

BEFORE THE NATIONAL GREEN TRIBUNAL AT NEW DELHI.

O.A NO. 295/2023

IN THE MATTER OF:

DIMPAL KUMAR.

...APPLICANT

VERSUS

GOVT. OF PUNJAB & ORS.


...RESPONDENTS

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PLACE: Delhi
DATE: 16.12.2024



(A.R. TAKKAR, ASHUTOSH BHARDWAJ, SHRIYA TAKKAR, ASMITA DUGGAL,

  
UNNATI ANAND, AASTHA TYAGI AND MANAN TAKKAR
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#P-6/2E, DLF PHASE-2, GURUGRAM-122002
MOB.: 9582209633

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ADDITIONAL REPLY ON BEHALF OF RESPONDENT NO.3 I.E. ALL INDIA STEEL ROLLERS ASSOCIATION.

MOST RESPECTFULLY SHOWETH:

1. The present Original Application has been filed by the Applicant alleging unregulated violation of air quality norms by 220 coal fired furnaces operating in Mandi Gobindgarh, Punjab, engaged in recycled steel production, Ceramics/Refractory, Cupola Furnaces, Forging Induction furnaces, Lead Smelting units, Rolling mills, Ply board, Milk Plant and Pyrolysis Plants. The matter is pending adjudication and is now listed for hearing on 17.12.2024.
2. That the present Additional reply is being filed by the Respondent No.3 i.e. All India Steel Rollers Association, to bring on record additional necessary facts and documents important for the fair and just adjudication of the instant Original Application.
3. The Respondent No.3 herein i.e. All India Steel Rollers Association was established in the year 1972. The Respondent No.3 herein is an apex body of more than 1,000 members. The Respondent No.3 promotes Re-Rolling technology (R&D) and rendering all assistance to members for efficient running of their units.
4. The Government of Punjab prepared an Action Plan for Clean Air for Mandi Gobindgarh under Chapter 8- Control of Industrial Emissions and under the said action plan the State of Punjab had proposed to convert the source of energy/fuel used by industries from coal to CNG/PNG. This Action Plan was prepared in

consonance with the directions of this Hon'ble Tribunal dated 08.10.2018 in OA 681/2018 which read as under:

“i. All the States and Union Territories with non-attainment cities must prepare appropriate action plans within two months aimed at bringing the standards of air quality within the prescribed norms within six months from date of finalization of the action plans.

ii. The Action Plans may be prepared by six-member committee comprising of Directors of Environment, Transport, Industries, Urban Development, Agriculture and Member Secretary, State Pollution Control Board or Committee of the concerned State. The Committee may be called Air Quality Monitoring Committee (AQMC). The AQMC will function under the overall supervision and coordination of Principal Secretary, Environment of the concerned State/Union Territory. This may be further supervised by the Chief Secretaries concerned or their counterparts in Union Territories by ensuring intra-sectoral co-ordination.

iii. The Action Plans may take into account the GRAP, the CAP and the action plan prepared by CPCB as well as all other relevant factors. The Action Plans may be forwarded to the CPCB by 31.12.2018. The same may be placed before the Committee as directed in direction no.

vi. The Action Plan will include components like identification of source and its apportionment considering sectors like vehicular pollution, industrial pollution, dust pollution, construction activities, garbage burning,

agricultural pollution including pollution caused by burning of crop residue, residential and indoor pollution etc. The action plan shall also consider measures for strengthening of Ambient Air Quality (AAQ) monitoring and steps for public awareness including issuing of advisory to public for prevention and control of air pollution and involvement of schools, colleges and other academic institutions and awareness programmes.

iv. The Action Plan will indicate steps to be taken to check different sources of pollution having speedy, definite and specific timelines for execution.

v. The Action Plan should be consistent with the carrying capacity assessment of the non-attainment cities in terms of vehicular pollution, industrial emissions and population density, extent of construction and construction activities etc. The carrying capacity assessment shall also lay emphasis on agricultural and indoor pollution in rural areas. Depending upon assessed carrying capacity and source apportionment, the authorities may consider the need for regulating number of vehicles and their parking and plying, population density, extent of construction and construction activities etc. Guidelines may accordingly be framed to regulate vehicles and industries in non-attainment cities in terms of carrying capacity assessment and source apportionment.

vi. The Committee comprising of (a) Shri. Prashant Gargava, Member Secretary, CPCB, (b) Dr. Mukesh Khare, Professor, IIT Delhi, and (c) Dr. Mukesh Sharma,

Professor, IIT Kanpur shall examine the Action Plans and on the recommendations of the said Committee, the Chairman, CPCB shall approve the same by 31.01.2019.

vii. The Chief Secretaries of the State and Administrators/ Advisors to Administrators of the Union Territories will be personally accountable for failure to formulate Action Plans, as directed.

viii. The CPCB, SPCBs and State Pollution Control Committees shall develop a public grievance redressal portal for redressal of public complaints on air pollution along with a supervisory mechanism for its disposal in a time bound manner. Any visible air pollution can be reported at such portal by email/SMS. ix. The CPCB and all the State Pollution Control Boards and Pollution Control Committees shall collectively workout and design a robust nationwide ambient air quality monitoring programme in a revised format by strengthening the existing monitoring network with respect to coverage of more cities/towns. The scope of monitoring should be expanded to include all twelve (12) notified parameters as per Notification No B-29016/20/90/PCI-L dated 18th November, 2009 of CPCB. The continuous Ambient Air Quality Monitoring Stations (AAQMS) should be preferred in comparison to manual monitoring stations. The CPCB and States shall file a composite action plan with timelines for its execution which shall not be more than three months. It is expected that all such AAQMS shall be connected to central server of CPCB for reporting analysis of results in a form of Air

Quality Bulletin for general public at regular intervals atleast on weekly basis and ambient air quality on continuous basis on e-portal. MoEF&CC will provide requisite funds for the purpose. MoEF&CC in consultation with Ministry of Housing and Urban Affairs, North,, Ministry of Petroleum and Natural Gas, Ministry of Agriculture, Cooperation and Farmers Welfare or any other Ministry to lay down such guidelines as may be considered necessary for improvement of air quality in the country."

Copy of the order dated 08.10.2018 passed by the Hon'ble National Green Tribunal in OA 681/2018 is marked and annexed herewith as **Annexure-R3/1**.

