

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL, NEW DELHI

Original Application No. 687 of 2023

In the matter of Suo Moto Cognizance

In Re: **Air Quality Index in various Cities. The Hon'ble NGT Order dated 19.02.2024 in O.A. 687 of 2023.**

Sr. No	Particulars	Page No.
1	Additional status report of the State of Punjab through Scientific Officer (Air Laboratory), Punjab Pollution Control Board in compliance of order dated 19.02.2024.	1-7
2	Annexure- A. The city wise detail relating to the receipt and utilization of funds under NCAP.	8
3	Annexure- B The city wise detail of funds received and utilized under Fifteenth Finance Commission.	9
4	Annexure-C The detail of activities carried out for utilization of funds under NCAP and Fifteenth Finance Commission for improving air quality in the non-attainment cities.	10-15
5	Annexure-D The sector wise contribution in PM ₁₀ / PM _{2.5} pollutant as per final Source Apportionment (SA) study report of Ludhiana	16
6	Annexure-E The detail of activities/efforts carried out for mitigating the major contributors in pollution (PM ₁₀ /PM _{2.5}) as per final Source Apportionment (SA) study report of Ludhiana	17-18
7	Annexure-F The ambient air quality data for Ludhiana city (where SA study has been completed).	19

Place **PATIALA**

Submitted by


Date **26.04.2024**

Scientific Officer
(Air Laboratory)
Punjab Pollution Control Board,
Nabha Road, Patiala
(On the behalf of State of Punjab)

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL, NEW DELHI

Original Application No. 687 of 2023

In the matter of Suo Moto Cognizance

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Additional status report of the State of Punjab through Scientific Officer (Air Laboratory), Punjab Pollution Control Board in compliance of order dated 19.02.2024.

Respectfully Showeth

1. That the Hon'ble National Green Tribunal was pleased to take Suo Moto cognizance of the above-mentioned case on the basis of the Air Quality Bulletins of CPCB posted on their website in the respect of Air Quality Index (AQI) for different cities from 20.10.2023 to 01.11.2023 and issued notice to the States where the cities AQI has dipped to severe, very poor and poor with directions to take immediate remedial action and submit action taken report. The Hon'ble Tribunal has passed series of orders in the case, in compliance of which the Punjab Pollution Control Board has filed reply/status reports from time to time on behalf of the State of Punjab.

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2. That in compliance to order dated 05.12.2023, a status report dated 05.02.2024 was filed by the Scientific Officer (Air Laboratory), Punjab Pollution Control Board on behalf of the State of Punjab disclosing therein the utilization of funds received from CPCB for improvement of air quality in non-attainment cities and the fact that the funds have been used for the purpose for which the funds have been allocated. In the said report dated 05.02.2024, the status of funds received and utilized as on 25.01.2024 under NCAP and XVth Finance Commission was given. However, after 25.01.2024, funds amounting to Rs. 13,38,525/- have been further received by the Board. The status with regard to release and utilization of funds for implementation of action plans to improve air quality of non-attainment cities under the National Clean Air Program and XVth Finance Commission is given here in below: -

- a) The State of Punjab has received total funds amounting to Rs. 102.691 Crores under National Clean Air Program (NCAP) [Rs.13,38,525/- have been received after the filing of first status report dated 05.02.2024]. Out of 102.691 Crores, Rs. 49.15 Cr. has been received up to 31.03.2023. The State of Punjab has utilized Rs. 37.0307 Cr. as on 31.03.2024. The city wise detail relating to the receipt and utilization of funds under NCAP is given in **Annexure- A**.



- b) The State of Punjab has received Rs. 159 Crores under XV-FC (Fifteenth Finance Commission) out of which Rs. 131.58 Cr. has been utilized. The city wise detail of funds received and utilized is given in **Annexure- B**.
- c) That it is relevant to mention here that the funds have been utilized under the heads which have direct connection with the improvement of air quality as per city action plans. The detail of activities carried out for utilization of funds under NCAP and Fifteenth Finance Commission for improving air quality in the non-attainment cities is given in the **Annexure-C**.

3. That the Hon'ble Tribunal after consideration of the reports filed by some States in compliance to order dated 05.12.2023, has made certain observations by passing a further order dated 19.02.2024. The observations of the Hon'ble Tribunal as contained in para 5 of the order dated 19.02.2024 are reproduced here in below for kind perusal and reference.

