

MEGHALAYA STATE POLLUTION CONTROL BOARD

Forests & Environment Department
Government of Meghalaya



ANNUAL REPORT 2019-2020

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CHAPTER 1

INTRODUCTION

The Government of Meghalaya constituted the State Board for Prevention and Control of Water Pollution on the 16th November, 1983 under the provision of sub-section (1) of Section 4 of the Water (Prevention & Control of Pollution) Act, 1974. Subsequently, the State Board was entrusted with the responsibility for the implementation and enforcement of the Air (Prevention & Control of Pollution) Act, 1981 renamed as Meghalaya State Pollution Control Board in 1988.

Besides the enforcement of the Water Act and the Air Act, the Board is also enforcing/ implementing/ monitoring the provisions of the following Acts, Rules and Notifications:-

- 1) The Environmental Protection Act, 1986 and the Rules framed there under viz.,
 - The Hazardous Waste (Management and Handling) Rules, 1989 as amended in 2016.
 - 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 Environmental Impact Assessment Notification, 2006 and Amendments.
 - The Chemical Accidents (Emergency Planning, Preparedness & Response) Rules, 1996.
 - The Bio-Medical Wastes (Management & Handling) Rules, 1998 as amended in 2016
 - The Recycled Plastics Manufacture and Usage Rules, 1999 as amended in 2016.
 - 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 as amended in 2016.
 - The Batteries (Management & Handling) Rules 2001.
 - The Construction and Demolition Waste Rules, 2016.
 - E-Waste Management Rules, 2016.
- 2) The Public Liability Insurance Act, 1991.

The Headquarter of the Board is located in Shillong. Presently, the Board does not have any Regional or District Offices. The Board is having its own well equipped environmental Laboratory located at its Head Office, Lumpyngngad, Shillong to augment its activities for performing of its functions. The Laboratory is recognized by the State Government as State Water and Air Laboratory under the provisions of the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981 respectively. The Board's Laboratory has also obtained the accreditation of the National Accreditation Board of Laboratories for carrying out sampling and analysis of samples of water, waste water, stack emission, ambient air, bacteriological tests etc.

The Board is functioning with 86 Employees as on 31st March 2020 against a sanctioned strength of 147. The details of Staff Position are given in Annexure-I. The Organization Chart of the Board is given in Annexure-II.

The main activities carried out by the State Board in performing of its functions is as highlighted below:-

- (i) Inspection of industries and local bodies.
- (ii) Monitoring the quality of water and wastewater.
- (iii) Monitoring the quality of ambient air and stack emissions.
- (iv) Inspection of sites proposed for setting up of industries to verify the suitability of the same from environmental point of view.
- (v) Monitoring of water quality and water bodies under National Water Quality Monitoring (NWQM) Programme.
- (vi) Monitoring of Ambient air quality under National Air Monitoring Programme (NAMP).
- (vii) Offering guidance to industries and local bodies on statutory provisions.
- (viii) Issue of “Consents to Establish” and “Consents to Operate” in respects of industries, mining projects specified developmental projects, municipal bodies and health care facilities etc.
- (ix) Management of waste as provided in the Rules framed under the Environmental (Protection) Act, 1986:
 - (a) **Hazardous Waste Management:**
 - Enforcement of Provisions of the Rules and Regulations through Authorization regulation mechanism.
 - Monitoring of Compliance to Standards.
 - Submission of Annual Report to Central Pollution Control Board.
 - (b) **Bio-Medical Waste Management:**
 - Enforcement of Provisions of the Rules and Regulations through Authorization regulation mechanism.
 - Monitoring of Compliance to Standards.
 - Submission of Annual Report to Central Pollution Control Board.
 - (c) **Municipal Solid Waste Management:**
 - Enforcement of provisions of the Rules and Regulations through Authorization mechanism.
 - Monitoring of Compliance to Standards.
 - Submission of Annual Report to Central Pollution Control Board.
 - (d) **Batteries Management**
 - Enforcement of provisions of the Rules and Regulations through Authorization mechanism.
 - Monitoring of Compliance to Standards.
 - Submission of Annual Report to Central Pollution Control Board.

- (e) **Plastic Management :**
 - Enforcement of Provisions of the Rules and Regulations through Authorization regulation mechanism.
 - Monitoring of Compliance to Standards.
 - Submission of Annual Report to Central Pollution Control Board.
- (f) **Noise Pollution Management :**
 - 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.
- (g) **E-Waste Management:**
 - Inventorization of E-Waste generation
 - Enforcement and Monitoring the implementation of the Provisions of the Rules.
 - Submission of Annual Report to Central Pollution Control Board.
- (h) **Construction & Demolition Waste Management:**
 - Enforcement and Monitoring the implementation of the Provision of the Rules.
 - Submission of Annual Report to Central Pollution Control Board.

CHAPTER 2

CONSTITUTION OF THE BOARD & CHANGES THEREIN

The Meghalaya State Pollution Control Board was first constituted by the State Government under the provisions of Section 4 of the Water (Prevention & Control of Pollution) Act, 1974 vide Notification No. PHE.161/83/1 dated the 16th November, 1983. The last reconstitution was notified vide Notification No. ENV.6/2008/207 dated the 20th November, 2014.

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 Composition of the Board as reconstituted vide Notification No. ENV.6/2008/207, dated the 20th November, 2014 is as shown in Table 2.1 below.

TABLE – 2.1
Composition of the Board

- | | | |
|----|--|--------------------|
| 1. | Shri C.P. Marak, IFS,
Principal Chief Conservator of Forests & HoFF | : Chairman |
| 2. | Shri J.H. Nengnong,
Senior Environmental Engineer
Meghalaya State Pollution Control Board | : Member Secretary |

OFFICIAL MEMBERS

- | | | |
|----|---|----------|
| 3. | Chief Conservator of Forests / Conservator of Forests
nominated by the Principal Chief Conservator of Forests
& HOFF, Meghalaya | : Member |
| 4. | Chief Engineer
Public Health Engineering, Meghalaya,
Shillong or his nominee | : Member |
| 5. | The Director of Industries
Meghalaya, Shillong or his nominee | : Member |
| 6. | The Director of Health Services (Research, etc),
Meghalaya, Shillong or his nominee | : Member |
| 7. | The Director, Urban Affairs
Meghalaya, Shillong or his nominee | : Member |

MEMBERS FROM LOCAL AUTHORITIES

8. The Chief Executive Member
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 Municipality Board or his nominee : Member
12. The Chairman
Tura Municipality Board or his nominee : Member

REPRESENTATIVES FROM COMPANIES OR CORPORATIONS

13. The Managing Director
Meghalaya Industrial Development Corporation or his nominee : Member
14. The Managing Director
Mineral Development Corporation, Meghalaya or his nominee : Member

NON-OFFICIAL MEMBERS

15. Shri Sanggra A. Sangma,
Asstt. Professor, Don Bosco College, Tura : Member
16. Dr. W. Papang
Ex-Director, A.H &Vet. Department, Meghalaya, Shillong : Member
17. Dr. (Mrs) M.P.R. Lyngdoh, (Retired)
Principal, Shillong College, Shillong : Member

CHAPTER 3

MEETING OF THE BOARD WITH MAJOR DECISIONS

3.1 Major Decisions Taken During The 73rd Board Meeting Held On The 16th April, 2019.

3.1.1: A case study on cleaner production in Cement production in Cement industry for Environmental Sustainability, East Jaintia Hills District, Meghalaya

The Board accepted the draft Report of the Study conducted by the Meghalaya State Pollution Control Board on “Cleaner production in Cement production in Cement industry for Environmental Sustainability, East Jaintia Hills District, Meghalaya” and resolved that the draft report may be finalized and sent for printing, copies of which are to be circulated to the Members of the Board as well as to the cement industries for compliance. It was also resolved that an interactive meeting with the cement industries may be held to present the findings.

3.1.2: Comprehensive Programme for Prevention, Control & Abatement of Pollution

The Board approved the draft document on Comprehensive Programme for Prevention, Control & Abatement of Pollution incorporating the comments received from Forests & Environment Department, Government of Meghalaya and resolved that the final copy may be circulated to the concerned Government Departments for necessary follow-up action.

3.1.3: Proposal for Recognition of Laboratory

The Board approved the proposal to recognize the laboratory of M/s Mitra S.K. Private Ltd., Guwahati (for the purpose of testing of water, waste water and air samples) with a condition that the recognition can be revoked any time subject to satisfying performance of the Laboratory.

3.2. Major Decisions Taken During The 74th Board Meeting Held On The 6th November 2019.

3.2.1: Group Gratuity for the Board's Employees

The Board adopted the Ministry of Labour and Employment Notification No. 1283 dated 29-03-2018 issued under the Payment of Gratuity Act, 1972 to enhance the payment of Gratuity from a maximum of Rs.10 lacs to Rs.20 lacs payable to all retired employees of the Board with prospective effect.

3.2.2: Amendment to Rule 7 (b) of the Meghalaya State Pollution Control Board Medical Advance & Reimbursement Regulation, 2016

The Board approved the proposal to include ‘non-cosmetic dental treatment’ under Rule 7 (b) of the Meghalaya State Pollution Control Board Medical Advance & Reimbursement Regulation, 2016.

3.3 Major Decisions Taken During the 75th Board Meeting Held On The 28th February 2020

3.3.1: Inventorisation of the E-waste under the E-waste (Management & Handling) Rules, 2011

The Board approved the proposal to meet the expenditure for Inventorization of E-waste in the State of Meghalaya from the Scheme “Control of Pollution under Sub-Component-Assistance for abatement of pollution” sanctioned by the Ministry of MoEF & CC during the financial year 2019-2020.

3.3.2: Proposal for condemnation of the following Board’s vehicles

1. Mahindra MARSHAL Jeep
 2. Mahindra MAXX Jeep
- and Procurement of two Mahindra Bolero vehicles as replacement

The Board accepted the Motor Vehicle Inspector Condemnation/Inspection Report and approved the proposal to auction the two vehicles. New vehicles as replacement of condemned vehicles shall be purchased subject to availability of fund.

CHAPTER 4

COMMITTEES CONSTITUTED BY THE BOARD & THEIR ACTIVITIES

The following Committees are constituted by the Board with their activities to strengthen the functions of the Board from time to time.

I. THE CONSENT COMMITTEE

1. Chairman, Meghalaya State Pollution Control Board, Shillong. : Chairman
2. Senior Inspector of Boilers & Factories, Inspectorate of Boilers & Factories, Meghalaya, Shillong. : Member
3. Conservator of Forests, Meghalaya, Shillong. : Member
4. Deputy Director, Directorate of Commerce and Industries, Meghalaya, Shillong. : Member
5. Director of Mineral Resources, Meghalaya, Shillong. : Member
6. Member Secretary, Meghalaya State Pollution Control Board, Shillong. : Member Convener

TERMS OF REFERENCE

To examine/scrutinize the applications for Consent and recommend the grant or otherwise of Consent in respect of industries/developmental projects with project costs above Rs.25.00 lakhs.

II. THE PURCHASE COMMITTEE

1. Chairman, Meghalaya State Pollution Control Board, Shillong. : Chairman
2. Director of Commerce and Industries or his nominee. : Member
3. Chief Engineer P.H.E Deptt. Meghalaya or his nominee : Member
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, Shillong. : Convener

TERMS OF REFERENCE

To scrutinize the Quotation/Tender documents and make necessary recommendation thereof for purchase of Scientific Instruments/Equipments.

III. THE SELECTION COMMITTEE FOR GRADE 'A' POSTS

1. Additional Chief Secretary/Principal Secretary/Commissioner & Secretary to the Govt. of Meghalaya, Forests & Environment Department. : Chairman
2. Principal Chief Conservator of Forests/Additional Principal Chief Conservator of Forests, Social Forestry & Environment. : Member
3. Chairman, Meghalaya State Pollution Control Board, Shillong. : Member
4. Regional Director, Regional Directorate, North Eastern Regional Office, Central Pollution Control Board, Shillong. : Member
5. Member Secretary, Meghalaya State Pollution Control Board, Shillong. : Member Convener

TERMS OF REFERENCE

To assess the eligibility of candidates through written examination, interview, practical test etc. for the purpose of direct recruitment to Grade 'A' Posts and to recommend the list of successful candidates in order of merit to the Board for appointment.

IV. THE SELECTION COMMITTEE FOR GRADE 'B', 'C' & 'D' POSTS

1. Chairman, Meghalaya State Pollution Control Board, Shillong. : Chairman
2. One Service Expert to be nominated by the Chairman of the Board : Member
3. One Specialist to be nominated by the Chairman of the Board : Member
4. Member Secretary, Meghalaya State Pollution Control Board : Member Convener

TERMS OF REFERENCE

To assess the eligibility of candidates through written examination, interview, practical test etc. for the purpose of direct recruitment to Grade 'B', 'C' & 'D' Posts and to recommend the list of successful candidates in order of merit to the Board for appointment.

V. THE PROMOTION COMMITTEE FOR GRADE 'A' POSTS

1. Additional Chief Secretary/Principal Secretary/
Commissioner & Secretary to the Govt. of Meghalaya,
Forests & Environment Department. : Chairman
2. Principal Chief Conservator of Forests/Additional
Principal Chief Conservator of Forests,
Social Forestry & Environment. : Member
3. Chairman,
Meghalaya State Pollution Control Board, Shillong : Member
4. Regional Director, Regional Directorate,
North Eastern Regional Office,
Central Pollution Control Board, Shillong. : Member
5. Member Secretary,
Meghalaya State Pollution Control Board, Shillong. : Member Convener

TERMS OF REFERENCE

To assess the eligibility of candidates on the basis of seniority-cum-merit and recommend the list of eligible candidates in order of preference to the Board for promotion.

VI. THE PROMOTION COMMITTEE FOR GRADE 'B' & 'C' POSTS

1. Chairman, Meghalaya State Pollution Control Board. : Chairman
 2. Member Secretary,
Meghalaya State Pollution Control Board. : Member
 3. *Respective Head of Technical/Legal/Scientific/
Administrative/ Accounts Branch. : Member
 4. Administrative Officer
Meghalaya State Pollution Control Board. : Member Convener
- * To attend as and when promotion of employee(s) under their jurisdiction is/are to be recommended.

TERMS OF REFERENCE

To assess the eligibility of candidates on the basis of seniority-cum-merit and recommend the list of eligible candidates in order of preference to the Board for promotion.

VII. THE RESEARCH ADVISORY COMMITTEE

- | | | |
|----|--|------------|
| 1. | Chairman,
Meghalaya State Pollution Control Board, Shillong. | : Chairman |
| 2. | Director, SAIF, N.E.H.U, Shillong. | : Member |
| 3. | Chief Conservator of Forests
(Social Forestry & Environment) Meghalaya, Shillong. | : Member |
| 4. | Director of Health Services (Research),
Meghalaya, Shillong. | : Member |
| 5. | Representative of MoEF&CC,
North Eastern Regional Office, Shillong. | : Member |
| 6. | Incharge Zonal Office,
Central Pollution Control Board, Shillong. | : Member |
| 7. | Senior Accountant,
Meghalaya State Pollution Control Board, Shillong. | : Member |
| 8. | Member Secretary,
Meghalaya State Pollution Control Board, Shillong. | : Convener |

TERMS OF REFERENCE

To look into the aspects of research needs in the areas of environmental pollution monitoring and control.

CHAPTER 5

AIR QUALITY MONITORING

5.0 NATIONAL AIR QUALITY MONITORING

The Meghalaya State Pollution Control Board monitored the Ambient Air Quality at 10 (ten) stations in the State under National Air Monitoring Programme (NAMP) sponsored by Central Pollution Control Board (Fig.5.0). The frequency of monitoring was twice a week. Particulate Matter (PM_{10}), Sulphur Dioxide (SO_2), Nitrogen Dioxide (NO_2) and meteorological parameters viz. wind speed, wind direction, ambient air temperature, humidity, etc. were monitored at these stations and the observations are presented below:-

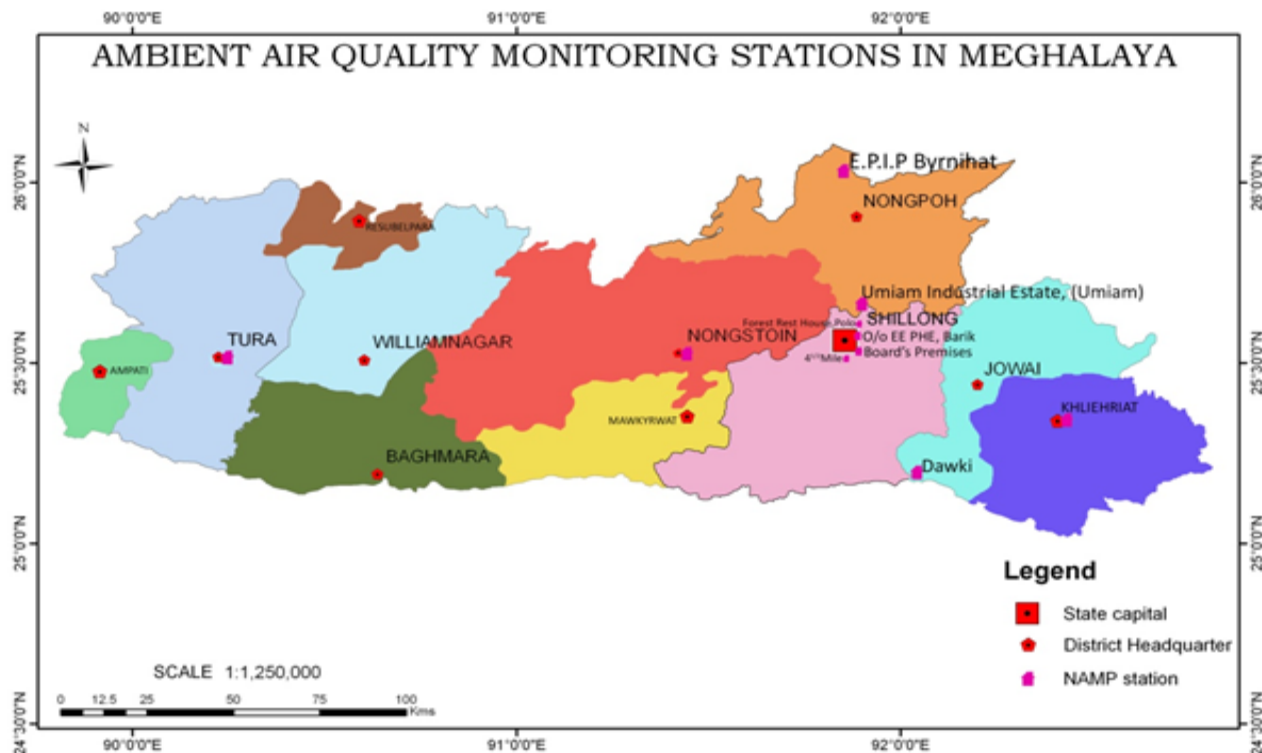


FIG. 5.0: LOCATION OF NAMP STATIONS IN THE STATE

5.1: Board's Office Premises, Lumpyngngad, Shillong (Station – I):

The Board regularly monitored the Air Quality from the station under National Air Monitoring programme (NAMP). The results of monitoring during January to December 2019 are given in Table: 5.1 and depicted in Fig. 5.1

Findings and Observations:

As per the air quality data (Table 5.1), maximum value (**$36.1 \mu g/m^3$**) of PM_{10} was observed during the month of February and minimum value (**$23.9 \mu g/m^3$**) was observed during the month of September.

The Annual Average of Sulphur Dioxide (SO_2), Nitrogen Dioxide (NO_2), Particulate Matter (PM_{10}) & Particulate Matter ($PM_{2.5}$) levels were within the National Ambient Air Quality standards.

Table 5.1: Ambient Air Quality data at Board's Office Premises, Lumpyngngad, Shillong, (Station – I), 2019.

Months → Parameters ↓	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual Avg.
PM ₁₀ (µg/m ³)	34.7	36.1	32	31.4	31.8	30.2	26.8	27.4	23.9	24.2	30.7	31.9	30.1
SO ₂ (µg/m ³)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
NO ₂ (µg/m ³)	4.5	8.9	9.1	4.5	10.1	11.3	4.5	4.5	4.5	4.5	4.5	9.5	4.5
Permissible limits (Annual Average) of Ambient Air Quality Standards as per EPA Notification GSR 826(E), dated 16 th November 2009. PM ₁₀ : 60 µg/m ³ ; SO ₂ : 50 µg/m ³ ; NO ₂ : 40 µg/m ³													

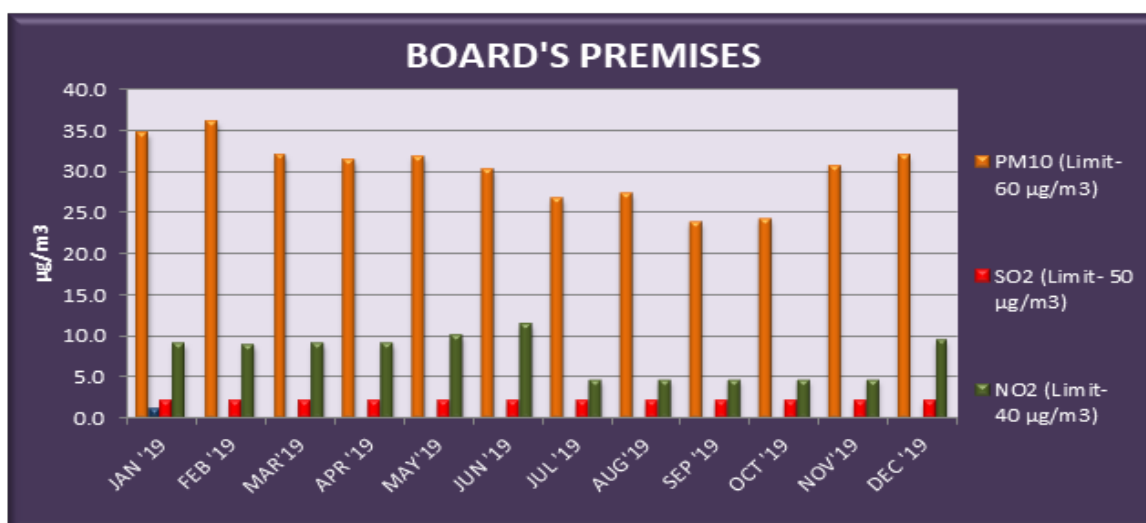


Fig.5.1: Monthly average of PM₁₀, SO₂, and NO₂ levels at Board's Premises, Shillong.

5.2: Office of the EE (PHE), Hills Division, Barik, Shillong. (Station – II)

The Board monitored the Air Quality from the station. The results of monitoring during January to December 2019 are given in Table: 5.2 and depicted in Fig. 5.2.

Findings and Observations:

- As per the air quality data (Table 5.2), maximum value (64.4 µg/m³) of PM₁₀ was observed during the month of March and minimum value (38.5 µg/m³) was observed during the month of August.
- The Annual Average of Sulphur Dioxide (SO₂), Nitrogen Dioxide (NO₂), and Particulate Matter (PM₁₀) levels remained within the National Ambient Air Quality standards.
- High levels of Particulate Matter (PM₁₀) may be due to emission from vehicle, dust generated due to movement of vehicles, natural dust, traffic congestion, and construction activities.

Table 5.2: Ambient Air Quality data at the Office of the EE (PHE), Hills Division, Barik, Shillong (Station – II), 2019

Months → Parameters ↓	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual Avg.
PM ₁₀ (µg/m ³)	63	62.4	64.4	57.2	50.9	43.7	39	38.5	41.2	50.1	60.2	61.1	52.6
SO ₂ (µg/m ³)	7.1	7.3	7.8	7.3	6.1	5.8	5.6	6.4	6.1	6.5	6.8	7.0	6.7
NO ₂ (µg/m ³)	19.6	19.8	20.4	19.7	21.3	24	19	21.5	22.1	23.6	24.6	24.2	21.7
Permissible limits (Annual Average) of Ambient Air Quality Standards as per EPA Notification GSR 826(E), dated 16 th November 2009. PM ₁₀ : 60 µg/m ³ ; SO ₂ : 50 µg/m ³ ; NO ₂ : 40 µg/m ³													

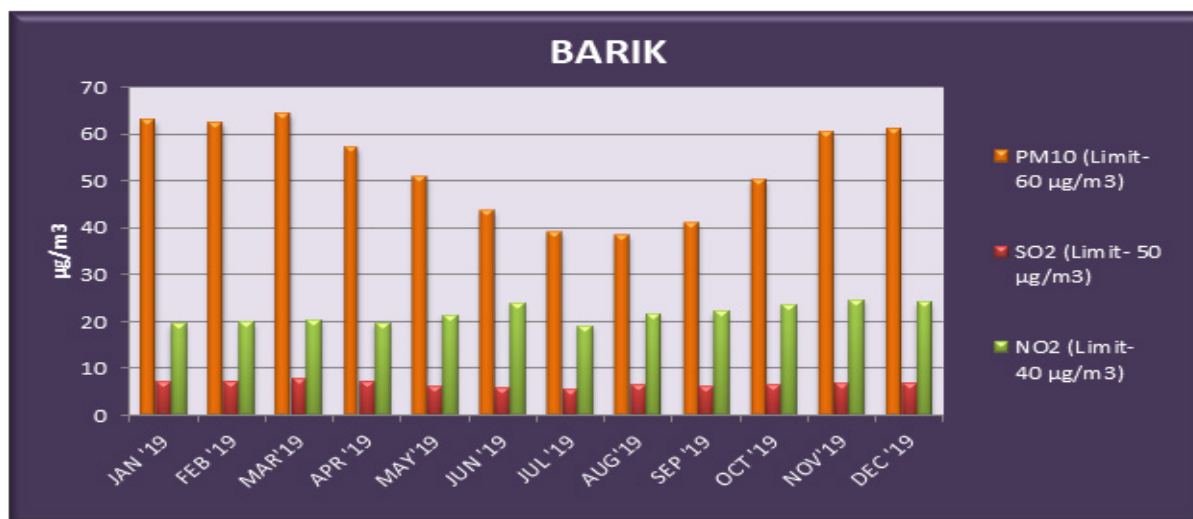


Fig.5.2: Monthly average of PM₁₀, SO₂, and NO₂ levels at Barik, Shillong.

5.3: Export Promotion Industrial Park (EPIP), Byrnihat, Ri-Bhoi District (Station – III):

The Board monitored the Air Quality from the station. The results of monitoring during January to December 2019 are given in Table: 5.3 and depicted in Fig. 5.3.

Findings and Observations:

- As per the air quality data (Table 5.3), maximum value (169.8 µg/m³) of PM₁₀ was observed during the month of March and minimum value (116.7 µg/m³) was observed during the month of October.
- The Annual Average of Sulphur Dioxide (SO₂), Nitrogen Dioxide (NO₂) levels remained within the National Ambient Air Quality standards.
- The Annual Average of Particulate Matter (PM₁₀) level exceeded the prescribed standards.

High concentrations of Particulate Matter (PM₁₀) levels may be attributable to the buildup of pollutants owing to emissions from industries located in the industrial area, emission from vehicle, dust generated due to movement of vehicles, natural dust and construction activities.

Table 5.3: Ambient Air Quality data at EPIP, Byrnihat, Ri-Bhoi District, (Station – III), 2019

Months → Parameters ↓	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual Avg.
PM ₁₀ (µg/m ³)	156.3	155.4	169.8	139.8	147.1	135.4	124.1	121.9	116.9	116.7	135.4	138.4	138.1
SO ₂ (µg/m ³)	24.6	25.3	23.8	22.2	22.7	21.9	20.2	18.8	18.4	18.2	18.8	18.6	21.1
NO ₂ (µg/m ³)	12.9	12.9	13.4	11.7	14.2	14.9	14.4	14.4	14.5	13.8	15.5	15.7	14.0
Permissible limits (Annual Average) of Ambient Air Quality Standards as per EPA Notification GSR 826(E), dated 16 th November 2009. PM ₁₀ : 60 µg/m ³ ; SO ₂ : 50 µg/m ³ ; NO ₂ : 40 µg/m ³													

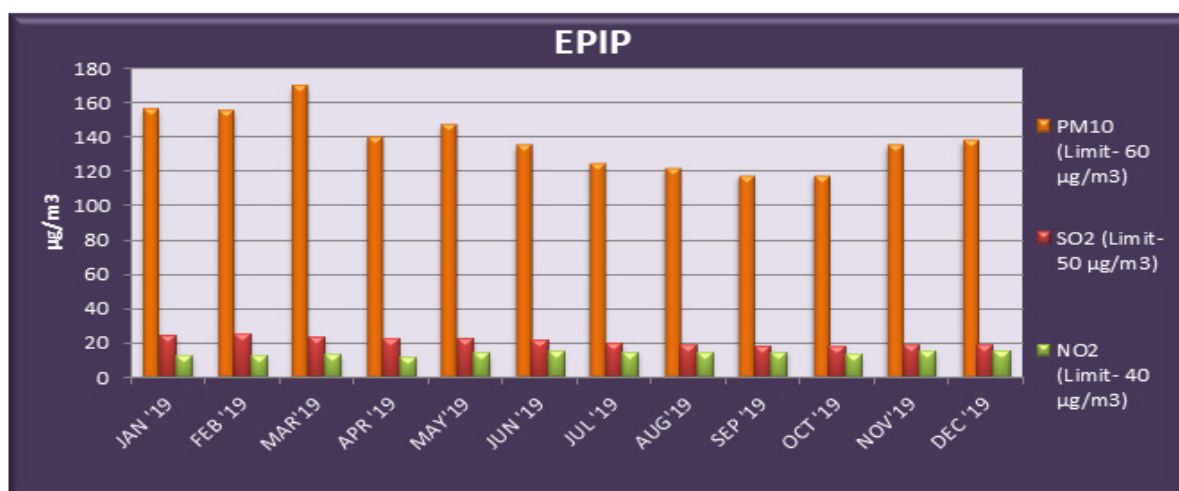


Fig.5.3: Monthly average of PM₁₀, SO₂, and NO₂ levels at EPIP, Byrnihat, Ri-Bhoi District

5.4: Dawki, West Jaintia Hills District (Station – IV):

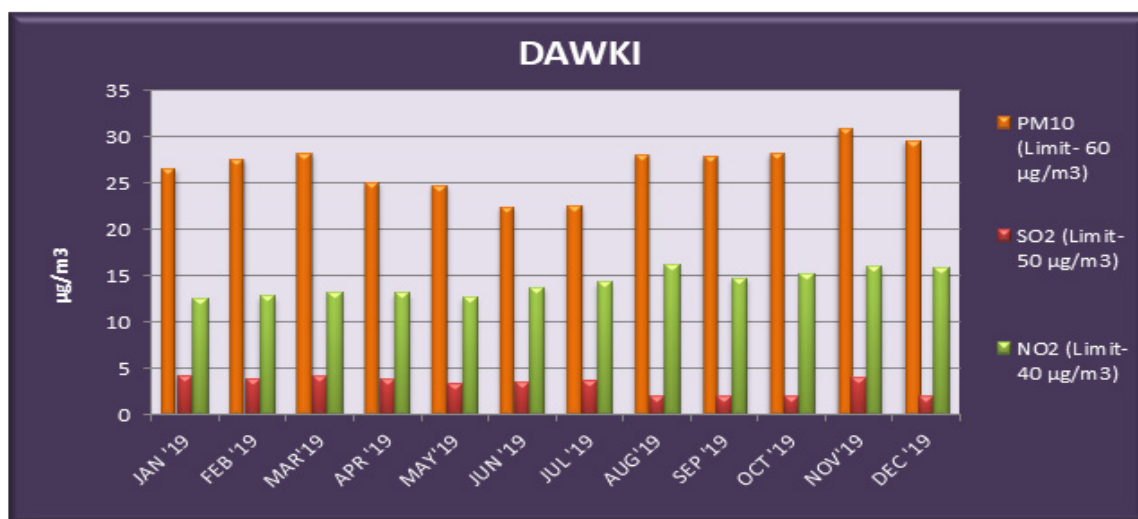
The Board monitored the Air Quality from the station. The results of monitoring during January to December 2019 are given in Table: 5.4 and depicted in Fig. 5.4.