5. That pursuant to the directions of this Hon'ble Tribunal, the Ministry of Environment Forest and Climate Change (MoEFCC) launched a National Clean Air Programme (NCAP) in 2019 which aimed at reducing ambient PM pollution levels in 131 non-attainment cities. The NCAP programme required these cities to [prepare action plans](#) to reduce the PM pollution levels by 20-30% by 2024, relative to 2017 levels. In 2022, the target was revised to reduce PM pollution levels by 40% by 2026.
6. That pursuant to the National Clean Air Programme (NCAP) by MoEFCC and directions of this Hon'ble Tribunal dated 08.10.2018, an action plan dated 30.04.2019 for clean air in Mandi Gobindgarh was prepared by Directorate of Environment and Climate Change Department of Science, Technology and Environment, Government of Punjab. The action plan prepared by the Government of Punjab proposed activities to minimize the pollution generated from the industries in Mandi Gobindgarh. Relevant portion from the Action Plan prepared by the Government of Punjab is reproduced herein below for the ready reference of this Hon'ble Authority:

“8.3 CIE 2 – Conversion to CNG/ PNG from Coal A large number of units in Gobindgarh are using coal as source of energy. With the availability of CNG in the city, PPCB will motivate the industry to convert from Coal to CNG. The State government will be approached to reduce VAT to make it viable alternative.”

Further, the Action Plan proposed the following action:

“8.5 CIE 4 – Action against non-complying industrial units: The regular monitoring of industries is being carried out as per the policy of the Board. In case, any industry is found violating the provisions of the Air (Prevention and Control of Pollution) Act, 1981, action under the provisions of the said Act is initiated against the violating industries. The number of inspections carried out and action taken will be monitored regularly by the District Level Committee.”

Copy of Action Plan dated 30.04.2019 for Clean Air for Mandi Gobindgarh prepared by the Government of Punjab is marked and annexed herewith as **Annexure-R3/2.**

7. That thereafter, an Original Application bearing no. 924/2019 titled as Neeraj Goyal vs. State of Punjab was filed before this Hon'ble Tribunal for remedial action against polluting activities by the motor scraping units in Mandi Gobindgarh, Punjab. This Hon'ble Tribunal vide order dated 01.10.2020 in OA No. 924/2019 had issued certain directions to the Respondent Board with respect to the rolling mills though the OA was filed for pollution by motor scraping units. Relevant portion from the order dated 01.10.2020 is reproduced herein below for the ready reference of this Hon'ble Authority:

“The issue for consideration is remedial action against polluting activities by the motor scraping units in Mandi Gobindgarh, Punjab....

.....In the context of directions to shift rolling mills from coal to PNG, we direct the State PCB to ensure that if such shifting does not take place, the non-compliant units be closed till compliance. This should apply not only to rolling mills but also to other similarly placed industries operating on coal. Wherever there is non-compliance, the State PCB may take coercive measures including closure, recovery of compensations and initiating prosecution, following due process of law.”

It is pertinent to mention herein that a perusal of the order dated 01.10.2020 clearly reveals that the issue for consideration before this Hon'ble Tribunal was remedial action against illegal polluting activities by the Motor Scrapping Units in Mandi Gobindgarh, and not Rolling Mills. Further, it may be relevant to state that none of the Rolling Mills of Mandi Gobindgarh were a party to the said Original Application before this Hon'ble Tribunal. Copy of order dated 01.10.2020 is marked and annexed herewith as **Annexure-R3/3**.

8. That although no rolling mill of Mandi Gobindgarh were a party to the OA/924/2019, yet some steel/rolling industries started shifting from Steam Coal to PNG in compliance of the directives issued by this Hon'ble Tribunal. This shift is evident from the report submitted by the Punjab State Pollution Control Board dated 01.04.2021 in OA/924/2019. The same is reflected from the order dated 06.04.2021 in OA No. 924/2019. Relevant from the order is reproduced below:

“CONVERSION OF INDUSTRIES FROM COAL TO PNG:

239 number of industries operating in Mandi Gobindgarh area are using coal as fuel in their furnaces. Presently, 48 number of industries have successfully converted their re-

heating furnace from coal to PNG and in addition to this, 160 number of more industries have made agreement with PNG provider and are in the process of shifting from coal to PNG. The status report of all the industries with regard to PNG status is attached herewith as Annexure 1. It is relevant to mention here that the Board has issued show cause notices for cancellation of consent under the Air (Prevention & Control of Pollution) Act, 1981 to all the industries, who have failed to shift their units from coal to PNG up to 31/12/2020. It is further relevant to mention here that the Board had issued notice to issue directions u/s 31-A of the Air (Prevention & Control of Pollution) Act, 1981 to 31 number of units who have failed to obtain valid consent of the Board and have also not converted their units from coal to PNG. It is pertinent to mention here that Punjab Pollution Control Board is sincerely making continuous and earnest efforts to shift the industries to PNG. Various meetings have been taken with All India Steel Re-Roller Association (AISRA) and AISRA has requested the Board to extend the timeline up to 30.06.2021 as shifting of industries from coal to PNG involves high financial cost of Rs. 25-30 lacs per unit and it will also take about 3 months' time to switch to PNG by making necessary modifications in the existing industries."

That the said Original Application was disposed of vide order dated 06.04.2021 with the following directions with respect to the rolling mills:

"Since 48 units have been given PNG, applications of 160 more units are in the process of getting PNG and 31 units have yet to initiate the process, the State of Punjab as well

as the Ministry of Petroleum may take expeditious steps in the matter. The Chief Secretary, Punjab may facilitate the project of laying of necessary infrastructure which is necessary for protection of environment and public health."

Copy of the order dated 06.04.2021 passed by this Hon'ble Tribunal in OA/964/2019 is marked and annexed herewith as **Annexure-R3/4**.

9. That there is no allegation against the Steel Rolling Mills regarding non-compliance of the orders passed by this Hon'ble Tribunal especially relating to conversion from usage of coal to PNG. It is an admitted fact that after this Hon'ble Tribunal passed orders regarding usage of PNG i.e. order dated 01.10.2020, in OA 924 of 2019, the Steel Rolling Mills did convert their industrial process and started using PNG as fuel. It is important to bring to the knowledge of this Hon'ble Tribunal that this conversion entailed a heavy cost as a new PNG furnace cost approximately 1.5 to 2.5 Crores, whereas, the modification involves a cost of Rs. 20 to 50 Crores, however, in the latter process the consumption of fuel increases.
10. The Rolling industries in Mandi Gobindgarh had commenced their gradual transition from steam coal to PNG. However, the sharp and unprecedented rise in prices posed a significant obstacle to this shift. The price of PNG surged from Rs. 19 per SCM to Rs. 56 per SCM in January 2022, while steam coal remained priced at Rs. 12/kg. This drastic price increase led to the permanent shutdown of 20% of the industries that had switched to PNG, causing significant financial losses. **It is important to note that PNG prices are not regulated by government authorities, and there is a clear monopoly by M/s IRM Energy Ltd. as far as the price of PNG is concerned.** During financial year 2021-2022, the purchase of PNG from the international market was about Rs. 120 crores but the sale of the same quantity of PNG was in excess of Rs. 240 crores. Copy of Balance sheet of M/s IRM Energy Ltd. is marked and annexed herewith as **Annexure-R3/5**.

