industrial Development Corporation or his : Member

nominee



14. The Managing Director, : Member Mineral Development Corporation, Meghalaya *or* his

nominee

NON-OFFICIAL MEMBERS

15. Shri S.G.Lyngdoh, : Member

Mawlai Nonglum, Shillong

16. Shri N.D. Shullai : Member

Jaiaw Pdeng, Shillong

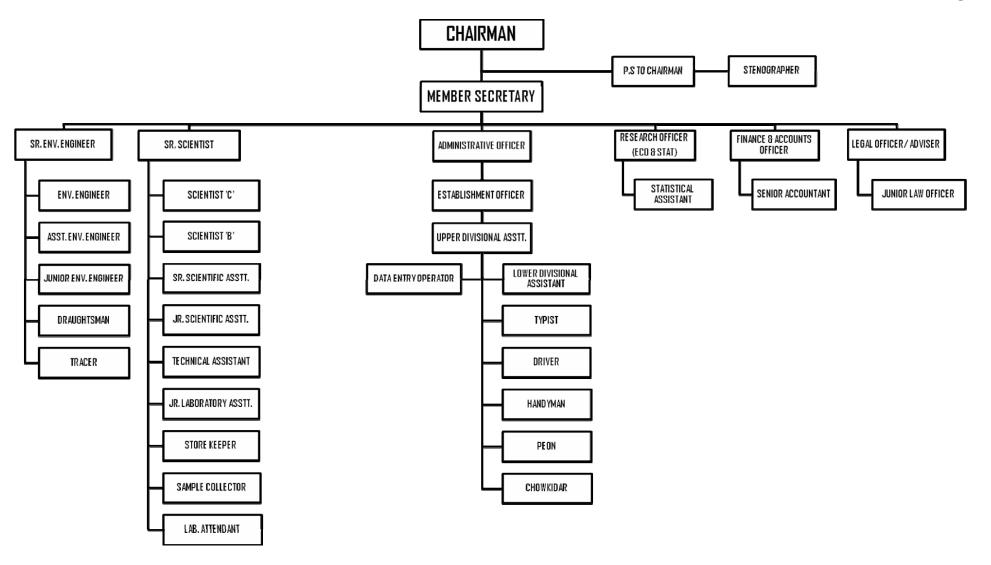
17. Shri D.S.Laloo, : Member

Moodiap, Nartiang, Jowai.



ORGANISATIONAL CHART

ANNEXURE II







ANNEXURE-III

STAFF POSITION OF THE MEGHALAYA STATE POLLUTION CONTROL BOARD AS ON 31ST MARCH 2005

SL. NO.	NAME OF POST	SANCTIONED STRENGTH	WORKING STRENGTH	VACANCY				
ADMINISTRATIVE & ACCOUNTS STAFF								
1.	Administrative Officer	1	-	1				
2.	Private Secretary to Chairman	1	-	1				
3.	Scientist 'B' (Eco. & Stat.)	1	-	1				
4.	Legal Officer	1	-	1				
5.	Junior Law Officer	1	-	1				
6.	Finance & Accounts Officer	1	-	1				
7.	Senior Accountant	1	1	-				
8.	Establishment Officer	1	1	-				
9.	Stenographer Grade II	1	1	-				
10.	Statistical Assistant	1	1	-				
11.	U.D.A.	4	2	2				
12.	L.D.A.	7	2	5				
13.	L.D.A cum Typist	5	3	2				
14.	Typist	4	1	3				
15.	Library Assistant	1	-	1				
16.	Driver	6	5	1				
17.	Handyman	1	-	1				
18.	Peon / Mali / Plumber	15	8	7				
19.	Chowkidar	3	2	1				
	TECHNIC	CAL STAFF						
1.	Sr. Environmental Engineer	1	-	1				
2.	Environmental Engineer	2	2	-				
3.	Asstt. Environmental Engg.	5	3	2				
4.	Junior Environmental Engineer	1	1	-				
5.	Senior Draftsman	1	-	1				
6.	Tracer	2	-	2				
7.	Data Entry Operator	1	-	1				
	}	FIC STAFF						
1.	Sr. Scientist	1	-	1				
2.	Scientist "C"	1	1	-				
3.	Scientist "B"	3	2	1				
4.	Scientific Assistant (Senior)	1	1	-				
5.	Junior Scientific Asstt.	7	2	5				
6.	Technical Assistant	2	1	1				
7.	Junior Laboratory Asstt.	4	2	2				
8.	Storekeeper	1	1	-				
9.	Sample Collector	5	5	-				
10.	Field Attendant/Laboratory Attendant	3 97	2 50	1				
	47							



