

**IN THE NATIONAL GREEN TRIBUNAL  
PRINCIPAL BENCH, NEW DELHI**

**Original Application No. 475 OF 2024**

**IN THE MATTER OF:**

**New Item titled "Mountains of Plastic are choking the Himalayan State appearing in the Hindu dated 04.03.2024".**

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**Date of hearing: 18.10.2024**

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3	<b>ANNEXURE: A-2</b> A true and correct copy of the letter dated 18.06.2024	20-21

Place: New Delhi

Date: 17.10.2024

*Anando Mukherjee*

**(ANANDO MUKHERJEE)**

Advocate for the Mizoram Pollution Control Board

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**IN THE NATIONAL GREEN TRIBUNAL,  
PRINCIPAL BENCH  
ORIGINAL APPLICATION NO. 475 OF 2024**

**IN THE MATTER OF:**

News Item titled "Mountains of Plastic are choking the Himalayan States appearing in the Hindu dated 04.03.2024."

**AFFIDAVIT OF THE MIZORAM POLLUTION CONTROL  
BOARD IN COMPLIANCE OF ORDER DATED 12.07.2024 PASSED  
BY THIS HON'BLE TRIBUNAL**

I, C. Lalduhawma, S/o Rev C. Rosiama, aged about 58, currently posted as Member Secretary, Mizoram Pollution Control Board, do hereby solemnly affirm and state as follows:-

1. That at present, I am posted and working as Member Secretary, and as such, in my official capacity, am well acquainted with the facts and circumstances of the present case, to depose on behalf of Mizoram Pollution Control Board ["MPCB"].
2. That I have gone through the above mentioned order dated 12.07.2024 passed by this Hon'ble Tribunal and having gone through the same, I state that I am fully competent to reply to the contents of the same as under. That I have been duly authorized to swear this Affidavit on

behalf of MPCB herein, and I am filing the same with liberty to bring on record additional grounds, if it be necessary at all.

3. At the outset, it is submitted that the MPCB has been cognizant of the issues caused by Plastic pollution, and has taken necessary steps in avoiding contamination of plastic in the State of Mizoram. In this regard, it is stated that the Answering Deponent herein is seeking to highlight the following compliances, and steps taken by the MPCB to address the issues raised by this Hon'ble Tribunal in its order dated 12.07.2024.

**A. Waste Management Capacity and Plastic Consumption**

- (i) It is stated that Plastic Waste is being managed in Aizawl at Material Recovery Facility at Tuirial. Another Centre is under development for Aizawl City at Industrial Growth Centre (IGC), Luangmual. In rural area, one such unit has been in operation and one more is in the pipeline.
- (ii) It is stated that from these facilities, the plastic wastes are baled and sent to Dalmia Cement Plant for co-incineration and through Producer Responsibility Organisation(s) ["PRO(s)"] for recycling. Utilisation of plastic wastes for road construction is also underway.



- (iii) It is further stated that as per the Plastic Waste Management Annual Report 2023-2024, 4948.305 MT of Plastic wastes are collected in the State of Mizoram.

**B. Curbing Unscientific Plastic Disposal causing Soil and Water Pollution**

- (i) In the State of Mizoram, the Public Health Engineering Department ["PHED"] is responsible for managing water supply to the public. As per the data provided by PHED, there are 43 supply schemes and their aerial distance from intake are atleast 100 meters and in some cases are nearly 30 kms from the settlements. However, in the case of settlements Greater Aizawl Water Supply Scheme Phase I & II, the water supply schemes are within 50 meters from the intake.
- (ii) It is stated that the cleanliness drives have been conducted regularly by UD&PA Deptt, PHED, MPCB, Aizawl Municipal Corporation ('AMC'), various NGOS and youth movements like 'Save the Riparian' along the stretches of stream confluence with River Tlawng and the river itself from where public water supply are drawn under the Greater Aizawl Water Supply Scheme Phase I & II.



**C. Unplanned Urbanisation and Jump in Tourists footfall**

- (i) It is stated that from the data of Tourism Department, State of Mizoram, there has been no drastic increase in tourist footfall, except in the year 2022-23, which is due to the relaxation of restrictions placed due to Covid -19. It is stated that there has been a sharp decline in the number of tourist during the year 2023-24. Therefore, it is stated that tourist influx will not have much impact in contributing to Plastic pollution caused due to random/improper disposal of plastic wastes by the Tourist.



**D. UPDATE ON DIRECTIONS OF THIS HON'BLE TRIBUNAL PASED IN OA NO. 178 OF 2022**

- (i) It is stated that this Hon'ble Tribunal has directed the GB Pant National Institute of Himalayan Environment to study the impact of Tourism on the Himalayan Region. In this regard, it is state that MPCB has provided all the requisite data and information to the Institute vide letters dated 17.05.2022 and 18.06.2024.

A true and correct copy of the letter dated 17.05.2022 is annexed herewith and marked as **Annexure A-1. [pg06to pg 19]**

A true and correct copy of the letter dated 18.06.2024 is annexed herewith and marked as **Annexure A-2. [pg 20 to 21]**

**E. Plastic accumulation and deposit in glaciers**

(i) It is stated that Plastic accumulation in mountains, rivers lakes and streams through melting of glacier does not arise as there are not glacier deposits in the State of Mizoram.

4. The Deponent craves liberty of this Hon'ble Court to file any further affidavit/s incase the need so arises during the course of further arguments in the present matter.

5. I state that the statements of facts mentioned herein are all true and correct to my knowledge, based on official records and nothing material has been concealed therefrom and no part of it is false.



*[Signature]*  
DEPONENT

**VERIFICATION:-**

I, the Deponent above named do hereby solemnly affirm and verify that what is stated in the foregoing affidavit is true to my knowledge and belief based on the records of the case and I believe the same to be true.

VERIFIED AT AIZAWL, MIZORAM, ON THIS 17<sup>th</sup> DAY OF OCTOBER, 2024

*[Signature]*  
17/10/24  
J.N. BUALTENG  
Advocate & Notary Public  
Aizawl : Mizoram

*[Signature]*  
DEPONENT

Notarial Registration  
No. 34/10  
Date 17/10/24

**MIZORAM STATE POLLUTION CONTROL BOARD**

6

No.H.88088/Poltn/50(90)/2022-MPCB/19-32

Dated Aizawl, the 17<sup>th</sup> May, 2022

To,

Under Secretary  
Environment, Forests & Climate Change Department  
Government of Mizoram

**Subj: O.A No.178/2022 in Re : News item published in the Hindu dt. 27.02.2022 titled, 'Tourism had brought economic prosperity to the Himalayan region, but the environment cost has been catastrophic.'**

Ref: YL No.C.18014/351/2022-FST/4 dated 25.04.2022

Sir,

With reference to the subject and email cited above, may I submit herewith the required information as per Table 5.1, 5.2 & 5.3 for your kind information.

Yours faithfully,

Encl. As above

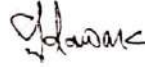
  
(C. LALDUHAWMA)  
Member Secretary,  
Mizoram Pollution Control Board

Table 5.1 Air Quality parameters for the state (district wise)

Notes: Data for PM<sub>2.5</sub>, O<sub>3</sub> and black Carbon not available as monitoring has not been carried out for these parameters.