11. That Rolling Mills of Mandi Gobindgarh were ordered to shift from coal fired to gas fired in 2020. Pursuant to that, 167 industries shifted to piped natural gas (PNG). **At the time of shifting to PNG, the price of PNG was Rs.19 per SCM. The prices started to increase to the tune of Rs.56 per SCM, due to monopoly of gas supplier company and non- transparency in price mechanism as there was no alternate supplier allowed to operate in Mandi Gobindgarh. As a result of the increase in rates, manufacturing cost increased from 500 to 600 per MT under unavoidable circumstances, approximately 50 to 60 industries had to shut down as they were unable to compete with other rolling mills of India where coal/furnace oil was being used. All rolling mills of Mandi Gobindgarh cluster are prepared and keen to use PNG because they have already invested huge amounts on modification of machinery for conversion from coal to PNG (167 units have already converted and each unit has incurred 1.5 to 2.5 crores).**
12. It is crucial to highlight that one of the significant factors impeding the adoption of PNG was the lack of governmental enforcement on neighbouring cities in Punjab like Khanna and Ludhiana and in states to switch to CNG/PNG. These cities and states continued using coal, a significantly cheaper fuel compared to PNG, in their industrial units. Consequently, products manufactured in neighbouring cities and states were priced lower than those produced in Mandi Gobindgarh. This put local manufacturers under dual pressure to compete with the lower rates of neighbouring cities and states while trying to sustain their market share. Ultimately, this disparity led to the closure of several rolling mills in Mandi Gobindgarh. It is important to mention herein that at present 70,000 people are directly employed with the steel rolling mills and more than one lakh people would be indirectly affected in case of closure of the steel rolling mills in Mandi Gobindgarh.
13. That there are a total of 9 non-attainment cities in the State of Punjab. A city is classified as a non-attainment city if it has failed to meet the National Ambient Air Quality Standards (NAAQS) for more than five years. It is important to note that although the State of Punjab has developed a uniform action plan for all 9 non-

attainment cities, only Mandi Gobindgarh has access to PNG (piped natural gas) for industrial use. In the remaining 8 non-attainment cities, PNG is not readily available, thereby forcing industries in these cities to rely on conventional fuels such as coal. As a result, only the Rolling Mills in Mandi Gobindgarh are being compelled to transition to PNG, while the Rolling Mills in other parts of Punjab continue to use coal. Consequently, the cost of energy for Rolling Mills in Mandi Gobindgarh is significantly higher, with PNG priced at ₹41.70, compared to coal, which costs ₹14 for the same amount. The cost of production of 1 tonne of Steel using PNG is approximately Rs.1720/- (using 40 SCM of PNG @ 42Rs/Kg). The cost of production of 1 tonne of Steel using Coal is approximately Rs.770/- (using 55kg of Coal @ 14Rs/Kg). The burning loss of PNG fuel is less compared to Coal which ends up saving approximately Rs.300/-, bringing down the cost of production using PNG to approximately Rs.1420/-, which is still a lot more as compared to the cost of production using Coal. The Profit margin of Steel industries is 0.4-0.8% per Tonne. This can be achieved only in case the rolling mills use steam coal and not PNG which was viable initially with the cost of Rs.19 per SCM which later became prohibitive creating 15% extra burden on the rolling industries due to which the viability finishes all together and the rolling mills were forced to reverse back to usage of steam coal. Thus usage of PNG creates an uneven playing field, as Rolling Mills elsewhere in Punjab benefit from the use of a much cheaper fuel. This disparity makes it economically unviable for the industries in Mandi Gobindgarh to compete, as they face significantly higher production costs. Ultimately, this situation would lead to the closure of rolling industries in Mandi Gobindgarh due to their inability to compete with other Rolling Mills in Punjab and other cities in India.

14. In a meeting held on 30.12.2022 between the Chief Secretary, Punjab, and representatives of the rolling mills, the State Government clarified that it did not exercise control over the price mechanism. The Government further stated that it was in the process of finalizing a comprehensive fuel policy for the state, which was expected to be notified in the near future. **It was unanimously resolved that the**

rolling mills operating in Mandi Gobindgarh area may be granted relaxation for some time for converting from their conventional fuels to cleaner fuels and the Competent Authority of the Board may consider / decide regarding extending the validity of the Consents to Operate till finalisation of the State Fuel Policy or 31.12.2023, whichever is earlier, subject to suitable conditions. Copy of proceedings of meeting held on 30.12.2022 between the Chief Secretary, Punjab, and representatives of the rolling mills are marked and annexed herewith as **Annexure-R3/6**.

15. That thereafter, the present Original Application was filed by the Applicant before this Hon'ble Tribunal. This Hon'ble Tribunal passed an order dated 21.04.2023 constituting a Joint Committee of the Central Pollution Control Board, Punjab Pollution Control Board and the District Magistrate to visit the site of Mandi Gobindgarh, interact with the stake holders, and furnish a factual action report.
16. That in compliance of the order dated 21.04.2023 the Joint Committee filed its report before this Hon'ble Tribunal. In the report it was specifically stated by the Joint Committee that:

“The PPCB has engaged the Indian Institute of Technology (IIT) in Delhi to conduct Source Apportionment Study of Mandi Gobindgarh. The study focuses on determining the sources of pollution of Mandi Gobindgarh. And accordingly, IIT Delhi has prepared a draft report Source Apportionment Study report on its findings and the preliminary findings were consequently discussed in multiple meetings of the expert group and scrutinized the Emission Inventory and the Source Apportionment studies mentioned in the report.

As per the Source Apportionment Study report of IIT Delhi, the Source contribution of PM2.5 and PM10 in the ambient air quality of Mandi Gobindgarh is tabulated here in below:

S.NO	SECTOR	PM2.5	PM10
1.	Domestic	2	1
2.	Road Dust	34	57
3.	MSW	8	4
4.	Vehicle	31	13
5.	Food Joints	0	0
6.	Crematoria	2	1
7.	Industries	23	24

The major contribution to ambient air quality is the road dust and vehicles, which according to the SA study contributes 34-57% and 13- 31% respectively."