ANNEXURE-IV

PUBLICATIONS							
SL NO	NAME OF STUDY/PROJECTS	YEAR OF PUBLICATION					
1.	Bio-Mapping of some important perennial rivers of Meghalaya	2004-2005					
2.	Study of Water Quality of Umkhrah River	2004-2005					



ANNEXURE-V (A)

LIST OF INDUSTRIES WHICH APPLIED FOR CONSENT TO ESTABLISH DURING 2004-2005

- 1. Stone Crushing Industry
- 2. Stone Crusher (Mison P.Marak)
- 3. Stone Crusher Unit (Akshay Kr. Hajong)
- 4. Stone Crusher Unit (Ramthing Sangma)
- 5. Stone Crusher Machine (Wanroyica Pohlong)
- 6. Assam Auto Agencies
- 7. Good Luck Coal Export
- 8. S.P.Industries
- 9. Shree Sai Prakash Alloys Pvt. Ltd.
- 10. Pyrbot Motor Workshop
- 11. Nongrum Motor Workshop
- 12. Byrnihat Springs Ltd.
- 13. P. Kharkongor Stone Crusher
- 14. Parbati Petro Products Pvt. Ltd
- 15. North Eastern Health Care & Hospitality Pvt. Ltd.
- 16. Meghalaya Fusions Ltd. (Ferro Unit)
- 17. Marak Stone Crushing
- 18. Purbanchal Alloys Ltd.
- 19. PMS Grinding Industry
- 20. S.B. Crusher
- 21. Catherine Mynsong Motor Works
- 22. Dynaroof Pvt. Ltd.
- 23. K. Singh Wann & Sons
- 24. Oxford Packaging Pvt Ltd.
- 25. Reming M. Sangma Brick Industry
- 26. P.K. Kongor Stone Crusher
- 27. Eastern Saw Mill
- 28. Abhi Coke Pvt. Ltd.
- 29. Apollo Tyres
- 30. Blah Products
- 31. Blah Enterprise
- 32. Servicing Centre
- 33. Premier Feed Mill
- 34. Premier Roller Flour Mill
- 35. Premier Hatchery
- 36. Premier Bakery
- 37. Vikash Saw-cum-Veneer Mill
- 38. Marak Stone Crusher



- 39. Ranikor Lime Industry
- 40. Hircon Associates Pvt. Ltd.
- 41. Milestone Beverages Pvt. Ltd.
- 42. Mohammad Ibrahim Scooter Repairing Works
- 43. Mahabir Foods Ltd.
- 44. R.Kharumnuid Stone Crusher
- 45. R.Kharpran Stone Crusher
- 46. M. Kharpran Stone Crusher
- 47. Shyam Century Ferrous Ltd.
- 48. Boktozama Stone Crusher
- 49. Megha Technical & Engineers Pvt. Ltd. (DG-Set)
- 50. A.D. Aggregate Crushers
- 51. Meghalaya Mineral Products (Re-Rolling Mill)
- 52. Uranium Corporation of India Ltd. (UCIL)
- 53. Martina Tariang Stone Crusher
- 54. Khasi Alloys Pvt. Ltd.
- 55. NEZONE Fragrances Pvt. Ltd.
- 56. Riangdo Veneers Pvt. Ltd.
- 57. Byrnihat Mini Flour Mill
- 58. Kynsai Basalt Crusher
- 59. Meghalaya Bitchem Pvt. Ltd.
- 60. S. Kharkongor Stone Crusher.
- 61. Kharsati Stone Crusher
- 62. A.R. Cashewnut Industry
- 63. Meghalaya Cements Ltd. (Crusher)
- 64. Lime Kiln (Goolman D.Sawian)
- 65. N.R. Foods
- 66. N.R. Chemicals



ANNEXURE-V (B)