Findings and Observations:

- As per the air quality data (Table 5.4), maximum value (30.9 µg/m³) of PM₁₀ was observed during the month of November and minimum value (22.4 µg/m³) was observed during the month of June.
- The Annual Average of Sulphur Dioxide (SO₂), Nitrogen Dioxide (NO₂) & Particulate Matter (PM₁₀) levels remain within the National Ambient Air Quality standards.

Table 5.4: Ambient Air Quality data at Dawki, West Jaintia Hills District, (Station – IV), 2019

Months → Parameters ↓	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual Avg.
PM ₁₀ (µg/m ³)	26.6	27.6	28.2	25.1	24.8	22.4	22.5	28.1	27.9	28.2	30.9	29.6	26.8
SO ₂ (µg/m ³)	4.2	3.9	4.1	2.0	2.0	2.0	2.0	2.0	2.0	2.0	4.0	2.0	2.0
NO ₂ (µg/m ³)	12.5	12.8	13.2	13.1	12.6	13.7	14.3	16.2	14.7	15.2	16	15.9	14.2
Permissible limits (Annual Average) of Ambient Air Quality Standards as per EPA Notification GSR 826(E), dated 16 th November 2009. PM ₁₀ : 60 µg/m ³ ; SO ₂ : 50 µg/m ³ ; NO ₂ : 40 µg/m ³													


Fig. 5.4: Monthly average of PM₁₀, SO₂, and NO₂ levels at Dawki, West Jaintia Hills District.

5.5: Tura, West Garo Hills District (Station – V):

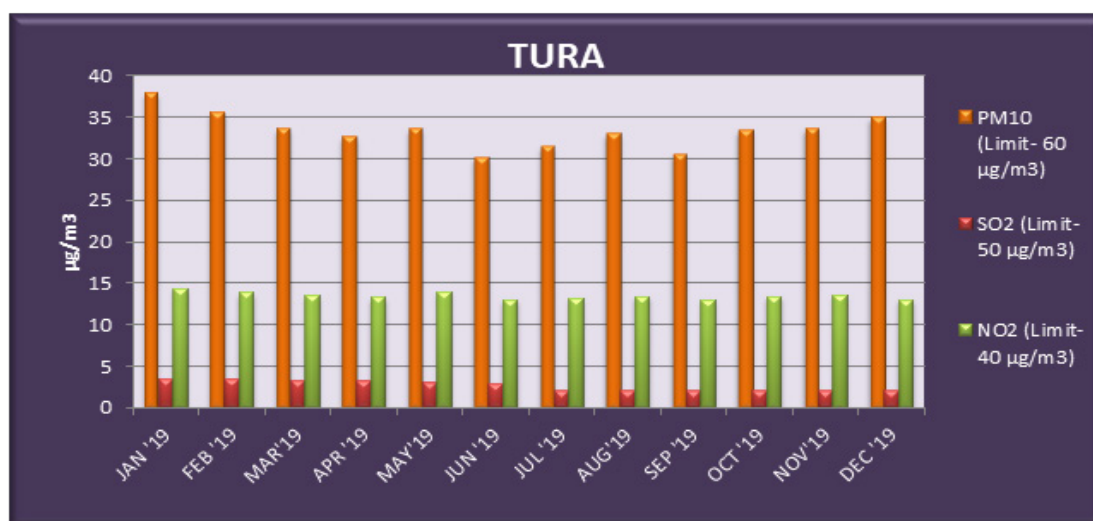
The Board monitored the Air Quality from the station. The results of monitoring during January to December 2019 are given in Table: 5.5 and depicted in Fig. 5.5.

Findings and Observations:

- As per the air quality data (Table 5.5), maximum value (37.9 µg/m³) of PM₁₀ was observed during the month of January and minimum value (30.1 µg/m³) was observed during the month of June.
- The Annual Average of Sulphur Dioxide (SO₂), Nitrogen Dioxide (NO₂) & Particulate Matter (PM₁₀) levels are within the National Ambient Air Quality standards

Table 5.5: Ambient Air Quality data at Tura, West Garo Hills District, (Station – V), 2019

Months → Parameters ↓	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual Avg.
PM ₁₀ (µg/m ³)	37.9	35.6	33.5	32.6	33.6	30.1	31.5	32.9	30.4	33.3	33.6	35	33.3
SO ₂ (µg/m ³)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
NO ₂ (µg/m ³)	14.3	13.8	13.5	13.3	13.9	13	13.2	13.4	13	13.4	13.6	13	13.5
Permissible limits (Annual Average) of Ambient Air Quality Standards as per EPA Notification GSR 826(E), dated 16 th November 2009. PM ₁₀ : 60 µg/m ³ ; SO ₂ : 50 µg/m ³ ; NO ₂ : 40 µg/m ³													

**Fig. 5.5: Monthly average of PM₁₀, SO₂, and NO₂ levels at Tura, West Garo Hills District****5.6: Khliehriat, Jaintia Hills District, (Station – VI):**

The Board monitored the Air Quality from the station. The results of monitoring during January to December 2019 are given in Table: 5.6 and depicted in Fig. 5.6

Findings and Observations:

- As per the air quality data (Table 5.6), maximum value (59.2 µg/m³) of PM₁₀ was observed during the month of January and minimum value (37.8 µg/m³) was observed during the month of September.
- The Annual Average of Sulphur Dioxide (SO₂), Nitrogen Dioxide (NO₂) & Particulate Matter (PM₁₀) levels are within the National Ambient Air Quality standards.

Table 5.6: Ambient Air Quality data at Khliehriat, East Jaintia Hills District, (Station-VI) 2019

Months → Parameters ↓	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual Avg.
PM ₁₀ (µg/m ³)	59.2	49.3	48.9	44.4	44.9	40.8	41.7	46.1	37.8	44.6	45.8	46.8	45.9
SO ₂ (µg/m ³)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
NO ₂ (µg/m ³)	12.2	12.3	12.2	11.5	13.1	12.7	13.3	13.8	12	12.8	12.7	13.6	12.7
Permissible limits (Annual Average) of Ambient Air Quality Standards as per EPA Notification GSR 826(E), dated 16 th November 2009. PM ₁₀ : 60 µg/m ³ ; SO ₂ : 50 µg/m ³ ; NO ₂ : 40 µg/m ³													

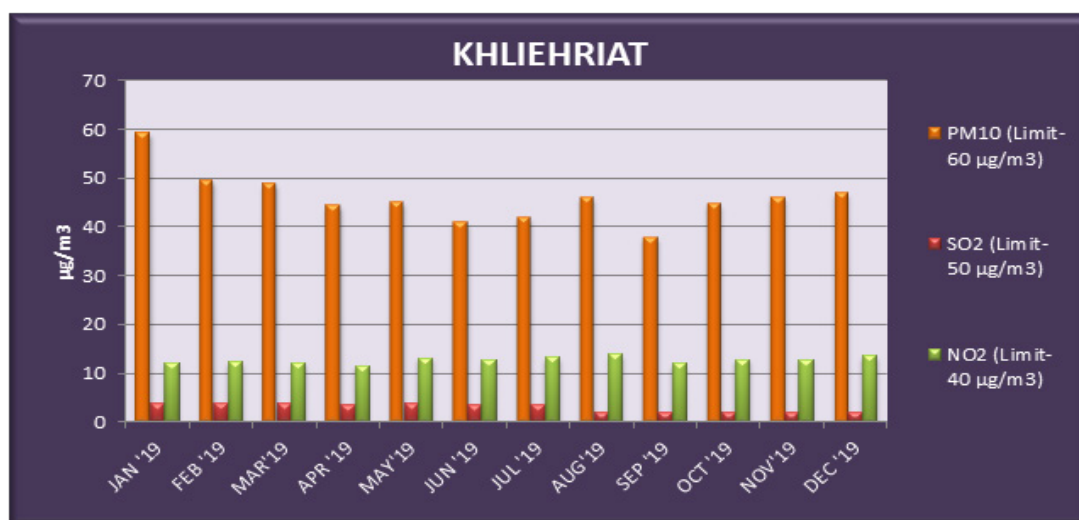


Fig. 5.6: Monthly average of PM₁₀, SO₂, and NO₂ levels at Khliehriat, East Jaintia Hills District

5.7: Nongstoin, West Khasi Hills District (Station – VII):

The Board monitored the Air Quality from the station. The results of monitoring during January to December 2019 are given in Table: 5.7 and depicted in Fig. 5.7.

Findings and Observations:

- As per the air quality data (Table 5.7), maximum value (34.7 µg/m³) of PM₁₀ was observed during the month of January and minimum value (26.5 µg/m³) was observed during the month of July.
- The Annual Average of Sulphur Dioxide (SO₂), Nitrogen Dioxide (NO₂) & Particulate Matter (PM₁₀) levels are within the National Ambient Air Quality standards.

Table 5.7: Ambient Air Quality data at Nongstoin, West Khasi Hills District. (Station-VII), 2019

Months → Parameters ↓	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual Avg.
PM ₁₀ (µg/m ³)	34.7	33.5	32.9	28.6	31.5	29.3	26.5	31	30.5	32.1	31	33.4	31.3
SO ₂ (µg/m ³)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
NO ₂ (µg/m ³)	12.8	13.8	13.2	12.4	12.8	14	13	13.9	13.9	13.9	13.4	13.8	13.4
Permissible limits (Annual Average) of Ambient Air Quality Standards as per EPA Notification GSR 826(E), dated 16 th November 2009. PM ₁₀ : 60 µg/m ³ ; SO ₂ : 50 µg/m ³ ; NO ₂ : 40 µg/m ³													

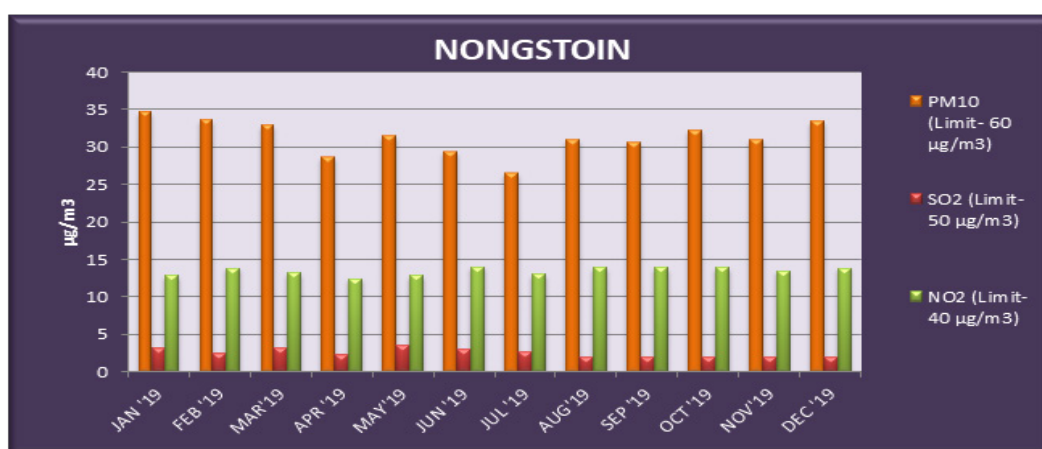


Fig 5.7: Monthly average of PM₁₀, SO₂, and NO₂ levels at Nongstoin, West Khasi Hills District

5.8: Umiam Industrial Estate, Umiam, Ri-Bhoi District. (Station – VIII):

The Board monitored the Air Quality from the station. The results of monitoring during January to December 2019 are given in Table: 5.8 and depicted in Fig. 5.8.

Findings and Observations:

- As per the air quality data (Table 5.8) maximum value (117.9 µg/m³) of PM₁₀ was observed during the month of March and minimum value (85.5 µg/m³) was observed during the month of July.
- The Annual Average of Sulphur Dioxide (SO₂), Nitrogen Dioxide (NO₂) levels remain within the National Ambient Air Quality standards.
- The Annual Average Particulate Matter (PM₁₀) levels observed to be above the National Ambient Air Quality standards.
- High levels may be due to emission from vehicle, dust generated due to movement of vehicles, natural dust, and construction activities, emissions from industries located in the industrial area.

Table 5.8: Ambient Air Quality data at Umiam Industrial Estate, Ri-Bhoi District, 2019

Months → Parameters ↓	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual Avg.
PM ₁₀ (µg/m ³)	104.2	112.8	117.9	108.8	108.9	89.9	85.5	104.1	80.2	92.7	91.2	96	99.4
SO ₂ (µg/m ³)	4.5	4.6	4.9	4.5	4.4	4.2	3.9	4.1	4.1	4.1	4.1	4.2	4.3
NO ₂ (µg/m ³)	11.2	12.0	12.9	12.0	12.9	12.6	12.3	12.9	12.3	12.4	12.7	12.8	12.4
Permissible limits (Annual Average) of Ambient Air Quality Standards as per EPA Notification GSR 826(E), dated 16 th November 2009. PM ₁₀ : 60 µg/m ³ ; SO ₂ : 50 µg/m ³ ; NO ₂ : 40 µg/m ³													

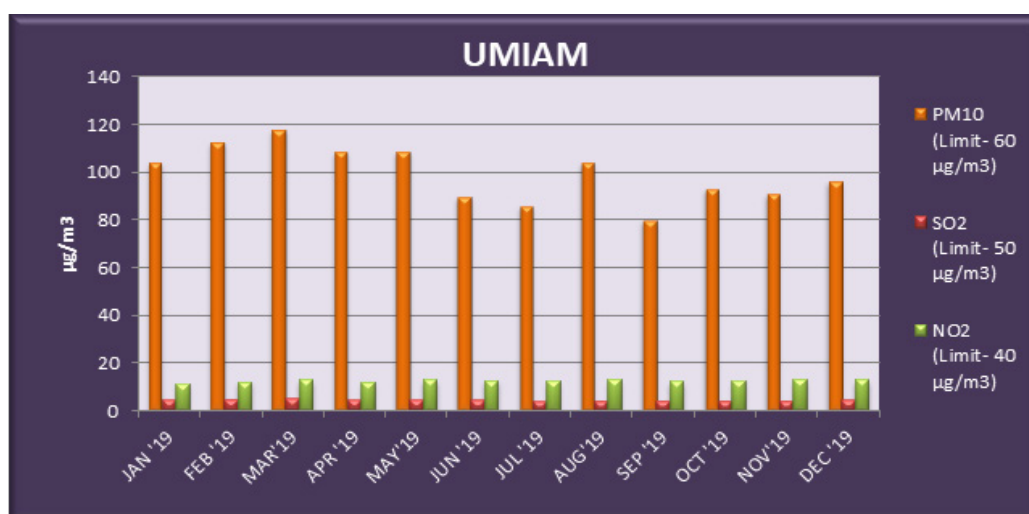


Fig. 5.8: Monthly average of PM10, SO2, and NO2 levels at Umiam Industrial Estate, Ri-Bhoi District

5.9: Forest Rest House, Polo Hills, Shillong, (Station – IX):

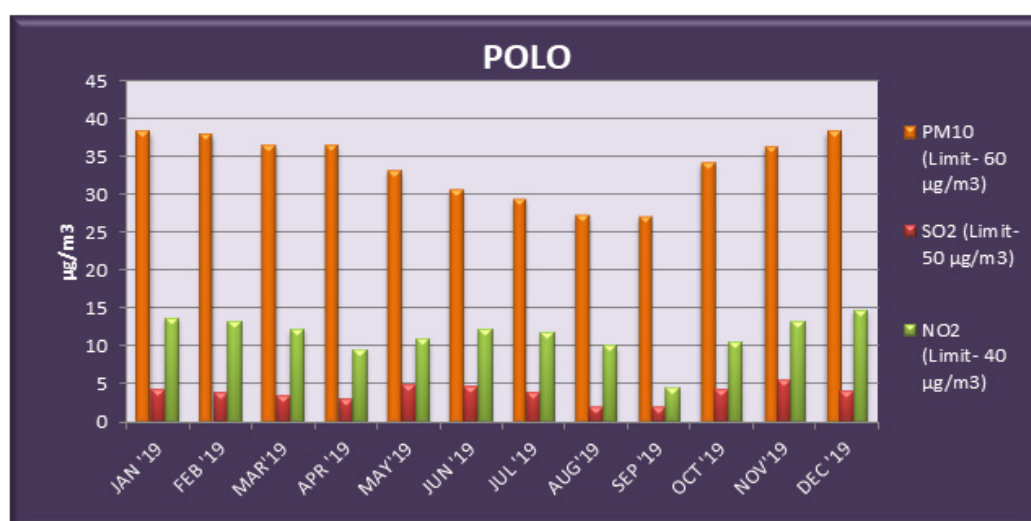
The Board regularly monitored the Air Quality from the station under National Air Monitoring programme (NAMP). The results of monitoring during January to December 2019 are given in Table: 5.9 and depicted in Fig. 5.9.

Findings and Observations:

- As per the air quality data (Table 5.9), maximum value (38.2 µg/m³) of PM₁₀ was observed during the month of January and minimum value (27.1 µg/m³) was observed during the month of September.
- The Annual Average of Sulphur Dioxide (SO₂), Nitrogen Dioxide (NO₂) & Particulate Matter PM₁₀ levels are within the National Ambient Air Quality standards

Table 5.9: Ambient Air Quality data at Forest Rest House, Polo Hills, Shillong, 2019

Months → Parameters ↓	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual Avg.
PM ₁₀ (µg/m ³)	38.2	37.9	36.4	36.4	33	30.5	29.3	27.2	27.1	34.1	36.1	38.2	33.7
SO ₂ (µg/m ³)	4.3	2.0	2.0	2.0	4.9	4.6	3.9	2.0	2.0	4.3	5.6	4.0	2.0
NO ₂ (µg/m ³)	13.7	13.3	12.2	9.4	10.9	12.2	11.8	10	4.5	10.5	13.3	14.7	11.4
Permissible limits (Annual Average) of Ambient Air Quality Standards as per EPA Notification GSR 826(E), dated 16 th November 2009. PM ₁₀ : 60 µg/m ³ ; SO ₂ : 50 µg/m ³ ; NO ₂ : 40 µg/m ³													

**Fig.5.9: Monthly average of PM₁₀, SO₂, and NO₂ levels at Forest Rest House, Polo Hills, Shillong.****5.10: Myllem Range Office, Social Forestry, 4 ½ Mile, Upper Shillong, (Station – X):**

The Board regularly monitored the Air Quality from the station under National Air Monitoring programme (NAMP). The results of monitoring during January to December 2019 are given in Table: 5.10 and depicted in Fig.5.10.

Findings and Observations:

- As per the air quality data (Table 5.10), maximum value (47.2 µg/m³) of PM₁₀ was observed during the month of March and minimum value (23.2 µg/m³) was observed during the month of September.
- The Annual Average of Sulphur Dioxide (SO₂), Nitrogen Dioxide (NO₂) & Particulate Matter (PM₁₀) levels are within the National Ambient Air Quality standards.

Table 5.10: Ambient Air Quality data at Myllem Range Office, Social Forestry, 4 ½ Mile, Upper Shillong, 2019

Months → Parameters ↓	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual Avg.
PM ₁₀ (µg/m ³)	37.9	35.8	47.2	35.7	33.6	30.5	25.4	25.8	23.2	22.7	33.8	32.2	32.0
SO ₂ (µg/m ³)	2.0	3.9	3.6	5.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
NO ₂ (µg/m ³)	11.5	14.3	12.9	10.5	11.8	12.5	10.8	9.8	4.5	4.5	4.5	4.5	9.5
Permissible limits (Annual Average) of Ambient Air Quality Standards as per EPA Notification GSR 826(E), dated 16 th November 2009. PM ₁₀ : 60 µg/m ³ ; SO ₂ : 50 µg/m ³ ; NO ₂ : 40 µg/m ³													

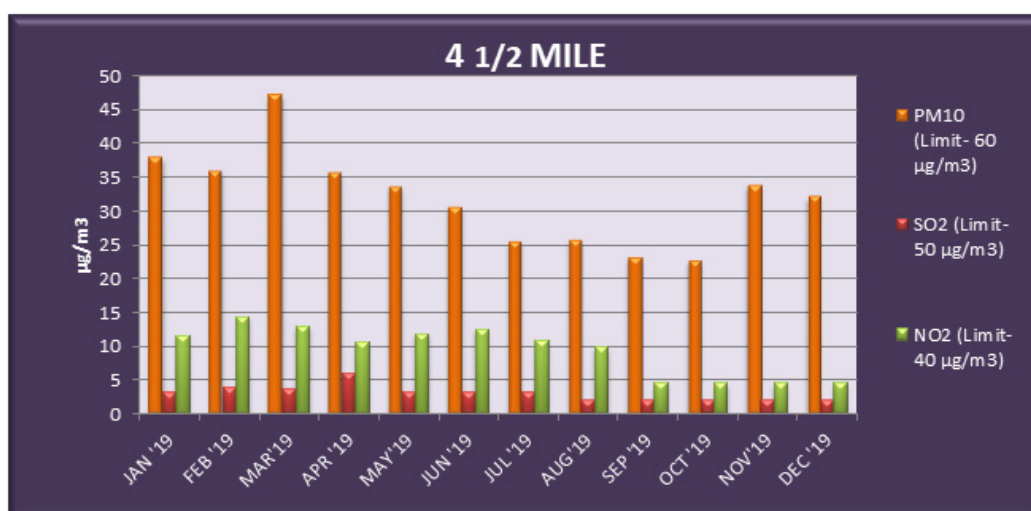


Fig.5.10: Monthly average of PM₁₀, SO₂, and NO₂ levels at Myllem Range Office, Social Forestry, 4½ Mile, Upper Shillong.

5.1.0: Ambient Air Quality and Source Emission Monitoring

The Board carried out Ambient Air Quality (Table 5.1.0) and Source Emission Monitoring (Table 5.1.1) in residential areas and industrial units operating in the State during 2019-2020. The following results were obtained during the monitoring: -

Table 5.1.0: Ambient Air Quality data during 2019-2020

Sl.No.	Name of Industry/Location	Date of Monitoring	Sampling Station	Parameters				Remarks
				PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	
1.	NESAC, Umiam	28.05.2019	Near Guest House	-	41.4	-	-	W
2.	NESAC, Umiam	28.05.2019	Residential Quarters	101.2	-	-	-	A

Sl.No.	Name of Industry/Location	Date of Monitoring	Sampling Station	Parameters				Remarks
				PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	
3.	NESAC, Umiam	29.05.2019	Near Guest House	96.4	-	-	-	W
4.	NESAC, Umiam	29.05.2019	Residential Quarters	-	39.0	-	-	W
5.	NAMP Station, Umiam	28.05.2019	AAQM Station, Umiam	113.9	-	4.4	12.9	A
6.	NAMP Station, Umiam	29.05.2019	AAQM Station, Umiam	87.9	-	4.2	13.0	W
7.	Municipal Dumping Site, Tura	04.06.2019	Near Main Gate	17.7	-	2.0	4.5	W
8.	Municipal Dumping Site, Williamnagar	06.06.2019	Near Dumping Site	15.8	-	2.0	4.5	W
9.	Municipal Dumping Site, Jowai	07.06.2019	Near Dumping Site	19.4	-	2.0	12.4	W
10.	Municipal Dumping Site, Baghmara	14.06.2019	Near Dumping Site	15.4	-	2.0	4.5	W
11.	Municipal Dumping Site, Resubelpara	18.06.2019	Near Dumping Site	14.8	-	2.0	4.5	W
12.	Municipal Dumping Site, Shillong	25.06.2019	Near Dumping Site	27.1	-	2.0	4.5	W
13.	MSPCB, Rilbong Point	02.07.2019	Rilbong Point, Residence of Kong Kongthaw	74.0	-	7.7	23.2	W
14.	3 rd Mile, Upper Shillong	02.07.2019	Dispensary, 3 rd Mile, Upper Shillong	69.5	-	6.8	21.9	W
15.	MCCL Mines, Sohra.	02.07.2019	Quarry Al-3	25.3	10.1	2.0	11.6	W
16.	MCCL, Sohra.	02.07.2019	Near Weigh-bridge	20.4	9.9	2.0	10.6	W
17.	MCCL, Sohra	02.07.2019	Near Canteen	28.4	10.4	4.1	11.6	W
18.	M/s CMJ Breweries (P) Ltd., EPIP, Byrnihat	15.07.2019	Near Boiler	128.3	-	20.7	14.6	A
19.	M/s NTL Steels (P) Ltd., EPIP, Byrnihat	15.07.2019	Near Office	131.0	-	20.9	13.7	A
20.	M/s Maithan Alloys (P) Ltd., EPIP, Byrnihat	23.07.2019	Guest House Terrace	114.3	-	12.8	14.5	A
21.	M/s Byrnihat Oxygen (P) Ltd., Byrnihat Industrial Area	23.07.2019	Near Office	86.7	-	13.2	4.5	W
22.	M/s Meghalaya Steels (P) Ltd., EPIP, Byrnihat	24.07.2019	Near Office	127.7	-	14.9	12.6	A

Sl.No.	Name of Industry/Location	Date of Monitoring	Sampling Station	Parameters				Remarks
				PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	
23.	M/s Ri Bhoi Ispat & Rolling Mills (P) Ltd., 13 th Mile, Tamulkuchi.	30.07.2019	Near Entrance	138.0	-	17.8	19.5	A
24.	M/s Sriram Wires Products (P) Ltd., 13 th Mile, Tamulkuchi.	30.07.2019	Near Mandir	89.0	-	11.4	15.1	W
25.	M/s Pawan Casting (P) Ltd., Haribagan	31.07.2019	Near Office	123.0	-	15.1	16.0	A
26.	M/s Excel Foods (P) Ltd., 10 th Mile, Mawsmat	06.08.2019	Near Canteen	155.3	-	18.0	20.0	A
27.	M/s Godrej Consumer Products (P) Ltd., 15 th Mile, Rangsakona.	06.08.2019	Near Entrance	134.0	-	22.9	17.0	A
28.	M/s Shree Sai Smelters (P) Ltd., 15 th Mile, Rangsakona.	07.08.2019	Near Office	167.4	-	23.2	18.2	A
29.	M/s Seshu Nutrition (P) Ltd., 9 th Mile, Baridua	13.08.2019	Terrace	170.6	-	21.7	20.9	A
30.	SIPMIU, Mawiong, Shillong.	21.08.2019	New Landfill Site	66.3	-	2.0	10.7	W
31.	SIPMIU, Mawiong, Shillong.	21.08.2019	Near Garage	70.7	-	4.7	11.9	W
32.	M/s Meghalaya Bitchem (P) Ltd., 9 th Mile, Killing.	21.08.2019	Near Security Guard Shed	248.9	-	18.8	22.9	A
33.	Selim Hydro Electric Power, MePGCL	20.08.2019	Damsite Guest House	15.8	-	2.0	4.5	W
34.	Selim Hydro Electric Power, MePGCL	21.08.2019	Damsite	14.9	-	2.0	4.5	W
35.	Selim Hydro Electric Power, MePGCL	21.08.2019	Power House	13.6	-	2.0	9.6	W
36.	Shillong Expressway Pvt. Ltd., Mawkhanu, Shillong.	14.10.2019	Near Front Office	143.4	-	5.8	13.7	A
37.	Ward's Lake, Police Bazar, Shillong	05.02.2020	Near City Hut Restuarant	58.8	46.3	2.0	10.2	W
38.	Don Bosco College, Tura	12.03.2020	College Prem-ises	44.2	25.3	2.0	4.5	W

W - Within Permissible Limits

A - Above Permissible Limits

Table 5.1.1: Source Emission Monitoring data during 2019-2020

Sl. No.	Name of Sampling Location	Date of Sampling	Type of Stack	Parameters tested	Observed value (mg/Nm ³)	Remarks
1.	M/s Maithan Alloys (P) Ltd., EPIP	21.08.2019	Induction Furnace	PM	42.3	W
2.	M/s Shyam Century Ferrous (P) Ltd., EPIP, Byrnihat.	21.08.2019	Induction Furnace	PM	108.3	A
3.	M/s Godrej Consumer Products (P) Ltd., 15 th Mile, Rangsakona.	22.08.2019	Boiler (Hot Water Generator)	PM	222.7	A

W - Within Permissible Limits

A - Above Permissible Limits

5.1.2 Monitoring of Ambient Air Quality in the Municipal Dumping Sites in the State.

To assess the ambient air quality in the Municipal Dumping sites in the State, the Meghalaya State Pollution Control Board conducted the monitoring in the dumping sites located in West Jaintia Hills District, East Garo Hills District, West Garo Hills District, North Garo Hills District, South Garo Hills District, and East Khasi Hills District, during 4th to 26th June 2019. Ambient air quality monitoring was performed by the method prescribed by Central Pollution Control Board. The parameters selected for the purpose of monitoring the ambient air quality included the Particulate Matter (PM₁₀), Sulphur-Dioxide (SO₂), Nitrogen Dioxide (NO₂). Monitoring was being carried out for 24 hours (4 hourly sampling for gaseous pollutants & 8 hourly sampling for particulate matter). The monitoring of meteorological parameters such as wind speed and direction, relative humidity and temperature was also integrated with the monitoring of the air quality.