Month of the year	Year : 2010								
	District : Aizawl								
	Location with data in $\mu\text{g}/\text{mg}^3$								
	KHATLA			LAIPUITLANG			BAWNGKAWN		
	SO <sub>2</sub>	NO <sub>2</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>	PM <sub>10</sub>
January	2.0	4.5	37	2.0	4.5	26	2.0	4.5	44
February	2.0	4.5	48	2.0	4.5	39	2.0	4.5	53
March	2.0	4.5	65	2.0	4.5	50	2.0	4.5	70
April	2.0	4.5	47	2.0	4.5	37	2.0	4.5	57
May	2.0	4.5	44	2.0	4.5	36	2.0	4.5	52
June	2.0	4.5	39	2.0	4.5	23	2.0	4.5	44
July	2.0	4.5	39	2.0	4.5	29	2.0	4.5	45
August	2.0	4.5	40	2.0	4.5	27	2.0	4.5	37
September	2.0	4.5	33	2.0	4.5	25	2.0	4.5	39
October	2.0	4.5	33	2.0	4.5	31	2.0	4.5	46
November	2.0	4.5	41	2.0	4.5	36	2.0	4.5	46
December	2.0	4.5	46	2.0	4.5	36	2.0	4.5	51
Annual Average	2.0	4.5	50	2.0	4.5	33	2.0	4.5	49
	2.0	4.5	44	2.0	4.5	33	2.0	4.5	49

Month of the year	Year : 2011								
	District : Aizawl								
	Location with data in $\mu\text{g}/\text{mg}^3$								
	KHATLA			LAIPUITLANG			BAWNGKAWN		
	SO <sub>2</sub>	NO <sub>2</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>	PM <sub>10</sub>
January	2.0	4.5	35	2.0	4.5	28	2.0	4.5	38
February	2.0	10.26	32	2.0	9.0	25	2.0	10.78	35
March	2.0	11.17	47	2.0	10.14	39	2.0	11.78	48
April	2.0	9.79	40	2.0	9.4	33	2.0	9.54	46
May	2.0	9.62	39	2.0	9.6	29	2.0	9.67	42
June	2.0	9.30	37	2.0	4.5	28	2.0	9.33	40
July	2.0	9.78	38	2.0	9.0	29	2.0	9.80	41
August	2.0	9.98	41	2.0	9.2	34	2.0	10.30	42
September	2.0	9.46	41	2.0	9.12	34	2.0	10.39	44
October	2.0	10.12	38	2.0	9.45	35	2.0	10.56	46
November	2.0	9.7	41	2.0	9.60	34	2.0	9.89	44
December	2.0	11.22	47	2.0	10.15	41	2.0	10.96	49
Annual Average	2.0	9.58	40	2.0	8.64	32	2.0	9.79	43

Month of the year	Year : 2012														
	District : Aizawl														
	Location with data in $\mu\text{g}/\text{m}^3$														
	KHATLA			LAIPUITLANG			BAWNGKAWN			DAWRPUI			LENGPUI		
$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	
January	2.0	4.5	44	2.0	4.5	35	2.0	4.5	49	2.0	26.1	112	2.0	4.5	65
February	2.0	4.5	52	2.0	4.5	41	2.0	4.5	56	2.0	32.0	133	2.0	4.5	53
March	2.0	13.6	76	2.0	4.5	50	2.0	9.2	64	2.0	31.1	129	2.0	4.5	73
April	2.0	11.2	69	2.0	4.5	55	2.0	9.2	66	2.0	24.4	93	2.0	4.5	43
May	2.0	9.8	59	2.0	4.5	45	2.0	9.4	57	2.0	19.8	75	2.0	4.5	23
June	2.0	9.6	62	2.0	4.5	51	2.0	10.8	65	2.0	15.8	50	2.0	4.5	14
July	2.0	4.5	62	2.0	4.5	53	2.0	4.5	64	2.0	19.8	37	2.0	4.5	11
August	2.0	4.5	61	2.0	4.5	54	2.0	4.5	66	2.0	20.6	47	2.0	4.5	8
September	2.0	4.5	48	2.0	4.5	45	2.0	4.5	51	2.0	16.2	41	2.0	4.5	5
October	2.0	4.5	49	2.0	4.5	44	2.0	4.5	50	2.0	16.5	52	2.0	4.5	10
November	2.0	4.5	47	2.0	4.5	44	2.0	4.5	51	2.0	52.0	77	2.0	4.5	20
December	2.0	4.5	53	2.0	4.5	48	2.0	4.5	57	2.0	25.0	72	2.0	4.5	25
Annual Average	2.0	4.5	57	2.0	4.5	47	2.0	4.5	58	2.0	24.9	77	2.0	4.5	29

Month of the year	Year : 2012																	
	District : : Lunglei, Kolasib, Champhai																	
	Location with data in $\mu\text{g}/\text{m}^3$																	
	LUNGLEI DISTRICT						KOLASIB DISTRICT						CHAMPHAI DISTRICT					
FARMVENG			CHANMARI-I			PROJECT VENG			DIAKKAWN			KAHRAWT			VENGTHLANG			
$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	
January	2.0	4.5	40	2.0	4.5	29	2.0	4.5	73	2.0	4.5	137	2.0	4.5	21	2.0	4.5	91
February	2.0	4.5	35	2.0	4.5	35	2.0	4.5	84	2.0	4.5	124	2.0	4.5	38	2.0	4.5	222
March	2.0	4.5	44	2.0	4.5	47	2.0	4.5	91	2.0	4.5	113	2.0	4.5	74	2.0	4.5	201
April	2.0	4.5	32	2.0	4.5	37	2.0	4.5	41	2.0	4.5	99	2.0	4.5	37	2.0	4.5	129
May	2.0	4.5	35	2.0	4.5	37	2.0	4.5	34	2.0	4.5	73	2.0	4.5	29	2.0	4.5	91
June	2.0	4.5	35	2.0	4.5	39	2.0	4.5	31	2.0	4.5	71	2.0	4.5	19	2.0	4.5	67
July	2.0	4.5	35	2.0	4.5	35	2.0	4.5	16	2.0	4.5	61	2.0	4.5	16	2.0	4.5	43
August	2.0	4.5	38	2.0	4.5	45	2.0	4.5	13	2.0	4.5	46	2.0	4.5	12	2.0	4.5	49
September	2.0	4.5	44	2.0	4.5	46	2.0	4.5	12	2.0	4.5	41	2.0	4.5	9	2.0	4.5	46
October	2.0	4.5	43	2.0	4.5	49	2.0	4.5	26	2.0	4.5	42	2.0	4.5	15	2.0	4.5	82
November	2.0	4.5	38	2.0	4.5	51	2.0	4.5	36	2.0	4.5	48	2.0	4.5	13	2.0	4.5	82
December	2.0	4.5	40	2.0	4.5	45	2.0	4.5	32	2.0	4.5	47	2.0	4.5	12	2.0	4.5	103
Annual Average	2.0	4.5	41	2.0	4.5	41	2.0	4.5	41	2.0	4.5	75	2.0	4.5	25	2.0	4.5	101

Month of the year	Year : 2013														
	District : Aizawl														
	Location with data in $\mu\text{g}/\text{mg}^3$														
	KHATLA			LAIPUITLANG			BAWNGKAWN			DAWRPUI			LENGPUI		
$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	
January	2.0	11.5	52	2.0	4.5	48	2.0	10.8	54	2.0	30.6	113	2.0	4.5	51
February	2.0	4.5	56	2.0	4.5	54	2.0	12.9	57	2.0	26.5	91	2.0	4.5	59
March	2.0	4.5	79	2.0	4.5	47	2.0	10.9	66	2.0	39.8	125	2.0	4.5	71
April	2.0	4.5	55	2.0	4.5	36	2.0	11.5	67	2.0	25.7	119	2.0	4.5	46
May	2.0	4.5	36	2.0	4.5	31	2.0	4.5	31	2.0	14.9	42	2.0	4.5	15
June	2.0	4.5	40	2.0	4.5	30	2.0	9.7	37	2.0	10.9	42	2.0	4.5	17
July	2.0	4.5	32	2.0	4.5	16	2.0	10.4	79	2.0	4.5	37	2.0	4.5	9
August	2.0	4.5	29	2.0	4.5	17	2.0	9.6	44	2.0	14.4	43	2.0	4.5	13
September	2.0	4.5	29	2.0	4.5	17	2.0	4.5	40	2.0	17.8	38	2.0	4.5	14
October	2.0	4.5	37	2.0	4.5	36	2.0	12.1	46	2.0	20.6	67	2.0	4.5	18
November	2.0	4.5	46	2.0	4.5	59	2.0	13.0	50	2.0	31.7	126	2.0	4.5	20
December	2.0	4.5	48	2.0	4.5	49	2.0	11.0	46	2.0	30.8	105	2.0	4.5	32
Annual Average	2.0	4.5	45	2.0	4.5	37	2.0	10.0	51	2.0	22.3	79	2.0	4.5	30