LIST OF UNITS WHERE CONSENT TO ESTABLISH ISSUED DURING 2004-2005

- 1. Salonsar Business Pvt. Ltd.
- 2. Syiemlieh Enterprise
- 3. Ri-Bhoi Bottling
- 4. Auto Workshop
- 5. Stone Crusher Unit (Ramthing Sangma)
- 6. Meghalaya Salt
- 7. Mohammad Ibrahim Scooter Repairing Works
- 8. M.D.H Beverages
- 9. Commercial Iron & Steel (P) Ltd.
- 10. Mahabir Foods Ltd.
- 11. Premier Hatchery
- 12. Catherine Mynsong Motor Works
- 13. Purbanchal Alloys Ltd.
- 14. B.S. Bamboo Processing Unit
- 15. Shillong Veneer & Saw Mill Pvt. Ltd.
- 16. Stone Crushing Industry
- 17. Byrnihat Ispat Pvt. Ltd.
- 18. L. Madanlal Aluminium Ltd.
- 19. Riangdo Veneers (P) Ltd.
- 20. Pawan Casting (Meghalaya) (P) Ltd
- 21. Byrnihat Ispat Pvt. Ltd.
- 22. Premier Bakery
- 23. North Eastern Health Care & Hospitality Pvt. Ltd.
- 24. Stone Crusher Machine (Wanroyica Pohlong)
- 25. Manjeng Sangma Stone Crusher Unit
- 26. Mawmluh Cherra Cements Ltd. (MCCL)
- 27. D.Khongwir Lime Industry
- 28. Bijoy Industries (Cashew Nut)
- 29. Phillip Tyres
- 30. Manjeng Sangma Stone Crusher Unit
- 31. Gee-See-Kaa Stone Crusher
- 32. Good Luck Coal Export
- 33. NEIGRIHMS (DG-Set)
- 34. Byrnihat Wood Industries Pvt.Ltd.
- 35. Meghalaya Cements
- 36. Sumati Stone Crushing Unit
- 37. NEIGRIHMS (STP)
- 38. Pyrbot Motor Workshop
- 39. Sirish Sangma Stone Crushing Industry



- 40. Ri-Bhoi Fertilizers & Chemicals Pvt. Ltd.
- 41. Nongrum Motor Workshop
- 42. P. Kharkongor Stone Crusher
- 43. Stone Crusher Unit (Ramthing Sangma)
- 44. Blah Black Stone Products
- 45. S.K. Abdullah Stone Crusher
- 46. I. Lakhmi Stone Crusher
- 47. D.Lakhmi Stone Crusher
- 48. Silda Milk Processing Unit
- 49. Sangma Stone Crusher
- 50. Sawkmie Automobile & Steel Fabrication Works
- 51. Rynjah Bakery (Closed)
- 52. Byrnihat Steel (P) Ltd.
- 53. Mawmluh Cherra Cements Ltd. (MCCL)
- 54. MECOBRIO, Umbir (Closed)
- 55. Rynjah Bakery (Closed)
- 56. J. Automobile Works (Closed)
- 57. Lyngdoh Polythene Plastic Industries
- 58. Meghalaya Lime & Mineral Industry
- 59. Meghalaya Industrial Development Corporation (Closed)
- 60. Auto Diesel Works (Closed)
- 61. Ryngksai Welding Workshop
- 62. Woodland Nursing Home
- 63. Anderson Meat Product (Closed)
- 64. Bomber Cement Plant
- 65. Bethesda Hospital (P) Ltd.
- 66. Meghalaya Fusions Ltd. [Ready To Eat (RTE) Unit]
- 67. (MeSEB) Lakroh Mini Hydel Project
- 68. MeSEB) Sonapani Mini Hydel Project
- 69. Caspiancy Synrem Lime Kiln
- 70.821 R.K.Enterprise (Pommad)
- 71.820 M.M.Enterprise (Rngain)
- 72.10(2004) D.Lakhmi Stone Crusher
- 73.19(2004) Ri-Bhoi Fertilizers & Chemicals Pvt. Ltd.
- 74.20(2004) -Starlin Rynjah Stone Crushing Unit
- 75. Gee-See-Kaa Stone Crusher
- 76. Marbaniang Lime Kiln Unit
- 77. Sirish Sangma Stone Crushing Industry
- 78. S.P.Industries
- 79.48(2004) Good Luck Ferro Alloys Pvt. Ltd.
- 80.63(2004) Catherine Mynsong Motor Works
- 81. Servicing Centre
- 82. PMS Grinding Industry
- 83. Fancon's Automobile Repairing Centre



ANNEXURE - V (C)