17. That since the Joint Committee failed to annex the IIT report, this Hon'ble Tribunal vide order dated 10.10.2023 directed the Respondent Punjab Pollution Control Board to furnish a fresh report. That therefore, in compliance of the order dated 10.10.2023, the Respondent Board filed its report dated 25.11.2023 in which it annexed source apportionment study conducted by IIT Delhi (copy of the report is at page 218 of the court file). It is pertinent to mention herein that a perusal of the source apportionment study conducted by IIT Delhi would clearly show that road dust and vehicles are the major contributors towards air pollution in Mandi Gobindgarh. About 18,000 heavy loaded vehicles are entering and leaving the city on a daily basis. Most of the vehicles are 10-12 years old and in a very bad condition resulting in significant emissions in the atmosphere. Copy of recent photographs with geo coordinates depicting the pollution being caused by road dust and vehicles in Mandi Gobindgarh are marked and annexed herewith as **Annexure-R3/7**.
18. That in the interregnum, that the State of Punjab notified the Fuel Policy for the Industries of the State of Punjab on 04.10.2023. Relevant portion from the Fuel Policy is reproduced below:

“(II) Upon availability of supply of CNG / PNG / CBG etc. in various geographical areas of the state by the respective licensees authorized by the Petroleum and Natural Gas Regulatory Board (PNGRB), the State Government in consultation with the State Pollution Control Board shall issue appropriate directions and timelines to the industries and other stakeholders for conversion to such cleaner fuels considering technoeconomic and legal feasibility.

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(VII) Due to dynamics of cost and availability of fuels based on international market State Government in consultation with PPCB shall be empowered to permit usage of alternative fuels for a limited period based on techno-economic feasibility as per the prevailing scenario to ensure the sustainability of industrial sector in the State.”

Copy of Fuel Policy for the Industries of the State of Punjab is marked and annexed herewith as **Annexure-R3/8**.

19. That without appreciating the ground reality, the State resorted to the whimsical withdrawal of the relaxation so granted to the rolling mills operating in Mandi Gobindgarh for shifting from conventional fuels to cleaner fuels. The relaxation granted to the rolling mills (as evident from proceedings of meeting dated 30.12.2022) was withdrawn without any prior notice vide Order bearing no. 347 dated 05.10.2023.
20. It is imperative to mention herein that Action Plan for Clean Air in Mandi Gobindgarh specifies that, regarding the transition from coal to CNG/PNG, the State Government will be approached to reduce VAT to make these fuels a viable alternative. Furthermore, the Punjab State Fuel Policy for Industries, notified on

04.10.2023, states that as supply of CNG/PNG/CBG becomes available in various regions of the state through licensees authorized by the Petroleum and Natural Gas Regulatory Board (PNGRB), the State Government, in consultation with the State Pollution Control Board, will issue appropriate directions and timelines for industries and other stakeholders to switch to cleaner fuels, considering techno-economic and legal feasibility. However, the price of PNG has risen steeply, from ₹18 to ₹56, making it financially unfeasible for rolling industries to sustain operations, leading to the closure of numerous units. Despite this, the State Government has overlooked the directive that the transition to cleaner fuels should only occur when it is economically and financially viable for industries. The State Government has enforced the transition without implementing mechanisms to regulate and control PNG prices, thereby exacerbating the financial strain on all rolling industries in Mandi Gobindgarh.

21. That constrained by the withdrawal of the relaxation, as mentioned above, the Respondent herein vide email dated 04.12.2023 requested National Institute of Secondary Steel Technology to provide the contribution of re-rolling mills of Mandi Gobindgarh in air pollution. That in response to the same vide letter/report dated 16.12.2023, the National Institute of Secondary Steel Technology provided the comparative emission of particulate matter (SPM) from re-rolling mills, Induction Furnace and forging units. Relevant portion from the analysis report is reproduced below:

“1. As per Source Apportionment Study Report of IIT Delhi, engaged by PPCB for the purpose, contribution of PM2.5 and PM10 in the ambient air quality of Mandi Gobindgarh by industries is 2324% only. Major pollution is caused by road dust and vehicles to the tune of 65-70%.

2. As steel processing units are estimated to contribute 75% of the pollution caused by industries in Mandi Gobindgarh, the total contribution of steel processing units in causing air pollution in Mandi Gobindgarh is approx.: 17% (23%x75) only.

3. The comparative emissions of particulate matter (SPM) from re-rolling mills Induction furnace and foraging units are tabulated below:

S No.	Type of Industry	No of units in Mandi Gobindgarh	% of total steel processing units	pollution multiplier *	Relative contribution	Overall % contribution in Mandi Gobindgarh
1	Induction Furnace Units	100	30%	1	30	12.49%
2	Rolling Mills	200	61%	1/6	10	4%
3	Foraging u	30	9%	1/6	1.5	0.6%
<i>Total</i>		330	100			17%

*The SPM generation in IF units per ton of steel produced is approximately 6 times that generated in rolling mills

From the analysis given in the above table, it is estimated that contribution of rolling mills in total air pollution of Mandi Gobindgarh is less than 4%."

Copy of the analysis of the National Institute of Secondary Steel dated 06.12.2023 is marked and annexed herewith as **Annexure-R3/9**. It is therefore evident from the

said report that the contribution of rolling mills in total air pollution of Mandi Gobindgarh is less than 4 %. That the rolling mills in Mandi Gobindgarh use steam coal which has minimum sulphur emissions and does not add to any pollution in terms of SPM in the ambient air prevalent in Mandi Gobindgarh.

22. That it is relevant to add here that in so far as the steel industry is concerned, the Rolling Mills of the Respondent No. 3 Association cause minimum impact on the ambient air quality of Mandi Gobindgarh. The Steel Rolling Mills generally operate at an average of about 10 hours a day, whereas the Induction furnaces operate generally on an average of 20 hours a day. The Rolling Mills are all connected with stacks of adequate height i.e. say about 90/100 feet and the SPM duly controlled within the prescribed limits through adequate and appropriate Air Pollution Control Devices so released through these stacks travels in a gradually decreasing diffused state far away not affecting Mandi Gobindgarh. Whereas in case of Induction Furnaces lot of SPM escapes from lower levels at the Industry location.
23. That it is relevant to mention herein that as per the Action Plan for Clean Air for Mandi Gobindgarh prepared by the Government of Punjab, the estimated contribution of various sources in air pollution is given as under:

1.	Industrial Emissions	50%
2.	Road Dust	25%
3.	Vehicular Pollution	15%
4.	Burning of Garbage and Biomass	5%
5.	Construction and Demolition Activities	4%
6.	Other Sources	1%

That therefore as per the action plan, the contribution of the Industrial Emissions in air pollution in the year 2019 was 50%. However, the Source Apportionment Study report of IIT Delhi clearly demonstrates that the contribution of Industrial Emissions to

Air Pollution has significantly reduced to 23%, in which the contribution of rolling mills in total air pollution of Mandi Gobindgarh is less than 4 % as per the analysis of the National Institute of Secondary Steel dated 06.12.2023. In any case the rolling mills have installed stacks of adequate height which have little room for any air pollutant to come down and pollute the area of Madi Gobindgarh as the treated air pollutants are carried away to far flung distances while getting disbursed and consequently reducing the air concentration.