Month of the year	Year : 2013																	
	District : Lunglei, Kolasib, Champhai																	
	Location with data in $\mu\text{g}/\text{mg}^3$																	
	LUNGLEI DISTRICT						KOLASIB DISTRICT						CHAMPHAI DISTRICT					
FARM VENG			CHANMARI-I			PROJECT VENG			DIAKKAWN			KAHRAWT			VENGTHLANG			
$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	
January	4.4	4.5	33	4.1	4.5	32	2.0	4.5	48	2.0	4.5	45	2.0	4.5	26	2.0	4.5	123
February	2.0	4.5	45	4.6	4.5	40	2.0	4.5	49	2.0	4.5	45	2.0	4.5	25	2.0	4.5	106
March	4.4	4.5	33	4.1	4.5	32	2.0	4.5	48	2.0	4.5	45	2.0	4.5	26	2.0	4.5	123
April	2.0	4.5	40	4.7	4.5	43	2.0	4.5	55	2.0	4.5	40	2.0	4.5	20	2.0	4.5	125
May	2.0	4.5	40	2.0	4.5	45	2.0	4.5	48	2.0	4.5	39	2.0	4.5	20	2.0	4.5	95
June	2.0	4.5	42	2.0	4.5	46	2.0	4.5	42	2.0	4.5	44	2.0	4.5	19	2.0	4.5	110
July	2.0	4.5	43	2.0	4.5	51	2.0	4.5	33	2.0	4.5	48	2.0	4.5	18	2.0	4.5	109
August	2.0	4.5	44	2.0	4.5	59	2.0	4.5	25	2.0	4.5	46	2.0	4.5	20	2.0	4.5	45
September	2.0	4.5	40	2.0	4.5	60	2.0	4.5	31	2.0	4.5	39	2.0	4.5	18	2.0	4.5	47
October	2.0	4.5	41	2.0	4.5	61	2.0	4.5	33	2.0	4.5	42	2.0	4.5	21	2.0	4.5	89
November	2.0	4.5	43	2.0	4.5	63	2.0	4.5	36	2.0	4.5	44	2.0	4.5	23	2.0	4.5	91
December	2.0	4.5	44	2.0	4.5	65	2.0	4.5	46	2.0	4.5	47	2.0	4.5	22	2.0	4.5	95
Annual Average	2.0	4.5	41	2.0	4.5	50	2.0	4.5	41	2.0	4.5	44	2.0	4.5	22	2.0	4.5	97

Month of the year	Year : 2014														
	District : Aizawl														
	Location with data in $\mu\text{g}/\text{mg}^3$														
	KHATLA			LAIPUITLANG			BAWNGKAWN			DAWRPUI			LENGPUI		
$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	
January	2.0	4.5	57	2.0	4.5	55	2.0	9.5	44	2.0	16.7	91	2.0	4.5	38
February	2.0	4.5	58	2.0	4.5	45	2.0	9.4	39	2.0	21.8	136	2.0	4.5	43
March	2.0	4.5	62	2.0	4.5	36	2.0	9.2	35	2.0	16.7	115	2.0	4.5	61
April	2.0	4.5	62	2.0	4.5	63	2.0	10.2	37	2.0	13.2	124	2.0	4.5	41
May	2.0	4.5	44	2.0	4.5	36	2.0	9.7	33	2.0	12.7	60	2.0	4.5	19
June	2.0	4.5	36	2.0	4.5	37	2.0	10.2	30	2.0	9.5	46	2.0	4.5	15
July	2.0	4.5	33	2.0	4.5	37	2.0	9.8	27	2.0	12.3	41	2.0	4.5	12
August	2.0	4.5	33	2.0	4.5	37	2.0	4.5	26	2.0	10.8	45	2.0	4.5	14
September	2.0	4.5	33	2.0	4.5	36	2.0	9.2	27	2.0	9.0	27	2.0	4.5	17
October	2.0	4.5	38	2.0	4.5	33	2.0	11.0	32	2.0	12.9	46	2.0	4.5	22
November	2.0	4.5	43	2.0	4.5	35	2.0	11.6	32	2.0	11.6	38	2.0	4.5	26
December	2.0	4.5	46	2.0	4.5	33	2.0	12.0	32	2.0	12.7	46	2.0	4.5	29
Annual Average	2.0	4.5	45	2.0	4.5	40	2.0	9.69	33	2.0	13.3	68	2.0	4.5	28

Month of the year	Year : 2014																	
	District : Lunglei, Kolasib, Champhai																	
	Location with data in $\mu\text{g}/\text{mg}^3$																	
	LUNGLEI DISTRICT						KOLASIB DISTRICT						CHAMPHAI DISTRICT					
FARM VENG			CHANMARI-I			PROJECT VENG			DIAKKAWN			KAHRAWT			VENGTHLANG			
$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	
January	4.4	4.5	41	4.1	4.5	52	2.0	4.5	43	2.0	4.5	44	2.0	4.5	23	2.0	4.5	97
February	2.0	4.5	45	4.6	4.5	56	2.0	4.5	33	2.0	4.5	45	2.0	4.5	22	2.0	4.5	87
March	4.4	4.5	33	4.1	4.5	60	2.0	4.5	41	2.0	4.5	44	2.0	4.5	28	2.0	4.5	101
April	2.0	4.5	40	4.7	4.5	61	2.0	4.5	36	2.0	4.5	43	2.0	4.5	26	2.0	4.5	84
May	2.0	4.5	40	2.0	4.5	59	2.0	4.5	27	2.0	4.5	43	2.0	4.5	28	2.0	4.5	56
June	2.0	4.5	42	2.0	4.5	52	2.0	4.5	26	2.0	4.5	46	2.0	4.5	26	2.0	4.5	55
July	2.0	4.5	43	2.0	4.5	49	2.0	4.5	25	2.0	4.5	44	2.0	4.5	22	2.0	4.5	65
August	2.0	4.5	44	2.0	4.5	53	2.0	4.5	26	2.0	4.5	43	2.0	4.5	22	2.0	4.5	57
September	2.0	4.5	40	2.0	4.5	54	2.0	4.5	15	2.0	4.5	39	2.0	4.5	21	2.0	4.5	66
October	2.0	4.5	41	2.0	4.5	54	2.0	4.5	20	2.0	4.5	44	2.0	4.5	25	2.0	4.5	59
November	2.0	4.5	43	2.0	4.5	56	2.0	4.5	23	2.0	4.5	44	2.0	4.5	24	2.0	4.5	50
December	2.0	4.5	44	2.0	4.5	59	2.0	4.5	25	2.0	4.5	46	2.0	4.5	23	2.0	4.5	53
Annual Average	2.0	4.5	41	2.0	4.5	55	2.0	4.5	28	2.0	4.5	44	2.0	4.5	24	2.0	4.5	69