The sampling locations of the above mentioned dumping sites is as shown in Table 1.0 below.

Table 1.0: Sampling Locations for Ambient Air Quality Monitoring in the Municipal Dumping Sites in the District Headquarters of the State.

Sl. No.	Sampling Location	District
1.	Municipal Dumping Site, Rongkhon, Songittal, Tura	West Garo Hills District
2.	Balsrigittim, Williamnagar	East Garo Hills District
3.	Arapara, Baghmara,	South Garo Hills District
4.	Mongpangro, Resubelpara	North Garo Hills District
5.	Mynkjai, Jowai	West Jaintia Hills District
6.	Marten, Mawiong, Shillong	East Khasi Hills District

Observations and Findings:

The findings on the assessment of Air quality in the monitored locations conducted by the Board, revealed that the concentrations of PM₁₀, Sulphur Dioxide (SO₂) and Nitrogen Dioxide (NO₂) (Table 2.0) were found to be within the prescribed standards (Table 3.0) at all the locations.

Table 2.0: Ambient Air Quality data at Municipal Dumping Sites in the State

Sl. No.	Sampling Location	Parameters (24 hours avg.)		
		PM ₁₀ (µg/m ³)	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)
1.	Municipal Dumping Site, Rongkhon, Songittal, Tura	17.7	2.0	4.5
2.	Balsrigittim, Williamnagar	15.8	2.0	4.5
3.	Arapara, Baghmara,	15.4	2.0	4.5
4.	Mongpangro, Resubelpara	14.8	2.0	4.5
5.	Mynkjai, Jowai	19.4	2.0	12.4
6.	Marten, Mawiong, Shillong	27.1	2.0	4.5

Table 3.0: National Ambient Air Quality Standards

NATIONAL AMBIENT AIR QUALITY STANDARDS				
Sl. No.	Pollutant	Time Weighted Average	* Concentration in Ambient Air	
			Industrial, Rural, and Other Areas.	Ecologically Sensitive Areas (Notified by Central Government)
1.	Particulate Matter (PM ₁₀) (µg/m ³)	24 hours	100	100
2.	Sulphur Dioxide (SO ₂) (µg/m ³)	24 hours	80	80
3.	Nitrogen Dioxide (NO ₂) (µg/m ³)	24 hours	80	80
* Permissible limits of Ambient Air Quality Standards as per EPA Notification GSR 826(E), dated New Delhi, the 16th November 2009.				

5.1.3: Action Taken on Point 4 of the Action Plan for Control of Air Pollution in Non-Attainment cities - Byrnihat town, Ri-Bhoi District, Meghalaya.

The Meghalaya State Pollution Control Board, Shillong, had carried out Ambient Air Quality, Source Emission, and Noise Level monitoring of air polluting industries and industrial area located in Byrnihat town, Ri-Bhoi District, during 15th July to 23rd August 2019. The Ambient Air quality, Source Emission, and Noise level data recorded is presented below:-

A. Air Quality monitoring of industrial units in Byrnihat town.

(a) Ambient Air Quality monitoring:

To assess the ambient air quality in Byrnihat town, the Meghalaya State Pollution Control Board conducted the Ambient Air Quality monitoring in industrial units located in the industrial areas in Byrnihat town during 15th July to 23rd August 2019. Ambient air quality monitoring was performed

by the method prescribed by Central Pollution Control Board. The parameters selected for the purpose of monitoring the ambient air quality included the Particulate Matter (PM₁₀) Sulphur-Dioxide (SO₂), and Nitrogen Dioxide (NO₂). Monitoring was being carried out for 24 hours (4 hourly sampling for gaseous pollutants & 8 hourly sampling for particulate matter). The monitoring of meteorological parameters such as wind speed and direction, relative humidity and temperature was also integrated with the monitoring of the air quality.

Observations and Findings:

The PM₁₀ concentrations in industrial units located in the industrial areas in Byrnihat town exceeded the prescribed limits (24 hours avg.) in 16 (sixteen) locations out of the 18 (eighteen) locations monitored (Table 1.0). As per the Air Quality Index, calculated based on 24 hours average data, the rating of air quality in Byrnihat town falls under the “Moderate” category which may cause breathing discomfort to people with lung disease such as asthma, and discomfort to people with heart disease, children and older adults.

High concentrations of Particulate Matter (PM₁₀) observed may be attributed to the buildup of pollutants owing to emissions from industries located in the industrial area, emission from vehicle, dust generated due to movement of vehicles, natural dust, and construction activities. The 24 hours average concentrations of Sulphur-Dioxide (SO₂) and Nitrogen Dioxide (NO₂) in all the stations meets the prescribed standards.

Table 1.0: Ambient Air Quality monitoring data of industrial areas in Byrnihat town

Sl. No.	Name Of Industry/Location	Sampling Location	Date of Monitoring	Parameters (24 hours avg.)			AQI
				PM ₁₀ (µg/m ³)	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	
1.	M/s CMJ Breweries (P) Ltd., EPIP, Byrnihat	Near Boiler	15.07.2019	128.3	20.7	14.6	119
2.	M/s NTL Steels (P) Ltd., EPIP, Byrnihat	Near Office	15.07.2019	131.0	20.9	13.7	121
3.	NAMP Station, Byrnihat	NAMP Station	16.07.2019	143.2	21.3	14.8	129
4.	M/s Maithan Alloys (P) Ltd., EPIP, Byrnihat	Guest House Terrace	23.07.2019	114.3	12.8	14.5	110
5.	M/s Byrnihat Oxygen (P) Ltd., Byrnihat Industrial Area	Near Office	23.07.2019	86.7	13.2	4.5	87
6.	M/s Meghalaya Steels (P) Ltd., EPIP, Byrnihat	Near Office	24.07.2019	127.7	14.9	12.6	118
7.	NAMP Station, Byrnihat	NAMP Station	24.07.2019	127.1	19.7	15.1	118

Sl. No.	Name Of Industry/Location	Sampling Location	Date of Monitoring	Parameters (24 hours avg.)			AQI
				PM ₁₀ (µg/m ³)	SO ₂ (µg/m ³)	NO ₂ (µg/m ³)	
8.	M/s Ri Bhoi Ispat & Rolling Mills (P) Ltd., 13 th Mile, Tamulkuchi.	Near Entrance	30.07.2019	138.0	17.8	19.5	125
9.	M/s Sriram Wires Products (P) Ltd., 13 th Mile, Tamulkuchi.	Near Mandir	30.07.2019	89.0	11.4	15.1	89
10.	M/s Pawan Casting (P) Ltd., Haribagan	Near Office	31.07.2019	123.0	15.1	16.0	115
11.	NAMP Station, Byrnihat	NAMP Station	31.07.2019	123.7	20.0	14.4	116
12.	M/s Excel Foods (P) Ltd., 10 th Mile, Mawsmai	Near Canteen	06.08.2019	155.3	18.0	20.0	137
13.	M/s Godrej Consumer Products (P) Ltd., 15 th Mile, Rangsakona.	Near Entrance	06.08.2019	134.0	22.9	17.0	123
14.	M/s Shree Sai Smelters (P) Ltd., 15 th Mile, Rangsakona.	Near Office	07.08.2019	167.4	23.2	18.2	145
15.	M/s Seshu Nutrition (P) Ltd., 9 th Mile, Baridua	Terrace	13.08.2019	170.6	21.7	20.9	147
16.	NAMP Station, Byrnihat	NAMP Station	14.08.2019	110.3	18.2	14.7	107
17.	M/s Meghalaya Bitchem (P) Ltd., 9 th Mile, Killing.	Near Security Guard Shed	21.08.2019	248.9	18.8	22.9	199
18.	NAMP Station, Byrnihat	NAMP Station	21.08.2019	101.9	17.9	14.3	101
Permissible Limits (24 hours avg.) : SO₂ : 80 µg/m³ ; NO₂ : 80 µg/m³ ; PM₁₀ : 100 µg/m³ National Ambient Air Quality Standards (NAAQS) as per EPA Notification GSR 826(E), dated 16th November 2009.							
AQI calculation is as per standard procedures prescribed by Central Pollution Control Board (CPCB), New Delhi. Rating Scale: Good: 0-50; Satisfactory: 51-100; Moderate: 101 - 200; Poor: 201-300; Very Poor: 301-400; Severe: >400							

b. Source Emission monitoring of industrial units in Byrnihat town

The Board conducted Source Emission monitoring of industrial units located in the industrial areas in Byrnihat town during 15th July to 23rd August 2019. The major parameter selected for the purpose of monitoring the source emission was Particulate Matter (PM), apart from velocity, differential pressure, and temperature of stack.

Observations and Findings:

Concentration of Particulate Matter monitored in 2(two) industrial units (Table 2.0) exceeded the prescribed limits.

Table 2.0: Source Emission monitoring data of industrial units in Byrnihat town

Sl. No.	Name of Industry	Date of Monitoring	Type of Stack	Pollutant	Prescribed Standards (mg/Nm ³)
				PM (mg/Nm ³)	
1.	M/s Maithan Alloys (P) Ltd., EPIP	21.08.2019	Induction Furnace	42.3	50.0
2.	M/s Shyam Century Ferrous (P) Ltd., EPIP, Byrnihat.	21.08.2019	Induction Furnace	108.3	50.0
3.	M/s Godrej Consumer Products (P) Ltd., 15 th Mile, Rangsakona.	22.08.2019	Boiler (Hot Water Generator)	222.7	150.0

ASSESSMENT OF VEHICULAR POLLUTION

The Board has an Auto-emission-testing centre in its Office premises at Lumpyngngad, Shillong which has been functioning since January 1994. The centre caters to the exhaust testing needs for the commercial and private light petrol and diesel driven 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. The number of vehicles tested during the period from 01.04.2019 to 31.03.2020 is as stated below:-

Period	Type of Vehicle	Total No. of Vehicles Tested	Vehicles Complying To Emission Standards		Vehicles Non-Complying To Emission Standards	
1.04.2019 to 31.03.2020	A. Petrol Driven	1323	Nos.	%	Nos.	%
	2 (two) wheelers		1323	100	0	-
	3 (three) wheelers	22	20	90.9	2	9.1
	LMV	17067	17054	99.9	13	0.1
	B. Diesel Driven	3644	3627	99.5	17	0.5
	LMV					
	Medium/Heavy Vehicles	190	180	94.7	10	5.3

CHAPTER 6

WATER QUALITY MONITORING

6.1.0 MONITORING OF WATER QUALITY

The monitoring of the water quality is one of the function for prevention and control of water pollution and maintaining or restoring the wholesomeness of water as enshrined in the Water (Prevention and Control of Pollution) Act 1974. In order to obtain information on the overall health and general environmental condition of the surface and ground water resources of the State, the Meghalaya State Pollution Control Board is monitoring the water quality of the selected water bodies in the State under National Water Monitoring Programme (NWMP) on regular basis. During the year 2019-2020 the monitoring network covers 36 rivers/streams, 4 lakes and 10 spring/well comprising a total of 81 sampling locations (67 nos. of surface water and 10 nos. of ground water and 4 lakes). The monitoring was done on monthly basis for surface and on half yearly basis for ground water. The regular parameters analyzed include pH, Conductivity, Turbidity, Total Suspended Solids, Total Dissolved Solids, Nitrite Nitrogen, Nitrate Nitrogen(NO_3), Ammonia Nitrogen, Kjeldahl Nitrogen, Sulphate, Chloride, Hardness, Calcium, Magnesium, Sodium, Potassium, Total Phosphate Acidity, Alkalinity, Fluoride, Dissolved Oxygen, Bio-Chemical Oxygen Demand, Chemical Oxygen Demand, Total Coliform, Fecal Coliform. The metals viz. Iron, Zinc, Manganese, Copper, Lead, Cadmium, Chromium and Nickel were analyzed once a year in the month of April. The detail of the monitoring stations with regard to location was as mentioned in the Table 6.1.0.

Table 6.1.0: Monitoring of Surface Water Quality in Meghalaya

SURFACE WATER			
District	Name of Water Bodies	Locations of Sampling Station	Monitoring Frequency
East Khasi Hills	Umkhrah River	Demthring Umkaliar, Shillong Mawlai Slaughter House Mawpdang, Mawlai	Monthly
	Umkhen River	Wahkdait Ksehpongden Diengpasoh	Monthly
	Umshyrpi River	Risa Colony Law College, Dhankheti Umshyrpi Bridge	Monthly
	Umiam Mawphlang River	Nongkrem Umtynngar Mawphlang Shella	Monthly
	Umngot River	Smit Dawki	Monthly
	Ward's Lake	Shillong	Monthly
	Sderkariah River	Sohra (Cherrapunjee)	Monthly
	Laitryngew Stream	Laitryngew	Monthly
	Wah KhlekKhlek River	Saitsohen	Monthly
	Wahrew River	Majai	Monthly
West Khasi Hills	Nonbah River	Nongstoin, Market Phodsohsat	Monthly
	Kynshi River	Sohiong Nongk hnum	Monthly
	Wahblei River	Riangdo Shdaddkhar	Monthly
	Rwiang River	Rwiang	Monthly
South West Khasi Hills	Rilang River	Mawkyrwat	Monthly
	UmngiRiver	Jakrem Umpung	Monthly
	Kynshi River	Ranikor	Monthly

SURFACE WATER			
District	Name of Water Bodies	Locations of Sampling Station	Monitoring Frequency
Ri – Bhoi	Umiam Lake	Outfall of Umiam River into lake Middle Point Near United Christian College Exit Point	Monthly
	Umtrew River	Umrans Byrnihat	Monthly
East Jaintia Hills	Lukha River	Lunar at Myndihati (Tributary of Lunar) Sunapur Khaddum	Monthly
	Thadlaskein Lake	Mukhla	Monthly
	Kyrhukhla River	Khliehriat	Monthly
	Kalipai River	Rymbai	Monthly
	Kme Um River	Rymbai	Monthly
	Waikhurwi River	Mookhlot	Monthly
	Kwai River	Sutnga, Mawpun	Monthly
West Jaintia Hills	Myntdu River	Leshka Jowai MihMyntdu	Monthly
	Lamu River	Leshka	Monthly
	Lynriang River	Leshka	Monthly
	Myntang River	Nartiang Mynso	Monthly
	Umiurem River	Iale	Monthly
	Kupli River	Iooksi Khandong	Monthly
	Thlumuwi River	Thlumuwi	Monthly
East Garo Hills	Damring River (Krishnei)	Resubelpara	Monthly
	Manda (Dudhnai) River	Jampa Wagaisi	Monthly
	Tasek Lake	Songsak (Naphak)	Monthly
	Simsang River	Williamnagar	Monthly
South Garo Hills	Bugi River	Mibanpara Dalu	Monthly
	Simsang River	Baghmara Nangalbibra	Monthly
	Nongal River	Nongal	Monthly
West Garo Hills	Ganol River	Tura Garobada	Monthly
	Damring River	Boldamgre	Monthly

GROUND WATER			
District	Name of Water Bodies	Locations of Sampling Station	Monitoring Frequency
East Khasi Hills	Police Bazar Spring	Shillong	Half Yearly
	Mawpdang Spring	Shillong	
	Wah U Dkhar Spring	Sohra	
West Khasi Hills	Mawthadrishan Well	Markasa	Half Yearly
South West Khasi Hills	Jakrem Hot Spring	Jakrem	Half Yearly
Ri-Bhoi	Narbong Well	Byrnihat	Half Yearly
West Jaintia Hills	Umsahep Spring	Shangpung	Half Yearly
East Jaintia Hills	Borewell at Good Shephard Parish	Ladrymbai	Half Yearly
	Borewell at KhliehwahShasem - A	Khliehriat	
	Borewell at KhliehwahShasem - B		

1. 6.1.1: Water Quality of the Sampling Stations in the Districts of Meghalaya

a) WATER QUALITY OF RIVERS IN EAST KHASI HILLS

24 (Twenty Four) sampling stations including Ground Water were located in East Khasi Hills. In all the monitored locations the pH was observed to be in the normal range of 6.5 to 8.5. The dissolved Oxygen was found to be very low in Umkhrach and Umshyrpi rivers with the minimum value 0.5 mg/l recorded at Umshyrpi River (Law College) and Umkhrach River at Slaughter house Mawlai during the dry winter months of February and March., whereas its concentration in other rivers was always above 4mg/l, which was the minimum oxygen requirement for propagation of wildlife fisheries etc. The Bio-chemical Oxygen Demand was observed to be above 3mg/l in Ward's lake, Umkhrach and Umshyrpi Rivers. The total coliform count was observed to be above 5000mpn/100ml in Umkhrach and Umshyrpi Rivers. The monitoring results indicated that organic and Bacteria were the main pollutants in the water bodies. This was mainly due to direct discharge of waste water in an untreated form from the residential and commercial centres. The amount of waste received by the two rivers viz. Umkhrach and Umshyrpi Rivers was much beyond their assimilative capacity and thus has deteriorated the water quality to the extent that the water of these two rivers cannot be put to any beneficial uses. The water quality of Ward's Lake, meets the criteria for propagation of wildlife and fisheries. The water quality of other water bodies was relatively good as and can still be put for various beneficial purposes although it was not recommended to use directly for drinking purposes unless treated and disinfected by an organized water supply system.

b) WATER QUALITY OF RIVERS IN WEST KHASI HILLS & SOUTH WEST KHASI HILLS

8 (Eight) sampling stations including Ground Water were located in West Khasi Hills and 5 (Five) Sampling including Ground Water were Located in South West Khasi Hills. In all the monitored locations the pH was observed to be in the normal range of 6.5 to 8.5. The dissolved Oxygen content in all monitored rivers was always above 4mg/l, which was the minimum oxygen requirement for propagation of wildlife fisheries etc. The Bio-chemical Oxygen Demand was observed to be above 3mg/l and Total Coliform count above 500mpn/100ml in Nanbah River at Nongstoin. Located in the centre of the District headquarter of West Khasi Hills, this river is also subjected to pollution arising out of direct disposal of solid and liquid waste from residential & commercial areas, automobile workshops and servicing centres etc. and agricultural runoff. However, the water of this river can be used for propagation of wildlife & fisheries and irrigation purposes. The water quality of other water bodies was relatively good and can still be put for various beneficial purposes although it was not recommended to use directly for drinking purposes unless treated and disinfected by an organized water supply system.

c) WATER QUALITY OF RIVERS IN RI-BHOI

A Total of 7 (Seven) sampling stations were located in Ri-Bhoi. In all the monitored locations the pH was observed to be in the normal range of 6.5 to 8.5. The dissolved Oxygen content in all the stations was found to be above 4mg/l, which was the minimum oxygen requirement for propagation of wildlife fisheries etc. The Bio-chemical Oxygen Demand was observed to be above 3mg/l in Umiam Lake and Umtrew River at Byrnihat. The Total Coliform count in these water bodies was also observed to be high. The Umiam Lake received the waste that was generated in

the Shillong city through the two rivers viz. Umkhrach and Umshyrpi Rivers whereas the Umtrew River was subjected to pollution originating from the residential, commercial and industrial areas. The water of Umiam Lake and Umtrew River can be used for propagation of wildlife & fisheries, and irrigation purposes. The water quality of other water bodies was relatively good and can still be put for various beneficial purposes although it was not recommended to use directly for drinking purposes unless treated and disinfected by an organized water supply system

d) WATER QUALITY OF RIVERS IN EAST & WEST JAINTIA HILLS

A total of 24 (Twenty Four) sampling stations including ground water were located in Jaintia Hills, of which 12 were located at East Jaintia Hills and 12 were located at West Jaintia Hills. The pH in (i) Myntdu River at Leshka (ii) Lunar River at Myndihati (iii) Kyrhukhla River at Lad-Rymbai (iv) Lukha at Sunapur (v) Kalipai River at Rymbai (vi) Kme Um at Rymbai (vii) Waikhrywi at Mookhlot (viii) Kwai River at Sutnga (ix) Lynriang River at Leshka (x) Umiurem at Iale (xi) Kupli River at Looksi and Khangdong (xii) Thlumuwi River at Thlumuwi was observed to be very low, with the minimum value of 2.3 recorded at Lunar River at Myndihati during the dry months of April. Low pH indicates that water was acidic in nature which was mainly due to acid effluent from coal mines located on the catchment and in the upstream side. The dissolved Oxygen in all monitored rivers was always above 4mg/l, which was the minimum oxygen requirement for propagation of wildlife fisheries etc. The Bio-chemical Oxygen Demand was observed to be above 3mg/l at Myntdu River Jowai, Kyrhukhla River Khliehriat and Lunar River Myndihati. The total coliform count was observed to be above 500mpn/100 ml in Myntdu River at Jowai mainly due to contamination from the domestic waste water/sewage. The water quality of other water bodies was relatively good and can still be put for various beneficial purposes although it was not recommended to use directly for drinking purposes unless treated and disinfected by an organized water supply system.

e) WATER QUALITY OF RIVERS IN GARO HILLS

13(Thirteen) sampling stations were located in Garo Hills. In all the monitored locations the pH was observed to be in the normal range of 6.5 to 8.5 except in Nongal River in Nongal it was found to be in the lower side where the average pH was 4.5. The dissolved Oxygen content in all the monitoring stations was found to be above 4mg/l, which was the minimum oxygen requirement for propagation of wildlife fisheries etc. The Bio-chemical Oxygen Demand was observed to be below 3mg/l in all the monitored water bodies. The Total Coliform count was observed to be moderately high in Simsang & Ganol River. The water quality of all monitored water bodies was relatively good and can still be put for various beneficial purposes although it was not recommended to use directly for drinking purposes unless treated and disinfected by an organized water supply system.

Table 6.1.1: Water Quality Data JANUARY - DECEMBER 2019

District	Name of Rivers	Locations of Sampling Station	pH			Dissolved Oxygen (mg/l)			BOD (mg/l)			Faecal Coliform (MPN/100ml)			FaecalStreptococci (MPN/100ml)			Total Coliform (MPN/100ml)		
			Min	Max	Ave	Min	Max	Ave	Min	Max	Ave	Min	Max	Ave	Min	Max	Ave	Min	Max	Ave
East Khasi Hills	Umkhrah River	Demthring	6.8	7.6	7.2	0.8	3.8	2.4	21.0	50.0	34.3	21000	110000	60357	4700	13000	8266	46000	240000	133285
		Umkaliar, Shillong	6.8	7.5	7.2	2.5	8.2	5.1	10.5	40	23	8400	110000	56771	4100	7900	5683	23000	280000	144285
		Mawlai Slaughter House	7.3	7.9	7.4	0.5	3.4	1.9	24.0	56.0	37.1	23000	210000	102714	9400	14000	11633	76000	460000	250285
		Mawpdang, Mawlai	6.9	8.1	7.3	0.8	3.4	2.1	26.0	40.0	32.5	27000	230000	119142	13000	21000	16500	84000	490000	277142
	Umkhen River	Wahkdait	7.0	7.3	7.1	6.5	7.4	6.9	1.6	2.4	2.0	17	36	26	2	4	3	140	350	221
		Ksehpondeng	6.8	7.5	7.1	6.6	7.9	7.2	1.1	1.9	1.5	12	32	22	4	4	4	70	210	129
		Diengpasoh	7.3	7.8	7.5	7.0	7.6	7.3	1.4	2.2	1.7	6	24	15				110	280	188
	Umshyrpi River	Risa Colony	6.7	7.3	6.9	6.9	7.8	7.2	1.2	2.8	1.9	11	34	22	9	10	9.5	94	170	129
		Law College, Dhankheti	6.8	7.6	7.1	0.5	3.5	2.0	24.0	44.0	32.5	22000	130000	72071	6300	11000	8500	58000	280000	158000
		Umshyrpi Bridge	6.7	7.3	7.0	3.0	6.0	4.8	13.0	31.0	21.2	9100	79000	42585	5800	9400	7433	33000	240000	115428
	Umiam Mawphlang River	Nongkrem	6.8	7.2	6.9	6.0	7.6	6.8	1.2	2.2	1.7	14	32	23	4	6	5	170	320	236
		Umtyngngar	6.8	7.3	7.1	6.4	7.6	6.9	1.6	2.4	1.9	11	31	20	--	--	--	140	240	185
		Mawphlang	6.7	7.3	7.0	7.0	7.6	7.2	1.5	1.8	1.6	12	26	18	--	--	--	120	280	222
		Shella	7.6	7.9	7.7	6.9	8	7.5	1.0	1.5	1.2	2	27	15	--	--	--	94	350	194
	Umngot River	Smit	6.6	7.2	6.8	6.4	7.9	7.0	1.2	2.7	1.9	10	27	19	--	--	--	130	280	195
		Dawki	7.0	7.6	7.3	7.0	8.2	7.7	1.0	1.7	1.2	2	26	14	--	--	--	110	210	152
	Ward's Lake	Shillong	6.9	7.6	7.3	6.2	7.4	6.9	3.8	4.8	4.2	240	2200	1118	64	70	67	630	4800	2486
	Sderkariah River	Sohra (Cherrapunjee)	3.6	5.7	4.7	4.6	7.9	6.9	1.4	2.1	1.7	11	58	29	--	--	--	110	350	200
	Laitryngew Stream	Laitryngew	4.1	4.7	4.3	7.0	7.7	7.3	1.4	2.0	1.6	8	42	22	--	--	--	63	210	119
	Wah KhlekKhlek River	Saitsohpen	6.6	7.4	7.0	6.6	7.6	7.0	1.4	2.0	1.8	12	34	22	--	--	--	84	230	158
	Wahrew River	Majai	7.0	7.4	7.2	6.7	8.0	7.4	1.0	1.8	1.2	0	2	0.3	0	0	0	4	21	11
West Khasi Hills	Nonbah River	Nongstoin,Market	6.8	7.5	7.0	5.5	7.4	6.5	3.2	5.6	4.2	130	490	285	17	21	19	410	2400	1319
		Phodsohsat	6.8	7.2	6.9	6.3	8.2	7.3	1.2	2.1	1.5	6	31	18	--	--	--	63	210	125
	Kynshi River	Sohiong	6.8	7.3	7.0	6.9	8.0	7.3	1.2	2.0	1.6	10	24	17	--	--	--	94	280	178
		Nongkhnum	6.8	7.1	6.9	7.3	8.2	7.7	1.0	10.0	2.3	6	31	17	--	--	--	63	170	110
	Wahblei River	Riangdo	6.6	7.5	7.1	5.8	7.9	7.1	1.2	2.0	1.5	4	31	17	--	--	--	49	140	96
		Shdaddkhar	6.2	7.1	6.7	6.5	7.8	7.2	1.2	2.0	1.6	8	24	16	--	--	--	94	170	133
South West Khasi Hills	Rwiang River	Rwiang	7.1	7.5	7.2	7.2	8.0	7.5	1.0	1.7	1.3	10	24	16	--	--	--	34	79	51
	Rilang River	Mawkyrwat	6.8	7.4	7.1	7.2	8.0	7.6	1.0	10.0	2.4	2	22	13	--	--	--	58	170	113
	UmngiRiver	Jakrem	6.7	7.2	7.0	6.5	7.9	7.3	1.0	1.4	1.1	0	4	1	0	0	0	4	27	15
		Umpung	6.8	7.5	7.1	7.3	8.2	7.7	1.0	1.4	1.1	0	14	5	--	--	--	11	42	26
	Kynshi River	Ranikor	6.0	6.9	6.5	6.8	7.4	7.0	1.6	2.4	1.9	6	26	16	--	--	--	49	210	122