24. Although the Rolling Mills contribute less than 4% to air pollution, they are committed to reducing this figure to below 2%. To achieve this, they have developed a new device called the Air Pollution Control Device (APCD) to minimize Suspended Particulate Matter (SPM) levels. As part of a pilot project, one rolling mill in Mandi Gobindgarh invested approximately ₹35 lakh in the installation and enhancement of the APCD. Following the complete upgrade, SPM levels have significantly dropped to a range of 75 to 90 (when coal is used as fuel), which is comparable to SPM levels achieved when PNG (Piped Natural Gas) is used as fuel.
25. That in addition to the fact that the contribution of rolling mills in total air pollution of Mandi Gobindgarh is less than 4 %, it is also imperative to mention herein that PM2.5 and PM10 emissions were higher during the period when industries transitioned from coal to PNG. Subsequently, when industries reverted to steam coal from PNG due to the relaxation, the levels of PM2.5 and PM10 emissions decreased. A report of the Central Pollution Control Board on the Continuous Ambient Air Quality of Mandi Gobindgarh dated 09.03.2024 is reproduced hereunder:

From Date	To Date	PM2.5	PM10	SO2
01-01-2018 00:00	01-01-2019 00:00	68.98	116.94	12.72

01-01-2019 00:00	01-01-2020 00:00	61.36	131.89	14.79
01-01-2020 00:00	01-01-2021 00:00	62.0	123.28	16.54
01-01-2021 00:00	01-01-2022 00:00	64.69	132.19	11.04
01-01-2022 00:00	01-01-2023 00:00	72.39	141.15	10.75
01-01-2023 00:00	01-01-2024 00:00	66.21	129.13	16.97

While the transition from coal to PNG was intended to lower pollution levels, the data clearly demonstrates that this objective has not been achieved. Copy of the report of the Central Pollution Control Board on the Continuous Ambient Air Quality of Mandi Gobindgarh dated 09.03.2024 is marked and annexed herewith as **Annexure-R3/10**.

26. That it is relevant to mention herein that as per the notification dated 31.03.2012 issued by the Ministry of Environment and Forest, the standards for emissions (SPM) were prescribed as 150 mg/nm³ in sensitive areas and 250 mg/nm³ in other areas. That admittedly as a matter of fact the rolling mills in Mandi Gobindgarh have never exceeded the said parameters as prescribed by the Ministry of Environment and Forest under notification dated 31.03.2012. Therefore, since the rolling mills have never exceeded the prescribed parameters and are hence compliant, therefore the same should not be forced to shut down. Copy of the notification dated 31.03.2012 issued by Ministry of Environment and Forest is marked and annexed herewith as **Annexure-R3/11**.

27. That the Ministry of Environment, Forest and Climate Change issued a notification dated 07.06.2024, as per which the standalone rolling units are exempted from taking prior Environment Clearance. Copy of the notification dated 07.06.2024 issued by Ministry of Environment, Forest and Climate Change is marked and annexed herewith as **Annexure-R3/12**.
28. It is imperative to mention herein that the fuel policy dated 04.10.2023 specifically states as follows:

“And whereas, the usage of coal pet coke, furnace oil and other fuels in the boilers/furnaces or in any other form by the industry, needs to be regulated due to presence of higher Sulphur content leading to Sulphur Dioxide (SO₂) emissions in the ambient air, which may adversely affect the environment;”

At the outset it is imperative to mention herein that in afore reproduced portion of the State Fuel Policy, the State has mentioned that the usage of coal, pet coke furnace oil and other fuels needs to be regulated. However, in the later part of the State Fuel Policy only usage of pet coke and furnace oil has been regulated and the State has omitted to regulate the usage of coal. **As per the National Ambient Air Quality Standards issued vide Notification No. B- 29016/20/90/PCI-L dated 18.11.2009 by the Central Pollution Control Board, the annual prescribed limit for Sulphur Dioxide (SO₂) shall be between 50 ug/m³. However, as per the Ambient Air Quality Report dated 09.03.2024, the presence of Sulphur Dioxide (SO₂) at Mandi Gobindgarh has never exceeded 16.97 ug/m³-annually, which is way below even to the prescribed limit for an Ecologically Sensitive Areas as notified by the Central Government as is clear from the said notification dated 18.11.2009.** Copy of the National Ambient Air Quality Standards issued vide Notification No. B-29016/20/90/PCI-L dated 18.11.2009 by the Central Pollution Control Board is marked and annexed herewith as **Annexure-R3/13**.

29. The objective of the Petroleum and Natural Gas Regulatory Board Act, 2006 reads as under:

*“An Act to provide for the establishment of Petroleum and Natural Gas Regulatory Board to regulate the refining, processing, storage, transportation, distribution, marketing and sale of petroleum, petroleum products and natural gas excluding production of crude oil and natural gas **so as to protect the interests of consumers** and entities engaged in specified activities relating to petroleum, petroleum products and natural gas and to ensure uninterrupted and adequate supply of petroleum, petroleum products and natural gas in all parts of the country and **to promote competitive markets** and for matters connected therewith or incidental thereto.”*

The objective of the Petroleum and Natural Gas Regulatory Board Act, 2006, is to protect the interest of the consumers and to ensure an uninterrupted and adequate supply of petroleum, petroleum products, and natural gas across the country and promoting competitive markets. However, there is a clear monopoly by M/s IRM Energy Ltd. in Mandi Gobindgarh which contravenes the fundamental purpose of the Act. Despite the marketing exclusivity period of the distributor having ended on 30.09.2023, the distributor continues to enjoy exclusive rights. Copy of the document reflecting that the marketing exclusivity period of the distributor has ended on 30.09.2023 is marked and annexed herewith as **Annexure-R3/14**.