Month of the year	Year : 2015														
	District : Aizawl														
	Location with data in $\mu\text{g}/\text{mg}^3$														
	KHATLA			LAIPUITLANG			BAWNGKAWN			DAWRPUI			LENGPUI		
	SO <sub>2</sub>	NO <sub>2</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>	PM <sub>10</sub>
January	2.0	4.5	46	2.0	4.5	28	2.0	11.1	29	2.0	11.6	43	2.0	4.5	44
February	2.0	4.5	42	2.0	4.5	25	2.0	10.8	29	2.0	9.8	45	2.0	4.5	48
March	2.0	4.5	45	2.0	4.5	25	2.0	11.3	30	2.0	17.9	82	2.0	4.5	59
April	2.0	10.1	58	2.0	4.5	32	2.0	12.3	64	2.0	23	75	2.0	4.5	43
May	2.0	10.1	42	2.0	4.5	34	2.0	11	38	2.0	17.5	59	2.0	4.5	34
June	2.0	4.5	31	2.0	4.5	21	2.0	9	29	2.0	17.7	32	2.0	4.5	16
July	2.0	4.5	32	2.0	4.5	20	2.0	4.5	24	2.0	13.9	41	2.0	4.5	20
August	2.0	4.5	38	2.0	4.5	18	2.0	4.5	26	2.0	13.9	41	2.0	4.5	27
September	2.0	4.5	40	2.0	4.5	21	2.0	4.5	25	2.0	13.2	31	2.0	4.5	31
October	2.0	4.5	85	2.0	4.5	24	2.0	4.5	28	2.0	15.7	52	2.0	4.5	30
November	2.0	4.5	131	2.0	4.5	24	2.0	10	32	2.0	18	72	2.0	4.5	20
December	2.0	4.5	214	2.0	4.5	52	2.0	4.5	28	2.0	20.2	124	2.0	4.5	54
Annual Average	2.0	4.5	67	2.0	4.5	27	2.0	4.5	32	2.0	16.5	58	2.0	4.5	36

Month of the year	Year : 2015																	
	District : Lunglei, Kolasib, Champhai																	
	Location with data in $\mu\text{g}/\text{mg}^3$																	
	LUNGLEI DISTRICT						KOLASIB DISTRICT						CHAMPHAI DISTRICT					
FARM VENG			CHANMARI-I			PROJECT VENG			DIAKKAWN			KAHRAWT			VENGTHLANG			
SO <sub>2</sub>	NO <sub>2</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>	PM <sub>10</sub>	
January	2.0	4.5	40	2.0	4.5	59	2.0	4.5	22	2.0	4.5	39	2.0	4.5	24	2.0	4.5	53
February	2.0	4.5	42	2.0	4.5	57	2.0	4.5	23	2.0	4.5	37	2.0	4.5	26	2.0	4.5	52
March	2.0	4.5	42	2.0	4.5	57	2.0	4.5	30	2.0	4.5	45	2.0	4.5	28	2.0	4.5	56
April	2.0	4.5	37	2.0	4.5	40	2.0	4.5	31	2.0	4.5	42	2.0	4.5	21	2.0	4.5	57
May	2.0	4.5	43	2.0	4.5	47	2.0	4.5	21	2.0	4.5	45	2.0	4.5	24	2.0	4.5	29
June	2.0	4.5	19	2.0	4.5	23	2.0	4.5	19	2.0	4.5	46	2.0	4.5	22	2.0	4.5	34
July	2.0	4.5	11	2.0	4.5	18	2.0	4.5	24	2.0	4.5	44	2.0	4.5	20	2.0	4.5	37
August	2.0	4.5	13	2.0	4.5	29	2.0	4.5	18	2.0	4.5	46	2.0	4.5	19	2.0	4.5	39
September	2.0	4.5	14	2.0	4.5	30	2.0	4.5	19	2.0	4.5	44	2.0	4.5	20	2.0	4.5	44
October	2.0	4.5	25	2.0	4.5	42	2.0	4.5	24	2.0	4.5	42	2.0	4.5	21	2.0	4.5	40
November	2.0	4.5	38	2.0	4.5	53	2.0	4.5	25	2.0	4.5	44	2.0	4.5	23	2.0	4.5	51
December	2.0	4.5	87	2.0	4.5	67	2.0	4.5	25	2.0	4.5	44	2.0	4.5	21	2.0	4.5	49
Annual Average	2.0	4.5	34	2.0	4.5	44	2.0	4.5	31	2.0	4.5	43	2.0	4.5	22	2.0	4.5	45

Month of the year	Year : 2016														
	District : Aizawl														
	Location with data in $\mu\text{g}/\text{mg}^3$														
	KHATLA			LAIPUITLANG			BAWNGKAWN			DAWRPUI			LENGPUI		
$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	
January	2.0	12.2	268	2.0	4.5	52	2.0	4.5	26	2.0	25.4	93	2.0	4.5	59
February	2.0	13.6	128	2.0	4.5	54	2.0	12.4	94	2.0	26.4	119	2.0	4.5	72
March	2.0	13.4	129	2.0	4.5	57	2.0	12.4	99	2.0	20.6	115	2.0	4.5	66
April	2.0	10.1	66	2.0	4.5	26	2.0	11.6	76	2.0	16.7	83	2.0	4.5	46
May	2.0	9.9	66	2.0	4.5	37	2.0	11.9	71	2.0	16	70	2.0	4.5	32
June	2.0	9.1	56	2.0	4.5	28	2.0	11.6	56	2.0	14.9	65	2.0	4.5	19
July	2.0	4.5	51	2.0	4.5	26	2.0	11.3	51	2.0	13.9	73	2.0	4.5	24
August	2.0	9.1	82	2.0	4.5	34	2.0	4.5	75	2.0	20.2	93	2.0	4.5	33
September	2.0	4.5	39	2.0	4.5	19	2.0	4.5	62	2.0	15.6	47	2.0	4.5	20
October	2.0	10	43	2.0	4.5	20	2.0	10.6	36	2.0	4.5	55	2.0	4.5	23
November	2.0	11.9	55	2.0	4.5	25	2.0	13.2	64	2.0	15.8	66	2.0	4.5	23
December	2.0	14.7	60	2.0	4.5	31	2.0	14.3	71	2.0	13	73	2.0	4.5	40
Annual Average	2.0	10.2	84	2.0	4.5	29	2.0	10.2	65	2.0	16.9	79	2.0	4.5	36

Month of the year	Year : 2016																	
	District : Lunglei, Kolasib, Champhai																	
	Location with data in $\mu\text{g}/\text{mg}^3$																	
	LUNGLEI DISTRICT						KOLASIB DISTRICT						CHAMPHAI DISTRICT					
FARM VENG			CHANMARI-I			PROJECT VENG			DIAKKAWN			KAHRAWT			VENGTHLANG			
$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	
January	2.0	4.5	49	2.0	4.5	58	2.0	4.5	25	2.0	4.5	41	2.0	4.5	21	2.0	4.5	64
February	2.0	4.5	60	2.0	4.5	59	2.0	4.5	25	2.0	4.5	43	2.0	4.5	19	2.0	4.5	64
March	2.0	4.5	52	2.0	4.5	81	2.0	4.5	23	2.0	4.5	43	2.0	4.5	23	2.0	4.5	66
April	2.0	4.5	46	2.0	4.5	51	2.0	4.5	25	2.0	4.5	41	2.0	4.5	19	2.0	4.5	60
May	2.0	4.5	28	2.0	4.5	41	2.0	4.5	23	2.0	4.5	41	2.0	4.5	19	2.0	4.5	46
June	2.0	4.5	21	2.0	4.5	25	2.0	4.5	20	2.0	4.5	41	2.0	4.5	17	2.0	4.5	20
July	2.0	4.5	14	2.0	4.5	18	2.0	4.5	19	2.0	4.5	39	2.0	4.5	13	2.0	4.5	21
August	2.0	4.5	12	2.0	4.5	15	2.0	4.5	20	2.0	4.5	38	2.0	4.5	16	2.0	4.5	21
September	2.0	4.5	8	2.0	4.5	13	2.0	4.5	20	2.0	4.5	36	2.0	4.5	14	2.0	4.5	18
October	2.0	4.5	7	2.0	4.5	17	2.0	4.5	22	2.0	4.5	37	2.0	4.5	16	2.0	4.5	25
November	2.0	4.5	17	2.0	4.5	35	2.0	4.5	15	2.0	4.5	34	2.0	4.5	73	2.0	4.5	26
December	2.0	4.5	27	2.0	4.5	46	2.0	4.5	30	2.0	4.5	33	2.0	4.5	19	2.0	4.5	33
Annual Average	2.0	4.5	28	2.0	4.5	38	2.0	4.5	22	2.0	4.5	39	2.0	4.5	22	2.0	4.5	30