Ri – Bhoi	Umiam Lake	Outfall of Umiam River into lake	6.9	7.5	7.1	4.2	5.8	5.1	6.0	9.5	7.5	790	2700	1757	--	--	--	1500	5800	3492
		Middle Point	7.2	8.0	7.5	5.7	6.8	6.2	5.0	8.1	6.3	410	2700	1446	--	--	--	1100	4700	2921
		Near United Christian College	7.1	8.1	7.4	5.2	7.0	6.0	5.2	8.8	6.6	580	2400	1587	--	--	--	1200	6300	3435
		Exit Point	7.0	7.5	7.3	5.4	6.6	6.1	5.2	8.4	6.4	540	2700	1565	--	--	--	1400	4900	3164
	Umtrew River	Umrans	6.9	8.0	7.3	6.0	7.6	7.1	1.4	5.4	2.1	38	120	71	21	22	21	220	840	500
		Byrnihat	6.9	7.4	7.2	5.4	7.5	6.6	3.3	5.8	4.2	120	700	374	22	23	22	630	3300	1874
East Jaintia Hills	Lukha River	Lunar at Myndihati (Tributary of Lunar)	2.3	3.3	2.7	5.0	7.2	6.3	3.3	5.5	4.1	0	0	0	0	0	0	0	12	3
		Sunapur	6.7	7.3	7.1	7.3	8.0	7.6	1.2	1.8	1.5	13	49	30	2	6	3	110	280	185
		Khaddum	4.6	7.5	6.2	6.8	7.9	7.3	1.3	2.5	1.8	9	26	17				70	150	104
	Thadlaskein Lake	Mukhla	6.8	7.2	7.0	6.6	7.5	7.0	1.4	2.0	1.7	12	33	22	2	2	2	84	240	153
	Kyrhukhla River	Khliehriat	2.7	4.4	3.3	6.0	7.6	6.8	3.2	5.5	4.0	0	14	2	0	0	0	0	58	14
	Kalipai River	Rymbai	2.6	3.1	2.7	5.2	7.7	6.8	1.2	2.8	1.8	0	0	0	0	0	0	0	12	7
	Kme Um River	Rymbai	2.8	3.8	3.1	6.0	8.0	7.1	1.2	2.2	1.6	0	0	0	0	0	0	0	14	7
	Waikhyrwi River	Mookhlot	2.7	3	2.8	5.9	7.4	6.8	1.7	2.4	1.9	0	0	0	0	0	0	0	11	3
	Kwai River	Sutnga, Mawpun	3.4	3.8	3.5	5.4	7.9	6.8	1.3	2.5	1.8	0	13	5	0	0	0	17	79	41
	Lamu River	Leshka	5.1	7.6	6.9	6.8	8.4	7.7	1.0	1.4	1.1	11	22	16	--	--	--	63	130	95
	Lynriang River	Leshka	3.3	4.2	3.9	6.2	7.6	7.0	1.6	2.4	2.0	0	2	0	--	--	--	0	18	8
	Myntdu River	Leshka	5	6.6	5.9	6.0	7.7	6.9	1.2	1.9	1.5	11	26	18				63	170	110
		Jowai	6.6	7.1	6.8	6.1	7.4	6.8	3.2	6.5	4.0	210	2400	1164	46	48	47	700	4900	2703
West Jaintia Hills	Myntdu River	Mih Myntdu	6.7	7.2	6.9	6.4	7.8	7.1	1.1	1.7	1.4	20	49	32	9	23	16	120	240	174
	Myntang River	Nartiang	6.8	7.2	6.9	6.9	7.8	7.3	1.2	1.8	1.5	12	36	24	2	6	3	83	240	154
		Mynso	6.8	7.3	7.0	7.2	7.9	7.4	1.2	1.8	1.4	6	27	15	0	2	1	110	280	182
	Umiurem River	Iale	2.9	4.7	3.8	5.4	7.5	6.7	1.4	2.8	1.9	0	2	0.3	0	0	0	0	17	8.1
	Kupli River	Iooksi	3.5	4.2	3.9	6.0	7.4	6.7	1.4	2.4	1.8	0	0	0	0	0	0	2	6	3
		Khandong	3.4	4.7	3.7	6.5	7.7	7.1	1.3	2.2	1.7	0	4	1.5	0	0	0	4	14	9
	Thlumuwi River	Thlumuwi	4.4	5.7	4.8	6.4	7.7	7.2	1.2	1.8	1.5	8	39	19	0	4	2	70	220	133
East Garo Hills	Damring River (Krishnei)	Resubelpara	6.8	7.3	7.1	6.7	7.5	7.1	1.3	2.2	1.7	21	43	31	--	--	--	150	430	267
	Manda (Dudhnai) River	Jampa	5.9	7.4	6.7	6.8	7.8	7.2	1.5	2.2	1.8	17	41	28	--	--	--	120	430	240
		Wagaisi	6.8	7.5	7.1	7	7.9	7.4	1.0	1.7	1.4	11	38	24	--	--	--	130	540	286
	Tasek Lake	Songsak (Naphak)	6.8	7.6	7.2	6.5	7.7	6.9	1.5	2.3	1.8	21	47	33	--	--	--	110	280	180
	Simsang River	Williamnagar	7.1	7.6	7.3	7.0	7.7	7.3	1.3	1.8	1.5	110	410	225	--	--	--	430	2700	1436
South Garo Hills	Bugi River	Mibanpara	7.0	7.8	7.3	6.8	7.5	7.1	1.5	2.3	1.8	8	32	19	--	--	--	84	280	177
		Dalu	7.2	7.8	7.4	6.3	7.5	6.9	1.5	2.4	1.8	12	38	25	--	--	--	70	170	116
	Simsang River	Baghmara	6.9	7.5	7.1	7.0	7.7	7.4	1.1	1.9	1.5	2	140	76	--	--	--	120	430	240
		Nangalbibra	4.4	7.3	6.5	7.0	7.7	7.3	1.0	1.8	1.3	17	94	48	--	--	--	210	920	454
	Nongal River	Nongal	3.7	4.5	4.0	6.7	7.6	7.0	1.0	1.9	1.5	6	27	15	--	--	--	79	280	125
West Garo Hills	Ganol River	Tura	7.1	7.8	7.3	7	8	7.4	1.0	1.8	1.4	170	1400	687	--	--	--	410	2200	1140
		Garobada	7.1	7.5	7.3	6.3	7.7	6.9	1.1	2	1.5	79	1100	468	--	--	--	130	2100	1005
	Damring River	Boldamgre	7.1	7.5	7.2	6.8	7.4	7.1	1	1.8	1.4	11	22	16	--	--	--	120	240	175

6.1.2 Ground Water Quality

A total of 10 (Ten) ground water located all over the State was monitored on half-yearly basis. The water of all the monitored sources was used for different purposes. As per the monitoring results (Table 6.1.2), high iron content in some Sampling location maybe due to the geology of the area. The pH level at hot spring Jakrem was recorded to be high which was probably due to increase solubility of salts in hot water. Flouride concentration was also recorded to be high at this hot spring which is the characteristic of any hot spring.

Table 6.1.2: Ground Water Quality in Meghalaya during 2019

District	Name of Rivers	Locations	Year	pH	Conductivity	Turbidity	Flouride	Iron	Total Coliform
East Khasi Hills	Dreamland Spring	Police Bazar, Shillong	2019	5.75	257.0	2.15	0.065	0.13	68
	Mawpdang Spring	Shillong		5.65	237.0	2.8	0.055	0.26	22
	Wah-U-Dkhar	Sohra		6.3	108.0	2.15	0.06	0.16	4
Ri-Bhoi	Narbong Well	Byrnihat		6.65	145.0	2.5	0.055	0.34	35
Jaintia Hills	Umsahep Hot Spring	Shangpung		5.95	135.0	2.2	0.06	0.16	2
West Khasi Hills	Mawthadrishan Well	Markasa		6.75	60.0	4.2	0.065	0.14	15
South West Khasi Hills	Jakrem, Hot Spring	Jakrem		9.25	337.0	3	20.5	0.14	4
East Jaintia Hills	Borewell at Good Shephard Parish in Lad Rymbai	Khliehriat		7.25	149.0	1	0.06	0.11	
	Borewell at KhliehwahShasem-A in Khliehriat	Khliehriat		5.1	126.0	1.85	0.05	0.48	27
	Borewell at KhliehwahShasem-A in Khliehriat	Khliehriat		4.8	106.0	1.6	0.06	0.66	7.5

6.1.3 Water Quality Monitoring under Board's Programme

The Board had also carried out the monitoring of the water quality of other water bodies in the State which were used for different purposes and subjected to different types of pollution. Based on the monitoring the following reports were published by the Board.

- A Report on Inspection & Analyses of the Water Quality of the Water Bodies in Shangpung area West Jaintia on the 6th August 2019-** The Monitoring was carried during 6th August 2019 in response to the Complaint on the Matters of Polluted the River Umiurem by the Dorbar Shnong Shangpung Mission, Shangpung.

b) A Report on Water Quality of Streams/Drains from the Premises of Eastern Air Command, Air Force Upper Shillong, on the alleged Release of Sewage/Effluent Towards Elephant Falls Upper Shillong - The Monitoring was carried during 10th September 2019 in the presence of the official of the Eastern Air Command along with the Officers from different State Government Department which was headed by District Magistrate.

6.1.4 Monitoring of water bodies on account of NGT order

A total of 14 samples were collected and analyzed from the water bodies located in coal mining areas

6.1.5 Analysis of water bodies received from Government Departments, Private Agencies and Public

In addition to the regular programme the Board was also engaged in analyzing water samples received from Government Departments, Private Agencies and Public. A total of 392 samples were analyzed during the year.

6.1.6 Water Quality Monitoring during Idol Immersion

The Meghalaya State Pollution Control Board, Shillong, conducted water quality monitoring before and after puja festival of three immersion ghats in the state viz. (i) Polo immersion site, Shillong, located along the River Umkhrah (ii) Babupara immersion site, Tura, located along the Babupara-Rongkhon River and (iii) SyntuKsiar (Lynterarchaka) immersion site, Jowai, located along the river Myntdu. The monitoring was conducted in order to assess the environmental impact due to such immersion.

TABLE 1: WATER QUALITY DATA OF RIVER WAH UMKHRAH DURING PRE-IMMERSSION, IMMERSION & POST-IMMERSION DAY, KALI PUJA FESTIVAL 2019

		Site I (100m Upstream of Immersion Ghat)			Site II (Site of Immersion Ghat)			Site III (100 m downstream of Immersion Ghat)		
	Date of Sampling	04.10.2019	08.10.2019	11.10.2019	04.10.2019	08.10.2019	11.10.2019	04.10.2019	08.10.2019	11.10.2019
	Time	12:15	18:57	14:55	12:23	19:19	15:46	12:40	19:48	15:27
	Weather	Rainy	Rainy	Cloudy	Rainy	Rainy	Cloudy	Rainy	Rainy	Cloudy
	Colour	Light brown	Brown	Greenish brown	Light brown	Brown	Greenish brown	Light brown	Brown	Greenish brown
1.	Temperature (°C)	20.2	21.0	21.7	19.0	20.0	23.0	20.0	20.0	23.0
2.	pH	7.3	7.3	7.3	7.2	7.3	7.4	7.2	7.3	7.4
3.	Conductivity $\mu S/cm$	228.0	235.0	240.0	240.0	240.0	245.0	233.0	245.0	243
4.	Dissolved Oxygen mg/L	4.0	2.8	3.2	3.2	2.7	2.7	3.8	2.9	2.9
5.	BOD mg/L	19.0	20.0	12.5	22.0	25.0	15.0	24.0	22.0	15.1
6.	COD mg/L	23.0	8.0	24.0	21.0	7.0	22.0	25.0	6.0	20.0
7.	Calcium mg/L	46.0	42.0	60.0	50.0	46.0	66.0	50.0	40.0	60.0
8.	Magnesium mg/L	24.0	22.0	24	24.0	22.0	22.0	22.0	24.0	14.0
9.	Turbidity (NTU)	11.5	10.5	7.2	14.1	25.5	10.8	12.8	30.4	7.8
10.	Hardness mg/L	70.0	64.0	80.0	74.0	68.0	88.0	72.0	64.0	74.0
11.	Total Dissolved Solids mg/L	149.0	163.0	166.0	157.0	167.0	169.0	152.0	166.0	168.0
12.	Total Suspended Solids mg/L	12.0	20.0	10.0	15.0	22	10.0	11.0	23.0	10.0
13.	Chromium mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
14.	Copper mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
15.	Lead mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
16.	Zinc mg/L	0.18	0.01	0.08	0.12	0.03	0.12	0.16	0.10	0.09

**TABLE 2: WATER QUALITY DATA OF RIVER MYNTDU DURING PRE-IMMERSSION, IMMERSION
& POST-IMMERSION DAY, KALI PUJA FESTIVAL 2019**

		Site I (100m Upstream of Immersion Ghat)			Site II (Site of Immersion Ghat)			Site III (100 m downstream of Immersion Ghat)		
		04.10.2019	08.10.2019	11.10.2019	04.10.2019	08.10.2019	11.10.2019	04.10.2019	08.10.2019	11.10.2019
	Date of Sampling									
	Time	12:02	15:00	14:20	12:10	15:30	14:37	12:23	15:45	14:53
	Weather	Cloudy	Clear	Cloudy	Cloudy	Clear	Cloudy	Cloudy	Clear	Cloudy
	Colour	Slightly brown	Clear	Clear	Slightly brown	Clear	Clear	Slightly brown	Clear	Clear
1.	Temperature (°C)	20.0	24.0	21.0	20.0	24.0	21.0	20.0	24.0	21.0
2.	pH	7.2	7.1	7.6	7.1	7.1	7.6	7.1	7.2	7.5
3.	Conductivity $\mu\text{S}/\text{cm}$	42.0	48.0	35.0	44.0	47.0	33.0	47.0	43.0	32.0
4.	Dissolved Oxygen mg/L	7.4	6.2	7.2	7.4	7.1	7.4	6.9	6.9	7.1
5.	BOD mg/L	1.4	1.7	1.8	1.6	1.5	1.5	1.5	1.6	1.7
6.	COD mg/L	4.0	4.0	8.0	4.0	6.0	6.0	4.0	4.0	8.0
7.	Calcium mg/L	7.0	6.0	12.0	6.0	6.0	12.0	6.0	6.0	12.0
8.	Magnesium mg/L	5.0	4.0	7.0	4.0	4.0	6.0	4.0	4.0	6.0
9.	Turbidity (NTU)	6.5	5.9	5.5	6.7	6.2	7.0	6.9	5.8	6.2
10.	Hardness mg/L	10.0	20.0	19.0	10.0	18.0	18.0	10.0	18.0	18.0
11.	Total Dissolved Solids mg/L	25.0	23.0	24.0	23.0	21.0	23.0	24.0	22.0	22.0
12.	Total Suspended Solids mg/L	5.0	35.0	10.0	5.0	15.0	10.0	5.0	25.0	10.0
13.	Chromium mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
14.	Copper mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
15.	Lead mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
16.	Zinc mg/L	BDL	BDL	0.04	BDL	BDL	0.09	BDL	0.04	0.08

TABLE 3: WATER QUALITY DATA OF RIVER BABUPARA-RONGKHON DURING PRE-IMMERSSION, IMMERSION & POST-IMMERSION DAY, KALI PUJA FESTIVAL 2019

		Site I (100m Upstream of Immersion Ghat)			Site II (Site of Immersion Ghat)			Site III (100 m downstream of Immersion Ghat)		
	Date of Sampling	04.10.2019	08.10.2019	11.10.2019	04.10.2019	08.10.2019	11.10.2019	04.10.2019	08.10.2019	11.10.2019
	Time	15:06	20:02	11:14	15:19	20:19	11:27	15:32	20:49	11:44
	Weather	Sunny	Rainy	Sunny	Sunny	Rainy	Sunny	Sunny	Rainy	Sunny
	Colour	Clear	Brownish	Clear	Clear	Brownish	Clear	Clear	Brownish	Clear
1.	Temperature (°C)	26.0	24.0	26.0	26.0	25.0	26.0	26.0	25.0	26.0
2.	pH	7.3	7.5	7.4	7.4	7.5	7.4	7.3	7.4	7.5
3.	Conductivity $\mu S/cm$	87.0	74.0	83.0	93.0	75.0	86.0	92.0	77.0	85.0
4.	Dissolved Oxygen mg/L	7.4	7.3	7.4	7.5	7.1	7.6	7.6	7.2	6.7
5.	BOD mg/L	1.8	2.0	1.6	1.8	1.9	1.4	1.9	2.0	2.0
6.	COD mg/L	4.0	4.0	4.0	5.0	6.0	4.0	4.0	4.0	5.0
7.	Calcium mg/L	22.0	20.0	20.0	24.0	20.0	24.0	20.0	22.0	20.0
8.	Magnesium mg/L	12.0	12.0	12.0	12.0	10.0	10.0	14.0	12.0	12.0
9.	Turbidity (NTU)	11.6	15.2	12.4	20.5	12.7	11.5	13.6	18.5	10.8
10.	Hardness mg/L	34.0	30.0	32.0	36.0	50.0	34.0	34.0	34.0	32.0
11.	Total Dissolved Solids mg/L	60.0	51.0	57.0	64.0	30.0	59.0	63.0	53.0	59.0
12.	Total Suspended Solids mg/L	15.0	15.0	15.0	25.0	15.0	15.0	15.0	15.0	15.0
13.	Chromium mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
14.	Copper mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
15.	Lead mg/L	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
16.	Zinc mg/L	0.06	0.04	0.05	0.07	0.03	BDL	0.05	0.05	0.03

CHAPTER 7

NOISE LEVEL MONITORING

7.1 NOISE LEVEL MONITORING OF INDUSTRY/FIRM/INSTITUTION/RESIDENTIAL

The Board conducted Noise Level Monitoring of Industry/Firm/Institution/Residential etc. during 2019-2020. The ambient noise level recorded are presented as follows:- (Table 7.1) :

Table 7.1 Noise level monitoring of Industry/Firm/Organization/Private

Sl. No.	Name of Industry/Firm/Institution/Residential	Sampling Location	Date of Sampling	Category	Observed Value {dB(A) Leq}		Prescribed Standard {dB(A) Leq}	Remarks
1.	Smti. A. Kharbuli, Mawlai Mawdatbaki, NEHU Road, Shillong, (EKHD)	House Premises	21-05-19 to 25-05-19	Residential	Day	47.9	55.0	W
					Night	-	-	-
2.	St. John Whitehall, Dum Dum, Nongthymmai, Shillong, (EKHD)	School Premises	11-06-19 to 13-06-19	Residential	Day	59.8	55.0	A
					Night	-	-	-
3.	Municipal Dumping Site, Rrongkhon Songital, Tura, (WGH)	Near Main Gate	04-06-19	Industrial	Day	49.3	75.0	W
					Night	-	-	-
4.	Municipal Dumping Site, Balasrigittim, Williamnagar, (EGH)	Near Dumping Site	06-06-19	Industrial	Day	47.6	75.0	W
					Night	-	-	-
5.	Jowai Municipal Dumping Site(WJHD)	Near Dumping Site	07-06-19	Industrial	Day	58.1	75.0	W
					Night	-	-	-
6.	Municipal Dumping Site Arapara, Baghmara (WGHD)	Near Dumping Site	14-06-19	Industrial	Day	46.3	75.0	W
					Night	-	-	-
7.	Municipal Dumping Site Maypangro Resubelpara (NGHD)	Near Dumping Site	18-06-19	Industrial	Day	45.0	75.0	W
					Night	-	-	-
8.	Marten Mawlai Shillong, Mawiong(EKHD)	Near Dumping Site	25-06-19	Industrial	Day	62.4	75.0	A
					Night	54.7	70.0	W
9.	Salim Dam Site Guest House (MePDCL)	Dam Site Guest House	20-08-19	Residential	Day	52.8	55.0	W
					Night	44.5	45.0	W
10.	MePDCL Umsohlong (EKHD)	Dam Site Hilltop	21-08-19	Residential	Day	53.8	55.0	W
					Night	41.4	45.0	W

Sl. No.	Name of Industry/Firm/Institution/Residential	Sampling Location	Date of Sampling	Category	Observed Value {dB(A) Leq}		Prescribed Standard {dB(A) Leq}	Remarks
11.	MePDCL	Salim Power House Hilltop	21-08-19	Residential	Day	50.9	55.0	W
					Night	43.0	45.0	W
12.	M/S CMJ Brewaries (P) Ltd.	EPIP Byrnihat	15-08-19	Industrial	Day	72.1	75.0	W
					Night	65.6	70.0	W
13.	M/S NTL Steel	EPIP Byrnihat	15-07-19	Industrial	Day	81.4	75.0	A
					Night	71.4	70.0	A
14.	Mithaw Alloy (P) Ltd	EPIP Byrnihat	23-07-19	Industrial	Day	70.8	75.0	W
					Night	65.8	70.0	W
15.	Byrnihat Pvt.Ltd	EPIP Byrnihat	23-07-19	Industrial	Day	72.4	75.0	W
					Night	68.6	70.0	W
16.	Meghalaya Steel Pvt. Ltd.	EPIP Byrnihat	24-07-19	Industrial	Day	73.4	75.0	W
					Night	70.0	70.0	W
17.	Ri-Bhoi Ispat Pvt. Ltd.	EPIP Byrnihat	30-07-19	Industrial	Day	81.2	75.0	A
					Night	78.1	70.0	A
18.	Shri Ram Wire Pvt. Ltd EPIP Byrnihat	Near Mandir	30-7-19	Industrial	Day	80.0	75.0	A
					Night	79.6	70.0	A
19.	Pawan Casting Pvt. Ltd EPIP Byrnihat	Near Office	31-07-19	Industrial	Day	77.0	75.0	A
					Night	72.6	70.0	A
20.	Excel Food Pvt.Ltd EPIP Byrnihat	Near Canteen	06-08-19	Industrial	Day	84.1	75.0	A
					Night	78.2	70.0	A
21.	Godrej Pvt.Ltd EPIP Byrnihat	Near Entrance	06-08-19	Industrial	Day	80.5	75.0	A
					Night	80.8	70.0	A
22.	Shri Sai Smelter Pvt.Ltd. EPIP Byrnihat	Near Office	07-08-19	Industrial	Day	87.0	75.0	A
					Night	74.8	70.0	A
23.	Sishu Nutrition Pvt.Ltd. EPIP Byrnihat	Terrace	13-08-19	Industrial	Day	87.5	75.0	A
					Night	76.3	70.0	A
24.	Bitchem Pvt.Ltd EPIP Byrnihat	Near Security Guard	21-08-19	Industrial	Day	66.4	75.0	W
					Night	65.3	70.0	W
25.	Shyam Century (Pvt. Ltd.) EPIP Byrnihat	Near Office	21-08-19	Industrial	Day	84.6	75.0	A
					Night	75.1	70.0	A
26.	Marten Landfill Site,Mawiong (EKHD)	Near Garage	21-08-19	Industrial	Day	72.8	75.0	W
					Night	46.3	70.0	W

Sl. No.	Name of Industry/Firm/Institution/Residential	Sampling Location	Date of Sampling	Category	Observed Value {dB(A) Leq}		Prescribed Standard {dB(A) Leq}	Remarks
27.	Marten(New) Landfill Site,Mawiong (EKHD)	New Landfill Site	21-08-19	Industrial	Day	52.4	75.0	W
					Night	40.5	70.0	W
28.	R/O Lyngwa Mawbah Shillong, Barapathar(EKHD)	Residence of Smti R.Lyngwa	06-09-19	Industrial	Day	55.0	74.7	W
					Night	-	-	-
29.	Shillong Express Pvt. Ltd. Shillong Bypass, Mawkhan (EKHD)	Front of the Office	14-10-19	Residential	Day	72.5	55.0	A
					Night	68.9	45.0	A
30.	MeECL,HEP Mawblei (EKHD)	Near Power House	03-12-19	Residential	Day	52.7	55.0	A
					Night	43.8	45.0	W
31.	MeECL,HEP Mawblei (EKHD)	Near Camp Site	04-12-19	Residential	Day	48.8	55.0	W
					Night	41.5	45.0	W
32.	MeECL, HEP Mawblei (EKHD)	Near Residential Area	05-12-19	Residential	Day	49.2	55.0	W
					Night	42.4	45.0	W

Note: A – Above the Prescribed Standards;
W – Within the Prescribed Standards.

7. 2 AMBIENT NOISE LEVEL DURING IDOL IMMERSION, 2019

The ambient noise level monitoring was conducted on the 8th of October, 2019 (i.e. immersion day) at the respective immersion sites in Shillong, Tura and Jowai in order to monitor the level of noise during the occasion.

Sampling Methodology & Parameter Analyzed

The monitoring was carried out using Envirotech SLM 109 and Larson-Davis DSP 80 sound level meters, and the noise levels were measured in dB (A) i.e. the level of sound in decibels on scale – A, as per the human ear sensitivity requirements. The result was expressed in Leq, denoting the A weighted energy mean of the noise level averaged over the measurement period. The monitoring was conducted for continuous 30 minutes duration wherein Leq readings were recorded for every 10 minute interval.

Findings & Conclusion

The levels recorded during the occasion at the respective immersion sites in Shillong, Tura and Jowai is given in tables below:

Table 7.2.1: Ambient Noise Level during IDOL IMMERSION, 2019 in Shillong

Location A	River Umkhrah Immersion Site, Polo, Shillong	
Time Duration	Leq dB(A)	Ambient Noise Level Standard (Day time) [Residential Area] Leq dB(A)
12:45 Hrs. to 12:55 Hrs.	70.5	55.0
12:55 Hrs. to 13:05 Hrs.	73.6	
13:05 Hrs. to 13:15 Hrs.	75.3	

The above table (**Table 7.2.1.**) revealed that the ambient noise level at the immersion ghat along the river Umkhrah at Polo, Shillong was high.

The levels recorded at every fifteen minute interval from the time duration of 12:45 Hrs. (12:45 pm) to 13:15 Hrs. (1:15 pm) showed that the level exceeds the daytime Ambient Noise Standard of 55.0 dB(A) Leq (for a Residential area) during every monitored time interval.

The noise, as observed on the above day and duration of monitoring was due to various kinds of festival activities during the immersion process.

Table 7.2.2: Ambient Noise Level during IDOL IMMERSION, 2019 in Tura

Location B	River Babupara-Rongkhon Immersion Site, Babupara, Tura	
Time Duration	Leq dB(A)	Ambient Noise Level Standard (Day time) [Residential Area] Leq dB(A)
12:45 Hrs. to 12:55 Hrs.	70.0	55.0
12:55 Hrs. to 13:05 Hrs.	66.0	
13:05 Hrs. to 13:15 Hrs.	68.5	

The above table (**Table 7.2.2**) revealed that the ambient noise level at the immersion ghat along the river Babupara-Rongkhon at Babupara was high.

The recorded noise levels showed that the level obtained exceeded the daytime Ambient Noise Standard of 55.0 dB(A) Leq (for a Residential area) during the monitored time intervals.

The noise, as observed during monitoring, was due to festive activities during the immersion process.

Table 7.2.3: Ambient Noise Level during IDOL IMMERSION, 2019 in Jowai

Location C	River Myntdu Immersion Site, SyntuKsiar, Jowai	
Time Duration	Leq dB(A)	Ambient Noise Level Standard (Day time) [Residential Area] Leq dB(A)
12:45 Hrs. to 12:55 Hrs.	62.4	55.0
12:55 Hrs. to 13:05 Hrs.	61.9	
13:05 Hrs. to 13:15 Hrs.	57.8	

The above table (**Table 7.2.3**) revealed that the ambient noise level at the immersion ghat along the river Myntdu at Lynter Archaka, Syntu Ksiar, Jowai, exceeded the daytime Ambient Noise Standard of 55.0 dB(A) Leq (for a Residential area) but was comparatively lower than the noise levels obtained at the immersion sites in Shillong and Tura.

7. 3: 'NOISE LEVEL MONITORING' of Non-Attainment City at 16th Mile, Byrnihat, 20th March 2020

As per the decision of the Air Quality Monitoring Committee (AQMC) in the 5th Air Quality Monitoring Committee meeting held on 21st February 2020, in the Conference Hall, O/o PCCF & HoFF, Forest & Environment Department, Govt. of Meghalaya, Shillong, on Pt. 10 of the Action Plan: Monitoring of Noise level was carried out on the 20th March 2020 in Byrnihat (Non-attainment city) by the Meghalaya State Pollution Control Board in collaboration with the Police Department, Ri-Bhoi District.

It was observed that the ambient noise level (**Table 7.31.**) at the above mentioned location exceeded the limits of ambient noise level standards for a Commercial Area as per the Ministry of Environment & Forests Notification vide No. S.O. 123(E) dated 14th Feb, 2000 and the Noise Pollution (Regulation and Control) Rules, 2000. It may be mentioned that the high level of noise recorded was due to the noise from vehicles moving along the national highway as the mentioned site/location was at close proximity to the national highway.

Table 7.3.1: Ambient Noise Level monitoring near Meera Service Station, 16th Mile, Byrnihat, on 20th March 2020

Parameters	Limits in {dB(A)Leq} {Noise Pollution(Regulation and Control) Rules,2000.} Under EPA, 1986.		Test Method	Sampling Location
				Meera Service Station, Byrnihat, Ri-Bhoi District
Ambient Noise Level {dB(A)Leq}	Day Time (6 AM to 10 PM) (Commercial Area)	65	IS-9989/981-RA 2001/MPCB/CL-SOP/2017-18/21	77.8
Observations: Higher level of noise observed was attributed to noise from vehicles plying along the national highway in proximity to the sampling location/site.				

7. 4: Ambient Noise Level Monitoring During Christmas & New Year Festival 2019

Christmas and New Year are two festivals that are celebrated with much pomp and gaiety not only throughout India but the world over. New Year is usually very commonly celebrated with the bursting of firecrackers and sparklers and at times, though on a much lesser scale, the occasion of Christmas is also welcomed in the same fervour. As this kind of activity contributes to air as well as noise pollution, it is imperative that the Board therefore monitor air and noise level quality during the period.

With this objective, the Meghalaya State Pollution Control Board, Shillong, conducted Ambient Noise Level and Air Quality monitoring during Christmas and New Year festival on the 24th to 25th December, 2019 and the 31st December, 2019 to 1st January, 2020 respectively. This was also in pursuance to the interim directions of the Hon'ble Supreme Court.

Area Monitored

Shillong, the selected city for conducting the ambient noise level and air quality survey during the two festive periods is Meghalaya's largest and most populous city as well as its capital and therefore has the largest number of people celebrating the festivals.

The location selected was Police Bazar (Meghalaya Legislative Assembly office's premises), a commercial area.

Methodology

The monitoring team was equipped with Envirotech SLM 109 sound level meter. The noise levels were measured in dB(A) i.e. the level of sound in decibels on scale – A as per the human ear sensitivity requirements. The result was expressed in Lmin, Lmax and Leq, wherein Lmin indicates the minimum value of the sound level in decibels and Lmax the maximum value of sound level in decibels occurring during the single event and Leq denotes the A weighted energy mean of the noise level averaged over the measurement period. The noise level was monitored for continuous 6 hours duration i.e. from 20:00 hours (8:00 P.M.) to 02:00 hours (2:00 A.M.) where Lmin, Lmax and Leq readings were recorded for every hourly interval.