30. That since the rolling industries had already invested a huge amount of money in shifting from steam coal to PNG and had already installed the requisite machinery, but had to switch back to steam coal due to the price monopoly of the gas supplier i.e. M/s IRM Energy Ltd., the Respondent association herein approached the Petroleum and Natural Gas Regulatory Board vide letter dated 28.06.2024 to

declare the CGD Network of the Distributor of PNG as common carrier, in light of the fact that the marketing exclusivity period of the said carrier had come to an end on 30.09.2023. In other words, during the marketing exclusivity period, the said distributor has a monopoly over distributor of PNG and hence any type of rate can be fixed by the said distributor, however, after being declared a common carrier more players can enter the market which would result in competitive prices. Copy of the letter dated 28.06.2024 is marked and annexed herewith as **Annexure-R3/15**.

In view of the submissions stated above, it is respectfully submitted that, as evident from the reports of the Joint Committee and the Indian Institute of Technology (IIT), the primary contributors to ambient air quality deterioration are road dust and vehicular emissions. Furthermore, according to the analysis conducted by the National Institute of Secondary Steel on 06.12.2023, the contribution of rolling mills to the total air pollution in Mandi Gobindgarh is less than 4%. Although the rolling mills were not parties to OA/964/2019, they complied with the directions issued by this Hon'ble Tribunal by installing the necessary devices and transitioning from coal to PNG (Piped Natural Gas). However, the steep and unprecedented rise in PNG prices created a significant challenge for this transition. The rolling mills have already invested substantial amounts in installing the required devices for using PNG, which remain in place to this day. However, they continue to face difficulties due to the monopoly of gas suppliers and the unregulated pricing of PNG. The rolling industries express their willingness to switch back to PNG, provided that the Government regulates PNG prices to ensure the sustainability of these industries and prevent financial losses that could lead to their closure.

PRAYER

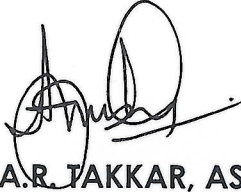
In light of the facts and circumstances mentioned herein above, it is prayed that this Hon'ble Tribunal may be graciously pleased to:-

- i. Take the present Additional Reply on record;

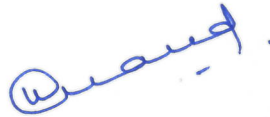
- ii. Pass such other/ further Order(s) as this Hon'ble Tribunal may deem fit and proper in the facts of the present matter in favour of the answering Respondent No.3 herein.

PLACE: Delhi

DATE: 16.12.2024



(A.R. TAKKAR, ASHUTOSH BHARDWAJ, SHRIYA TAKKAR, ASMITA DUGGAL,



UNNATI ANAND, AASTHA TYAGI AND MANAN TAKKAR
ARTLO

#P-6/2E, DLF PHASE-2, GURUGRAM-122002

MOB.: 9582209633

BEFORE THE NATIONAL GREEN TRIBUNAL AT NEW DELHI,
O.A NO. 295/2023

IN THE MATTER OF:

DIMPAL KUMAR.

...APPLICANT

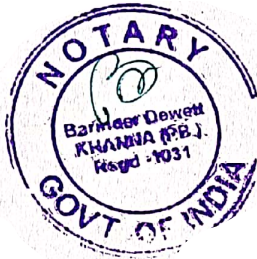
VERSUS

GOVT. OF PUNJAB & ORS.

...RESPONDENTS

AFFIDAVIT

I, VinodVashisht S/o. Ramesh
ChanderVashishtAged About 70 Years R/o Kothi
No 22-23, New Khanna City Extension near
Golden Grain Club, Khanna, Ludhiana, Punjab –
141401 the above named deponent do hereby
solemnly affirm and state as under:



1. That the Additional Reply on Behalf of Respondent No 3 (All India Steel Rollers Association) has been drafted under the authority and instructions of the deponent and after perusing its contents, the deponent has duly signed it, and the contents of paragraph Nos. 1 to thereof are true and correct to the knowledge of the deponent, and the same may be read as contents of this affidavit also, which are not being reproduced for the sake of brevity. No part of it is false and nothing material has been kept concealed therefrom.
2. That the contents of paragraphs no. 1 to 30 of above filled Additional Reply are true and correct to my knowledge, no part of it is false and nothing material has been kept concealed therefrom.

Vinod Vashisht

3. That the Annexures attached with the Additional Reply are true copies of their respective original.

Place:

Date: 14.12.2024

[Signature]
DEPONENT

VERIFICATION:

Verified that the contents of para 1 and 3 of my affidavit are true and correct to my knowledge. No part of it is false and nothing material has been kept concealed therefrom.

Place:

Date: 14.12.2024

[Signature]
DEPONENT



Attested as identified
[Signature]
NOTARY PUBLIC
Kharana (P.B.)
Dist. Ludhiana
14/12/2024

Certified that the affidavit/SPA/GPA/lease deed registered & submitted to the deponent or agent who is named directly to understand the same at the time marking thereof

ANNEXURE R-3 /1

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

Original Application No. 681 of 2018

IN THE MATTER OF:

**News Item Published In 'The Times of India' Authored by Shri. Vishwa Mohan
Titled
"NCAP with Multiple Timelines to Clear Air in 102 Cities to be released around
August 15"**

**CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON
HON'BLE DR. JUSTICE JAWAD RAHIM, JUDICIAL MEMBER
HON'BLE MR. JUSTICE S.P. WANGDI, JUDICIAL MEMBER
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER**

Dated: 08th October, 2018.