Month of the year	Year : 2017														
	District : Alzawl														
	Location with data in $\mu\text{g}/\text{mg}^3$														
	KHATLA			LAIPUITLANG			BAWNGKAWN			DAWRPUI			LENGPUI		
$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	
January	2.0	16.5	69	2.0	4.5	20	2.0	12.3	76	2.0	19.3	42	2.0	4.5	42
February	2.0	13.2	81	2.0	4.5	24	2.0	13.5	119	2.0	22.6	111	2.0	4.5	61
March	2.0	16	87	2.0	4.5	25	2.0	14.1	90	2.0	25.8	97	2.0	4.5	56
April	2.0	12.1	72	2.0	4.5	31	2.0	13.8	82	2.0	24.8	117	2.0	4.5	59
May	2.0	11.6	44	2.0	4.5	26	2.0	13	75	2.0	9.5	96	2.0	4.5	40
June	2.0	4.5	30	2.0	4.5	25	2.0	13.7	65	2.0	14.6	65	2.0	4.5	15
July	2.0	4.5	36	2.0	4.5	20	2.0	4.5	43	2.0	13.2	56	2.0	4.5	21
August	2.0	4.5	52	2.0	4.5	19	2.0	4.5	47	2.0	13	50	2.0	4.5	22
September	2.0	4.5	76	2.0	4.5	22	2.0	4.5	33	2.0	12.5	68	2.0	4.5	20
October	2.0	9.8	57	2.0	4.5	22	2.0	9.4	46	2.0	10.1	58	2.0	4.5	27
November	2.0	12.6	67	2.0	4.5	20	2.0	12.3	53	2.0	12.8	66	2.0	4.5	27
December	2.0	11.1	45	2.0	4.5	22	2.0	4.5	32	2.0	11.5	72	2.0	4.5	28
Annual Average	2.0	10.5	60	2.0	4.5	23	2.0	10.8	63	2.0	15.1	72	2.0	4.5	34

Month of the year	Year : 2017																	
	District : Lunglei, Kolasib, Champhai																	
	Location with data in $\mu\text{g}/\text{mg}^3$																	
	LUNGLEI DISTRICT			KOLASIB DISTRICT			CHAMPHAI DISTRICT											
FARM VENG			CHANMARI-I			PROJECT VENG			DIAKKAWN			KAHRAWT			VENGTHLANG			
$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	
January	2.0	4.5	34	2.0	4.5	48	2.0	4.5	32	2.0	4.5	38	2.0	4.5	18	2.0	4.5	30
February	2.0	4.5	34	2.0	4.5	46	2.0	4.5	39	2.0	4.5	39	2.0	4.5	27	2.0	4.5	48
March	2.0	4.5	46	2.0	4.5	46	2.0	4.5	44	2.0	4.5	49	2.0	4.5	23	2.0	4.5	58
April	2.0	4.5	13	2.0	4.5	27	2.0	4.5	31	2.0	4.5	45	2.0	4.5	26	2.0	4.5	48
May	2.0	4.5	24	2.0	4.5	37	2.0	4.5	23	2.0	4.5	43	2.0	4.5	23	2.0	4.5	36
June	2.0	4.5	17	2.0	4.5	30	2.0	4.5	16	2.0	4.5	29	2.0	4.5	14	2.0	4.5	23
July	2.0	4.5	8	2.0	4.5	28	2.0	4.5	15	2.0	4.5	31	2.0	4.5	14	2.0	4.5	18
August	2.0	4.5	7	2.0	4.5	26	2.0	4.5	11	2.0	4.5	34	2.0	4.5	14	2.0	4.5	19
September	2.0	4.5	8	2.0	4.5	25	2.0	4.5	11	2.0	4.5	27	2.0	4.5	16	2.0	4.5	22
October	2.0	4.5	7	2.0	4.5	19	2.0	4.5	10	2.0	4.5	27	2.0	4.5	18	2.0	4.5	20
November	2.0	4.5	8	2.0	4.5	30	2.0	4.5	24	2.0	4.5	36	2.0	4.5	18	2.0	4.5	24
December	2.0	4.5	9	2.0	4.5	28	2.0	4.5	17	2.0	4.5	31	2.0	4.5	20	2.0	4.5	34
Annual Average	2.0	4.5	18	2.0	4.5	33	2.0	4.5	23	2.0	4.5	36	2.0	4.5	19	2.0	4.5	32

Year : 2018  
District : Aizawl  
Location with data in  $\mu\text{g}/\text{mg}^3$

Month of the year	KHATLA			LAIPUITLANG			BAWNGKAWN			DAWRPUI			LENGPUI		
	SO <sub>2</sub>	NO <sub>2</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>	PM <sub>10</sub>
January	2.0	14.1	83	2.0	4.5	20	2.0	9.7	22	2.0	11.5	95	2.0	4.5	69
February	2.0	14.1	91	2.0	4.5	22	2.0	12.1	41	2.0	14.1	115	2.0	4.5	71
March	2.0	15.7	92	2.0	4.5	23	2.0	11.6	56	2.0	16.1	107	2.0	4.5	62
April	2.0	13.1	71	2.0	4.5	20	2.0	12.3	84	2.0	12.7	85	2.0	4.5	52
May	2.0	4.5	42	2.0	4.5	20	2.0	9	54	2.0	10.5	69	2.0	4.5	34
June	2.0	4.5	27	2.0	4.5	17	2.0	4.5	30	2.0	9.3	66	2.0	4.5	34
July	2.0	4.5	44	2.0	4.5	16	2.0	4.5	30	2.0	9.6	54	2.0	4.5	34
August	2.0	4.5	78	2.0	4.5	17	2.0	4.5	39	2.0	4.5	57	2.0	4.5	36
September	2.0	9.1	40	2.0	4.5	21	2.0	4.5	59	2.0	9.5	56	2.0	4.5	39
October	2.0	9.7	88	2.0	4.5	18	2.0	4.5	64	2.0	9.8	55	2.0	4.5	47
November	2.0	11.6	134	2.0	4.5	19	2.0	4.5	64	2.0	9.6	52	2.0	4.5	62
December	2.0	11.5	72	2.0	4.5	20	2.0	4.5	50	2.0	4.5	49	2.0	4.5	58
Annual Average	2.0	22.1	72	2.0	4.5	19	2.0	4.5	49	2.0	10.8	72	2.0	4.5	50

Year : 2018  
District : Lunglei, Kolasib, Champhai  
Location with data in  $\mu\text{g}/\text{mg}^3$