- i. The reports indicate that in cities, action plans are implemented without having complete Source Apportionment Studies.
- ii. The major contributor to air pollution is the road dust and accordingly efforts should be towards undertaking road dust mitigating activities. However,

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progressive reduction of PM₁₀ and PM_{2.5} linking with the source identified, is not disclosed.

- iii. Out of 53 cities identified under the present matter, 19 cities fall in Non-Attainment City (NAC) and Rs. 1644.4025 crores has been allocated for air quality improvement. MoEF&CC needs to ensure that assets created by expanding such amount are proper utilized and issue relating to O&M are duly addressed. It is also necessary that such funding do not create too much dependency on central funding and authorities concerned in the States and cities perform their own statutory and obligatory functions.
 - iv. We also find that dust pollution issue and its behavior is concerned with metrological conditions and each city is required to have seasonal trends and accordingly, action plan be implemented in advance.
4. That in view of the above observations, the Hon'ble Tribunal was pleased to issue the following directions vide order dated 19.02.2024
- i. The States/cities which have not furnished the reports are directed to provide the complete report at least one week before the next date of hearing.

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- ii. All the cities (53) should disclose contribution by each polluting source in terms of identified pollutant (PM₁₀/PM_{2.5}) as per source apportionment and progressive reduction on account of measures taken.
5. That out of the 53 cities identified in the present matter which find mention in order dated 03.11.2023, 4 cities namely Bathinda, Amritsar, Ludhiana and Mandi Gobindgarh fall in the State of Punjab. The Brief facts relating to these cities of Punjab in terms of order dated 19.02.2024 are given below: -

A) Bathinda

The Bathinda city does not fall in the category of non-attainment city and thus has received no funds under National Clear Air Program. The Source Apportionment study of Bathinda city has not been carried out as such.

B) Amritsar

The Board has signed Memorandum of Understanding (MoU) with Indian Institute of Technology, Delhi in September, 2022 to carry out Source Apportionment (SA) study of Amritsar city. As per the terms and conditions of MoU, the Indian Institute of Technology, Delhi has submitted interim report in reference to Source Apportionment (SA) study of Amritsar. Final Source

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Apportionment (SA) study of Amritsar is awaited from Indian Institute of Technology, Delhi.

C) Ludhiana

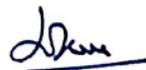
The Source Apportionment study of Ludhiana has been conducted by the Punjab State Council for Science & Technology, Chandigarh and The Energy & Resources Institute, New Delhi. The sector wise contribution in PM₁₀/ PM_{2.5} pollutant as per final Source Apportionment (SA) study report of Ludhiana is enclosed herewith as **Annexure-D**.

The detail of activities/efforts carried out for mitigating the major contributors in pollution (PM₁₀/PM_{2.5}) as per final Source Apportionment (SA) study report of Ludhiana is given in **Annexure-E**.

The ambient air quality data for Ludhiana city (where SA study has been completed) is enclosed as **Annexure-F**.

D) Mandi Gobindgarh

The Source Apportionment study of Mandi Gobindgarh is being conducted by Indian Institute of Technology, Delhi and is at advanced stage of finalization after incorporating suggestions of peer review group.



6. That the State of Punjab is sincerely endeavoring to make prompt utilization of funds and for the purpose the fund has been allocated without leaving any gap in utilization. Further, funds are being utilized by making efforts/activities for mitigating the major contributors in pollution as per SA study report/city action plans. The Punjab Pollution Control Board is making sincere efforts to get the Source Apportionment (SA) study of Amritsar, Mandi Gobindgarh and other non-attainment cities (except Ludhiana and Jalandhar where already completed) completed at the earliest.
7. That the further status report (in continuation of the status report earlier filed on 05.02.2024) is hereby submitted on behalf of the State of Punjab in compliance to order dated 19.02.2024 for kind consideration and appropriate orders of this Hon'ble Tribunal.