ORDER

1. Proceedings in this matter have been initiated on the basis of a newspaper item dated 03.08.2018 in the Times of India under the heading "*NCAP with multiple timelines to clean air in 102 cities to be released around August 15*"¹. According to the news item, the National Clean Air Programme (NCAP) proposes to reduce pollution in 102 cities where standards of air pollution are in excess in the next 10 years- 35% in next 3 years, 50% in next 5 years and 70-80% in next 10 years.
2. The question that arises for consideration is whether the timeline of 10 years for bringing down pollution levels is in accordance with the mandate of law requiring pollution free environment especially when there is imminent threat to human health as a result of such pollution. According to a survey, 15,000 persons died prematurely in Delhi in the year 2016. Delhi was ranked as third in the list of cities reporting most deaths due to air pollution. Premature deaths in

¹ <https://timesofindia.indiatimes.com/india/ncap-with-multiple-timelines-to-clean-air-in-102-cities-to-be-released-around-august-15/articleshow/65254122.cms>

Mumbai, Kolkata, Bangalore and Chennai are reported to be between 5,000-10,000 in 2016.²

3. 102 cities have been identified as 'Non-attainment cities'. Non-attainment city is the one which does not meet the National Ambient Air Quality Standards (NAAQS). The said standards are prescribed under Section 16 (2) (h) of Air (Prevention and Control of Pollution) Act, 1981, (Air Act, 1981) vide Notification dated 18.11.2009 by the Central Pollution Control Board (CPCB).
4. Serious concerns have been expressed in the last four decades about the need to restore the standards of the air quality, in view of the adverse effect of air pollution on public health. Section 20 of the Air Act, 1981 provides for directions for ensuring standards for emission from automobiles by the State Pollution Control Boards. Section 21 of the Air Act, 1981 requires Consent to Establish (CTE) or operate an industrial plant in air pollution control areas. Conditions for such grant include installation of equipments for control of air pollution, use of specified chimneys and such other conditions as may be necessary. Section 22 provides for control of industrial pollution. State Boards can also seek injunction against air pollution from any source under Section 21-A. Section 31-A empowers a Pollution Board to give directions to close an industrial activity on the ground of pollution. It is, however, well known that the statutory mechanism under the Air Act, 1981 has not been successful in controlling air pollution. The result is that air pollution has been subject matter of consideration by the Hon'ble Supreme Court and other Courts as well as this Tribunal.

²<https://www.ndtv.com/delhi-news/delhis-air-pollution-has-caused-of-death-of-15-000-people-study-1883022>.

5. Directions have been issued by the Hon'ble Supreme Court for control of vehicular pollution³, industrial and construction sector pollution⁴, power sector pollution⁵ and agricultural sector pollution⁶. This Tribunal also dealt with some of such issues.⁷ CPCB has also issued directions under Section 18(1)(b) of the Air Act, 1981 vide letter dated 29.12.2015 regarding prevention, control or abatement of air pollution and improvement of ambient air quality⁸.
6. A Comprehensive Action Plan (CAP) for air pollution control for NCR was prepared in pursuance of order of the Hon'ble Supreme Court dated 06.2.2017 by the Environment Pollution (Prevention and Control) Authority (EPCA) in consultation with the CPCB and DPCC on 05.04.2017.⁹ The said plan also provides for enforcement of Graded Response Action Plan (GRAP) notified by the MoEF&CC on 12.01.2017¹⁰. The GRAP envisages specific steps for different levels of air quality such as improvement in emission and fuel quality and other measures for vehicles, strategies to reduce vehicle numbers, non-motorised transport network, parking policy, traffic management, closure of polluting power plants and industries including brick kilns,

³ M.C. Mehta v. Union of India (1985)2 SCC 431, M.C. Mehta v. Union of India (2001) 3 SCC 756, M.C. Mehta v. Union of India (1998) 6 SCC 63, M.C. Mehta v. Union of India (2002) 3 SCC 356, M.C. Mehta v. Union of India (1998) 6 SCC 60

⁴ M.C. Mehta v. Union of India (1997) 2 SCC 353, M.C. Mehta v. Union of India and Shriram Foods and Fertilizer Industries and Anr. (1986) 2 SCC 235, Rural Litigation and Entitlement Kendra, Dehradun v. State of U.P. (1985) 2SCC 431, Mohd. Haroon Ansari v. District Collector (1998) 6 SCC 60, Union of India v. Union Carbide Co. (1989) 1 SCC 674, M.C. Mehta v. Union of India (1992) 4 SCC 256, Sterlite Industries (India) Ltd. etc. v. Union of India & Ors.(2013) 4SCC 575 , M.C. Mehta v. Union of India (2004) 6 SCC 588, M.C. Mehta v. Kamal Nath (2000)6 SCC 213

⁵ Consumer Education and Research Centre v. Union of India (1995)3 SCC 42, Dahanu Taluka Environment Protection group and Ors. v. Bombay Suburban Electricity Supply Company Ltd. and Ors (1991) 2SCC 539

⁶ Arjun Gopal and Ors v. Union of India and Ors (2017) 16 SCC 280, Dr. B.L Wadhwa v. Union of India and Ors (1996) 2 SCC 594

⁷ Vardhman Kaushik v. Union of India and Ors. O.A no. 21 of 2014, Vikrant Kumar Tongad v. Environment Pollution (Prevention and Control) Authority and Ors, O.A No. 118 of 2013, Satish Kumar v. Union of India and Ors, O.A. No. 56 (T_{HC}) OF 2013, Smt. Ganga Lalwani V. Union of India and Ors. O.A No. 451 of 2018

⁸ p. 38, <http://envfor.nic.in/sites/default/files/NCAP%20with%20annex-ilovepdf-compressed.pdf>

⁹ Report No.71, EPCA-R/2-17/L-21, Comprehensive Action Plan for air pollution control with the objective to meet ambient air quality standards in the National Capital Territory of Delhi and National Capital Region, including states of Haryana, Rajasthan and Uttar Pradesh.

¹⁰ S.O.118(E), Notification, Ministry of Environment, Forest and Climate Change

control of generator sets, open burning, open eateries, road dust, construction dust, etc.

7. The GRAP categorises levels of pollution as severe plus, severe, very poor, moderate to poor. The action to be taken in such situations includes stopping entry of trucks, stopping construction activities, odd and even scheme of private vehicles, shutting of schools, closing of brick kilns, stone crushers, hot mix plants, power plants, intensifying public transport services, mechanised cleaning of road, and sprinkling of water, stopping the use of diesel generator sets, enhancing parking fees, etc. Implementation of prescribed norms in the light of legal provisions and court directions remains a challenge. The consequence is that India is being ranked high in terms of level of pollution compared to many other countries with enormous adverse impact on public health. Most victims are children, senior citizens and the poor.¹¹

8. A chamber meeting was held in this Tribunal on 05.09.2018 to review the situation. The same was attended by all the Members of the Tribunal, representatives of CPCB, Ministry of Road Transport and Highways (MoRTH), Ministry of Petroleum and Natural Gas, Ministry of Environment, Forest and Climate Change (MoEF&CC), Ministry of Agriculture, Cooperation and Farmers Welfare, Ministry of Heavy Industries, States of Haryana, Punjab, Uttar Pradesh and Rajasthan, NCT of Delhi, IIT Delhi, IIT Kanpur and NEERI. In the said meeting, presentation was given by CPCB to the effect that 102 cities have been declared as “non-attainment” cities based on study of data from 2011-2015 and directions were issued by the CPCB to concerned States to

¹¹ <https://www.thehindu.com/sci-tech/energy-and-environment/india-ranks-177-out-of-180-in-environmental-performance-index/article22513016.ece>
<https://www.ndtv.com/delhi-news/delhis-air-pollution-has-caused-of-death-of-15-000-people-study-1883022>

frame city specific action plans. 73 such plans were received. 36 were finalized. 37 are pending. 29 are yet to be submitted.