Month of the year	LUNGLEI DISTRICT						KOLASIB DISTRICT						CHAMPHAI DISTRICT					
	FARM VENG			CHANMARI-I			PROJECT VENG			DIAKKAWN			KAHRAWT			VENGTHLANG		
	SO <sub>2</sub>	NO <sub>2</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>	PM <sub>10</sub>
January	2.0	4.5	9	2.0	4.5	24	2.0	4.5	28	2.0	4.5	37	2.0	4.5	18	2.0	4.5	38
February	2.0	4.5	9	2.0	4.5	22	2.0	4.5	26	2.0	4.5	34	2.0	4.5	27	2.0	4.5	46
March	2.0	4.5	9	2.0	4.5	20	2.0	4.5	25	2.0	4.5	34	2.0	4.5	23	2.0	4.5	41
April	2.0	4.5	7	2.0	4.5	38	2.0	4.5	13	2.0	4.5	30	2.0	4.5	26	2.0	4.5	32
May	2.0	4.5	6	2.0	4.5	13	2.0	4.5	9	2.0	4.5	28	2.0	4.5	23	2.0	4.5	28
June	2.0	4.5	6	2.0	4.5	12	2.0	4.5	10	2.0	4.5	26	2.0	4.5	14	2.0	4.5	24
July	2.0	4.5	5	2.0	4.5	10	2.0	4.5	5	2.0	4.5	29	2.0	4.5	14	2.0	4.5	28
August	2.0	4.5	6	2.0	4.5	8	2.0	4.5	7	2.0	4.5	26	2.0	4.5	14	2.0	4.5	32
September	2.0	4.5	8	2.0	4.5	10	2.0	4.5	11	2.0	4.5	31	2.0	4.5	16	2.0	4.5	32
October	2.0	4.5	6	2.0	4.5	11	2.0	4.5	15	2.0	4.5	33	2.0	4.5	18	2.0	4.5	32
November	2.0	4.5	7	2.0	4.5	12	2.0	4.5	23	2.0	4.5	35	2.0	4.5	18	2.0	4.5	33
December	2.0	4.5	8	2.0	4.5	13	2.0	4.5	24	2.0	4.5	29	2.0	4.5	20	2.0	4.5	33
Annual Average	2.0	4.5	7	2.0	4.5	16	2.0	4.5	16	2.0	4.5	31	2.0	4.5	19	2.0	4.5	33

Year : 2019															
District : Aizawl															
Month of the year	Location with data in $\mu\text{g}/\text{mg}^3$														
	KHATLA			LAIPUITLANG			BAWNGKAWN			DAWRPUI			LENGPUI		
	SO <sub>2</sub>	NO <sub>2</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>	PM <sub>10</sub>
January	2.0	11.6	78	2.0	4.5	21	2.0	4.5	38	2.0	9.0	61	2.0	4.5	46
February	2.0	11.6	122	2.0	4.5	20	2.0	11.6	43	2.0	11.5	59	2.0	4.5	55
March	2.0	13.1	152	2.0	4.5	24	2.0	4.5	58	2.0	16.2	68	2.0	4.5	63
April	2.0	13.1	123	2.0	4.5	22	2.0	4.5	48	2.0	14.9	65	2.0	4.5	34
May	2.0	12.8	116	2.0	4.5	20	2.0	4.5	56	2.0	17.8	71	2.0	4.5	41
June	2.0	11.5	66	2.0	4.5	20	2.0	4.5	50	2.0	14.5	68	2.0	4.5	25
July	2.0	4.5	34	2.0	4.5	16	2.0	4.5	30	2.0	9.6	53	2.0	4.5	22
August	2.0	4.5	52	2.0	4.5	18	2.0	4.5	31	2.0	11.5	53	2.0	4.5	20
September	2.0	4.5	60	2.0	4.5	18	2.0	4.5	39	2.0	4.5	52	2.0	4.5	29
October	2.0	4.5	55	2.0	4.5	19	2.0	4.5	40	2.0	4.5	48	2.0	4.5	27
November	2.0	10.3	111	2.0	4.5	19	2.0	4.5	47	2.0	10.4	51	2.0	4.5	47
December	2.0	11.6	94	2.0	4.5	22	2.0	4.5	61	2.0	4.5	53	2.0	4.5	47
Annual Average	2.0	9.4	89	2.0	4.5	20	2.0	4.5	45	2.0	11	59	2.0	4.5	36

Year : 2019																		
District : Lunglei, Kolasib, Champhai																		
Month of the year	Location with data in $\mu\text{g}/\text{mg}^3$																	
	LUNGLEI DISTRICT						KOLASIB DISTRICT						CHAMPHAI DISTRICT					
	FARM VENG			CHANMARI-I			PROJECT VENG			DIAKKAWN			KAHRAWT			VENGTHLANG		
	SO <sub>2</sub>	NO <sub>2</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>2</sub>	PM <sub>10</sub>
January	2.0	4.5	7	2.0	4.5	8	2.0	4.5	23	2.0	4.5	36	2.0	4.5	25	2.0	4.5	23
February	2.0	4.5	6	2.0	4.5	9	2.0	4.5	23	2.0	4.5	35	2.0	4.5	24	2.0	4.5	23
March	2.0	4.5	7	2.0	4.5	9	2.0	4.5	23	2.0	4.5	36	2.0	4.5	23	2.0	4.5	23
April	2.0	4.5	7	2.0	4.5	10	2.0	4.5	17	2.0	4.5	36	2.0	4.5	20	2.0	4.5	17
May	2.0	4.5	7	2.0	4.5	10	2.0	4.5	21	2.0	4.5	28	2.0	4.5	23	2.0	4.5	21
June	2.0	4.5	6	2.0	4.5	10	2.0	4.5	15	2.0	4.5	23	2.0	4.5	22	2.0	4.5	15
July	2.0	4.5	6	2.0	4.5	9	2.0	4.5	13	2.0	4.5	22	2.0	4.5	20	2.0	4.5	10
August	2.0	4.5	6	2.0	4.5	9	2.0	4.5	9	2.0	4.5	24	2.0	4.5	20	2.0	4.5	9
September	2.0	4.5	6	2.0	4.5	9	2.0	4.5	9	2.0	4.5	24	2.0	4.5	18	2.0	4.5	7
October	2.0	4.5	8	2.0	4.5	10	2.0	4.5	7	2.0	4.5	21	2.0	4.5	18	2.0	4.5	10
November	2.0	4.5	8	2.0	4.5	10	2.0	4.5	10	2.0	4.5	27	2.0	4.5	17	2.0	4.5	11
December	2.0	4.5	6	2.0	4.5	11	2.0	4.5	11	2.0	4.5	26	2.0	4.5	20	2.0	4.5	20
Annual Average	2.0	4.5	6	2.0	4.5	9	2.0	4.5	20	2.0	4.5	26	2.0	4.5	21	2.0	4.5	16

Year : 2020  
District : Aizawl

Location with data in  $\mu\text{g}/\text{mg}^3$

Month of the year	Location with data in $\mu\text{g}/\text{mg}^3$									DAWRPUI			LENGPUI		
	KHATLA			LAIPUITLANG			BAWNGKAWN			$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$
	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$
January	2.0	10.3	84	2.0	4.5	22	2.0	4.5	48	2.0	4.5	52	2.0	4.5	50
February	2.0	4.5	69	2.0	4.5	23	2.0	4.5	57	2.0	4.5	42	2.0	4.5	59
March	2.0	4.5	65	2.0	4.5	22	2.0	4.5	53	2.0	4.5	42	2.0	4.5	53
April	2.0	4.5	53	2.0	4.5	19	2.0	4.5	39	2.0	4.5	18	2.0	4.5	37
May	2.0	4.5	27	2.0	4.5	17	2.0	4.5	34	2.0	4.5	44	2.0	4.5	28
June	2.0	4.5	17	2.0	4.5	18	2.0	4.5	30	2.0	4.5	45	2.0	4.5	18
July	2.0	4.5	14	2.0	4.5	18	2.0	4.5	35	2.0	4.5	44	2.0	4.5	12
August	2.0	4.5	16	2.0	4.5	19	2.0	4.5	37	2.0	4.5	47	2.0	4.5	16
September	2.0	4.5	14	2.0	4.5	18	2.0	4.5	44	2.0	4.5	45	2.0	4.5	14
October	2.0	4.5	16	2.0	4.5	18	2.0	4.5	18	2.0	4.5	42	2.0	4.5	20
November	2.0	4.5	11	2.0	4.5	19	2.0	4.5	26	2.0	4.5	41	2.0	4.5	18
December	2.0	4.5	22	2.0	4.5	22	2.0	4.5	45	2.0	4.5	65	2.0	4.5	40
Annual Average	2.0	4.5	34	2.0	4.5	20	2.0	4.5	39	2.0	4.5	44	2.0	4.5	30