Place: PATIALA

Submitted by

Date: 26.04.2024



Scientific Officer
(Air Laboratory),
Punjab Pollution Control Board, Nabha
Road, Patiala
(On behalf of State of Punjab)

Annexure-A

**Status of fund received and utilized by 9 non-attainment cities as on
31.03.2024 in the State of Punjab under NCAP**

S. no.	Name of City	Funds Received (Rs. In Cr.)						Fund Utilization		
		2019-20	2020-21	2022-23	Total Fund Received up to 31.03.2023	2023-24	Total fund Received up to 31.03.2024	Fund Utilized up to 31.03.2024 (Rs. In Cr.)	Percentage fund utilized up to 31.03.2024 w.r.t. to fund received up to 31.03.2023	Percentage fund utilized up to 31.03.2024 w.r.t. to fund received up to 31.03.2024
1	Jalandhar	0.12	4	10.53	14.65	30.79	45.44	8.8045	60.10	19.38
2	Khanna	0.06	1.9	1.4	3.36	3.64	7	3.7096	100.00	52.99
3	MGG	0.06	3	1.84	4.9	0.738	5.638	3.6217	73.91	64.24
4	Patiala	0.06	4	4.49	8.55	12.627	21.177	6.9977	81.84	33.04
5	Dera Bassi	0.06	0.38	0.45	0.89	0.45	1.34	0.8826	99.17	65.87
6	Dera baba Nanak	0.06	0.76	1.91	2.73	4	6.73	2.4379	89.30	36.22
7	Naya Nangal	0.06	1	1.01	2.07	1.296	3.366	1.377	66.52	40.91
8	Amritsar	6	0	0	6	0	6	5.515	91.92	91.92
9	Ludhiana	6	0	0	6	0	6	3.6847	61.41	61.41
Total		12.48	15.04	21.63	49.15	53.541	102.691	37.0307	75.34	36.06



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Punjab Pollution Control Board
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**Status of fund received and utilized by 2 million Plus Cities up to
31.03.2024 in the State of Punjab under Fifteenth Finance Commission
(XV-FC) Grant**

S. no.	Name of city	Fund received under XV-FC			Total fund utilized up to 31.03.2024 (Rs in Cr)	Percentage fund Utilization up to 31.03.2024
		(Rs in Cr)				
		Funds received from 01.04.2020 to 31.03.2023	23-24	Total Fund Received up to 31.03.2024		
1	Ludhiana	91.75	0.00	91.75	67.71	73.8
2	Amritsar	67.25	0.00	67.25	63.87	94.97
Total Fund		159.00	0.00	159.00	131.58	82.75

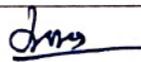
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Punjab Pollution Control Board
Patiala.

Annexure-C

Details of activities carried out w.r.t. fund utilization in 9 non-attainment cities under NCAP.

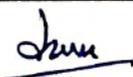
Name of Non-attainment Cities	Sr. No.	Activities carried out
Jalandhar	1	End-to-end paving of roads along with black-topping and maintaining potholes free roads/Greening of traffic corridors, open areas, gardens, community places, schools and housing societies/Regular cleaning of street surfaces and spraying of water to suppress dust.
	2	Dissemination of CAAQMS data
	3	Capacity Building & Public Awareness
	4	Carrying Capacity
	5	Purchase of PM ₁₀ sampler for Manual ambient air quality Monitoring station
	6	SA Study
Khanna	1	P/L Interlocking tiles 80 mm remaining part of Lalheri Road.
	2	1 Vehicle Mounted Anti- Smog Gun.
	3	Purchase of vehicle mounted road sweeping machine 6 cum
	4	De congestion of Roads S/o Traffic Lights
	5	S/o 2 No of Tanker
	6	Smog tower
	7	Dissemination of CAAQMS data
	8	Capacity Building & Public Awareness
	9	Carrying Capacity
	10	Purchase of PM ₁₀ sampler for Manual ambient air quality Monitoring station
	11	Miscellaneous
	12	SA Study
Patiala	1	Self- Propelled Sweeping Machine
	2	Construction of Environment Park in Banna Road Factory area
	3	Purchase of Sprinkler (Water Tanker)
	4	Construction footpath at factory area near Sushil Palace set a ward no. 13