City

Name: SHILLONG

State: Meghalaya

Coordinates: 25°34'00"N & 91°53'00"E

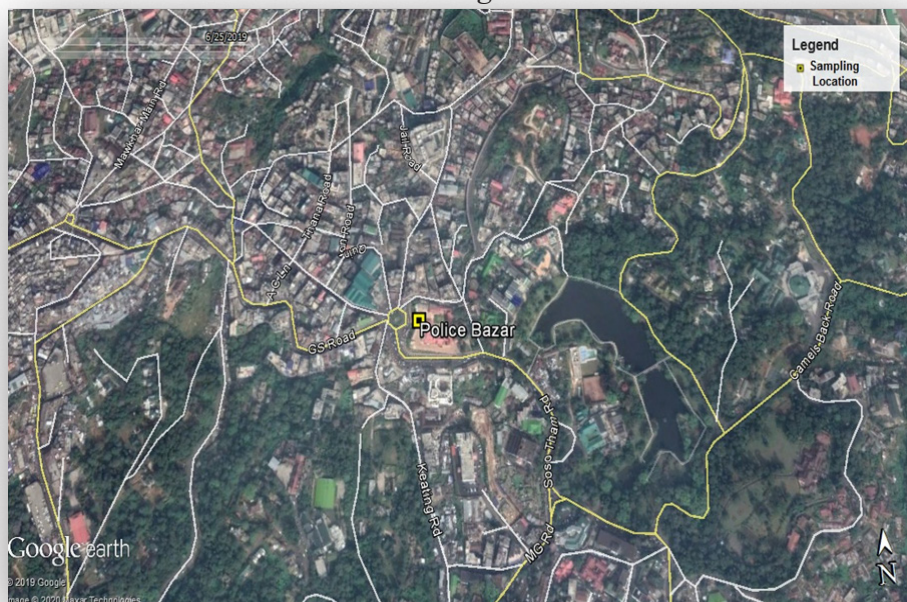
Elevation: 1496m (4,908 feet) above sea level

Climate/Meteorology: Yearly average minimum temperature is 13.6° C (56.5° F) and maximum is 21.7° C (71.1° F) and the average yearly rainfall is 4,931 mm (194.13 inches).

Population: 1, 43,229 as per 2011 census

Major Land use: According to the Master Plan of Shillong city, which includes the Shillong Agglomeration and 35 other surrounding villages covering an area of 174 Sq. km., the existing land-use has been classified into the categories viz. Residential, Commercial, Public, Semi-Public (administrative, institutional, open space i.e. parks, play ground and graveyards), Industrial, Security, Circulation (roads, parking lots, etc.), Vacant (areas with poor accessibility, steep slopes, etc.), Urban agriculture, Forests and water bodies.

Monitoring Location



Map showing the monitoring location in Shillong city

Description of monitoring site

Police Bazar: This location is a commercial area and the major shopping and business area of the city. People from all over the city as well as the state and even tourists from outside the state and country frequent here for their business and shopping activities. The main noise sources here are vehicular traffic, and noise caused by pedestrians, shoppers and other business activities. During Christmas and New Year, residents and visitors including tourists visit this place to celebrate these festivals with enthusiasm and therefore the location is a suitable site for the above study.

Data/Observations – Ambient Noise Level

Ambient Noise Level Quality during Christmas and New Year festival 2019:

Table 1

Location: Police Bazar	Christmas festival period (24.12.2019 to 25.12.2019)			New Year festival period (31.12.2019 to 01.01.2020)		
Time duration	Lmin	Lmax	Leq dB(A)	Lmin	Lmax	Leq dB(A)
20:00 to 21:00 Hr.	58.2	63.7	59.2	58.2	81.8	62.0
21:00 to 22:00 Hr.	50.5	66.3	54.5	57.5	78.7	61.5
22:00 to 23:00 Hr.	51.6	68.6	62.6	57.8	91.3	61.8
23:00 to 24:00 Hr.	53.6	69.7	60.3	57.9	94.1	70.9
24:00 to 01:00 Hr.	54.2	70.3	68.7	67.6	97.3	74.5
01:00 to 02:00 Hr.	53.9	68.2	55.9	62.3	80.9	68.3

Interpretation of noise data/results

Police Bazar (Meghalaya Legislative Assembly office's premises)

It is observed from Table 1 above that the noise level on 24th - 25th December, 2019, was within the day time standard limit of 65.0 dB (A) Leq (for a commercial area) from the time duration of 20:00 Hrs.(8:00 pm) to 21:00 Hrs. (9:00 pm) while it was above the same standard from 21:00 Hrs.(9:00 pm) to 22:00 Hrs.(10:00 pm). During night time, however, the noise level was above the standard of 55.0 dB (A) Leq (for night time) at all time intervals from 22:00 Hrs.(10:00 pm) to 02:00 Hrs.(02:00 am). The higher level of noise monitored was mainly due to traffic noise and various celebration activities going on at Police Bazar junction and not due to noise from firecrackers alone.

From the 31st of December, 2019, to the 1st of January, 2020, it was observed that there is an overall increase in the noise level at all time intervals during day as well as night time from 20:00 Hrs. (8:00 pm) to 02:00 Hrs. (02:00 am). On this occasion, firecrackers as well as other activities forming part of the celebration contributed to the overall recorded noise level with a major contribution being the bursting and burning of crackers and sparklers.

Conclusion

From the findings of the study above, it was observed that the ambient noise levels were slightly on the higher side during Christmas while it was markedly high during New Year celebration. The bursting of firecrackers and burning of sparklers during the two festival periods especially during New Year is one of the contributing factors to the higher level of noise monitored on the occasion(s).

CHAPTER 8

ENVIRONMENTAL AWARENESS

8.1.0 World Environment Day 2019:

(1) 'Free Vehicular Emission Testing Camp' at the Additional Secretariat Parking Lot, Shillong.

World Environment Day is celebrated on 5th June of the calendar every year and the theme for the year 2019 was **“Beat Air Pollution”**. As part of the celebration, the NSS Unit, Lady Keane College, Shillong, in collaboration with the Meghalaya State Pollution Control Board, organized a 'Free Vehicular Emission Testing Camp' for petrol and diesel driven vehicles at the Additional Secretariat Parking Lot, Shillong, on the 4th June 2019.

The programme started with a short inaugural function in which the students from the Khasi Traditional Music of Lady Keane College performed a song on the theme of environmental awareness. Speaking on the occasion, Shri. S. Swer Scientist C, MSPCB, urged the public on the need for such environmental awareness and maintained that any small act towards environmental sustenance contributes towards the larger goal. This same sense of responsibility and accountability towards a healthier environment was also echoed by Shri. N. Swer, P.O, NSS Unit of Lady Keane College, as the time was ripe for such an environmental consciousness to develop.

During the camp, a total number of 155 vehicles were tested (Petrol driven – 129 nos. and Diesel driven - 26 nos.). Out of the 129 nos. of Petrol driven vehicles tested, 127 nos. complied with the

emission standard limits while 2 nos. were found to be above the limits (Table 1). Out of the 26 nos. of Diesel driven vehicles tested, 25 nos. complied with the emission standard limits while 1 no. was found to be above the limits (Table 1). Emission standards for petrol and diesel driven vehicles are indicated in Tables 2 and 3.



Inaugural function

The vehicles complying with the emission standards were issued with a 'Green Certificate' with a validity of 6(six) months from the date of issue, and vehicles not complying with the emission standards were issued a "Red Certificate". The vehicles found

to be having emissions above the Emission standards were advised to undergo checking and necessary 'tuning' of the engine so that they can be brought within the 'Pollution Under Control' category.



Emission test of Petrol vehicle in progress

Emission test of Diesel vehicle in progress



Apart from Vehicular emission testing, the student volunteers participated in the “Poster and Slogan writing Competition” and a panel of 7 judges from the Meghalaya State Pollution Control Board deliberated and selected the winners. Ms. Cassandra Khonglah won the Poster making competition with Ms. Mebarihun Thabah and Ms. Lakersha Wanbah coming in at second and third place respectively. For the Slogan writing competition, Ms. Carolina Syngkrem took home the honours of winning first place.

Vehicular Emission Testing: 4th June 2019 at Additional Secretariat Parking Lot, Shillong

Table 1: Nos. of Petrol and Diesel Driven Vehicles Tested

Type of Vehicle	Total No. of Vehicles Tested	No. of Vehicles within Permissible Limit	No. of Vehicles above Permissible Limit	Percentage of Vehicles within Permissible Limit	Percentage of Vehicles above Permissible Limit
Petrol Driven	129	127	2	98.4 %	1.6 %
Diesel Driven	26	25	1	96.1 %	3.9 %

Table 2: Emission standards for Petrol driven vehicles

Sl. No.	Vehicle Type	Present Norms CO%	New Norms CO%	(in parts per million) HC limit
1.	2 Wheelers (2/4-stroke) & 3 Wheeler (manufactured prior to 31-03-2000)	4.5	4.5	9000
2.	4 stroke 2 Wheeler and 3 Wheeler vehicles fitted with catalytic converters (manufactured after 31-03-2000)	4.5	3.5	4500
3.	4 Wheelers vehicles (manufactures after 31-03-2000) (Petrol/CNG/LPG)	3.0	3.0	1500
4.	Bharat Stage II complaint Passenger Cars/CNG Buses/LPG (Fitted with 3-way catalytic converters)	3.0	0.5	750

Source: Central Motor Vehicles Amendment Rules, 1999

Table 3: Smoke Density for all Diesel driven vehicles

Method of Test	Maximum Smoke Density		
	Light Absorption Co-efficient (l/m)	Bosch Units	Hartridge Unit
Free acceleration for turbo charged engine and naturally aspirated engine	2.45	--	65

Source: Central Motor Vehicles Amendment Rules, 1999

(1) 'Free Vehicular Emission Testing Camp' at Byrnihat, Ri Bhoi District.

World Environment Day is celebrated on 5th June of the calendar every year and the theme for the year 2019 was **"Beat Air Pollution"**. As part of the celebration, the Office of the Transport Department, Ri-Bhoi District, Government of Meghalaya, in collaboration with the Meghalaya State Pollution Control Board organized a 'Free Vehicular Emission Testing Camp' for petrol and diesel driven vehicles at Byrnihat, on the 5th June 2019.



Overview of the Vehicular Emission Testing Camp

During the camp, a total number of 90 vehicles were tested (Petrol driven – 40 nos. and Diesel driven - 50 nos.). Out of the 40 nos. of Petrol driven vehicles tested, 38 nos. complied with the emission standard limits while 2 nos. were found to be above the limits (Table 1). Out of the 50 nos. of Diesel driven vehicles tested, 47 nos. complied with the emission standard limits while 3 nos. was found to be above the limits (Table 1). Emission standards for petrol and diesel driven vehicles are indicated in Tables 2 and 3.

The vehicles complying with the emission standards were issued with a 'Green Certificate' with a validity of 6(six) months from the date of issue, and vehicles not complying with the emission standards were issued a "Red Certificate". The vehicles found to be having emissions above the Emission standards were advised to undergo checking and necessary 'tuning' of the engine so that they can be brought within the 'Pollution Under Control' category.



*Emission test
of Diesel driven vehicle in progress*



*Emission test
of Petrol driven vehicle in progress*

Vehicular Emission Testing: 5th June 2019 at Byrnihat, Ri-Bhoi District.

Table 1: Nos. of Petrol and Diesel Driven Vehicles Tested

Type of Vehicles	Total No. of Vehicles Tested	No. of Vehicles within Permissible Limit	No. of Vehicles above Permissible Limit	Percentage of Vehicles within Permissible Limit	Percentage of Vehicles above Permissible Limit
Petrol Driven	40	38	2	95 %	5 %
Diesel Driven	50	47	3	94 %	6 %

Table 2: Emission standards for Petrol driven vehicles

Sl. No.	Vehicle Type	Present Norms CO%	New Norms CO%	(in parts per million) HC limit
1.	2 Wheelers (2/4-stroke) & 3 Wheeler (manufactured prior to 31-03-2000)	4.5	4.5	9000
2.	4 stroke 2 Wheeler and 3 Wheeler vehicles fitted with catalytic converters (manufactured after 31-03-2000)	4.5	3.5	4500
3.	4 Wheelers vehicles (manufactures after 31-03-2000) (Petrol/CNG/LPG)	3.0	3.0	1500
4.	Bharat Stage II complaint Passenger Cars/CNG Buses/LPG (Fitted with 3-way catalytic converters)	3.0	0.5	750

Source: Central Motor Vehicles Amendment Rules, 1999

Table 3: Smoke Density for all Diesel driven vehicles

Method of Test	Maximum Smoke Density		
	Light Absorption Co-efficient (l/m)	Bosch Units	Hartridge Unit
Free acceleration for turbo charged engine and naturally aspirated engine	2.45	--	65

Source: Central Motor Vehicles Amendment Rules, 1999

CHAPTER 9

PRESENT STATE OF THE ENVIRONMENT, ENVIRONMENTAL PROBLEMS AND COUNTER MEASURES

One of the beautiful hill states of North Eastern Region of India is Meghalaya measuring 22,429 Sq. Kms. of area with 29,66,889 population as per 2011 Census. The State is rich in mineral resources which are found almost in its entire southern belt. Private mining activities were very unscientific and unplanned thus causing severe water pollution and environmental degradation. Small scale industries have been increasing into larger ones, for example, from small scale industries of stone crushing into large scale cement industries which gives rise to the ecological imbalance in the State. To curb these ever increasing problems, this Board therefore, applies different measures as per the Rules in force.

Pollution Control and Waste Management:

9.1: Solid Waste Management

Indiscriminate dumping of garbage, indiscriminate discharge or disposal of domestic sewage, trade effluents, urban solid wastes due to rapid population growth and fast urbanization also contributed to the ecological imbalance in the State. In this respect, the Meghalaya State Pollution Control Board has issued a direction to all Urban Local Bodies in the State to implement the provisions of the Solid Waste Management Rules, 2016 relating to development of infrastructure for collection, storage, segregation, transportation, processing and disposal of municipal solid wastes (in areas within its jurisdiction) in accordance to the provisions and compliance criteria/standards as stipulated in the Solid Waste Management Rules, 2016.

9.2: Bio-Medical Waste Management:

Hospitals, Nursing Homes, Health Care Facilities has increased tremendously in recent years in the State and without proper methods of disposal of wastes from the health care units may pose great risk to human health and may create environmental pollution. Thus, prompting the government to implement new ways of scientific management of bio-medical wastes. The Board has issued direction to ensure that all health care units to apply for authorization in the prescribed Form II as required under Rule 10 of the Bio-Medical Waste Management Rules, 2016.

9.3: Consent Management:

Under the large-scale industrial sector cement plants falls under the 17 categories of highly polluting industries. The others were medium and small-scale industries such as power plants, lime calcination plants, ingot manufacturing and steel rolling mills, Ferro alloys manufacturing unit, stone crushing units, auto workshops, auto servicing units, D.G. Sets etc. Most of the lime calcination units were coal – fired and kilns were of traditional types (pajwa), which do not have even hood and chimney for venting out the smoke.

The Board was regulating the discharged of effluents and air emissions from industries through the issuance of Consents to Establish/Operate under Water & Air Acts. While issuing Consents, conditions were being imposed with regard to the effluent and the emission standards to which industries have to comply with. Conditions were also stipulated for setting up effluent treatment plants and/or installing of air pollution control systems whenever they were found necessary.

The Board periodically collects and analyses effluent samples for verification of compliance to the consent conditions by industrial units. The industries were also instructed to ensure that pollution control systems, whenever necessary, were installed and commissioned within a stipulated period.

During the year **2019-2020** the number of industries/firms/units which the Board granted for Consent to Establish and Consent to Operate under the Water (Prevention & Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981 is appended in the Annexure-3 and Annexure-4 respectively.

9.4: Water Quality Assessment:

The Meghalaya State Pollution Control Board (MSPCB) has established a network of Water Quality monitoring stations in the State. The present network comprises of 54 stations in the State under the National Water Monitoring Programme (NWMP). The monitoring network covers 20 Rivers, 4 Lakes, 7 springs/wells.

Out of the 81 stations, the following water bodies have been identified by CPCB as polluted stretched in the State of Meghalaya with respect to BOD level

	<u><i>Name of River</i></u>	<u><i>District</i></u>
1.	Umkhrah&Umshyrpi Rivers	: East Khasi Hills District
2.	Kyrhukhla River, Lunar River (Tributary of Lukha River) at Myndihati	: East Jaintia Hills District
3.	UmtrewByrnihat Rivers	: Ri-Bhoi District
4.	Myntdu (Jowai)	: West Jaintia Hills District
5.	Nanbah (Nongstoin)	: West Khasi Hills District

Measures taken:

1. The Board had informed the respective Deputy Commissioners of the district regarding the status of the water bodies with a request to take necessary steps to formulate action plan to control the pollution sources.
2. The respective Deputy Commissioners had taken up with the line Departments for formulation of action plan. The District Administration has also issued prohibitory orders against dumping of solid waste and liquid waste in the respective rivers/streams.

9.5: Air Quality Assessment:

The Meghalaya State Pollution Control Board has been assessing the ambient air quality in the State over a period of time. A monitoring network with 10 (Ten) Ambient air quality-monitoring stations under National Air Monitoring Programme (NAMP) were placed to assess the changes in air quality.

Three criteria pollutants viz. PM_{10} (Particulate Matter having an aerodynamic diameter less than or equal to $10\ \mu m$), Sulphur Dioxide (SO_2) and Nitrogen Dioxide (NO_2) were monitored for regular monitoring of air quality. The monitoring of meteorological parameters such as wind speed and direction, relative humidity and temperature were also integrated with the monitoring of air quality.

Air quality monitored during 2019 indicates that PM_{10} levels exceeded the NAAQS (annual average) at 2 sampling stations viz (i) Export Promotion Industrial Park (EPIP), Byrnihat, (Stn-III- Industrial area) and (ii) Umiam Industrial Estate, Ri-Bhoi District (Industrial area).

High concentrations of Particulate Matter (PM_{10}) levels observed at Export Promotion Industrial Park (EPIP), Byrnihat, (Industrial area) and Umiam Industrial Estate, Ri-Bhoi District which may be attributable to the buildup of pollutants owing to emissions from industries located in the industrial area, dust generated due to movement of vehicles, natural dust, and construction activities.

Industrial Pollution Control:

1. The air pollution control devices installed should be properly maintained so as to ensure control of the Particulate Emission of the plant.
2. The ambient air quality within the Plant premises and surrounding areas should be maintained within the National Ambient Air Quality Standards.
3. The Board officials inspect the industries regularly to observe the measures taken for compliance of pollution control norms.
4. Appropriate preventive measures should be adopted to reduce fugitive emission so as to control the concentration of particulate matter in the ambient air.

CHAPTER 10

ENVIRONMENTAL TRAINING/ WORKSHOP/ SEMINAR/ CONFERENCE/SUMMIT

10.1 One of the important tools in the administrative system of the Board was the Environmental Training. The Trainees of the Board who were equipped with different trainings were in turn imparting trainings with presentations to reputed Institutes/ Organizations of the State.

The Environmental Training attended by the officials of the Board during the year 2019-2020 is shown in the following Table-10.1

Table-10.1: Environmental Training attended by the Board's Officials

Sl.No.	Date	Name of Officer/Staff	Training/Workshop/Seminar/Conference Programme & Place of Training
1.	18 th -20 th June 2019	1. Dr.(Miss) D. Tariang, JSA 2. Smti H. Kharkongor, LA	Training on "Climate Change Adaptation for District Level Officials & Training of Trainers", Shillong (MBDA).
2.	6 th September 2019	1. Shri B. Girod, Jr. Accountant	"Digital Payments", MATI, Shillong
3.	12 th September 2019	1. Smti E. Shilla, AEE 2. Smti M.N. Diengdoh, SSA	Workshop on Implementation Strategy of the Sexual Harassment of Women at Workplace, MATI, Shillong.
4.	13 th -21 st Sept. 2019	1. Shri C.P. Marak, IFS, Chairman 2. Shri Y.F. Laloo, AEE	"Best Practices in Environmental Governance" organised by CSE, New Delhi to be held at Sweden.
5.	14 th November 2019	1. Shri M.S. Tiewsoh, AEE	Workshop on "Execution of Action Plans for Polluted River Stretches-North East States", under National Hydrology Project at Shillong
6.	30 th January 2020	1. Shri M.S. Tiewsoh, AEE 2. Shri A. Lyngdoh, JSA	Workshop on "Restoration of Polluted Water Bodies", CPCB, Delhi
7.	13 th -14 th Feb. 2020	1. Smti. R.R. Marak, AEE 2. Dr.(Miss) D. Tariang, JSA	Inspection and Monitoring of Brick Kilns, Centre for Science and Environment, New Delhi.
8.	17 th -21 st Feb. 2020	1. Shri C.P. Marak, IFS, Chairman 2. Smti. R.R. Marak, AEE	"Geoenvironment 2020 on Contaminated Sites" Delhi.
9.	16 th March 2020	1. Shri J.F. Lamurong, AEE 2. Shri L. Shylla, Sr. Technical Asstt.	Workshop on Compliances of Hazardous Waste & E-Waste Management Rules, Guwahati

CHAPTER 11

OTHER ACTIVITIES OF THE BOARD

11.0 WASTE MANAGEMENT

11.0.1 Bio-Medical Waste Management Rules, 2016

The Meghalaya State Pollution Control Board was a Prescribed Authority for implementation of the Bio-Medical Waste Management Rules, 2016 in the State of Meghalaya.

The Meghalaya State Pollution Control Board carried out the following duties and responsibilities in implementation of the Bio-Medical Waste Management Rules, 2016.

1. Compilation of data and submission of the same in annual report to the Central Pollution Control Board.
2. Grant and renewal, suspension or refusal, cancellation or of authorization under these rules.
3. Monitoring of compliance of various provisions and conditions of authorization.
4. Action against health care facilities or common bio-medical waste treatment facilities for violation of these rules.
5. Organising training programmes for staff of health care facilities and common bio-medical waste treatment facilities on segregation, collection, storage, transportation, treatment and disposal of bio-medical wastes.
6. Inspection of Health Care Facilities from time to time to ensure compliance to the provisions of the Bio-Medical Waste Rules, 2016.

11.0.2 Status of Health Care Facilities

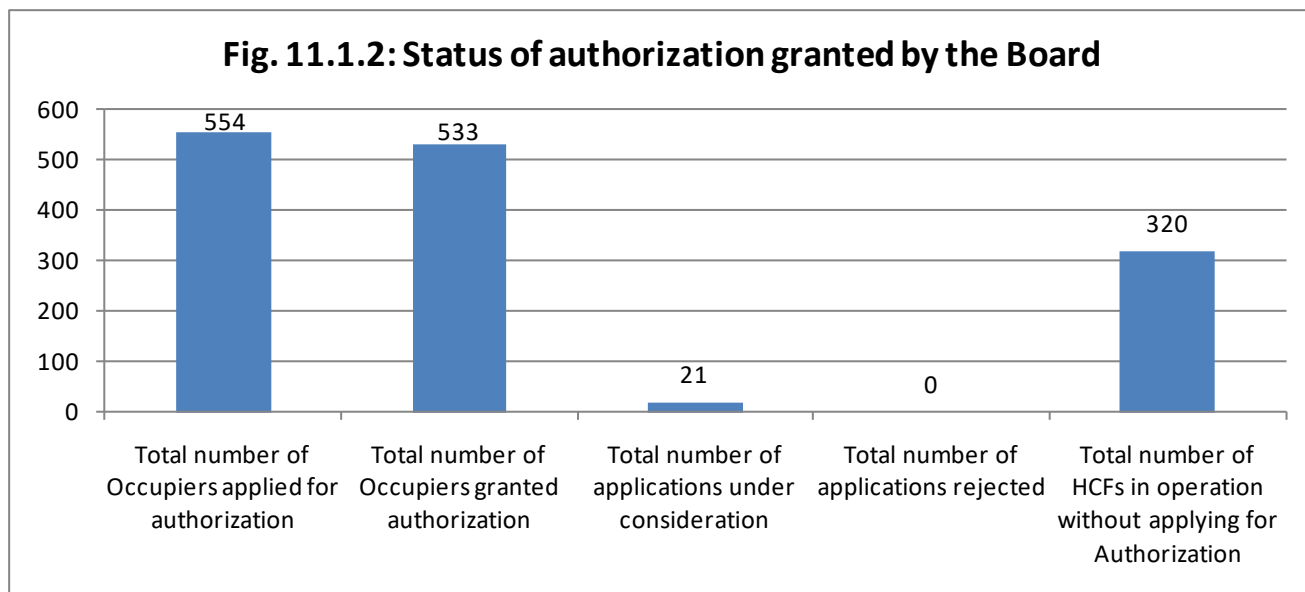
The category of Health Care Facilities (HCFs) in the State of Meghalaya is shown in the table – 11.1.1

Table – 11.1.1 Number of HCFs Category-wise in the State as on March 2020

Sl.No	Name of Health Care Facilities	2019-2020
1.	Bedded Hospitals and Nursing Homes (Bedded)	187
2.	Dispensaries, Sub Centers, Urban Primary Health Centre	454
3.	Veterinary Institutions	118
4.	Animal Houses	Nil
5.	Pathological Laboratories, Clinical Establishment, Eye Care Centre	113
6.	Research Institutions	1
7.	AYUSH	1
TOTAL		874

11.0.3 Status of Authorization under Bio-Medical Waste Management Rules, 2016

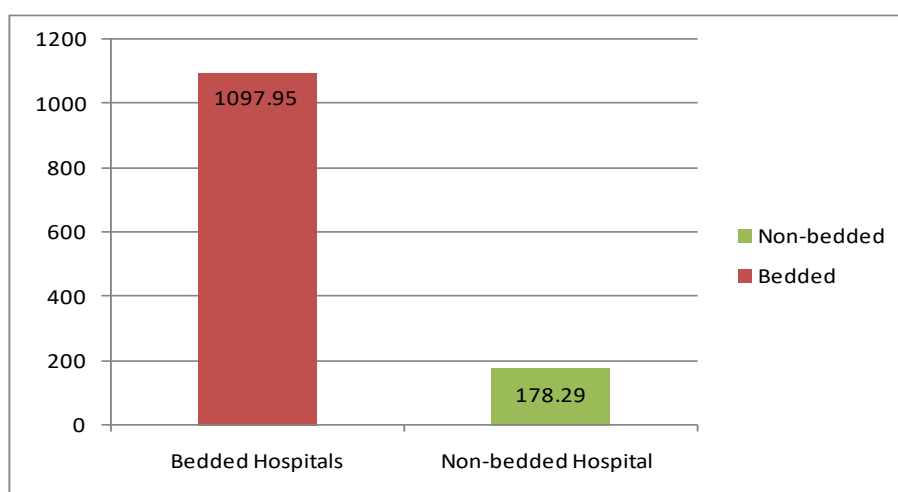
Status of authorization granted by the Board to the Health Care Facilities under Bio-Medical Waste Management Rules, 2016 is shown in the figure below:



11.1.3 Status of Bio-medical Waste Generation

The total quantity of Bio-medical Waste Generation in the State during the year was 1276.24 kg/day. Out of which, 1097.95 kg/day was generated by bedded HCFs and 178.29 kg/day from non-bedded HCFs (Fig. 11.1.3).

Fig. 11.1.3 Bio-medical Waste from Bedded and Non-bedded HCF



Total 1276.24 Kg/day

The district-wise distribution of Bio-medical Waste Generation is as shown in Table 11.1.3.

Table 11.1.3 District Wise Bio-medical Waste Generation (for the year 2019)

Sl. No.	Name of the District	Bio-medical Waste Generation (in Kg/day)
1.	East Khasi Hills	657.9583
2.	West Khasi Hills	98.7002
3.	South West Khasi Hills	7.24
4.	West Jaintia Hills	292.597
5.	East Jaintia Hills	1.299
6.	West Garo Hills	88.7431
7.	South Garo Hills	29.5695
8.	East Garo Hills	23.3357
9.	North Garo Hills	2.025
10.	Ri Bhoi	64.2461
11.	South West Garo Hills	10.528
Total		1276.24

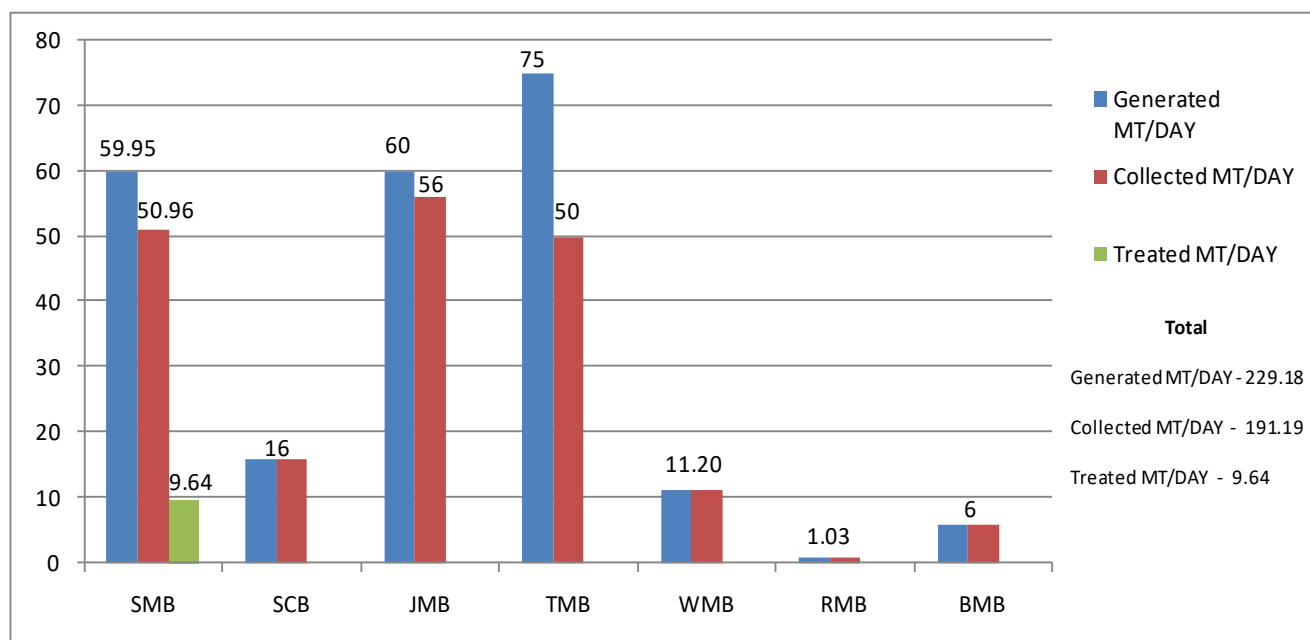
11.1.4. Bio-medical Waste Treatment and Disposal

The number of Health Facilities having captive treatment and disposal facilities were 187 and the total bio-medical waste treated and disposed by captive treatment facilities in kg/day were 962.32 kg/day. Bio-medical waste treatment and disposal by Common Bio Medical Waste Treatment Facilities was available only in Shillong. The facility comprised of a double chambered incinerator of 100 kg/hr capacity and located at Mawlai Mawiong, Shillong. The facility is being operated by the Shillong Municipal Board and has been providing service to 12 hospitals, 1 Veterinary Hospital, 1 Medical Research Institution, 4 Diagnostic Centres and 4 Dispensaries. The average quantity of bio-medical waste disposed in the facility is about 491.5 kg/day.

