

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE, CHENNAI**

IN

ORIGINAL APPLICATION No. O A 77 of 2021(SZ)

IN THE MATTER OF

Suo Motu proceedings initiated

based on letter received

From Justice A.V. Ramakrishna Pillai,

Former Judge, High Court of

Kerala, Chairman,

SLMC, Kerala.

:

Applicant(s)

Verses

The Chief Secretary,

Government of Kerala,

Thiruvananthapuram and Others

:

Respondent(s) And

ORIGINAL APPLICATION No. O A 442/2013(SZ)

Applicant(s) : Jith Kumar, Muthedathu

Versus

Respondent(s) : The State of Kerala & others

And

ORIGINAL APPLICATION No. O A 20 / 2017(SZ)

Abdul Basheer

Versus

Kochi Municipal Corporation & Others

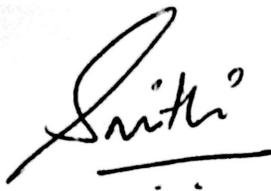
ORIGINAL APPLICATION No. O A 276/2017(SZ)

Lawyers Environmental Awareness Forum

Versus

SEIAA, Thiruvananthapuram

**REPORT FILED BY THE CHIEF ENVIRONMENTAL ENGINEER, REGIONAL
OFFICE, ERNAKULAM FOR AND ON BEHALF OF THE KERALA STATE
POLLUTION CONTROL BOARD**



Dated this the 28th day of March 2023

Adv. Rema Smrithi,

ADDITIONAL STANDING COUNSEL FOR THE RESPONDENT

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BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL

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RENUMBERED AS O A 77 of 2021(SZ)

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REPORT FILED BY THE CHIEF ENVIRONMENTAL ENGINEER,
REGIONAL OFFICE, ERNAKULAM FOR AND ON BEHALF OF THE
KERALA STATE POLLUTION CONTROL BOARD

I, Baburajan P K, 52 years, S/o. Late P A Kuttappan, now working as the Chief Environmental Engineer, Regional Office, Kerala State Pollution Control Board, Ernakulum. I am competent to and duly authorized to represent the Board. I know the facts and circumstances of the cases. The factual submissions made hereunder are true and correct to the best of my knowledge, information and belief. In these circumstances, it is just and necessary that this Hon'ble Tribunal may be pleased to accept the accompanying report on file and it is so humbly prayed in the interests of justice in this case.

1. In compliance with the order of the Hon'ble Tribunal dated 24.03.2023, I may humbly submitted that the fire incident happened on 02.03.2023 in the legacy waste dumping area where the bio mining activities was going on. The major portion of the waste dumped in that area is plastic. The fire subsided completely on 13.03.2023. The Board have continuously monitored the air quality at selected locations during the fire incident and continued monitoring for another 5 more days after the smoke and fire had completely subsided. The report show that the parameters are within the ambient air quality standards and the ambient air quality has improved very much when compared with the air quality during the time of fire incident. A copy of the ambient air quality data is produced herewith and marked as **Annexure 1** and **Annexure 2**.
2. The site was again inspected on 15.03.2023 and 26.03.2023 by the Board .During the inspection it was noticed that burnt plastic waste has formed a layer over the waste heap. Huge quantity of unburnt plastic and other non-biodegradable waste are still there under the burnt plastic layer. It covers an area of around 40 acres. It was also noticed that no ash in powder form could be seen at the site giving a chance to spread in the surrounding ambient air. Photographs of the waste heap taken after the fire incident are produced herewith and marked as **Annexure 3**. It is also submitted that after the fire was extinguished, there was rain in that area intermittingly for 2 days.




BABURAJAN P.K.
Chief Environmental Engineer

3. It is respectfully submitted that the Board collected water samples from the confluence point of Kadambrayar and Chithrapuzha in the presence of Kochi corporation officials and village officer, Puthencruz. The consolidated details of the analysis reports of the sample collected from Kadambrayar is furnished as Table 1:

Sl no	Parameters	Kadambrayar - Chithrapuzha confluence point	Standards as per IS 2296-1982
1	pH	6.5	6.5 to 8.5
2	BOD	3.7	3
4	Total dissolved solids (mg/L)	370	1500
5	Chlorides (mg/L)	99	600
6	Fluorides (mg/L)	0.23	1.5
7	Nitrates as N (mg/L)	2.47	50
9	Sulphates (mg/L)	27	400
10	Cyanides (mg/L)	BDL	0.05
12	Phenolic Compounds (mg/L)	BDL	0.005
13	Hexavalent Chromium (mg/L)	BDL	0.05
15	Oil and Grease (mg/L)	BDL	0.1
17	Iron(mg/L)	2.37	50
18	Copper(mg/L)	BDL	1.5
19	Zinc(mg/L)	0.04	15
21	Lead(mg/L)	0.07	0.1
22	Cadmium(mg/L)	BDL	0.01
23	Arsenic(mg/L)	BDL	0.2
24	Total Coliform(cfu/100ml)	1000	5000

Table 1. Analysis reports of the sample collected from Kadambrayar

The analysis reports of the river water (Kadambrayar) shows that the water body comes under the Class C as per IS 2296:1982 (Drinking water source with conventional treatment followed by disinfection).




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 Chief Environmental Engineer

4. It is respectfully submitted that the on-going bio mining of the waste which was interrupted due to the fire incident has to be completed on a war footing basis. This is because the monsoon in Kerala is about to start normally in the first week of June. The Kochi Corporation has to take urgent measures to ensure that the bio mining is completed within this time frame. If any ash is found underneath the fused plastic layer during the bio mining, it shall be disposed by the Kochi Corporation without causing any environmental problems by providing adequate control measures. The Board shall monitor the air quality of usual stations and water quality of Kadambrayar periodically.