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5	Construction of Street No. 3 to 7 Gopal Colony, Ward No. 32, Patiala
6	Purchase of vehicle mounded Anti Smog gun for MC Patiala
7	Estimate for the supply of litter picker, vacuumed type for Municipal Corporation Patiala.
8	Rough cost estimate for supply erection, testing and commissioning including warranty, comprehensive operation & maintenance of grid-Connected rooftop solar plant at office, Patiala.
9	Construction of remaining streets of Gopal Colony (left side street of roads from MC Gaushala to Samzi Mandi ward no. 32)
10	Construction of park in swarn vihar near circket academy ward no. 27
11	Laying interlocking tiles in Gurdev inclave near dera Abbu Shah Ward no. 43
12	Construction of park in Bada Arai Majra in ward no. 32
13	Renovation/upgradation of park in focal point Patiala
14	Construction of park in Vikas Colony Block-A Ward no. 27
15	Renovation and upgradation of Haryy Park in Upkar Nagar Ward No. 13
16	Construction of Vikas Colony Park (Tubewell No.2) Ward no. 27
17	Balance work of development of park near CIA staff ward no. 41
18	Construction Jagjeet Kohli park in ward no. 37
19	Upgradation/Renovation of Environment Park near Bhupindra Plaza Sirhind Road Patiala
20	Development/Rehabilitation of Park Opposite Plot-C 165 in Focal Point Patiala
21	Interlocking tiles near house no Dr.Sartaj H.No-233 and adjoining area Aman Bagh
22	Repair of interlocking tiels and RCC roads in Patiala II area in ward no. 2-29
23	Self- Propelled Sweeping Machine O&M
24	Dissemination of CAAQMS data
25	Capacity Building & Public Awareness


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	26	Carrying Capacity
	27	Purchase of PM ₁₀ sampler for Manual ambient air quality Monitoring station
	28	Miscellaneous
	29	SA Study
	30	Development of OXY Park
Dera Baba Nanak	1	Plantation in land area measuring in 8 Hectares by District Forest Officer, Gurdaspur
	2	Awareness camp organized by Agriculture Department, Gurdaspur
	3	Capacity Building & Public Awareness
	4	Carrying Capacity
	5	Purchase of PM ₁₀ sampler for Manual ambient air quality Monitoring station
	6	SA Study
	7	Mechanical Sweeping Machine (for internal roads of city)
	8	Mechanical Sweeping Machine (for external roads of city)
	9	3 no. Air Pollution hot spot identified and air purifier installed at all locaton for improvement of air quality
	10	3no organic waste compost machines, decentralization of processing of waste, dry waste collection centers
Gobindgarh	1	Vehicle Mounted Road Sweeping with one year O & M
	2	Vehicle Mounted Dust Control/Anti-Smog Gun Fogger
	3	2 Tractor Swaraj 735 FE
	4	Water Tanker with Sprinkling System capacity 5000 Lts.
	5	W No.22 P/L Interlock Tiles 60mm In Street H/O Parveen Madam To Sanjay,Nahar Singh To Charnjeet Kaur,Brij Lal To Tiwari
	6	W No.21 P/L Interlock Tiles 60mm In Street H/O Kamal To Gurmeet Kaur ,Dinesh Sharma To Tiwari ,Pala Singh To Balwinder Singh
	7	W No.9 P/L Interlock Tiles 60mm In Street Dispensary To Ranjeet Singh, Malkeet Singh To Jaspal Singh,Billu To Billa Singh
	8	W No.24 P/L Interlock Tiles 60mm In Street Fashion Beauty Parlour To Firoz Barber Shop



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	9	W NO.10 P/L interlock tiles 60MM IN street h/o Mohan Singh To Jarnail Singh, Dhiyan Singh Karyana Store To Near Teubwel
	10	P/L Interlock tiles 80MM Main Firni Nasrali H.No 281 Wonder World To Arshad Shop To Pal Cottage House Ward No 29
	11	Purchase of 6 nos. Hopper 2.0
	12	Const RMC flooring street from G.K trading Mill to Keshav Complex near Amloh road
	13	Red Light installed at Bus Stand, Bhadla Chowk and Solar Panels at different locations
	14	Dissemination of CAAQMS data
	15	Capacity Building & Public Awareness
	16	Carrying Capacity
	17	Purchase of PM ₁₀ sampler for Manual ambient air quality Monitoring station
	18	Misce.
	19	SA Study
Naya Nangal	1	Awareness program for students conducted on 07/09/2022
	2	Smog tower installation for clean air at Rajeev Gandhi chowk near bus stand on 07/09/2022
	3	Purchase of Water tanker and Trackers for Sprinkling of Water on roads.
	4	Widening of Roads
	5	Capacity Building & Public Awareness
	6	Carrying Capacity
	7	Purchase of PM ₁₀ sampler for Manual ambient air quality Monitoring station
	8	SA Study
Dera Bassi	1	Purchase of mechanical sweeping machine
	2	Capacity Building & Public Awareness
	3	Carrying Capacity