11.2.0 SOLID WASTE MANAGEMENT

The Meghalaya State Pollution Control Board enforced the Solid Waste Management Rules, 2016 through local bodies and review implementation of these rules twice a year in coordination with the Directorate of Urban Affairs, Government of Meghalaya and the Deputy Commissioner of the respective District. The State is having 7(Seven) Local Bodies viz. Shillong Municipal Board (SMB), Shillong Cantontment Board (SCB), Jowai Municipal Board (JMB), Tura Municipal Board (TMB), Williamnagar Municipal Board (WMB), Resubelpara Municipal Board (RMB) and Baghmara Municipal Board (BMB). These Municipal Authorities were responsible for managing the solid waste generated within their respective jurisdiction. The Shillong Municipal Board however, has extended its disposal facility for other town outside its jurisdiction falling under the Shillong Urban Agglomeration. The status of generation and collection of Solid in the respective towns during 2019-2020 is as shown in the Fig. 11.2.1

11.2.1 Status of Solid Waste Generation, Collection & Treatment made by local bodies YEAR 2019-2020



(Municipal Authorities)

11.2.1 Status of Waste Collection, Segregation, Storage, Transportation, Processing and Disposal

Local Body	SMB	SCB	TMB	JMB	WMB	BMB	RMB
Activity							
Collection							
• Quantity (MT/Day)	50.96 MT	16 MT	50 MT	56 MT	11.20 MT	6 MT	1.03 MT
• Door to Door (Y/N)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
• Garbage Bins (Y/N)	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Segregation							
At Source (Y/N)	No	Yes	No	No	No	No	No
At Disposal Site (Y/N)	Yes	Yes	No	No	No	No	No
Secondary Storage							
No. of Masonry Bins	Nil	60	35	Nil	21	14	12
No. of Dustbin	Nil	88	62	Nil	15	200	8
No. of Containers	Nil	-	16	Nil	-	-	-
Transportation Equipment							
No. of Tractor	Nil	-	1	Nil	Nil	-	-
No. of Non-Tipping Truck	3	-	1	2	-	-	-
No. of Tipping Truck	18	2	18	4	2	1	1
No. of Dumper Placer	1	2	2	-	3	1	1
No. of Refuse Collection	1	1	1	-	-	-	-
No. of Robot Lifter	2	-	1	-	1	-	-
Others	15	-	-	-	1	-	-

Local Body	SMB	SCB	TMB	JMB	WMB	BMB	RMB
Activity							
Processing							
Composting	9.64	-	-	-	-	-	-
Shredding	TPD	-	-	-	-	-	-
Compacting	-	-	-	-	-	-	-
Refuse derived Fuel	-	-	-	-	-	-	-
Disposal							
Sanitary Landfilling (Y/N)	Yes	Disposal	No	No	No	No	No
Dumping Yard	Yes	at SMB facility	Yes	Yes	Yes	Yes	Yes

11.2.2 Monitoring at Waste processing/Landfills sites

Sl. No.	Name of facilities	Ambient Air	Ground Water	Leachate Quality	Compost Quality	VOCs
1.	Dumping Site of Shillong Municipal Board	Yes	Yes	Yes	No	No
2.	Landfill Site of Jowai Municipal Board	Yes	No	No	No	No
3.	Landfill Site of Tura Municipal Board	Yes	No	No	No	No
4.	Landfill Site of Williamnagar Municipal Board	Yes	No	No	No	No

11.3.0 PLASTIC WASTE MANAGEMENT RULES 2016

The implementation of the Plastic Waste Management Rules 2016 is in conjunction with the Solid Waste Management Rules, 2016. All the Municipalities in the State are responsible for proper management of Plastic Waste generated within their respective jurisdiction. According to the information obtained from the Local Bodies, the generation of Plastic Wastes in the State during 2019-2020 is about 1283.34 MT.

The manufacturing units registered under Plastic Waste Management Rules, 2016 are as follows

M/S Megha Polycon (P) Ltd	: DPE/LLDPE Water Storage Tanks
M/S Kakarania Innovative Systems (P) Ltd	: Polythene tubes; Plastic bags (plain/printed); Plastic sheet films; Linear Wrappers; Laminated rolls/pouches (plain/printed)
M/S Meghalaya Polymers	: Water Stage Tanks
M/S K R Polymers	: Plastic Pipes and Pipe Fittings

Details of Plastic Waste Management (PWM):

For the proper management of Plastic Waste, the following procedures are being followed:

Collection & Segregation:

The Waste is collected as municipal waste into dry waste and wet waste. The plastic waste is segregated from the dry waste at the dumpsite and collected for compaction and bailing.

Disposal:

(Co-processing): Dalmia Bharat Cement, Lumshnong, East Jaintia Hills District, has informed Regional Director, Northeastern Zone, CPCB that their plant was ready for co-incineration of plastic and solid waste.

Road Construction:

A 1 km road was constructed in Nongkynjeng Village in West Khasi Hills, Meghalaya using plastic waste.

Partial or complete ban on usage of plastic carry bags:

The use and sale of plastic bags less than 50 microns has been prohibited and public notice has been issued regarding compliance to the PWM Rules 2016.

It may also be mentioned that Raids/Checking/Survey were conducted by the District Magistrate, East Khasi Hills District on the local market for compliance to the PWM Rules 2016.

11.4.0 The Batteries (Management and Handling) Rules, 2001.

The implementation of the Batteries (Management and Handling) Rules, 2001 was a continuous process.

Part-A: Quantity of used leads batteries channelized to registered recyclers for the year 2019-2020

A - Manufacturer

Sl. No.	Name & Address of Manufacturers	Quantity of batteries sold		Quantity of batteries sold		NO of collection centres	No of dealers	No of registered dealers
		Nos.	Weights in kgs.	Nos.	Weights in kgs.			
1.	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

B - Assembler

Sl. No.	Name & Address of Assembler	Quantity of batteries assembled & sold		Quantity of batteries sent to Authorized recyclers	
		Nos.	Weights in kgs.	Nos.	Weights in kgs.
1.	GreenVision Technologies Pvt. Ltd.	Nil	Nil	Nil	Nil

C - Importer

Sl. No.	Number of Importer	Quantity of batteries Imported & sold		Quantity of batteries sent to Authorized recyclers	
		Nos.	Weights in kgs.	Nos.	Weights in kgs.
1.	Nil	Nil	Nil	Nil	Nil

D - Bulk Consumers

Sl. No.	Number of Bulk Consumers	Number of Bulk Consumers submitted returns	Quantity of batteries Sold		Quantity of batteries sent to Authorized Recyclers	
			Nos.	Weights in kgs.	Nos.	Weights in kgs.
1.	9	5	96	700	285	6001

E - Auctioneers

Sl. No.	Number of Auctioneers	Number of Auctioneers submitted returns	Quantity of batteries Sold		Quantity of used batteries sent to Authorized Recyclers	
			Nos.	Weights in kgs.	Nos.	Weights in kgs.
1.	Nil	Nil	Nil	Nil	Nil	Nil

F - Recyclers

Sl. No.	Number of Authorized Recyclers	Capacity of recyclers in MT/ year	Number of Authorized Recyclers submitted returns	Weight of used batteries received from the Recycler							
				Manufacturer	Assembler	Dealer	Importer	Bulk Consumers	Auctioneer	Self Imported	Other Sources
1.	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil

11.5.0 Hazardous Waste Management

All the hazardous waste generating industries in the State are responsible for proper implementation of the Hazardous & Other Waste Management Rules 2016.

Annual Inventory of Hazardous Waste Management (2019-2020)

Sl. No.	Name of the District	Number of Hazardous Waste Generating Industry	Authorized Quantity of Hazardous Waste (Metric Tonne)				Quantity of Hazardous Waste generated as per Annual Return within the State/UT (Metric Tonne)				Quantity of Hazardous Waste imported during the year (Metric Tonne)	Quantity of Hazardous Waste exported during the year (Metric Tonne)
			Landfillable	Incinerable	Recyclable	Utilizable	Landfillable	Incinerable	Recyclable	Utilizable		
0	1	2	3	4	5	6	7	8	9	10	11	12
1.	Ri-Bhoi	7	24		430		12.65		414.473		Nil	Nil
2.	East Khasi Hills	1			19.08				8.63			
3.	East Jaintia Hills	11			64.133				51.306			

11.6.0 E-Waste (Management) Rules, 2016:

E-Waste (Management) Rules, 2016 which was notified vide Notification No.GSR 339(E) dated 23/03/2016 by the Ministry of Environment, Forest & Climate Change, Government of India and enacted and put into force from 1st October,2016. The objective of this Rules was to improve the e-waste management system in the Country and to eliminate the constraints in implementation of the existing Rules and also to give thrust on waste minimization, recycling, for treatment and processing, scientific disposal etc.

The E-Waste Management Rules, 2016 was applied to every manufacturer, producer, consumer, bulk consumer, collection centres, dealers, e-retailer, refurbisher, dismantler and recycler involved in manufacture, sale, transfer, purchase, collection, storage and processing of e-waste or electrical and electronic equipment including their components, consumables, parts and spares which made the product operational.

The Meghalaya State Pollution Control Board has published Public Notice for awareness of all manufacturers, Producers, Collection Centre, Dealers, Refurbishes, Consumers & Bulk Consumers, Dismantler, Recycler on the provisions of E-Wastes Management Rules, 2016 for necessary compliance.

There was no E-Waste Manufacturing unit, Recycling unit within the State of Meghalaya.

M/s Karo Sambhav Pvt Ltd. and M/s RLG Reverse Logistics India Pvt. Ltd. are engaged by leading Producers as part of the EPR to carry out awareness programme and to collect the E-Waste on their behalf within Meghalaya.

QUANTITY OF E-WASTE COLLECTED FOR THE YEAR 2019-2020 IN THE STATE OF MEGHALAYA

	ELECTRICAL AND ELECTRONIC EQUIPMENT ITEM/ CODE	QUANTITY (NUMBERS)	QUANTITY (KG)
COLLECTION PERIOD 1 st APRIL 2019 to 31 st March 2020	Canon ir 4225 fuse film & pressure roller	-	1.84
	Network switch	-	2.5
	Atx smps	-	3.44
	Mouse	-	1.24
	Media converter	-	0.96
	Cpu fan	-	1.26
	5v adaptor	-	1.32
	Keyboard	-	2.3
	Mother board	-	2.16
	Lan card	-	0.36
	Ups	-	11.94
	Plotter smps	-	1.06
	Plotter carriage belt	-	0.38
	Plotter gl card	-	0.14
	Printer pressure roller	-	0.76
	Monitor with stand	-	29
	Hpsv lamp box no 01	-	26.6
	Hpsv lamp box no 02	-	
	Tube light box no 03	-	49.00
	Tube light box no 04	-	
	Tube light box no 05	-	
	Tube light box no 06	-	
	Tube light box no 07	-	
	Tube light box no 08	-	277.58
	Itew6	-	
	Itew3	-	38.50
	Printer	47 NOS	4262.00
	Type machine	2 NOS	
	Xerox machine	4 NOS	
	Fax machine	2 NOS	
	Ups	46 NOS	
	Heater	40 NOS	
	Type writer	16 NOS	
	Monitor	73 NOS	
	Blower	2 NOS	
	Cpu	31 NOS	
	Speaker	2 NOS	
	Keyboard	47 NOS	

COLLECTION PERIOD 1 st APRIL 2019 to 31 st March 2020	ELECTRICAL AND ELECTRONIC EQUIPMENT ITEM/ CODE	QUANTITY (NUMBERS)	QUANTITY (KG)
	Battery	33 NOS	4262.00
	Ribbon cartridge	34 NOS	
	Toner cartridge	133 NOS	
	Cpu fan	2 NOS	
	Scanner	3 NOS	
	Cash receipt printer	2 NOS	
	Mouse	11 NOS	
	Electronic type writer	16 NOS	
	Buffer cleaner	1NO	
	Dot matrix printer	5 NOS	
	Telephone set	16 NOS	
	Cartridge	12 NOS	
	Xerox toner	33 NOS	
	Standing fan	5 NOS	
	Hp deskjet3845	1 NO	
	Floor standing fan	1 NO	
	Power adapter	3 NOS	
	Electronic writing pad	10 NOS	
	Cd rom drive	21 NOS	
	Network router	1NO	
	Modem	3 NOS	
	Ethernet switch	1 NO	
	Dat drive	1 NO	
	Eliminator	1 NO	
	Chair	2 NOS	
	Flourescent tube	229 NOS	
	Electric kettle	2 NOS	
	Smps psp	3 NOS	
	Ac voltas	1 NO	
	Cvt	1 NO	
	Voltage stabiliser	5 NOS	
	External aux box	1 NO	
	Graphic	2 NOS	
	Mother board	3 NOS	
	Hard drive	1 NO	
Ram i no cyclostyle machine	4 NOS		
Aquard	1NO		
Calculator	3 NOS		
Scientific clock	1 NO		
REFRIGERATOR	1 NO		
TOTAL E-WASTE COLLECTED FOR THE YEAR 2019-2020 (i.e. From APRIL 2019 to March 2020) :4714.34 kgs			

11.7.0 Construction and Demolition Waste Management Rules, 2016:

Construction and Demolition Waste Management Rules, 2016 which was notified vide Notification No.G.S.R.317(E) dated 29th March 2016 by the Ministry of Environment, Forest and Climate Change, New Delhi with the objective of this Rule is to improve the management of waste resulting from construction, re-modeling, repair and demolition of any civil structure of individual or organisation or authority who generates construction and demolition waste such as building materials, debris, rubble.

The Construction and Demolition Waste Management Rules, 2016 implies mostly to service provider who provide services like water, sewerage, electricity, telephone, roads, drainage etc. often generate construction and demolition waste during their activities, which includes excavation, demolition and civil work. The Board had advised the Director, Urban Affairs Department to ensure formulation of the policy on Construction and Demolition Waste Management Rules, 2016. The Board, had also instructed the Government Departments/Agencies viz Meghalaya Urban Development Authority, Public Works Department (Roads & Buildings) to prepare Comprehensive Waste Management Plan as required under Construction and Demolition Waste Management Rules, 2016. The Public Works Department had intimated the Board that the Department had already initiated the process for identification of land required for disposal of construction and demolition wastes generated due to construction.

The Meghalaya Urban Development Authority issued a Press Release that prohibited all owner, contractors, firms including Government Department undertaking building construction to dump construction and demolition waste of building materials etc. on roadside, drains and public space.

Site for collection and processing facility yet to be identified by the concerned State Department.

CHAPTER 12

LEGAL MATTERS

12.1: CASES PENDING IN THE COURTS INVOLVING THE MEGHALAYA STATE POLLUTION CONTROL BOARD AS ON 31.03.2020.

Cases on Environmental issues involving the Meghalaya State Pollution Control Board (MSPCB) either directly or indirectly and which are pending in the Hon'ble Supreme Court, the High Court, the National Green Tribunals and District Courts are highlighted in the following tables:-

12.1.1: CASES IN THE HON'BLE SUPREME COURT

The following table highlights the cases involving Meghalaya State Pollution Control Board in the Hon'ble Supreme Court during 2019-2020:-

Sl. No.	Name of the Case	Subject Matter	Involvement
1.	SLP NOs.16308/07 with SLP 16314/07, 16317/07, 16467-16469/07, WP Nos.131/11, 141/11, 289/11344/11, 69/11,182/11, 354/11 and 304/11. Contempt Petition Nos. 236/11, 237/11, 288/11, 356/11, 37/12 in SLP No. 16308/07 and Contempt Petition No. 348/11 in SLP No. 19467- 19469/07. Ankur Gutka ETC. ETC Petitioners Versus- Indian Asthama Care Society Respondents AND ORS. ETC. ETC	Plastics Waste (Management and Handling) Rules,2011 and the Municipal Solid Waste (Management and Handling) Rules,2000	Pollution Control Boards became impleaded vide Order Dt. 3-4-2013- filing affidavit and complying to directions from time to time.
2.	Writ Petition (C) No. 657 of 1995- Research Foundation for Science Technology and Natural Resource Vs Union of India & Ors	Hazardous Waste.	Complying the directions of the Court and recommendations of the Supreme Court Monitoring Committee and submitting report through the Central Pollution Control Board.
3.	Writ Petition (C) No. 110/2006- Peoples Rights & Social Res. Centre & Ors Vs Union of India & Ors	Air Pollution Control Devices in quartz industries	Answering through Central Pollution Control Board.
4.	Writ Petition(Civil) No.728/2015- Arjun Gopal Vs Union of India	Air Pollution by bursting of Fire Crackers	Direct Respondents
5.	Supreme Court Order Dt 01.11.2017 in S.M.W (Civil) No.1/2015 – In Re: Outrage as Parents end life after child's dengue death & Ors	Solid Waste Management Rules, 2016	Answering through the State Government

Sl. No.	Name of the Case	Subject Matter	Involvement
6.	Supreme Court of India, Civil Appeal No 1657 of 2018, Bharat Jhunjhunwala versus Pushp Saini and others	Pertain to release and maintenance of minimum environmental flows (e-flow) in rivers downstream of all hydro – power projects situated in India.	Direct Respondent
7.	Civil Appeal no (s) 5826-5827 of 2019 Mathala Chandrapati Rao Vrs Union of India & Ors	Indigenous cows	Direct Respondent
8.	Writ Petition(s) Civil No. 13029/1985 M. C. Mehta vrs union of india & ors	Ban on the use of domestic Pet-coke by industries	Direct Respondent & answering through the State Government

12.1.2: CASE DISPOSED

Sl. No.	Name of the Case	Subject Matter	Involvement
1.	Civil Appeal No5272 of 2016 KA Hima Nongstoin Land Owners, Coal Traders and Producers Association VRS All Dimasa students Union Dima Hasao Dist(15-16)	Coal Mining	Direct Respondent
2.	Civil Appeal Dairy No. 3067/2018 Leber Laloo Vs All Dimasa Students Union, Hasao District Committee & Ors.	Coal Mining	Direct Respondent

12.1.3: CASES IN THE HON'BLE HIGH COURT

In the Hon'ble High Court, the cases have involved the Meghalaya State Pollution Control Board either as Direct Respondent or as Proforma Respondent and when involved indirectly the Meghalaya State Pollution Control Board answers through the State Government.

The following table highlights the cases involving the Meghalaya State Pollution Control Board in the Hon'ble High Court during 2019-2020

Sl. No.	Name of the Case	Subject Matter	Involvement
1.	P.I.L no. 14 of 2018 Shri. Riton Sun vrs State of Meghalaya & Ors	Umran Diary situated in Umsning, Ri – Bhoi District, Meghalaya	MSPCB is direct Respondent
2.	P.I.L No 2 of 2019 "Distribution of LPG Cylinders in the State of Meghalaya" Vrs State of Meghalaya	LPG storage and bottling capacity at Umiam, Ri Bhoi District	MSPCB is direct Respondent

Sl. No.	Name of the Case	Subject Matter	Involvement
3.	P.I.L (Sou Moto) No. 10 of 2019, In Re: Cleanliness of Umiam Lake Vs State of Meghalaya represented by its Chief Secretary	Cleanliness of Umiam Lake	MSPCB is direct Respondent
4.	P.I.L No 20 of 2019 Shri A.D. Lyngdoh Vs State of Meghalaya & Ors	Construction of salbs over Wah sohkhur streams	MSPCB is direct Respondent

In P.I.L No. 14 of 2018 Shri. Riton Sun vrs State of Meghalaya & Ors, P.I.L No 2 of 2019 "Distribution of LPG Cylinders in the State of Meghalaya" Vrs State of Meghalaya, P.I.L (Sou Moto) No. 10 of 2019, In Re: Cleanliness of Umiam Lake Vs State of Meghalaya represented by its Chief Secretary, P.I.L No 20 of 2019 Shri A.D. Lyngdoh Vs State of Meghalaya & Ors, the Meghalaya State Pollution Control Board answers directly in the High Court and P.I.L No. 10/2018 Court on its Own Motion vs State of Meghalaya, W.P.(C) No. 504 of 2019 Shri Dame Wanhi Rymbai & Anr. Vrs State of Meghalaya & Ors, P.I.L No 13 Of 2019 Shri S.P. Mahanta Vrs State of Meghalaya & Others – Reg got disposed of.

12.1.4: CASE DISPOSED

Sl. No.	Name of the Case	Subject Matter	Involvement
1.	P.I.L No. 10/2018 Court on its Own Motion vs State of Meghalaya	Greater Shillong WaterSupply Scheme	MSPCB was direct Respondent
2.	W.P.(C) No. 504 of 2019 Shri Dame Wanhi Rymbai & Anr. Vrs State of Meghalaya & Ors	Coke oven Plants	MSPCB was direct Respondent
3.	P.I.L. No 13 Of 2019 Shri S.P. Mahanta Vrs State Of Meghalaya & Others - Reg	To undo Traffic Congestion	MSPCB was indirect Respondent

12.2: CASES IN THE HON'BLE NATIONAL GREEN TRIBUNALS

Since the inception of the National Green Tribunal (NGT), cases involving the Meghalaya State Pollution Control Board have been mostly filed in the Tribunals. The NGT had constituted Zonal Benches for hearing cases in the Eastern Zone, in the Western Zone, in the Southern Zone and the Central Zone. The Principal Bench sometimes carries out Circuit Benches in the different States of India in matters having direct connection with the concerned state for quick disposal of the cases.

The following tables display the cases and their nature of involvement in different Tribunals and benches:-

CASES IN THE HON'BLE NATIONAL GREEN TRIBUNAL

12.2.1:PRINCIPAL BENCH, NEW DELHI

Sl. No.	Name of the Case	Subject Matter	Involvement
1.	Appl. No. 199/2014, Almitra H. Patel & Anr. Vs. Union of India & Ors.	Municipal Solid Waste Management	Complying to directions of the Tribunal and submitting reports through the CPCB.
2.	Original Application No.117 of 2014 Shantanu Sharma Vs Union of India & Ors	Fly Ash and its disposal	Direct Respondent and filing Affidavits.
3.	Original Application No.102 of 2014-Sandplast(India) Ltd & Anrs Vrs Ministry of Environment & Forest & Ors	Fly Ash	Direct Respondent and filing affidavit in answering the Tribunal
4.	Original Application No. 110(THc)/ 2012, Threat to Life Arising Out of coal Mining in South Garo Hills District .Vs. State of Meghalaya.	30 coal laborers trapped in a coal mine, 15 escaped and 15 reported to have died inside the coal mine.	Direct Respondent - filing affidavits and complying to directions of the tribunal. Committee Headed by Retd. Judge Guwahati High Court, Justice B.P. Katakey has been form to submit a report on the execution of the Order of the tribunal.
5.	Original Application No. 593 of 2017 in W.P. (Civil) No. 375 of 2012 Paryavarana Suraksha Samiti & Anr Vs Union of India & Ors	NGT, Delhi follows up the State Pollution Control Boards on Order/ Direction of the Supreme Court.	MSPCB files affidavits submitting reports of actions taken on Order/ Directions of the Supreme Court to the Tribunal
6.	Original Application No. 247 of 2017 (M.A. No. 469 of 2017) Central Pollution Control Board Vs. State of Andaman & Nicobar & Ors.	Plastic Waste Management Rules	Direct respondent- filed affidavit and files Action taken Report to CPCB.
7.	Original Application 200/2014 M.C. Mehta Vs Union of India & Ors	Prevention and control of pollution of river Ganga and its Tributaries.	The matter is being processed in light of O.A.606/2018 and the 'River Rejuvenating Committee' formed in O.A. No. 673/2018
8.	Original Application No 56/2013 and Original Application No 57/2013Satish Kumar Vs UOI & Ors and Mahavir Singh Vs UOI & Ors.	Order DT. 20-07-2018 – appointing a person of legal background in SPCBs.	Answering through the State Government.

Sl. No.	Name of the Case	Subject Matter	Involvement
9.	Original Application No. 804/2017 Rajiv Naryana & Anr. Vs Union of India & Ors.	Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules, 2016. Setting up of TSDF and taking immediate action against erring units by the concerned authorities / regulatory bodies.	MSPCB answers through the CPCB
10.	Original Application No. 606/2018 Solid Waste Management Rules, 2016	Solid waste management and allied issues	MSPCB answers through the State Government
11.	Original Application NO. 673/2018 News item published in "the Hindu" Authored by shri jacob koshy titled " More River Stretches are now Critically Polluted : CPCB"	Pollution of river Stretches	State Committee formed as per directions. MSPCB is member.
12.	Original Application No. 48/2016 Vivek Tyagi Vs State of U.P. & Ors.	To prevent discharge of untreated sewage in water bodies, including ponds and Upper Ganga Canal, endangering public health in Niwari town, 20 kms from Ghaziabad	MSPCB answers through the State Government
13.	Original Application NO. 681/2018 News Item published in "the times of India" authored by Shri. Vishwamohan titled " Nacp with multiple timelines to clean air in 102 cities to be released around august 15"	Remedial measures to be taken to bring the air quality of 102 cities identified as 'non-attainment cities'	State Committee formed as per directions. MSPCB is member.
14.	Original Application No. 46/2018 with Original Application 1083/2018, Nuggehalli Jayasimha with Residents of C2 Block Aya Nagar Vrs. Government of NCT of Delhi.	Dairies and Gaushalas in the State/UT	MSPCB answers through CPCB
15.	Original Application No. 710/2017, 711/2017, 712/2017, AND 713/2017 Shailesh Singh Vs Shella Hospital & Trauma centre Shahjhanpur & ors Kailash Hospital and Heart Institute & Ors Shri Ganga Charan Hospital (p) ltd., Bareilly & ors Katiyar Nursing Home, Hardoi & ors	Biomedical Waste Management	Complying to directions of the Tribunal coming through the CPCB and the State Govt.(Forest& Env. Dept.)
16.	Original Application 400/2019 Social action for Forest & Environment (safe) vrs Union of India & ors	Pryrolysis Industries	MSPCB answers through CPCB

Sl. No.	Name of the Case	Subject Matter	Involvement
17.	Original Application No. 173/2018 & Original Application No. 186/2016 In the matter titled Sudarsan Das vs State of West Bengal & Ors & Satendra Pandey Vs Ministry of Environment Forest & Climate Change & Anr respectively (NGT& Ors Vrs Virender Singh State of Gujarat & others)	Sand Mining	MSPCB answers through the State Government
18.	Original Application No. 325/2015 Lt. Col. Sarvadaman Singh Oberoi Vrs Union of India & Ors (River Restoration)	Restoration of all the water bodies	MSPCB answers through the State Government and CPCB and matter is also taken in light of O.A. No. 673/2018 in which a State Committee has been formed and MSPCB is also a member.
19.	Original Application NO. 512/2018 Shailesh Singh Vrs State of UP & Ors	E-waste	MSPCB answers through the State Government
20.	Original Application No. 1038/2018, In view of the News item titled 'CPCB to rank Industrial Units on Pollution Levels' published in "The Asian Age"	'CPCB to rank industrial units on pollution levels'	MSPCB answers through CPCB
21.	Original Application No. 148/2016 Mahesh Chandra Saxena Vrs South Delhi Municipal Corporation & Ors	utilization of treated waste water from the STPs	MSPCB answers through CPCB
22.	Original Application 581/2018 The Edayar Resident's Association, Edayar Vrs The Governement Of India & Ors	Removing the pollution and rejuvenating the polluted Karamana River in Thiruvananthpuram district.	The matter is taken in light of O.A. No. 673/2018 which pertain to River Rejuvenation Committee (RCC)
23.	Original Application No. 519/2019 & Original Application No. 386/2019 News Item Published In "The Times Of India" Authored By Jasjeev Gandhiok & Paras Singh Titled "Below Mountains Of Trash Lie Poison Lakes" With Centre For Wildlife And Environment Litigation Vrs Union Of India & Ors	Legacy Waste	MSPCB answers through CPCB
24.	Original Application No. 95/2018 Aryavart Foundation Vs Vapi Green Enviro Ltd & Ors	Pollution By Industries And Cetp	MSPCB answers through the State Government