LIST OF UNITS WHERE CONSENT TO OPERATE ISSUED DURING 2004-2005

- 1. Ali Asgar Stone Crusher Machine, Good Luck Coal Exports (I)
- 2. Dees Chemicals Pvt. Ltd.
- 3. Meghalaya Sova Ispat Alloys Ltd.
- 4. Meghalaya Ispat Sheet Ltd.
- 5. Meghalaya Lime & Mineral Industry
- 6. Wood's Garage
- 7. Ali Asgar Stone Crusher Machine, Good Luck Coal Exports (II)
- 8. Nalari Ferro Alloys (P) Ltd.
- 9. NEZONE Industries Ltd.
- 10. Shree Radha Creations Pvt. Ltd.
- 11. Wessly Doloi Stone Crusher
- 12. Syiem Auto Workshop
- 13. Mansan Fruit Products
- 14. Neelu Stone Crusher
- 15. Nonghuloo Stone Crushing Unit
- 16. P. Mylliem Automobile Workshop
- 17. Frostar Lartang Lime Kiln
- 18. Bimla Ispat & Alloys (P) Ltd.
- 19. Cements Manufacturing Co. Ltd.
- 20. N.L. Cold Storage Pvt. Ltd.
- 21. Megha Bread (Bakery)
- 22. Umadutt Industries (Amjok)
- 23. Gita Ferro Alloys Pvt. Ltd.
- 24. Trishul Hi-Tech Industries
- 25. Ambika Oil, North East Pvt. Ltd.
- 26. Basanty Kharbhih Stone Crusher
- 27. Byrong Limestone & Dolomite Mines
- 28. Blah Enterprise
- 29. Anirudha Steel (P) Ltd.
- 30. Jaintia Ferro Alloys Pvt. Ltd.
- 31. Gregory Kharsati Lime Kiln
- 32. Nezone Steels (Meghalaya) Ltd.
- 33. Meghalaya Electronics Development Corporation (MEDC)
- 34. Dynaroof Pvt. Ltd.



ANNEXURE -V (D)

LIST OF UNITS WHICH HAVE RECEIVED RENEWAL OF CONSENT TO ESTABLISH DURING 2004- 2005

- 1. Meghalaya Cements
- 2. Monolith Cements Pvt. Ltd.
- 3. Byrnihat Steel (P) Ltd.
- 4. Haisibon Kharkongor Stone Crusher
- 5. Kelson War & Sons Lime Kiln Unit
- 6. Shankur Sing Dkhar Lime Kiln
- 7. Phillip Tyres
- 8. Pillar Nongkhlaw Lime Factory
- 9. Byrong Limestone & Dolomite Mines
- 10. Flagon Distillers & Bottlers Pvt. Ltd.
- 11. Fancon's Automobile Repairing Centre
- 12. Stone Crusher (Pongtung)
- 13. Northeast Bottling Plant
- 14. Sasanta Sweet Lime Kiln
- 15. D. Rymbai Lime Products
- 16. J.S. Bakery & Confectionery
- 17. M.M.Enterprise (Rngain)
- 18. R.K.Enterprise (Pommad)
- 19. D.Kshiar Stone Crusher
- 20. I.R.S. Brick Industry
- 21. Dynasty Motors Pvt. Ltd
- 22. Shree Sai Smelters (India) (P) Ltd.
- 23. R.K Motors
- 24. Meghalaya Minerals & Mines (P) Ltd.
- 25. T.S. Shrieh Lime
- 26. Ali Asgar Stone Crusher Machine, Good Luck Coal Exports (I)
- 27. Kmel Nongbri Stone Crusher
- 28. B.S. Marbaninag Stone Crusher Unit
- 29. Hanny Fibre Pvt. Ltd.
- 30. P. Mylliem Automobile Workshop
- 31. Meghalaya Salt
- 32. Shankur Sing Dkhar Lime Kiln
- 33. Harmel A. Sangma Stone Crusher Machine
- 34. Umiam Calcinates(consent)
- 35. Cements Manufacturing Co. Ltd.
- 36. Shree Sai Prakash Alloys Pvt. Ltd. (Integrated Steel Plant)
- 37. H.K.S.Stone Crusher Plant
- 38. Moris Lyngdoh Automobile Servicing Unit
- 39. Shree Sai Smelters (India) (P) Ltd.
- 40. Bakery & Confectioners