All the facts stated above are true to the best of my knowledge, information and belief.

Dated this the 28th day of March 2023




CHIEF ENVIRONMENTAL ENGINEER
BABURAJAN P.K.
Chief Environmental Engineer

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Dated this the 28th day of March 2023

Adv. RemaSmrithi,

ADDITIONAL STANDING COUNSEL FOR THE RESPONDENT

Annexure 1

AIR QUALITY DATA

DATE	TIME	NAMP DATA(MANUAL STATION)													
		IRUMPANAM				KALAMASSERY				VYTTILA				PUTHENCRUZ (Started on 06/03/2023)	
		Daily average PM10 (µg/m ³) Standard (100µg/m ³)	Daily average PM2.5(µg/m ³) Standard (60 µg/m ³)	Daily average SO2(µg/m ³) Standard(80 µg/m ³)	Daily average NO2(µg/m ³) Standard(80 µg/m ³)	Daily average PM10 (µg/m ³) Standard (100µg/m ³)	Daily average PM2.5(µg/m ³) Standard (60 µg/m ³)	Daily average SO2(µg/m ³) Standard(80 µg/m ³)	Daily average NO2(µg/m ³) Standard(80 µg/m ³)	Daily average PM10 (µg/m ³) Standard (100µg/m ³)	Daily average PM2.5(µg/m ³) Standard (60 µg/m ³)	Daily average SO2(µg/m ³) Standard(80 µg/m ³)	Daily average NO2(µg/m ³) Standard(80 µg/m ³)	TIME	Daily average PM2.5(µg/m ³) Standard (60 µg/m ³)
02.03.2023-03.03.2023	06.00AM-06.00AM	110	82	BDL	BDL	134	84	BDL	BDL	139	76	4.1	BDL		-
03.03.2023-04.03.2023	10.00AM-10.00AM	192	119	BDL	BDL	251	101	BDL	BDL	-	-				-
04.03.2023-05.03.2023	02.00PM-02.00PM	144	105	BDL	BDL	115	89	BDL	BDL	-	-				-
06.03.2023-07.03.2023	10.00AM-10.00AM	184	140	BDL	BDL	-	-			260	195	BDL	9.5	01.00PM-01.00PM	89
07.03.2023-08.03.2023	02.00PM-02.00PM	399	201	4.5	7.1					104	60	BDL	14	04.00PM-04.00PM	
08.03.2023-09.03.2023	10.00PM-10.00PM	136	52	4	BDL					132	54	4	BDL	10.00PM-10.00PM	31
10.03.2023-11.03.2023	6.00AM-6.00AM	136	97	BDL	9.1					91	71	BDL	BDL	11 hrs sampling only	14
11.03.2023-12.03.2023	8.00AM - 8.00AM	143	113	BDL	BDL					102	51	BDL	BDL		52
12.03.2023-13.03.2023	9.00AM-9.00AM	96	69	BDL	BDL					82	54	BDL	BDL		75
13.03.2023-14.03.2023	10.00AM-10.00AM	67	71	BDL	BDL					65	64	BDL	BDL		71
14.03.2023-15.03.2023	2.00 PM -2.00PM	62	52	BDL	BDL					73	57	BDL	BDL		58
16.03.2023-17.03.2023	6.00 AM -6.00 AM	40	25	BDL	BDL					58	20	BDL	BDL		28
17.03.2023-18.03.2023	9.00AM-9.00AM	35	32	BDL	BDL					54	20	BDL	BDL		17



CHIEF ENVIRONMENTAL ENGINEER

BABURAJAN P.K.
Chief Environmental Engineer

AIR QUALITY DATA

DATE	CONTINUOUS AMBIENT AIR QUALITY MONITORING STATION DATA				
	VYTTILA				
	Daily average PM10 ($\mu\text{g}/\text{m}^3$) Standard(100 $\mu\text{g}/\text{m}^3$)	Daily average PM2.5($\mu\text{g}/\text{m}^3$) Standard(60 $\mu\text{g}/\text{m}^3$)	Daily average NO2($\mu\text{g}/\text{m}^3$) Standard(80 $\mu\text{g}/\text{m}^3$)	Daily average SO2($\mu\text{g}/\text{m}^3$) Standard(80 $\mu\text{g}/\text{m}^3$)	AQI
01.03.2023	100	67	18.35	14.45	136
02.03.2023	96	65	15.18	20	103
03.03.2023	154	109	8.57	25.09	Insufficient data
04.03.2023	134	209	15.08	26.59	186
05.03.2023	135	144	5.47	42.29	184
06.03.2023	135	90	15.35	27.59	148
07.03.2023	169.18	130.41	25.59	14.7	215
08.03.2023	129	88	275.24	11.42	158
09.03.2023	154	116	87.06	30.77	Insufficient data
10.03.2023	121	81	40.8	33.51	150
11.03.2023	128	98	33.4	38.84	Insufficient data
12.03.2023	122	90	40.37	39.17	176
13.03.2023	106	72	33.21	39.72	138
14.03.2023	101.96	66.11	18.86	47.2	125
15.03.2023	80.72	49.38	10.16	49.71	96
16.03.2023	65.28	43.39	13.71	48.59	75
17.03.2023	57	32.83	16.5	25.61	61
18.03.2023	59.13	35.14	12.68	27.63	63
19.03.2023	54.08	36.51	2.58	29.01	55
20.03.2023	92	56	7.15	29.46	81



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Photographs of the waste heap taken after the fire incident



Babu
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