Sl. No.	Name of the Case	Subject Matter	Involvement
25.	Original Application No. 496/2016 Tribunal on its own motion Applicant Versus Govt. of NCT of Delhi & Ors	Rain Water Harvesting	MSPCB answers through CPCB
26.	Original Application No. 360/2018 Shree Nath Sharma Vrs Union Of India & Ors	District Environment Plan	MSPCB answers through CPCB
27.	Original Application No. 465/2019 Kulwinder Singh Sandhu & Ors Versus Ram Murti & Ors	Carcass Disposal	MSPCB answers through CPCB
28.	Original Application No. 639/2018 Shailesh Singh Versus State of Haryana & Ors	Inspections of 'highly polluting 17 category', 'red' and 'orange' and 'green' category industries	MSPCB answers through the State Government
29.	Original Application No. 851/2018 Amit Jain Versus Union of India	pulp & paper unit importing waste paper	MSPCB answers through the State Government
30.	Original Application No. 568/2019 James Jose, Managing Director, CGR Hallmarkers Pvt. Ltd. Versus Govt. of India	Gold Assaying and Hallmarking Centres	MSPCB answers through CPCB
31.	Original Application No. 400/2017 Westend Green Farms Society Versus Union of India & Ors.	Enforcement of Environment Norms at Individual Establishments and the Area/Cluster of Restaurants/Hotels/Motels/Banquets etc.	MSPCB answers through CPCB
32.	Original Application No.621/2018 Mahendra Pandey Versus Union of India & Ors	E-waste	MSPCB answers through CPCB

12.2.2: CASES DISPOSED

Sl. No.	Name of the Case	Subject Matter	Involvement
1.	Original Application No. 260/2019 Suman, Sarpanch, Village Panchayat Dhola Majra, Sahabad, Markanda Versus State of Haryana	Charcoal kilns	MSPCB answers through CPCB
2.	Original Application No. 384 of 2016 Khalid Ashraf Vrs Union of India	prohibition of manufacture, sale, storage, purchase and use of thread made of nylon synthetic material and/or coated with synthetic substance which is non biodegradable for kite flying	MSPCB answers through CPCB

Sl. No.	Name of the Case	Subject Matter	Involvement
3.	Original Application No 843/2018 Sardar Patel Jan Chetna Education Society Vs State of Haryana & Ors	Directing the Director of Environment Haryana to take steps to specify the distance of stone crushers from educational institutions.	MSPCB answers through CPCB
4.	Original Application No. 52/2015(WZ) Bhagwan Bhadale & Anr. Vs the Commissioner, PMC & Ors.	Solid Waste Management rules, 2016	MSPCB answers through the State Level Committee.
5.	Original Application No. 24/2018/ EZ, Ambarnath Sengupta Vrs State of West Bengal & Ors	Immersion of idols	MSPCB answers through the State Government
6.	Original Application. No. 13 of 2014, Impulse NGO Network Vs. State of Meghalaya & Ors.	Illegal Mining activities in about 5000 coal mines and about one lakh quarries in Jaintia Hills District of Meghalaya.	The matter is being processed in light of O.A. No. 110(THC)/2012, Threat to life arising out of coal mining in south garo hills district vs. State of Meghalaya & Ors
7.	Original Application No. 73 of 2014, All Dimasa Students Union dima Hasao Dist. Committee Vs. State of Meghalaya & Ors.	Illegal mining in Jaintia Hills, causing acidity of the river Koopily consequently eroding the turbines of the Hydro Power Plant at the said river.	
8.	Original Application No. 186/2014. Thomas Nongtdu & Anr. Vs. The State of Meghalaya & Anr.	Coal Mining, transporting the extracted coal & Mining Plan	
9.	Original Application NO.287/2017- R.K.Momin Vs State of Meghalaya & Ors	Coal Mining	Direct Respondent and filing affidavits
10.	Original Application No. 21 of 2014-Vardhaman Kaushik Vrs Union of India & Ors and OA No.95 Of 2014- Sanjay Kulshrestha Vrs Union of India & Ors	Air Pollution and steps taken for prevention and control of Air Pollution	Replies and complies to directions of tribunal.
11.	Original Application No.124/2014 & Misc Application No.55/2014 Money Goyal & Ors Vrs MoEF & Ors	Plastic Waste	Furnished required information through the CPCB

12.3: NGT EASTERN ZONE, KOLKATA

Sl. No.	Name of the Case	Subject Matter	Involvement
1.	Original Application No.172/2016/ EZ- Sajay Laloo Vs State of Meghalaya & Ors	Contamination of River Myntdu, Jaintia Hills	MSPCB is Direct Respondent implementing the directions of the tribunal and filing affidavits

Sl. No.	Name of the Case	Subject Matter	Involvement
2.	Misc Application No, 121/2017/ EZ in W.P (C) No.375/2017(SC)- Paryavaran Suraksha Samiti & Anr Vs Union of India & Ors	Making the primary Effluent Treatment Plant fully operational within 3(three) months from the date of Judgment i.e. 22.02.2017	MSPCB is Direct Respondent implementing the directions of the tribunal and filing affidavits.
3.	Original Application No. 93/2017/ EZ- Greater Laban Community Development Society (glcds) Vs State of Meghalaya & Ors	Felling of trees and illegal construction of boundary wall Alleged encroachment of undeclared Critical Catchment Area in Lawsohtun Forest, Shillong by Secretary, Defence, Union of India	MSPCB is Direct Respondent implementing the directions of the tribunal and filing affidavits.
4.	Original Application No.158/2016/ EZ - Subhas Datta Vs State of West Bengal & Ors	Noise Pollution	MSPCB answers through the State Government and implementing the directions of the tribunal
5.	Original Application No. 48/2019 (EZ) Jitul Deka Vrs Union of India	Illegal Mining of Gravel and Stone	Direct Respondent- MSPCB answers through the State Government and implementing the directions of the tribunal and filing affidavits.

12.3.1: CASES DISPOSED

Sl. No.	Name of the Case	Subject Matter	Involvement
1.	Original Application No. 475/2018 {Earlier O.A. No. 42 (THc) of 2014(EZ), WP(C) Suo Moto 76/2012 of Meghalaya High Court, Environmental Pollution & Health Hazard in the State Vs. State of Meghalaya & Ors.	Based on a performance audit CAG Report on MSPCB that was printed in the media.	MSPCB is Direct Respondent implementing the directions of the tribunal and filing affidavits.
2.	Original Application No. 146 of 2014. Nababrata Bhattacharjee Vs. State of Meghalaya & Ors.	Pollution of the River Umkhrah & Umshyrpi.	
3.	Original Application No.15/2016/ EZ Shri James Roy Kurbah vs Shillong Municipal Board & Ors	Pollution of the River Umshyrpi.	

12.4: NGT WESTERN ZONE, PUNE

CASES DISPOSED

Sl. No.	Name of the Case	Subject Matter	Involvement
1.	Execution Application No. 03/2017 in Application No. 39 of 2013 (WZ) Dileep B. Nevatia – Vrs – Ministry of Road Transport & Highways & Anr	Noise Pollution from vehicles and Air Pollution emitted by vehicles	Complying to the directions of the Hon'ble NGT court from time to time.

12.5: CASES FILED IN THE DISTRICT COURTS OF MEGHALAYA

The NGT, Eastern Zone Bench, Kolkata in its various orders of the cases pending before it (mentioned above) had directed that the Meghalaya State Pollution Control Board to take Legal action against the defaulting industries violating the provision of the Water (Prevention and Control of Pollution) Act, 1974 and under the Air (Prevention and Control of Pollution) Act, 1981. Accordingly, complaints have been made against the defaulting industries before the Magistrate First Class of concerned Districts as empowered under relevant Sections of the Water (Prevention and Control of Pollution) Act, 1974 and the relevant section of the Air (Prevention and Control of Pollution) Act, 1981.

The following are the Complaints before the District Courts:

Sl. No.	Name of the Case	Subject Matter	Involvement
1.	Meghalaya State Pollution Control Board - Vrs - Swish Cafe	Violation of the terms and conditions of the Consent granted by the Board	Complainant
2.	Meghalaya State Pollution Control Board - Vrs - Rani Motors Sevicng Mawblei, Shillong	Non compliance to direction of MSPCB on Installation of ETP.	Complainant
3.	Meghalaya State Pollution Control Board - Vrs – Banalari World Cars Servicing Unit, Mawlai Mawdatbaki, Shillong	Non compliance to direction of MSPCB on Installation of ETP.	Complainant

CHAPTER 13

FINANCE & ACCOUNTS

The fund of the Meghalaya State Pollution Control Board comprises of contribution by the State Government in the form of Grant-in-Aid under Salary and Non-Salary Head, the Financial Assistance from the Ministry of Environment, Forests and Climate Change (MoEF&CC) under the Scheme “Assistance for Abatement of Pollution” and the Financial Assistance from the Central Pollution Control Board for monitoring of the Environment Quality under the National Programme viz. National Water Monitoring Programme (NWMP) and National Air Monitoring Programme (NAMP).

Besides, the Board is also generating its own financial Resources through collection of Consent/ Authorization Fees, Sales of Form and Publications, Analysis Fees of Air and Water Samples, Vehicular Emission Test, etc.

During the Financial Year 2019-2020, the Receipt and Expenditure of the Board is Rs.1305.84 Lakhs and Rs.1132.19 Lakhs respectively.

The financial summary of the Board during the year 2019-2020 is as shown in Table13.1 and Fig.13.1

TABLE-13.1: FINANCIAL SUMMARY FOR THE YEAR 2019-2020

Sl. No	Head of Accounts	Amount Rs. (in Lakhs)	
		Receipt	Expenditure
1.	Board's Own Resources		
	i. Consent Fees,Sale of Forms, Authorization Fees,Vehicle Emission Test,Waterand Air Sample Analysis etc.	288.21	262.63
	ii. Bank Interest	47.87	
	Sub Total 1 (i & ii)	336.08	262.63
2.	i.Grant -in-Aid,State Govt.(Salary)	578.19	578.19
	ii.Grant -in-Aid, State Govt.(Non-Salary) Establishment Expenditure	40.50	57.53
	Sub Total 2 (i & ii)	618.69	635.72
3.	State Govt.National Green Tribunal (NGT Committee Fund)	0.00	103.00
4.	Grant -in Aid ,State Govt. Development Scheme	0.00	0.00
5.	Grant ,Financial Assistance Ministry of Environment & Forests and Climate Change New Delhi	64.00	8.27
6.	Grant ,Financial Assistance Central Pollution Control Board, New Delhi	287.07	122.57
Total (1 to 6)		1305.84	1132.19

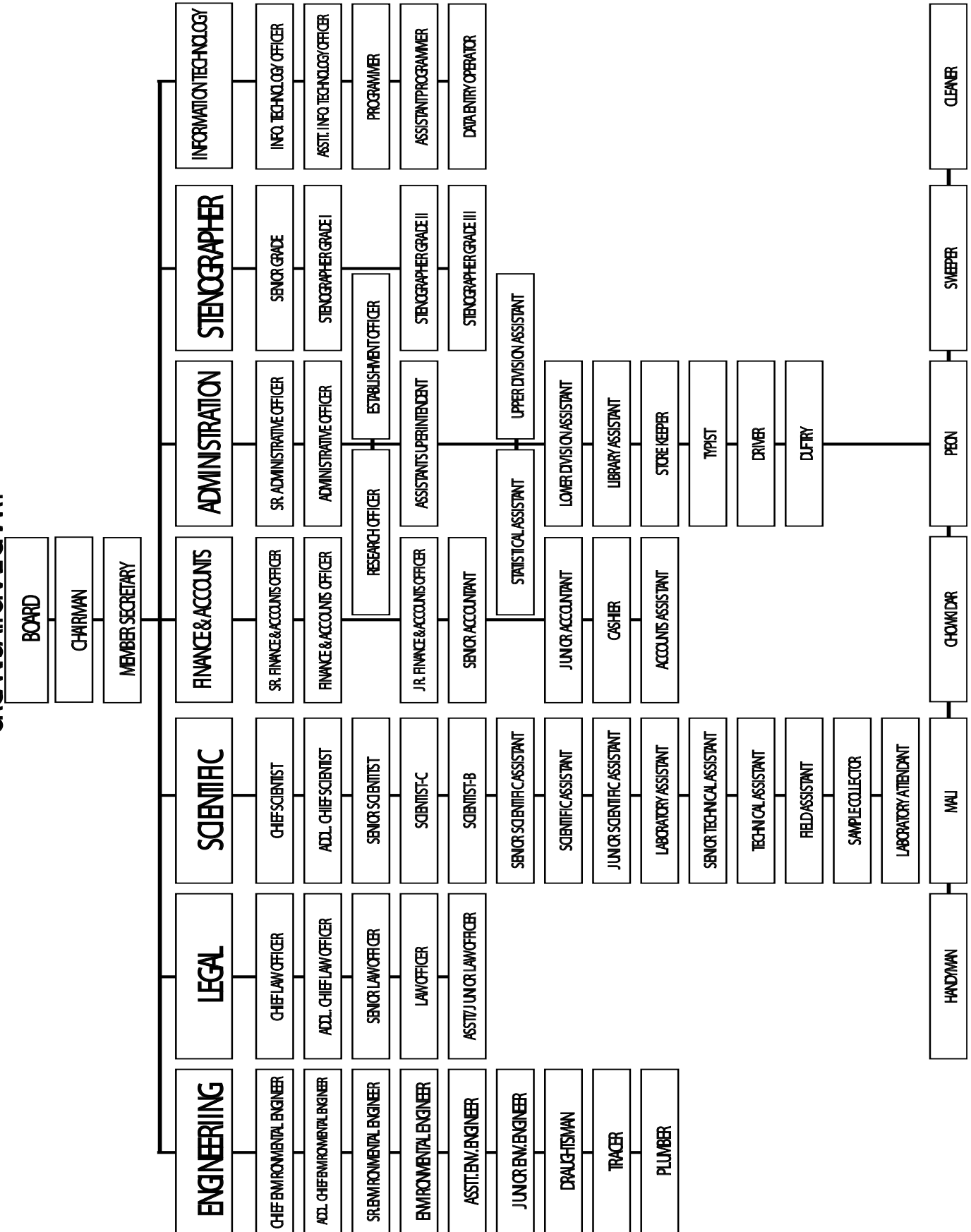
ANNEXURE-I

MEGHALAYA STATE POLLUTION CONTROL BOARD STAFF POSITION AS ON 31-03-2020

BRANCH	SL. NO.	NAME OF THE POST	SANCTIONED STRENGTH	WORKING STRENGTH	VACANCY
TECHNICAL	1.	Senior Environmental Engineer	1	1	0
	2.	Environmental Engineer	2	2	0
	3.	Assistant Environmental Engineer	7	5	2
	4.	Junior Environmental Engineer	1	1	0
	5.	Draftsman	1	1	0
	6.	Tracer	1	0	1
	7.	Plumber	1	1	0
LEGAL	1.	Law Officer	1	0	1
	2.	Junior Law Officer	1	1	0
SCIENTIFIC	1.	Senior Scientist	1	1	0
	2.	Scientist-C	2	2	0
	3.	Scientist-B	3	0	3
	4.	Senior Scientific Assistant	3	3	0
	5.	Scientific Assistant	5	1	4
	6.	Junior Scientific Assistant	6	4	2
	7.	Senior Technical Assistant	1	1	0
	8.	Technical Assistant	2	0	2
	9.	Laboratory Assistant	8	0	8
	10.	Field Attendant/Assistant	2	0	2
	11.	Sample Collector	12	10	2
	12.	Laboratory Attendant	5	4	1
FINANCE & ACCOUNTS	1.	Finance & Accounts Officer	1	0	1
	2.	Senior Accountant	2	2	0
	3.	Junior Accountant	2	0	2
ADMINISTRATION	1.	Administrative Officer	1	0	1
	2.	Research Officer (Info. & Pub.)	1	0	1
	3.	Establishment Officer	1	1	0
	4.	Assistant Superintendent	1	1	0
	5.	Upper Divisional Assistant	5	5	0
	6.	Statistical Assistant (Info. & Pub.)	1	0	1
	7.	Lower Division Assistant	13	11	2
	8.	Typist Grade III	4	1	3
	9.	Library Assistant	1	0	1
	10.	Store Keeper	1	0	1
	11.	Senior Driver/Driver	10	8	2
	12.	Duftry	1	1	0
	13.	Handyman	1	0	1
	14.	Peon	21	10	11
	15.	Mali	1	0	1
	16.	Chowkidar	4	3	1
	17.	Cleaner	2	1	1
	18.	Sweeper	2	1	1
STENOGRAPHER	1.	Stenographer Grade-II	1	1	0
INFORMATION TECHNOLOGY	1.	Assistant Programmer	1	0	1
	2.	Data Entry Operator	3	2	1
TOTAL			147	86	61

ANNEXURE-II

ORGANISATIONAL CHART



CONSENT TO ESTABLISH ISSUED DURING THE YEAR 2019-2020

Sl. No.	District	Name of Firm	Address	Type of Industry	CTE Issued on
1.	EJH	M/s Cosmos Cements Limited 2.30Ha. Lime Stone & Shale	Salang	Cements Ltd. (Lime Stone & Shale Mine)	20-08-2019
2.	EJH	M/s NE Coke Industry	Village: Mynnkree, 116 Km Stone, Lumshnong	Coke Manufacturing Unit	18-02-2020
3.	EJH	M/s Unique Industry	Wah Dienling, Village Diensatlang	Coke Manufacturing Unit	18-02-2020
4.	EJH	M/s Syrpailang Coke	SooKilo	Coke Manufacturing Unit	13-03-2020
5.	EJH	M/s Kantalo Coke	Umtyra Village, Elaka Sutnga	Coke Manufacturing Unit	18-03-2020
6.	EJH	M/s Khlieh Um Im Coke	Umtyra Village, Elaka Sutnga	Coke Manufacturing Unit	18-03-2020
7.	EKH	M/s Inequale Food Hub	Laitumkhrah, Main Road, Shillong	Restaurant	21-06-2019
8.	EKH	M/s Southern Taste Restaurant	Jingkieng, Firebrigade, Shillong	Restaurant	21-06-2019
9.	EKH	M/s Shillong View Servicing Centre	Mawblei, Shillong	Automobile Servicing	11-06-2019
10.	EKH	M/s The Barn	Mawlai Mawkynroh, Shillong	Restaurant	11-06-2019
11.	EKH	M/s The Hatton	Lachumiere, Shillong	Hotel & Restaurant	14-06-2019
12.	EKH	M/s Kerry's (Bakers & Confectioners)	Madan Laban, Shillong	Bakery	30-05-2019
13.	EKH	M/s Royal Residency	Thana Road, Police Bazar, Shillong	Guest House	30-05-2019
14.	EKH	M/s The Crescent Hotel	Khliehshnong, Sohra	Hotel	07-08-2019
15.	EKH	M/s Eco Park Guest House	Mawsmal, Nongthymmai, Sohra	Guest House	01-08-2019
16.	EKH	M/s Tlansing Car Wash	Umiew Village	Automobile Servicing	07-08-2019
17.	EKH	M/s Protik Roy Malngiang	Mawngap	Automobile Workshop & Servicing	15-07-2019
18.	EKH	M/s F.J. Services	Umjapung, Mawiong	Automobile Servicing	15-07-2019
19.	EKH	M/s Marble, Sanitary, Tiles & Hardware Goods Unit	Mawlai Mawiongrim	Cutting, Sizing and Polishing of Marble Stone	19-07-2019

Sl. No.	District	Name of Firm	Address	Type of Industry	CTE Issued on
20.	EKH	M/s LPL Centre Point	Khyndailad	Hotel & Restaurant	13-09-2019
21.	EKH	M/s Hope Clinic	Pine Mount Ridge, Laban, Shillong	Pathological Laboratory cum Clinic	25-09-2019
22.	EKH	M/s RD Customs Garage	Hill View Bungalow, Kenche's Madan Laban, Shillong	Automobile Workshop	20-09-2019
23.	EKH	M/s Happy Auto Service Centre	Laitkor Mawrie, Lumheh, Shillong	Automobile Servicing	20-09-2019
24.	EKH	M/s M.M Enterprise	Pynthorbah, Pynthor Umkhras, Shillong	Printing Press	26-09-2019
25.	EKH	M/s J N Motors LLP	Mawblei, Shillong	Automobile Servicing and Workshop	22-10-2019
26.	EKH	M/s Polo Orchid Resort(Expansion)	Nohsngithiang Falls, Mawsmat Sohra	Hotel cum Restaurant	22-10-2019
27.	EKH	M/s BB Serene Guest House	Diengiong	Guest House	22-10-2019
28.	EKH	M/s Nongkhaw Car Wash	Umlympung,	Automobile Servicing	22-10-2019
29.	EKH	M/s North Eastern Institute of Ayurveda and Homeopathy	Mawdiangdiang	Hospital and Institute	25-10-2019
30.	EKH	M/s Roseville Homestay	Lumrumnong, Mawkneng, Mawpat	Homestay	20-12-2019
31.	EKH	M/s Indian Institute of Management (IIM) Shillong	Umsawli	Building & Construction	26-09-2019
32.	EKH	M/s M.B. Lodge	Diengiong	Lodge	21-06-2019
33.	EKH	M/s Lapongnai Lodge	Diengiong, Shillong	Lodge	22-01-2020
34.	EKH	M/s P.Mawrie Car Wash	Nongmensong, Lumshyap	Automobile Servicing Unit	22-01-2020
35.	EKH	M/s Omega Stay Inn	Mawnianglah, 7 th Mile, Upper Shillong	Guest House cum Restaurant	22-01-2020
36.	EKH	M/s 7triap Bed and Breakfast	7 th Mile, Pomlum, Upper Shillong	Guest House	22-01-2020
37.	EKH	M/s Promudini Guest House	Lower Jail Road	Guest House	22-01-2020
38.	EKH	M/s Iabhhalang Automobile Workshop	Nongmensong, Umkdait, Shillong	Automobile Workshop	21-01-2020
39.	EKH	M/s Devyani International Limited	Marba Hub, Police Bazar, Shillong	Restaurant	21-01-2020
40.	EKH	M/s Pranabananda Sevaniketan	Jail Road, Shillong	Diagnostic Laboratory	14-01-2020

Sl. No.	District	Name of Firm	Address	Type of Industry	CTE Issued on
41.	EKH	M/s Changwoo Hotel cum Restaurant	Dong Surok, Saitsohpen, Sohra	Hotel cum Restaurant	14-01-2020
42.	EKH	M/s Banalari Pine Inn	Cleve Colony, Dhanketi	Hotel cum Restuarant	20-02-2020
43.	EKH	M/s Iakmenlang Lyngdoh Homestay	Mawjriong	Homestay	24-02-2020
44.	EKH	M/s Iakmenlang Lyngdoh Homestay	Mawjriong	Homestay	24-02-2020
45.	EKH	M/s Clinico Pathological Lab	Promodini Complex, Jail Road	Patho Lab	03-02-2020
46.	Ri-Bhoi	M/s Meghalaya Plywood Industries	Umiam Industrial Estate	Plywood, Blockboard & Flushdoor Manufacturing Unit	29-05-2019
47.	Ri-Bhoi	M/s Mansan Fruit Products	MIDC Industrial Area, Umiam	Packaged Drinking Water	29-05-2019
48.	Ri-Bhoi	M/s Tyndai Resort	Umroi, near Airport	Resort	03-09-2019
49.	Ri-Bhoi	M/s SRM Plasto Pvt. Ltd.	Umiam Industrial Area	Thinner, Spirit and Wood Polish Manufacturing Unit	26-07-2019
50.	Ri-Bhoi	M/s Biomass Briquetting Plant	Umiam Industrial Area	Biomass Briquettes	03-10-2019
51.	Ri-Bhoi	M/s Riango Veneer Pvt. Ltd.	Barapani Industrial Area, Umiam	Plywood, Blockboard & Flushdoor Manufacturing Unit	17-10-2019
52.	Ri-Bhoi	M/s SRS Beverages	8th Mile	Packaged Drinking Water	27-11-2019
53.	Ri-Bhoi	M/s B.K Saw & Veneer Mills Pvt. Ltd.	12 th Mile, Byrnihat	Plywood, MDF, Particle Board & Flushdoor Manufacturing Unit	27-11-2019
54.	Ri-Bhoi	M/s SKM Associate	Umiam Industrial Area	Hologram & Stickers	29-05-2019
55.	Ri-Bhoi	M/s Betel Nut Processing Unit	Umsaw Madan, Umbang	Betelnut Processing	01-10-2019
56.	Ri-Bhoi	M/s SSW Soap	Umran, Niangbyrnai	Soap Manufacturing	14-10-2019
57.	Ri-Bhoi	M/s Unico Pavers & Block	Killing	Paver Tiles & Hollow Blocks Manufacturing Unit	05-08-2019
58.	Ri-Bhoi	M/s Arsla Organic Tea Growers and Producers Co-Operative Society Ltd.	Nongiri-Um-Mawbah	Tea Manufacturing Unit	21-05-2019
59.	Ri-Bhoi	M/s N. S Blocks	Killing	Paver Blocks Manufacturing Unit	28-06-2019
60.	Ri-Bhoi	M/s Broming Industries	Umtru Road, Narbong	Block & Tiles Manufacturing Unit	04-06-2019

Sl. No.	District	Name of Firm	Address	Type of Industry	CTE Issued on
61.	Ri-Bhoi	M/s Atharv Industries	Umiam Industrial Area	Cardboard or Corrugated Box and Paper Products Manufacturing Unit	15-01-2020
62.	Ri-Bhoi	M/s SRKS Hospitalities (P) Limited	8 th Mile, Baridua	Hote, Restaurant cum Bar, Banquet Hall, Health Fitness Centre etc.	15-01-2020
63.	Ri-Bhoi	M/s M.K. Enterprise	Umiam Industrial Area	Biomass Briquettes	15-01-2020
64.	Ri-Bhoi	M/s Makhanbhog Timber & Moulding Pvt.Ltd.	16 th Mile, Byrnihat	Plywood, Block Board, Flush Door &Block Board Frame	18-02-2020
65.	Ri-Bhoi	M/s S.R.(India) Bio-Products	EPIP, Byrnnihat	Biomass Briquettes	18-02-2020
66.	Ri-Bhoi	M/s Car Wash Centre	16 th Mile, Byrnihat	Automobile Servicing	20-02-2020
67.	Ri-Bhoi	M/s Indian Oil Corporation Limited (IOCL)	Umiam	Bottling Plant and Molded Storage Vessels(MSVs)	21-02-2020
68.	SWKH	M/s Phylla Memorial Servicing Center	Mawkyrwat	Automobile Workshop cum Servicing	09-08-2019
69.	SWKH	M/S Auto Servicing Centre	Laitlawsang, Jakrem	Automobile Servicing	04-10-2019
70.	SWKH	M/s Thongni Car Wash	Mawkabait, Mawkyrwat	Automobile Workshop	12-02-2020
71.	WGH	M/s Hill View Stone Quarry	Bolchim, Chibinang	Stone Quarry	12-06-2019
72.	WGH	M/s Three Murti Stone Quarry	Manggapara, Zekabari	Stone Quarry	12-06-2019
73.	WGH	M/s Matchokchiring Stone Quarry	Matchok Chiring	Stone Quarry	12-06-2019
74.	WGH	M/s Rochonpara Stone Quarry(2.0 Ha)	Rochonpara	Stone Quarry	16-06-2019
75.	WGH	M/s Evalyni Kharbani Boulder Stone Quarry	Randhigopa	Stone Quarry	17-06-2019
76.	WGH	M/s Health Link	New Tura	Health Care Establishment	01-08-2019
77.	WGH	M/s Sengseng Car Washing Station	Sangsanggre, Tura	Automobile Servicing	05-08-2019
78.	WGH	M/s Marak Car Servicing Centre	Rongkhon, Tura	Automobile Servicing	05-08-2019
79.	WGH	Garo Hills Adventist Mission Nursing Home	Jengjal	Nursing Home	23-10-2019
80.	WGH	M/s Saha Enterprise	Chibinang, Kalapani, P.O-Phulbari	Packaged Drinking Water	20-12-2019

Sl. No.	District	Name of Firm	Address	Type of Industry	CTE Issued on
81.	WGH	Megha Stone Industries (Pavers)	Hallidayganj	Concrete Blocks & Pavers	09-08-2019
82.	WGH	M/s T. M. Stone Crusher	Wadagokgre, New Bhaitbari	Stone Crusher	26-11-2019
83.	WGH	M/s Bipul Ch. Sangma Stone Crusher	Dapgre Manggapara	Stone Crusher	23-04-2019
84.	WGH	M/s Pilson Marak Stone Crusher	Wakkrugre, Zekabari	Stone Crusher	23-04-2019
85.	WGH	M/s J.K Servicing	Matchakolgre, P.O-Araimile	Automobile Servicing	15-01-2020
86.	WGH	M/s Onyx Enterprise	13, Zikabari	Stone Crusher	03-03-2020
87.	WGH	M/s Lakshmi Stone Crusher	Hallidayganj	Stone Crusher	18-03-2020
88.	WGH	M/s Sengrik Magnon R.Marak	Rongkhon Agal, Tura	Pavers Block	09-03-2020
89.	WJH	M/s Amlari Amkhlew Limestone Mine	Amlari, Amlarem	Limestone Quarry	12-06-2019
90.	WJH	M/s Amsyndui Limestone Mine	Amsyndui, Nongtalang	Limestone Quarry	12-06-2019
91.	WJH	M/s Jarain Slate Stone Mine	Pdeng Amku Syiem, Jarain Village	Limestone Quarry	12-06-2019
92.	WKH	M/s Sky Lab	Mairang	Diagnostic Laboratory	19-06-2019
93.	WKH	M/s Teiblan Nongsiej	Siejlieh, Nongstoin	Automobile Workshop & Servicing	16-04-2019
94.	WKH	M/s Carbochem India	Shallang	Coke Manufacturing Unit	11-06-2019
95.	WKH	M/s Shemphang Riangshiang	Shallang	Coke Manufacturing Unit	04-06-2019
96.	WKH	M/s Rilangam Coke Industries	Shallang	Coke Manufacturing Unit	04-06-2019
97.	WKH	M/s MD Coke Industries	Nongdakong, Nongryngkhai	Coke Manufacturing Unit	19-12-2019