- 41. T.M. Motor Works
- 42.T.T.M.Bakery Unit
- 43. Meghalaya Alloys Pvt. Ltd.
- 44. Servell Enterprise
- 45. Riwar Mihngi Stone Crusher Service
- 46. Nezone Steels (Meghalaya) Ltd.
- 47. Tariang Body Builder
- 48. Mini Tea Processing Unit
- 49. Moderns Offset Printing Press
- 50. City Motor Works
- 51. Mehun Dkhar Stone Crusher
- 52. T. Uriah Stone Crusher
- 53. Teinam Bakery
- 54. Lum Mawshun Mining Corporation (Lafarge Umiam Pvt. Ltd.)
- 55. Flagon Distillers & Bottlers Pvt. Ltd.
- 56. Optomax Calcium Calcinate Pvt. Ltd.
- 57. N.L. Cold Storage Pvt. Ltd.
- 58. Nonghuloo Stone Crushing Unit



ANNEXURE - V (E)

LIST OF UNITS WHICH HAVE RECEIVED RENEWAL OF CONSENT TO OPERATE DURING 2004-2005

- 1. Meghalaya Minerals & Mines (P) Ltd.
- 2. Adhunik Meghalaya Steel (P) Ltd.
- 3. York Print Pvt. Ltd.
- 4. Dees Chemicals Pvt. Ltd.
- 5. Komorrah Limestone Mining Co.Ltd.
- 6. Timpack (P) Ltd.
- 7. Shyam Century Ferrous Ltd.,
- 8. RNB Minerals & Chemicals-Ferric & Non-Ferric Alum,
- 9. Greystone Ispat (P) Ltd.
- 10. Mansan Fruit Products
- 11. Pioneer Carbide (P) Ltd.
- 12. Meghalaya Bamboo Chips Ltd.
- 13. Meghalaya Ispat Sheet Ltd.
- 14. Shiromani Food Products Pvt. Ltd.
- 15. Meghalaya Steel (P) Ltd.,
- 16. R.N.B Minerals & Chemicals (P) Ltd.(Hydrated Lime),
- 17. Wessly Doloi Stone Crusher
- 18. Megha Polycon (P) Ltd.
- 19. J.L.Basaiawmoit/Joe Motor Automobiles
- 20. Eastern Panoroma Offset Press
- 21. Kakarania Innovative Systems (P) Ltd.
- 22. Goenka Engineering Works
- 23. Wessly Doloi Stone Crusher
- 24. Meghalaya Steel (P) Ltd., Steel Rolling Mill
- 25. Shree Shankar Atta Chakki Mill
- 26. Gee-See-Kaa Stone Crushing Unit
- 27. Eastern Petro Chemicals LPG
- 28. S. Suting, Nongthymmai, Mawsmai
- 29. Tony Passah Mechanical Engineering Work
- 30. Meghalaya Carbide & Chemical Products
- 31. Meghalaya Electronics Development Corporation (MEDC)
- 32. Modrina Auto Enterprise
- 33. Shree Sai Smelters (India) Pvt. Ltd.
- 34. Albarin Suting Stone Crusher
- 35. Toto Industries
- 36. Meghalaya Alloys Pvt. Ltd.
- 37. Gregory Kharsati Lime Kiln
- 38. Timpack (P) Ltd.
- 39. Nalari Ferro Alloys (P) Ltd.
- 40. NEZONE Industries Ltd.
- 41. S.M Polypack Industries



- 42. H.M. Cements Ltd.
- 43. H.K.S.Stone Crusher Plant
- 44. Shivani Ispat & Rolling Mills (P) Ltd.
- 45. RKB Mini Cement Plant
- 46. Forbes Aquamall Ltd.
- 47. Goenka Engineering Works
- 48. Meghalaya Bamboo Chips Ltd.
- 49. H.K.S.Stone Crusher Plant
- 50. Shivam Ispat & Alloys (P) Ltd.
- 51. Brahmaputra Wire Products
- 52. Marak Plastics
- 53. Pioneer Carbide (P) Ltd.
- 54. Ganpati Rolling Mills (P) Ltd.,
- 55. R.N.B Carbides & Ferro Alloys
- 56. Byrnihat Oxygen Pvt. Ltd.
- 57. Pawan Ispat (P) Ltd.
- 58. York Print Pvt. Ltd.
- 59. K.K.Beverages Pvt. Ltd.
- 60. Eastern Panoroma Offset Press
- 61. Thruin Nongspung Saw Mill
- 62. Fruit Preservation Centre, Shillong.
- 63. Belle Herbals Pvt. Ltd.
- 64.706 Meghalaya Gases Ltd.
- 65. Colortek (Meghalaya) Pvt. Ltd.
- 66. Shree Sai Megha Alloys (P) Ltd.
- 67. Panchamukhi Processors (Megha) Pvt. Ltd.
- 68. Shree Sai Rolling Mills (Indis) Pvt. Ltd. (TMT)
- 69. Brilsilain Kharmawphlang
- 70. VanshaJ.M.Perfumery & Essential Oil Co. Ltd.
- 71. K.K.Beverages Pvt. Ltd.
- 72. Northeast Bottling Plant
- 73. Shiromani Food Products Pvt. Ltd.