Year : 2020  
District : Lunglei, Kolasib, Champhai

Location with data in  $\mu\text{g}/\text{mg}^3$

Month of the year	Location with data in $\mu\text{g}/\text{mg}^3$																	
	LUNGLEI DISTRICT						KOLASIB DISTRICT						CHAMPHAI DISTRICT					
	FARM-VENG			CHANMARI-I			PROJECT VENG			DIAKKAWN			KAHRAWT			VENGTHLANG		
$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	
January	2.0	4.5	8	2.0	4.5	9	2.0	4.5	18	2.0	4.5	28	2.0	4.5	16	2.0	4.5	28
February	2.0	4.5	7	2.0	4.5	4	2.0	4.5	22	2.0	4.5	27	2.0	4.5	17	2.0	4.5	30
March	2.0	4.5	8	2.0	4.5	10	2.0	4.5	18	2.0	4.5	24	2.0	4.5	20	2.0	4.5	32
April	2.0	4.5	6	2.0	4.5	8	2.0	4.5	12	2.0	4.5	18	2.0	4.5	15	2.0	4.5	27
May	2.0	4.5	5	2.0	4.5	7	2.0	4.5	13	2.0	4.5	21	2.0	4.5	14	2.0	4.5	24
June	2.0	4.5	9	2.0	4.5	11	2.0	4.5	12	2.0	4.5	21	2.0	4.5	17	2.0	4.5	25
July	2.0	4.5	7	2.0	4.5	11	2.0	4.5	9	2.0	4.5	21	2.0	4.5	17	2.0	4.5	25
August	2.0	4.5	8	2.0	4.5	11	2.0	4.5	9	2.0	4.5	22	2.0	4.5	19	2.0	4.5	27
September	2.0	4.5	8	2.0	4.5	11	2.0	4.5	9	2.0	4.5	21	2.0	4.5	18	2.0	4.5	29
October	2.0	4.5	9	2.0	4.5	21	2.0	4.5	12	2.0	4.5	24	2.0	4.5	18	2.0	4.5	29
November	2.0	4.5	9	2.0	4.5	12	2.0	4.5	15	2.0	4.5	22	2.0	4.5	18	2.0	4.5	23
December	2.0	4.5	9	2.0	4.5	11	2.0	4.5	16	2.0	4.5	25	2.0	4.5	16	2.0	4.5	28
Annual Average	2.0	4.5	8	2.0	4.5	11	2.0	4.5	14	2.0	4.5	23	2.0	4.5	17	2.0	4.5	27

Month of the year	Year : 2021														
	District : Aizawl														
	Location with data in $\mu\text{g}/\text{mg}^3$														
	KHATLA			LAIPUITLANG			BAWNGKAWN			DAWRPUI			LENGPUI		
$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	
January	2.0	4.5	23	2.0	4.5	24	2.0	11.5	84	2.0	9.5	83	2.0	4.5	57
February	2.0	4.5	28	2.0	4.5	27	2.0	10.2	88	2.0	13.7	81	2.0	4.5	61
March	2.0	4.5	35	2.0	4.5	32	2.0	14.7	103	2.0	4.5	105	2.0	4.5	75
April	2.0	4.5	34	2.0	4.5	31	2.0	11.1	76	2.0	9.6	72	2.0	4.5	62
May	2.0	4.5	26	2.0	4.5	24	2.0	4.5	41	2.0	4.5	34	2.0	4.5	25
June	2.0	4.5	22	2.0	4.5	22	2.0	4.5	40	2.0	4.5	25	2.0	4.5	17
July	2.0	4.5	15	2.0	4.5	22	2.0	4.5	34	2.0	4.5	37	2.0	4.5	16
August	2.0	4.5	15	2.0	4.5	23	2.0	4.5	34	2.0	4.5	33	2.0	4.5	10
September	2.0	4.5	16	2.0	4.5	24	2.0	4.5	26	2.0	4.5	35	2.0	4.5	18
October	2.0	4.5	19	2.0	4.5	25	2.0	4.5	43	2.0	4.5	56	2.0	4.5	35
November	2.0	4.5	39	2.0	4.5	32	2.0	4.5	64	2.0	4.5	58	2.0	4.5	60
December	2.0	4.5	31	2.0	4.5	31	2.0	4.5	88	2.0	11.6	54	2.0	4.5	38
Annual Average	2.0	4.5	25	2.0	4.5	25	2.0	4.5	60	2.0	4.5	54	2.0	4.5	38

Month of the year	Year : 2021																	
	District : Lunglei, Kolasib, Champhai																	
	Location with data in $\mu\text{g}/\text{mg}^3$																	
	LUNGLEI DISTRICT			KOLASIB DISTRICT			CHAMPHAI DISTRICT											
FARM VENG			VENGLAI			PROJECT VENG			DIAKKAWN			KAHRAWT			VENGTHLANG			
$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	
January	2.0	4.5	12	2.0	4.5	27	2.0	4.5	18	2.0	4.5	25	2.0	4.5	16	2.0	4.5	32
February	2.0	4.5	10	2.0	4.5	12	2.0	4.5	17	2.0	4.5	25	2.0	4.5	15	2.0	4.5	31
March	2.0	4.5	29	2.0	4.5	46	2.0	4.5	17	2.0	4.5	24	2.0	4.5	23	2.0	4.5	34
April	2.0	4.5	71	2.0	4.5	80	2.0	4.5	14	2.0	4.5	24	2.0	4.5	21	2.0	4.5	36
May	2.0	4.5	24	2.0	4.5	29	2.0	4.5	12	2.0	4.5	15	2.0	4.5	17	2.0	4.5	29
June	2.0	4.5	8	2.0	4.5	11	2.0	4.5	12	2.0	4.5	17	2.0	4.5	17	2.0	4.5	26
July	2.0	4.5	8	2.0	4.5	11	2.0	4.5	13	2.0	4.5	17	2.0	4.5	12	2.0	4.5	27
August	2.0	4.5	15	2.0	4.5	19	2.0	4.5	12	2.0	4.5	16	2.0	4.5	14	2.0	4.5	24
September	2.0	4.5	14	2.0	4.5	26	2.0	4.5	15	2.0	4.5	16	2.0	4.5	14	2.0	4.5	24
October	2.0	4.5	12	2.0	4.5	31	2.0	4.5	16	2.0	4.5	21	2.0	4.5	14	2.0	4.5	22
November	2.0	4.5	18	2.0	4.5	33	2.0	4.5	16	2.0	4.5	21	2.0	4.5	19	2.0	4.5	24
December	2.0	4.5	14	2.0	4.5	26	2.0	4.5	15	2.0	4.5	18	2.0	4.5	17	2.0	4.5	24
Annual Average	2.0	4.5	20	2.0	4.5	27	2.0	4.5	15	2.0	4.5	22	2.0	4.5	17	2.0	4.5	28