CONSENT TO OPERATE ISSUED DURING THE YEAR 2019-2020

Sl. No.	District	Name of Firm	Address	Type of Industry	CTO Issued on
1.	EJH	M/s Cosmos Cements Limited 2.30Ha. Lime Stone & Shale	Salang	Cements Ltd. (Lime Stone & Shale Mine)	23-08-2019
2.	EKH	M/s Nats Restaurant	Police Point, Laitumkhrah, Shillong	Restaurant	03-04-2019
3.	EKH	M/s Larsen & Toubro Ltd.	NEIGRIHMS Campus Mawdiangdiang	Concrete Batching Plant	16-04-2019
4.	EKH	The Director of Meghalaya Animal Husbandary and Veterinary	Mawiong, Shillong	Slaughter House	30-01-2019
5.	EKH	M/s Kimberly Restaurant	Laitumkhrah	Restaurant	15-05-2019
6.	EKH	M/s Risa Lodge	Mawdiangdiang, Shillong	Lodge	23-05-2019
7.	EKH	M/s Hotel Island Park Residency	Jail Road, Police Bazar	Hotel	14-11-2019
8.	EKH	M/s Barukh Bakery & Confectionary	Nongkhyriem, Nongthymmai	Bakery & Confectionary	05-08-2019
9.	EKH	M/s Holly Lodge Guest House	Lumdiengsoh	Guest House	03-01-2019
10.	EKH	M/s Mission Nethralaya	Nongthymmai, Shillong	Eye Clinic (Health Care Facility)	14-06-2019
11.	EKH	M/s Hotel Blue Mount	O.B. Shopping Mall, Police Bazar, Shillong	Hotel	21-06-2019
12.	EKH	M/s Tango Bar & Restaurant	O.B Shopping Mall, Police Bazar, Shillong	Restaurant & Bar	21-06-2019
13.	EKH	M/s Grove Eatery	O.B Shopping Mall, Police Bazar, Shillong	Restaurant	21-06-2019
14.	EKH	M/S Orange Automobile	Laitkor Rngi, Shillong	Automobile Workshop	25-06-2019
15.	EKH	M/s Laitdiengwah Stone Quarry	Laitdiengwah, Smit	Stone Quarry	10-05-2019
16.	EKH	M/s Shillong View Servicing Centre	Mawblei, Shillong	Automobile Servicing	23-12-2019
17.	EKH	M/s Kerry's (Bakers & Confectioners)	Madan Laban, Shillong	Bakery	26-07-2019
18.	EKH	M/s Royal Residency	Thana Road, Police Bazar, Shillong	Guest House	04-10-2019
19.	EKH	M/s Elegance Guest House	Jail Road, Shillong	Guest House	26-09-2019

Sl. No.	District	Name of Firm	Address	Type of Industry	CTO Issued on
20.	EKH	M/s Roseville Homestay	Lumrumnong, Mawkneng, Mawpat	Homestay	28-01-2020
21.	EKH	M/s Shree Ganesh Industries	Police Bazar, Shillong,	Spice Grinding Unit	14-01-2020
22.	EKH	Civil Hospital Shillong	Shillong	Hospital	17-01-2020
23.	EKH	M/s Bramhome Guest House	Police Bazar	Guest House	04-02-2020
24.	Ri-Bhoi	M/s Automobile Servicing Centre	Mawdiangum, Nongpoh	Automobile Servicing	18-11-2019
25.	Ri-Bhoi	M/s Continental Veneer & Saw Mill	Byrnihat	Saw cum Veneer Mill	31-05-2019
26.	Ri-Bhoi	M/s Oaken Gold Bottling Pvt. Ltd.	8 th Mile, Baridua	IMFL Bottling	24-01-2019
27.	Ri-Bhoi	M/s Midas Paver Blocks	8 th Mile, Baridua	Paver Blocks Manufacturing Unit	04-10-2019
28.	Ri-Bhoi	M/s Meghalaya Bioenergy Industries	Umiam Industrial Area	Biomass Briquettes	05-02-2020
29.	Ri-Bhoi	M/s Arsla Organic Tea Growers and Producers Co-Operative Society Ltd.	Nongjri-Um-Mawbah	Tea Manufacturing Unit	20-02-2020
30.	Ri-Bhoi	M/s Dei Dakine Resort	Umbir, Umiam	Hotel	14-02-2020
31.	Ri-Bhoi	M/s Broming Industries	Umtru Road, Narbong	Block & Tiles Manufacturing Unit	13-01-2020
32.	NGH	M/s Garo Hills Beverages Monmohini Beverages	Tangsim A'we, Mendipathar	Package Drinking Water Unit	15-03-2019
33.	SWKH	M/s New Motor Workshop	Mawmoitiong, Mawkyrwat	Automobile Workshop	20-06-2019
34.	WGH	M/s Matchok Chiringgre Stone Quarry	Matchok Chiringgre	Stone Quarry	18-04-2019
35.	WGH	M/s Stone Quarry of Galamatgre	Galamatgre	Stone Quarry	17-04-2019
36.	WGH	M/s Hill View Stone Quarry	Bolchim, Chibinang	Stone Quarry	19-07-2019
37.	WGH	M/s Three Murti Stone Quarry	Manggapara, Zekabari	Stone Quarry	19-07-2019
38.	WGH	M/s Matchokchiring Stone Quarry	Matchok Chiring	Stone Quarry	28-06-2019
39.	WGH	M/s Rochonpara Stone Quarry(2.0 Ha)	Rochonpara	Stone Quarry	19-07-2019
40.	WGH	M/s Evalyni Kharbani Boulder Stone Quarry	Randhigopa	Stone Quarry	27-06-2019
41.	WGH	Megha Stone Industries (Pavers)	Hallidayganj	Concrete Blocks & Pavers	13-09-2019

Sl. No.	District	Name of Firm	Address	Type of Industry	CTO Issued on
42.	WGH	M/s T. M. Stone Crusher	Wadagokgre, New Bhaitbari	Stone Crusher	20-12-2019
43.	WGH	M/s G. Marak Stone Quarry 0.660 ha	Bollonggre P.O. Dhanua	Stone Quarry	14-03-2019
44.	WGH	M/s Wensilla Ch. Marak Stone Quarry	Manggapara	Stone Quarry	13-02-2019
45.	WGH	M/s M.P Agarwala Stone Crusher	Rongdenggre	Stone Crusher	01-04-2019
46.	WGH	M/s Areng Tea Industry	Rongram	Tea Processing Unit	05-07-2019
47.	WGH	M/s Debra Stone Crusher Industry	Matchokchring, Manggapara	Stone Crusher	13-06-2019
48.	WGH	M/s Pilson Marak Stone Crusher	Wakkrugre, Zekabari	Stone Crusher	28-06-2019
49.	WGH	M/s Ethendra Sangma Stone Crusher	Bollonggree, Dhanua	Stone Crusher	13-06-2019
50.	WGH	M/s Minhas SK Stone Crusher	Phulbari	Stone Crusher	26-03-2019
51.	WGH	M/s J.R. Marak Stone Crusher	Wagopgre	Stone Crusher	15-02-2020
52.	WJH	M/s Amlari Amkhlew Limestone Mine	Amlari, Amlarem	Limestone Quarry	17-09-2019
53.	WJH	M/s Amsyndui Limestone Mine	Amsyndui, Nongtalang	Limestone Quarry	17-09-2019
54.	WJH	M/s Compassion Clinical Laboratory	Mookyndup, Lahalaboh, Jowai	Diagnostic Centre	23-07-2019
55.	WJH	M/s Shallam Car Wash	Khlieh Kyor Kaheng, Khliehtyrshi, Jowai	Automobile Servicing	11-03-2020
56.	WKH	M/s Carbochem India	Shallang	Coke Manufacturing Unit	25-11-2019
57.	WKH	M/s Shemphang Riangshiang	Shallang	Coke Manufacturing Unit	22-11-2019
58.	WKH	M/s Rilangam Coke Industries	Shallang	Coke Manufacturing Unit	22-11-2019

RENEWAL OF CONSENT TO ESTABLISH ISSUED DURING THE YEAR 2019-2020

Sl. No.	District	Name of Firm	Address	Type of Industry	RCTE Issued on
1.	WKH	Mairang Civil Hospital	Mairang	Hospital	03-07-2019
2.	Ri-Bhoi	M/s Continental Veneer & Saw Mill	Byrnihat	Saw cum Veneer Mill	31-05-2019
3.	SGH	M/s Baghmara Civil Hospital	Baghmara	Hospital	28-01-2020

ANNEXURE-VI

RENEWAL OF CONSENT TO OPERATE ISSUED DURING THE YEAR 2019-2020

Sl. No	District	Name of Firm	Address	Type of Industry	RCTO Issued on
1.	EGH	M/s Tetenggrim Boulder Stone Mine	Tetenggrim	Stone Quarry	05-08-2019
2.	EJH	M/s Jaintia Cements Limited	Tohsniang, Latyrke, Sutnga Elaka	Cements Manufacturing	26-08-2019
3.	EJH	M/s Meghalaya Power Ltd	Lumshnong	Coal Based Thermal Power Plant	01-11-2019
4.	EJH	M/s Star Cement Cements Manufacturing Co. Ltd (Limestone Mine 13.58 Ha)	Wahpynkon Limestone at Lumshnong	Limestone Mine	25-11-2019
5.	EJH	M/s Star Cement Cements Manufacturing Co. Ltd. (Limestone Mine 70 Ha.)	Lumshnong	LimeStone Mine 70 Ha.	14-08-2019
6.	EJH	M/s Abhi Coke Pvt. Ltd.	Dat Simprien, Lad Rymbai	Metallurgical Coke Unit	02-07-2019
7.	EJH	M/s Megha Technical & Engineers (P) Ltd.	Lumshnong Village	Clinker Grinding Unit	02-07-2019
8.	EJH	M/s Meghalaya Cements Ltd. (Clay Bhatta-No.3)	Thangskai Village	Native Down Draft Furnace (Clay Bhatta-No.3)	14-08-2019
9.	EJH	M/s Jaintia Coke (P) Ltd.	Nongsniang Khliehriat	Coke Manufacturing Unit	05-11-2019
10.	EJH	M/s Star Cement (Cement Manufacturing Company Ltd.) (Limestone Mine 4.85 Ha)	Wahpynkon, Lumshnong	Limestone Mining 4.85 Ha	20-03-2020

Sl. No.	District	Name of Firm	Address	Type of Industry	RCTO Issued on
11.	EKH	M/s Rikaleng Limestone Mine	Tharia, Rikaleng Lynti Dkhar Area, Sohbar	Limestone Quarry	31-05-2019
12.	EKH	M/s Lime Stone Mine of Smti. Nondini Syiemlieh	Tharia, Ru- ing Elaka, Sohbar, Sohbar Sirdarship	Limestone Quarry	31-05-2019
13.	EKH	M/s Wahlong Limestone Quarry	Wahlong, Elaka Sirdarship, Block- Sohra	Limestone Quarry	31-05-2019
14.	EKH	M/s Tyngwaibah Limestone Quarry	Tyngwaibah Area, Sohbar Elaka	Limestone Quarry	31-05-2019
15.	EKH	M/s Plenty K Pyngrope Boulder Stone Quarry	Thlangkti, Wahkse, Laitmawroh, Laitlyngkot.	Stone Quarry	31-05-2019
16.	EKH	M/s The SAAD	Demseiniong, Shillong	Hotel	12-07-2019
17.	EKH	M/s AM Bedand Breakfast	Lachumiere	Guest house	14-11-2019
18.	EKH	Edingson Khongnohbeh	Nongjri Laitlyngngai	Stone Quarry	14-11-2019
19.	EKH	M/s Rice Bowl Restaurant	Glory's Plaza, Police Bazar	Restaurant	18-05-2019
20.	EKH	M/s A.P.R. Guest House	Lower Jail Road, Shillong	Guest House	23-05-2019
21.	EKH	M/s The Pear Tree(B&B)	Lower Lachumiere, Shillong	Guest House	07-05-2019
22.	EKH	M/s Laundry Service of Woodland Hospital	Lakkhotaa Lodge), Mawpun, Shillong	Laundry Service	17-05-2019
23.	EKH	M/s Mawmluh Cherra Cements Ltd. MCCL	Mawmluh Cherrapunjee (Expansion)	Cement Plant	23-12-2019
24.	EKH	M/s Hotel Aashiyana	Quinton Road, Police Bazar	Hotel	03-05-2019
25.	EKH	M/s Hiambok L. Thabah	Mawnarian Myllem	Stone Crusher	02-04-2019
26.	EKH	M/s Hotel Pine Borough	Police Bazar, Shillong	Hotel	20-12-2019
27.	EKH	M/s Hotel Serene	G.S Road, Police Bazar, Shillong	Hotel	17-04-2019
28.	EKH	M/s Volga Mistan Bhandar	Laitumkhrah Bazar, Shillong	Restaurant	04-04-2019
29.	EKH	M/s City Motor Works	Kenches Trace Shillong	Automobile Workshop	16-04-2019
30.	EKH	M/s Hotel Swastik	MTC Building, Jail Road, Shillong	Hotel	16-04-2019

Sl. No.	District	Name of Firm	Address	Type of Industry	RCTO Issued on
31.	EKH	M/s Living Roof Guest House & Café	Anders-153, Bomfyle Road, Shillong	Hotel & Café	29-04-2019
32.	EKH	M/s Hotel Natraj	Quinton Road, Police Bazar	Hotel	06-05-2019
33.	EKH	M/s Sunrise Guest House	Kenches Trace, Laban, Shillong	Guest House	07-05-2019
34.	EKH	M/s Woodland Guest House	Upper Lachumiere, Shillong	Guest House	07-05-2019
35.	EKH	M/s Rajhans Hotel	G. S Road, Police Bazar	Hotel	07-05-2019
36.	EKH	M/s Laxmi Hotel	G.S Road , Police Bazar	Restaurant	17-05-2019
37.	EKH	M/s White Orchid Guest House	Upper Lachumiere, Holding-141, Plot-79	Guest House	21-05-2019
38.	EKH	M/s E.M. Car Servicing	Maraikaphon, Sohra	Car Servicing Centre	21-05-2019
39.	EKH	M/s J. W. Car Wash	Pynthorbah Block - IV, Shillong	Automobile Servicing Unit, Car Wash	23-05-2019
40.	EKH	M/s Ess Bee Industries	Mawlai Mawroh, Shillong	Package Drinking Water Unit	29-05-2019
41.	EKH	M/s Hotel Shubham	Police Bazar, G.S Road	Hotel	29-05-2019
42.	EKH	M/s Avisaar Guest House	1 st Floor MTC Bldg. Jail Road Shillong	Guest House	03-07-2019
43.	EKH	M/s Wanphai Syngkrem Stone Crusher	Mawpran,Pynursla	Stone Crusher	13-09-2019
44.	EKH	M/s Hotel Utsav	Jail Road, Shillong	Hotel	14-06-2019
45.	EKH	M/s Delhi Mistan Bhandar	Police Bazar, Shillong	Restaurant	27-06-2019
46.	EKH	M/s Orchid Annex	Polo Road, Shillong	Hotel	28-06-2019
47.	EKH	M/s Hotel Meghalaya	Quinton Road, Police Bazar, Shillong	Hotel	08-07-2019
48.	EKH	M/s Red Rice Restaurant	G.S Road, Police Bazar, Shillong	Restaurant	10-07-2019
49.	EKH	M/s Pynkhrang Stone Crusher	Madan Thangsning	Stone Crusher	29-07-2019
50.	EKH	M/s Atithi Guest House	Thana Road, Police Bazar	Guest House	14-10-2019
51.	EKH	M/s Teiborlang Stone Crusher	Mynria, Thainthynroh, Lyngiong	Stone Crusher	01-11-2019
52.	EKH	M/s Smoky Falls Coffee	Rngi Jynriew Rum Nongthymmai	Coffee Roasting, Grinding & Packing Unit	06-11-2019

Sl. No.	District	Name of Firm	Address	Type of Industry	RCTO Issued on
53.	EKH	M/s R.K'S City Hub	Keating Road, Police Bazar	Hotel	05-12-2019
54.	EKH	M/s Prakash Hotel & Restaurant	Laitumkhrah, Police Point	Hotel & Restaurant	23-12-2019
55.	EKH	M/s J.K.R. Residency	Cleve Colony, Shillong	Guest House	29-05-2019
56.	EKH	M/s Eden Restaurant	Next to Star Plaza Shopping Complex Police Bazar Shillong	Restaurant	29-05-2019
57.	EKH	M/s Latei VILLE INN	Langkyrding, Shillong	Guest House	01-04-2019
58.	EKH	M/s Hotel City View Inn	Jail Road, Police Bazar	Hotel	07-05-2019
59.	EKH	M/s Hotel J.K. International	Jail Road Police Bazar	Hotel	14-05-2019
60.	EKH	Bethany Hospital	Nongrim Hills Shillong.	Hospital	14-01-2020
61.	EKH	M/s Anand Hotel	Quinton Road, Police Bazar	Lodge	20-02-2020
62.	EKH	M/s Shree Mahabir Flour Mill	Luckier Road, Shillong	Flour Mill Atta-Chakki Mill	14-01-2020
63.	EKH	M/s Marba Hub (M Crown Hotel)	Police Bazar, Shillong	Hotel & Restaurant alongwith 1010 KVA DG Set	04-02-2020
64.	EKH	M/s Thabah Auto Engineering Works	Mawlai Nongkwar	Automobile Workshop	06-01-2020
65.	NGH	M/s Supertech Conbrit Industries	Adokgre	Fly Ash Based Bricks, Concrete Tiles & Pavers & Hollow Blocks	20-01-2020
66.	Ri-Bhoi	M/s Sosi Manar Crusher	Baridua, 9 th Mile	Stone Crusher	25-07-2019
67.	Ri-Bhoi	Umduba Boulder Stone Mine	9 th Mile, Raid Marwet	Stone Quarry	16-10-2019
68.	Ri-Bhoi	M/s Ranjan Kro Stone Quarry	Tamulkuchi, 13 th Mile, Byrnihat	Stone Quarry	01-10-2019
69.	Ri-Bhoi	M/s Stone Quarry of Umlangpur	Umlangpur Elaka	Stone Quarry	01-10-2019
70.	Ri-Bhoi	M/s Summer Set Enterprise (Expansion)	Umnawe Killing	Stone Crusher	25-07-2019
71.	Ri-Bhoi	M/s Umnawe Stone Quarry of Phaisar Shilla	Umnawe Killing	Stone Quarry	29-10-2019
72.	Ri-Bhoi	M/s Paniram Narleng	Baridua Sitapathar	Stone Quarry	28-06-2019
73.	Ri-Bhoi	M/s Kedrina Jahrin Stone Crusher	Umnawe Killing	Stone Crusher	25-07-2019

Sl. No.	District	Name of Firm	Address	Type of Industry	RCTO Issued on
74.	Ri-Bhoi	M/s Dura Enterprise	Umduba, Killing	Stone Crusher	13-08-2019
75.	Ri-Bhoi	M/s S.K Dewsaw Wood Products	Umiam Industrial Area	Sawn-cum-Veneer Mill	18-04-2019
76.	Ri-Bhoi	M/s Umadutt Industries Ltd.	Amjok, Byrnihat	HDPE Bags Manufacturing Unit	18-04-2019
77.	Ri-Bhoi	M/s Meghalaya Forest Products	Umiam Industrial Area	Sawn-cum-Veneer Mill	01-04-2019
78.	Ri-Bhoi	M/s Umduba Stone Quarry of Jamanda Sangma	Umduba Killing	Stone Quarry	27-09-2019
79.	Ri-Bhoi	M/s Sriram Wires Products (Meghalaya)	13 th Mile, Tamulkuchi, Byrnihat	Black Wire Manufacturing	03-06-2019
80.	Ri-Bhoi	M/s M. N. Saw-cum-Veneer Mills (P) Ltd.	Umiam Industrial Area	Saw-cum-Veneer Mills	08-04-2019
81.	Ri-Bhoi	M/s Pawan Castings Meghalaya (Pvt.) Ltd.	Harlibagan, Byrnihat	M.S. Ingot & M.S. Rolled	18-04-2019
82.	Ri-Bhoi	M/s Seshu Nutrition (P) Ltd.	9 th Mile, Baridua	Energy Food Manufacturing Unit	16-10-2019
83.	Ri-Bhoi	M/s Vikash Saw Cum Veneer Mill	Umiam Industrial Area	Saw Mill	02-03-2019
84.	Ri-Bhoi	M/s K.K. Beverages (P) Limited	Khanapara, 9 th Mile	Packaged Drinking Water & Carbonated Drinks Manufacturing Unit	24-07-2019
85.	Ri-Bhoi	M/s Shivani ISPAT & Rolling Mill Pvt. Ltd.	13 th Mile, Tamulkuchi, Byrnihat	Re-Rolling mill	07-05-2019
86.	Ri-Bhoi	M/s Maithan Smelters Ltd.	EPIP,A-6, Byrnihat	Oxygen Plant	07-05-2019
87.	Ri-Bhoi	M/s Nalari Ferro Alloys Pvt. Ltd.	EPIP Byrnihat	Ferro Silicon	08-05-2019
88.	Ri-Bhoi	M/s Indomech Industries	Them Marwet, Khanapara	D.G Set Assembly Unit	24-05-2019
89.	Ri-Bhoi	M/s Lumlang Shylla Crusher Unit I (B) (Previously known as M/s Edwell Dkhar Crusher, Unit I (B))	Barapathar, Raid Marwet	Stone Crusher	07-06-2019
90.	Ri-Bhoi	M/s Lumlang Shylla Crusher unit F(B) (Previously known as M/s Edwell Dkhar Crusher, Unit F (B))	Barapathar, Raid Marwet	Stone Crusher	07-06-2019
91.	Ri-Bhoi	M/s Swastic Stone Crusher	Mawkhap, Jirang	Stone Crusher	14-06-2019
92.	Ri-Bhoi	M/s Aiborman Thangkhiew Stone Crusher	Manikpur Jirang	Stone Crusher	27-06-2019

Sl. No.	District	Name of Firm	Address	Type of Industry	RCTO Issued on
93.	Ri-Bhoi	M/s W.S. Doloi Crusher	Ampynsemkura, Jirang	Stone Crusher	03-06-2019
94.	Ri-Bhoi	M/s Iaipynskhem Lakhmi Stone Crusher	Rani, Jirang	Stone Crusher	03-07-2019
95.	Ri-Bhoi	M/s Muroh-Rim Stone Quarry (2.36 Acres)	Iew Muroh-Rim	Stone Quarry	08-07-2019
96.	Ri-Bhoi	M/s Greenland Lakhmi Crusher	New Amkrem, Jirang	Stone Crusher	09-07-2019
97.	Ri-Bhoi	M/s Io-Muroh Stone Quarry	Amjow Shrei Jirang	Stone Quarry	10-07-2019
98.	Ri-Bhoi	M/s D. Lakhmi Stone Crusher	Pynsengura, Jirang	Stone Crusher	19-07-2019
99.	Ri-Bhoi	M/s Donbor Lakhmi Stone Crusher	Puransukubarai, Jirang	Stone Crusher	19-07-2019
100.	Ri-Bhoi	M/s Maithan Alloys Ltd. (Power Plan)	EPIP, Byrnihat	Captive Power Plant	28-07-2019
101.	Ri-Bhoi	M/s Wessly Daloi Stone Crusher	Iew-Umpyur, Jirang	Stone Crusher	26-07-2019
102.	Ri-Bhoi	M/s Megha Foods Products	9 th Mile Baridua	Poultry and Other Animal Feed	08-08-2019
103.	Ri-Bhoi	M/s Shanlang Stone Crusher.	Bhoirymbong, Lumdaitkhla	Stone Crusher	14-08-2019
104.	Ri-Bhoi	M/s Meghalaya Cast And Alloys (P) Ltd.	Harlibagan, Byrnihat	M.S Ingot Manufacturing Unit of Capacity 34320 TPA	26-08-2019
105.	Ri-Bhoi	M/s Timber Craft & Veneer Products (India) Pvt. Ltd.	EPIP, Umiam Industrial Area	Sawn-cum-Veneer Mill	13-09-2019
106.	Ri-Bhoi	M/s Nalari Tea Industry	Nongpoh	Tea Industry	17-10-2019
107.	Ri-Bhoi	M/s K. Lapang Stone Crusher	Bakli Bagan, Jirang	Stone Crusher	25-11-2019
108.	Ri-Bhoi	M/s F.W. Ferrotech (P) Ltd. (Iron & Steel)	EPIP, Byrnihat	Re Rolling Mill	11-12-2019
109.	Ri-Bhoi	M/s North East Powerline Industries	Baridua	Assembly Unit (D.g Sets, Pump Sets, Transformers & Other Electrical Appliances)	29-10-2019
110.	Ri-Bhoi	M/s Deepak Baruah Stone Crusher	Mawkhap (Gonpati)	Stone Crusher	28-06-2019
111.	Ri-Bhoi	M/s Sharly Daloi Stone Crusher	Umkrem Dykhong Jirang	Stone Crusher	27-06-2019
112.	Ri-Bhoi	M/s Shiromani Food Products (P) Ltd.	Baridua	Food Grain Cleaning Sizing & Grading Unit	14-05-2019

Sl. No.	District	Name of Firm	Address	Type of Industry	RCTO Issued on
113.	Ri-Bhoi	M/s Ampynsengura Stone Mining	In-Mouza-Halem Gonpato, Jirang	Stone Quarry	08-07-2019
114.	Ri-Bhoi	M/s Halem Gonpati Boulder Stone Quarry	In-Mouza-Halem Gonpato, Jirang	Stone Quarry	08-07-2019
115.	Ri-Bhoi	M/s Sriram Fasteners	Tamulkuchi	M.S. Bolt, M.S. Nut, M.S Torkai, Barbed Wire, Chain Lin Fence Unit	01-08-2019
116.	Ri-Bhoi	M/s Megha Stone Crusher	Jorbid, Killing	Stone Crusher	19-03-2020
117.	Ri-Bhoi	M/s Aumz Industries	20 th Mile, Paham Mawlein	Veneer & Saw Timber Waste Grinding Unit	11-02-2020
118.	Ri-Bhoi	M/s Lodri Lyngdoh Saw-cum-Veneer	Umiam Industrial Area	Saw Mill	13-01-2020
119.	Ri-Bhoi	M/s Shillong Ispat & Rolling Mill	13 th Mile, Tamulkuchi, Byrnihat	M.S. Ingot & M.S. Rolled Unit	11-01-2020
120.	Ri-Bhoi	M/s Ri-Bhoi Ispat & Rolling Mills	13 th Mile Tamulkuchi	M.S Ingots	11-02-2020
121.	Ri-Bhoi	M/s K.K Thangmaw Crusher	20 th Mile, Byrnihat	Stone Crusher	18-02-2020
122.	Ri-Bhoi	M/s Paras Singh Stone Crusher	Maikhuli	Stone Crusher	18-03-2020
123.	Ri-Bhoi	M/s Megha Stone Crusher	Jorbid, Killing	Stone Crusher	19-03-2020
124.	Ri-Bhoi	M/s Aumz Industries	20 th Mile, Paham Mawlein	Veneer & Saw Timber Waste Grinding Unit	11-02-2020
125.	Ri-Bhoi	M/s Lodri Lyngdoh Saw-cum-veneer	Umiam Industrial Area	Saw Mill	13-01-2020
126.	Ri-Bhoi	M/s Shillong Ispat & Rolling Mill	13 th Mile, Tamulkuchi, Byrnihat	M.S. Ingot & M.S. Rolled Unit	11-01-2020
127.	Ri-Bhoi	M/s Ri-Bhoi Ispat & Rolling Mills	13 th Mile Tamulkuchi	M.S Ingots	11-02-2020
128.	Ri-Bhoi	M/s K.K Thangmaw Crusher	20 th Mile, Byrnihat	Stone Crusher	18-02-2020
129.	Ri-Bhoi	M/s Paras Singh Stone Crusher	Maikhuli	Stone Crusher	18-03-2020
130.	SWGH	M/s P.K and Company	Chondonpara	Stone Crusher	25-10-2019
131.	WGH	M/s Momin Stone Crusher	Bollonggree PO Dhanua	Stone Crusher	30-05-2019
132.	WGH	M/s P.K.S Bricks	Addangri, Dalu	Brick Kiln	13-09-2019
133.	WGH	M/s Hanseng A. Sangma Stone Quarry	Matchokchiing	Stone Quarry	30-10-2019
134.	WGH	M/s S. R. Marak Stone Crusher	Bollongre	Stone Crusher	09-03-2020

Sl. No.	District	Name of Firm	Address	Type of Industry	RCTO Issued on
135.	WGH	M/s M. R. Marak Stone Crusher	Bollongre	Stone Crusher	09-03-2020
136.	WGH	M/s Dilna Marasali Stone Crusher	Dilma Marasalli	Stone Crusher	09-03-2020
137.	WGH	M/s Sundare Hotel	Circular Road, Tura	Hotel & Restaurant	09-03-2020
138.	WGH	M/s Philips Tyres	Nakham Bazar, Tura	Tyre Retreading	04-02-2020
139.	WJH	M/s Limestone Quarry of Plenty K. Pyngrope	Thanghunai, Nongtalang Elaka	Limestone Quarry	08-05-2019
140.	WJH	M/s Lakareng Limestone Mine	Lakareng, Trangblang	Limestone Quarry	08-05-2019
141.	WJH	M/s Starline Fooding & Lodging	Iawmusiang, Hasahioo Tympang Club, Jowai	Hotel cum Restaurant	02-07-2019
142.	WJH	M/s Pyrbot Car Wash	Liar Pamkam Khliehtyrchi	Automobile Servicing	09-03-2020
143.	WKH	M/s Marwein Fruits and Beverages	Kynshi Bangla	Packaged Drinking Water	22-11-2019
144.	WKH	Makarios Medical Center	Mairang	Hospital	27-11-2019
145.	WKH	M/s Shakambari Ferro Alloys (P) Ltd.	Rwiang, Seinduly	Ferro Alloy	17-06-2019
146.	WKH	M/s Holy Cross Health Centre	Mairang	Hospital	17-05-2019

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