ANNEXURE -VI (A)

LIST OF UNITS WHERE SHOW CAUSE ARE ISSUED AGAINST THEM DURING 2004 – 2005

- 1. Tyre Rethreading Works
- 2. Brahm India Pvt. Ltd.
- 3. Edwel Dkhar Stone Crusher Unit
- 4. Gregory Kharsati Lime Kiln
- 5. Deborah Lime Industry
- 6. Donny Ryan N.Sangma Servicing Workshop
- 7. N.R.Roller Flour Mills Co.(P) Ltd.,
- 8. Lapphang Jana Nongbet Body Construction Workshop
- 9. D.K.Lakiang Bakery
- 10. Lawbyrwa Limestone Calcination Industry
- 11. S. Chyne Press
- 12. Donny Ryan N.Sangma Servicing Workshop
- 13. Stone Crusher (Mawlyngngad)
- 14. Jaintia Coal Processor
- 15. Anirudha Steel (P) Ltd.
- 16. RKB Mini Cement Plant
- 17. Motor Repair Workshop
- 18. A.R. Wahlang Auto Workshop
- 19. Imperial Granite
- 20. Control Marbaniang Lime Kiln
- 21. Dathai Photograph Frame & Laboratory
- 22. Lyngdoh Lime Products
- 23. loona Shadap Stone Crusher
- 24. Parbest Rangslang Stone Crusher
- 25. Auto Mech
- 26. Reginald Kharmujai, Sunbridge Dairy Processing Plant (Closed)
- 27. Shylla Auto Engineering
- 28. Diengdoh Lime Kiln
- 29. Gregory Kharsati Lime Kiln
- 30. Suting Fruit Processing Unit
- 31. R.K. Enterprise (Pommad)
- 32. Multi Mobile Precision
- 33. B.R. Workshop-cum- Truck Body Building Unit
- 34. Shree Radha Creation (P) Ltd.
- 35. Limestone Kiln (Pajwa) Unit
- 36. Eastern Servicing Garage
- 37. Megha Stone Crusher



- 38. Mawphor Offset Printing Press
- 39. Sohtun Printing Press
- 40. Miliata June Sakhar Stone Crusher
- 41. Sierra Motors
- 42. B.M. Enterprises
- 43. Stone Crusher (Pongtung)
- 44. Jaintia Coal Processor
- 45. P.M. Motor Workshop
- 46. Donny Ryan N. Sangma Servicing Workshop
- 47. Stone Crusher Rapki Lamare
- 48. Stone Crusher (Mawlyngngad)
- 49. Stanley Kurbah Automobile Workshop
- 50. Mawmihthied Lime
- 51. D.Kshiar Stone Crusher
- 52. Jaintia Cements Ltd.
- 53. Inheritance Dry Cleaners
- 54. Studio 223, Jopsimon Phanbuh
- 55. Jaintia Ferro Alloys Pvt. Ltd. (Ferro Silicon)
- 56. RKB Mini Cement Plant
- 57. L.S.P Cold Rethread Tyre Service
- 58. Trishul Hi-Tech Industries
- 59. Bimla Ispat & Alloys (P) Ltd.
- 60. M. Warjri, Ree Cottage Industry
- 61. Eastern Mining Ltd.