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	4	Purchase of PM10 sampler for Manual ambient air quality Monitoring station
	5	Miscellaneous
	6	SA Study
	7	Purchase of anti-smog gun for MC Derabassi
Ludhiana	1	Procurement of Mechanical Road Sweeping Machines
	2	Dissemination of CAAQMS data
	3	Capacity Building & Public Awareness
	4	Carrying Capacity
	5	Purchase of PM ₁₀ sampler for Manual ambient air quality Monitoring station
Amritsar	1	RD1.2 End-to-end paving of roads along with black-topping and maintaining potholes free roads
	2	RD1.4 Remove Road dust/silt regularly by using mechanical sweepers
	3	Dissemination of CAAQMS data
	4	Capacity Building & Public Awareness
	5	Carrying Capacity
	6	Purchase of PM10 sampler for Manual ambient air quality Monitoring station
	7	SA Study
	8	Miscellaneous



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Punjab Pollution Control Board
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Details of activities carried out w.r.t. fund utilization in 2 million Plus Cities under Fifteenth Finance Commission (XV-FC)

Name of NAC.	Sr. No.	Activities carried out
Amritsar	1	End-to-end paving of roads along with black-topping and maintaining potholes free roads
	2	Regular cleaning of street surfaces and spraying of water to suppress dust.
	3	Remove road dust/silt regularly by using mechanical sweepers
	4	Greening of traffic corridors, open areas, gardens, community places, schools and housing societies
	5	Introduce water fountain at major traffic intersection
	6	Widening of Roads
	7	Identify road stretches with high dust generation
	8	Parking Management
	9	Human Cremation
Ludhiana	1	Purchase of Machinery (Water Sprinklers, Fire tenders)
	2	New Road Works, widening of roads, Making roads pothole free
	3	Development of Park and Green Belts, Plantation Works
	4	Purchase of Anti-Smog Guns
	5	Purchase of Infrared recycling based mobile pothole patching machines


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 Punjab Pollution Control Board
 Patiala.

Annexure -D

**Sector wise contribution in PM₁₀/PM_{2.5} pollutants in Ludhiana City as per
Source Apportionment Study findings**

Sr. No.	Sector	Percentage Contribution of PM ₁₀	Percentage Contribution of PM _{2.5}
1	Transport	16	21
2	Industry	35	38
3	Biomass	16	19
4	Dust	28	16
5	Power Plants	1	1
6	Others	4	5



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Annexure -E

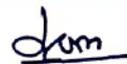
**Details of activities carried out as per Source Apportionment (SA) study
report**

Sr. No.	Name of Non-attainment city	Factors which have a larger share in contribution in pollution as per SA study finding	Activity carried out
1.	Ludhiana	Resuspension of Road Dust	Vacuum cleaning of roads for control of road dust being carried out. 3 Mechanical sweeping machines deployed at various locations with focus on hotspot areas. Orders for 2 additions Mechanical sweeping machines already made. Monitoring of road dust and its control using wall to wall paving and vacuumcleaning. Development of Park and Green Belts, Plantation Works
		Transport/ Vehicular emissions	Implementation of BS-VI norms. Policy regarding phasing out of old diesel autorickshaws/vehicles under consideration. Encouragement for E-vehicles and CNG fueled automobiles
		Industrial pollution	Monitoring of industrial pollution at regular intervals. Large scale units mandated to install continuous emission monitoring stations. CCTV



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Punjab Pollution Control Board
Ludhiana

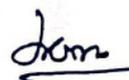
		cameras installed at requisite pollution control devices by large scale units and connectivity made with SPCB servers
	DG sets in commercial and residential establishments	Ban on DG sets without canopy/acoustic enclosures. Action taken under Air Act, 1981
	Refuse Burning	Ban on stubble burning place. Environmental Compensation being imposed as per NGT orders. Red entries being made in the khasra nos of defaulting farmers. FIRs u/s 144 CPC and prosecution u/s 31 of Air Act, 1981 also filed against continuous defaulters. Challans being issued in case of unauthorized solid waste burning by MCL authorities.
	Crematoriums	Introduction of LPG/electric crematoriums



Scientific Officer
Punjab Pollution Control Board
Patiala.

**The ambient air quality data of Ludhiana City
where SA study is completed**

Year	PM₁₀	PM_{2.5}
2021-22	167	55
2022-23	194	65
2023-24	171	57



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