Month of the year	Year : 2021																	
	District : Siaha, Mamit, Serchhip																	
	Location with data in $\mu\text{g}/\text{mg}^3$																	
	SIAHA DISTRICT						MAMIT DISTRICT						SERCHHIP DISTRICT					
NEW SIAHA			ECM VAHH			BAZAR VENG			LUNGSIR VENG			BAZAR VENG			P&E VENG			
$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	
January	2.0	4.5	113	2.0	4.5	41	2.0	4.5	67	2.0	4.5	44	2.0	4.5	75	2.0	4.5	77
February	2.0	4.5	49	2.0	4.5	73	2.0	4.5	76	2.0	4.5	61	2.0	4.5	64	2.0	4.5	72
March	2.0	4.5	68	2.0	4.5	101	2.0	4.5	69	2.0	4.5	61	2.0	4.5	95	2.0	4.5	92
April	2.0	4.5	88	2.0	4.5	95	2.0	4.5	36	2.0	4.5	43	2.0	4.5	74	2.0	4.5	78
May	2.0	4.5	35	2.0	4.5	26	2.0	4.5	33	2.0	4.5	32	2.0	4.5	31	2.0	4.5	23
June	2.0	4.5	14	2.0	4.5	17	2.0	4.5	25	2.0	4.5	28	2.0	4.5	12	2.0	4.5	20
July	2.0	4.5	12	2.0	4.5	-	2.0	4.5	26	2.0	4.5	21	2.0	4.5	6	2.0	4.5	14
August	2.0	4.5	11	2.0	4.5	14	2.0	4.5	-	2.0	4.5	15	2.0	4.5	13	2.0	4.5	13
September	2.0	4.5	12	2.0	4.5	17	2.0	4.5	22	2.0	4.5	17	2.0	4.5	9	2.0	4.5	11
October	2.0	4.5	21	2.0	4.5	13	2.0	4.5	21	2.0	4.5	21	2.0	4.5	13	2.0	4.5	12
November	2.0	4.5	15	2.0	4.5	12	2.0	4.5	23	2.0	4.5	24	2.0	4.5	13	2.0	4.5	16
December	2.0	4.5	26	2.0	4.5	38	2.0	4.5	23	2.0	4.5	25	2.0	4.5	10	2.0	4.5	22
Annual Average	2.0	4.5	39	2.0	4.5	37	2.0	4.5	35	2.0	4.5	33	2.0	4.5	33	2.0	4.5	38

Month of the year	Year : 2021					
	District : Lawngtlai					
	Location with data in $\mu\text{g}/\text{mg}^3$					
	L-IV			L-3 ELECTRIC VENG		
$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	$\text{SO}_2$	$\text{NO}_2$	$\text{PM}_{10}$	
January	2.0	4.5	100	2.0	4.5	43
February	2.0	4.5	102	2.0	4.5	119
March	2.0	4.5	226	2.0	4.5	202
April	2.0	4.5	167	2.0	4.5	142
May	2.0	4.5	44	2.0	4.5	38
June	2.0	4.5	36	2.0	4.5	24
July	2.0	4.5	33	2.0	4.5	30
August	2.0	4.5	42	2.0	4.5	22
September	2.0	4.5	-	2.0	4.5	24
October	2.0	4.5	33	2.0	4.5	30
November	2.0	4.5	31	2.0	4.5	21
December	2.0	4.5	35	2.0	4.5	26
Annual Average	2.0	4.5	71	2.0	4.5	63

Table 5.2 Air Quality Parameters for main tourist destinations/circuits.

Month of the year	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub> (ppm)	NO <sub>2</sub> (ppm)	O <sub>3</sub> (ppm)	Black Carbon (ppm)
January	Nil	Nil	Nil	Nil	Nil	Nil
February						
March						
April						
May						
June						
July						
August						
September						
October						
November						
December						
Annual Average						

CENTRAL POLLUTION CONTROL BOARD

Table 5.3 Air Quality Control measure taken in the State

Sl No.	Measures taken	Number	Capacity	Details(if any)
1.	Dust settlers	Nil	NA	NA
2.	Scrubbers	Nil	NA	NA
3.	Others	Nil	NA	NA
	<b>Total</b>	<b>Nil</b>	<b>NA</b>	<b>NA</b>

# MIZORAM POLLUTION CONTROL BOARD

No.H.88088/Poltn/50(90)/2022-MPCB/57-61 : Dated Aizawl, the 18<sup>th</sup> June, 2024

To.

The Under Secretary,  
EF&CC Department,  
Govt.of Mizoram

Subject: **O.A. No.178/2022 in Re:News item published in the Hindu dt 27.02.2022 titled” Tourism has brought economic prosperity to the Himalayan region, but the environmental cost has neeb catastrophic”-reg**

Reference: Y/L No.C.18014/351/2022-FST/562 dated 12.06.2024

Sir,

With reference to the subject and letter No. cited above, may I bring to your kind notice that in pursuance to CPCB RNDE’s direction vide letter dated 24.05.2023(enclosed). the Board vide its letter dated 27.07.2023 (enclosed) furnished its inputs for the aforementioned sections to MoEF&CC and CPCB, RDNE, Shillong.

Nevertheless, the inputs furnished by the Board on 27.07.2023 is reproduced again for your kind information and necessary action.

**1. Section.12.2.1: Assessment of solid waste generation:**

Data w.r.t the quantity of solid wastes generation and per capita per day waste generation as provided in the report do not match with the records or report provided by the Mizoram Pollution Control Board.

The correct data are as follows:

		MIZORAM	AIZAWL
2010-2011	Total Waste generation	NA	NA
	Landfill	NA	NA
	Per capita per day	NA	NA
2019-2020	Total Waste generation	348.19MT/day	167.91MT/day
	Landfill	NIL	NIL
	Per capita per day	520gm/day	502.68gm/day
2020-2021	Total Waste generation	285.473MT/day	150MT/day
	Landfill	6.74 MT/day	6.74MT/day
	Per capita per day	261gm/day	416.1 gm/day

**2. Section 12.2.2. Air quality and pollutants**

From January 2012, the number of air quality monitoring stations have substantially increased from 3 stations (Aizawl) to 19 stations located at Aizawl, Lunglei, Kolasib and Champhai districts. Summary of the data from 2011 to 2021 is indicated below:

- i. Air Quality Index (AQI) ranged from 7 to 87
- ii. 24 hour average concentration of pollutants:
  - a)  $\text{SO}_2$ -  $2 \mu\text{g m}^{-3}$
  - b)  $\text{NO}_2$ -  $4.5 \mu\text{g m}^{-3}$  (min) &  $24.3 \mu\text{g m}^{-3}$  (max)
  - c)  $\text{PM}_{10}$ -  $4 \mu\text{g m}^{-3}$  (min) &  $343 \mu\text{g m}^{-3}$  (max)

### 3. Section 12.2.2.

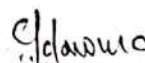
#### b. Parameter-wise air quality ( $\text{PM}_{10}$ , $\text{SO}_2$ , $\text{NO}_2$ etc.)

The whole paragraph in respect of the reported data needs revision due to the reason that the data appears to be analysed by taking the arithmetic average of the data from all the monitoring stations. However, in order to gain a comprehensive rightful insight of air quality trend in a particular area, the air quality data of that area may not be interlinked with that of other locations. The air quality of the monitoring locations should rather be evaluated individually based on which the Report must be prepared accordingly, not simply taking average of all the stations.

### 4. Section 12.2.3.

- i. As per the water quality data of Mizoram recorded in the website [www.mpcb.mizoram.gov.in](http://www.mpcb.mizoram.gov.in), the pH value of water monitoring location with station code. 3745 on October 2018 is recorded as 0.06 which should be read with the corrected value of 6.06. Accordingly, the Report may be appropriately revised.
- ii. In respect of the comments such as, 'the water quality (surface water) in conformity with the **desired level** required for riverine environment' and 'water quality of ground water revealed that only 33% samples were not found in compliance with the **desired levels** with respect to pH', it may be pointed out on what basis/standards/guidelines are these desired levels derived from or the data are compared to. CPCB has the notified water quality criteria for designated best uses in case of surface water and also Indian Standards in force for drinking water.

Yours faithfully,



(C. LALDUHAWMA)  
Member Secretary  
Mizoram Pollution Control Board