ANNEXURE -VI (B)

LIST OF INDUSTRIES WHICH CLOSURE NOTICE IS ISSUED DURING 2004 - 2005

- 1. Stanley Kurbah Automobile Workshop
- 2. Baison Dkhar Stone Crushing Unit
- 3. Hotel Rickman
- 4. Eastern Mining Ltd.
- 5. S.D.Diengdoh Bio-Coal Plant
- 6. M.Warjri, Ree Cottage Industry
- 7. Satya Megha Ispat (P) Ltd.
- 8. A.R. Wahlang Auto Workshop
- 9. Blah & Blah
- 10. B.M. Enterprises
- 11. Gita Ferro Alloys Pvt. Ltd.
- 12. Trishul Hi-Tech Industries
- 13. loona Shadap Stone Crusher
- 14. Motor Repair Workshop
- 15. Ichamati Lime Industry
- 16. Sohtun Printing Press
- 17. Multi Mobile Precision
- 18. Pollution from State Bank
- 19. F.S. Enterprise (Closed)
- 20. RKB Mini Cement Plant
- 21. Byrnihat Ispat Pvt. Ltd.
- 22. D.K.Lakiang Bakery
- 23. Lamphrang M. Umlong Bakery
- 24. Baison Dkhar Stone Crushing Unit
- 25. Mawmihthied Lime
- 26. Lawbyrwa Limestone Calcination Industry
- 27. Hotel Rickman
- 28. Moonlight Lime Products
- 29. Elvis Sohklet Enterprise Lime Kiln
- 30. Suting Fruit Processing Unit
- 31. Megha Bread (Bakery)
- 32. Anirudha Steel (P) Ltd.
- 33. Blah & Blah
- 34. Lyngdoh Lime Products
- 35. Pandit Chyne Lime Works (Closed)
- 36. ARLL Diary Products (Closed)



- 37. Gita Ferro Alloys Pvt. Ltd.
- 38. Trishul Hi-Tech Industries
- 39. Jaintia Cements Ltd.
- 40. Anirudha Steel (P) Ltd.
- 41. Miliata June Sakhar Stone Crusher
- 42. AMS Cement Pvt. Ltd.
- 43. Megha Stone Crusher
- 44. Douglas Rymbai Stone Crusher
- 45. Malngiang Lime Industry
- 46. Satya Megha Ispat (P) Ltd.
- 47. Wankhar Lime Manufacturer
- 48. W. Mawa Lime Kiln (Closed)
- 49. Santlet Enterprise
- 50. W.R. Kariang Marbaniang Lime Kiln
- 51. Lum Mawshun Mining Corporation (Lafarge Umiam Pvt. Ltd.)
- 52. Laitkynsew Lime & Chemicals
- 53. S. Suting, Nongthymmai, Mawsmai
- 54. Jorabat Briquette
- 55. Hills Motor Works
- 56. S.D. Diengdoh Bio-Coal Plant
- 57. Marsyiem Lime Works
- 58. Eastern Stone
- 59. Bimla Ispat & Alloys (P) Ltd.
- 60. Studio 223, Jopsimon Phanbuh
- 61. B. Rymbai Lime Industry
- 62. Wankhar Lime Manufacturer
- 63. Malngiang Lime Industry
- 64. Santlet Enterprise
- 65. Baison Dkhar Stone Crushing Unit
- 66. D. Rymbai Lime Products
- 67. Lamphrang M. Umlong Bakery
- 68. Ri-Lum Motor Works
- 69. RKB Mini Cement Plant
- 70. Ichamati Lime Industry



ANNEXURE-VII

TRAININGS BETWEEN 1st APRIL 2004 UPTO 31st MARCH 2005									
SL. NO	NAME & DESIGNATION	NAME OF TRAINING	PLACE OF TRAINING	PERIOD OF TRAINING	LETTER NO	REMARKS			
1.	Shri W.R. Kharkrang, AEE	Environmental statements including waste minisation, environmental auditing & management system for Cement Industries.	Central Building Research Institute	March 16-18, 2005	MPCB/TSC I (Pt- XVIII)/2004-2005/49 dtd. 21/02/2005	Cancelled vide Letter No. MPCB/TSC I (Pt- XVIII)/2004-2005/56 dtd. 10/03/2005			
2.	Smti J. Sawian, Sc 'B' & Smti M.N. Diengdoh, J.S.A	Water Management Training	PHE Conference Hall, Shillong	March 28-29, 2005	MPCB/TSC I (Pt- XVIII)/2004-2005/62 dtd. 24/03/2005	Attended			
3.	Shri W.R. Kharkrang, A.E.E	Principle of Environmental Compliance & Enforcement	Kolkata	May 5-7, 2004	MPCB/TSC I (Pt- XVII)/2004-2005/66	Attended			
4.	Shri W.R. Kharkrang, A.E.E	Environmental Management Capacity Building Technical Assistant Project	University of NSW, Sydney, Australia	June 14-25, 2004	MPCB/TSC I (Pt- XVII)/2004-2005/75 & 82	Attended			

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