9. Under the National Ambient Air Quality Monitoring Programme (NAAQM) of the CPCB, renamed as National Air Quality Monitoring Programme (NAMP), air quality data is compiled with reference to notified air standards. Four air pollutants viz. Sulphur Dioxide (SO₂), Oxides of Nitrogen as NO₂, Suspended Particulate Matter (PM₁₀) and fine Particulate Matter (PM_{2.5}) have been identified for regular monitoring at all the locations.¹² In addition to this, there are hundred and one (101) real-time Continuous Ambient Air Quality Monitoring stations (CAAQMS) in 57 cities monitoring 08 pollutants viz. PM₁₀, PM_{2.5}, SO₂, NO_x, Ammonia (NH₃), Carbon Monoxide (CO), Ozone (O₃) and Benzene. PM₁₀ are inhalable coarse particles, which are particles with a diameter between PM_{2.5} and 10 micrometers (µm) and PM_{2.5} are fine particles with a diameter of 2.5 µm or less. Particulates are the deadliest form of air pollutant due to their ability to penetrate deep into the lungs and blood streams unfiltered. The smaller PM_{2.5} are particularly deadly as they can penetrate deeper into the lungs.
10. As already noted, there are 102 non-attainment cities where the air quality is worse than National Ambient Air Quality Standards consecutively in the last five years. The number of cities has increased from 94 identified earlier under the National Air Quality Monitoring Programme (2011-15). The highest number of cities are in Maharashtra (17) followed by Uttar Pradesh (15), Punjab (9), Himachal Pradesh (7), Odisha and Madhya Pradesh (6 each), Assam, Andhra Pradesh and Rajasthan (5 each), Karnataka (4), Bihar, Chhattisgarh and Telangana (3 each), Gujarat, Jammu and Kashmir, Nagaland and Uttarakhand (2 each) and Jharkhand, Delhi, Chandigarh, Meghalaya, Tamil Nadu and West Bengal (1 each).

¹² <http://envfor.nic.in/sites/default/files/NCAP%20with%20annex-ilovepdf-compressed.pdf>

11. The list of 102 cities identified by CPCB with status of parameters exceeded and major sources of pollution are as follows:

State Sl. No	State	Cities Sl. No	Cities	Status	Major Sources of Pollution
1	Andhra Pradesh	1	Guntur	PM10	i. Vehicular Emissions. ii. Road Dust/Re-suspension of dust and other fugitive emission. iii. Air Pollution from Bio-Mass Burning iv. Industrial Air Pollution. v. Air Pollution from Construction and Demolition Activities. vi. DG sets vii. LPG instead of coal in restaurants/dhabas/ road side eateries.
		2	Kurnool	PM10	
		3	Nellore	PM10	
		4	Vijaywada	PM10	
		5	Vishakhapatnam	PM10	
		6	Guwahati	PM10	
		7	Nagaon	PM10	
2	Assam	8	Nalbari	PM10	
		9	Sibsagar	PM10	
		10	Silchar	PM10	
	Bihar	11	Gaya	N.A	
		12	Patna	N.A	
		13	Muzzafarpur	N.A	
3	Chandigarh	14	Chandigarh	PM10	
4	Chhattisgarh	15	Bhillai	PM10	
		16	Korba	PM10	
		17	Raipur	N.A	
5	Delhi	18	Delhi	PM10, NO2	
6	Gujarat	19	Surat	PM10	
		20	Amedabad	N.A	
		21	Baddi	PM10	
		22	Damtal	PM10	
		23	Kala Amb	PM10	
7	Himachal Pradesh	24	Nalagarh	PM10	
		25	Paonta-Sahib	PM10	
		26	Parwanoo	PM10	
		27	Sunder Nagar	PM10	
8	Jammu & Kashmir	28	Jammu	PM10	
		29	Srinagar	N.A	
9	Jharkhand	30	Dhanbad	PM10	
10	Karnataka	31	Bangalore	PM10	
		32	Devanagere	PM10	
		33	Gulburga	PM10	
		34	Hubli-Dharwad	PM10	
		35	Bhopal	PM10	
		36	Dewas	PM10	

State Sl. No	State	Cities Sl. No	Cities	Status	Major Sources of Pollution
11	Madhya Pradesh	37	Indore	PM10	i. Vehicular Emissions. ii. Road Dust/Re-suspension of dust and other fugitive emission. iii. Air Pollution from Bio-Mass Burning iv. Industrial Air Pollution. v. Air Pollution from Construction and Demolition Activities. vi. DG sets. vii. LPG instead of coal in restaurants/dhabas/ road side eateries.
		38	Sagar	PM10	
		39	Ujjain	PM10	
		40	Gwalior	N.A	
		41	Akola	PM10	
		42	Amravati	PM10	
		43	Aurangabad	PM10	
		44	Badlapur	PM10, NO2	
		45	Chandrapur	PM10	
		46	Jalgaon	PM10	
		47	Jalna	PM10	
12	Maharashtra	48	Kolhapur	PM10	
		49	Latur	PM10	
		50	Mumbai	PM10	
		51	Nagpur	PM10	
		52	Nashik	PM10	
		53	Navi Mumbai	PM10	
		54	Pune	PM10, NO2	
		55	Sangli	PM10	
		56	Solapur	PM10	
57	Ulhasnagar	PM10, NO2			
13	Meghalaya	58	Byrnihat	PM10	
14	Nagaland	59	Dimapur	PM10	
		60	Kohima	PM10	
15	Orissa	61	Angul	PM10	
		62	Balasore	PM10	
		63	Bhubneshwar	PM10	
		64	Cuttack	PM10	
		65	Rourkela	PM10	
		66	Talcher	PM10	
		67	Amritsar	N.A	
		68	DeraBassi	PM10	
		69	Gobindgarh	PM10	
70	Jalandhar	PM10			

State Sl. No	State	Cities Sl. No	Cities	Status	Major Sources of Pollution
16	Punjab	71	Khanna	PM10	i. Vehicular Emissions. ii. Road Dust/Re-suspension of dust and other fugitive emission. iii. Air Pollution from Bio-Mass Burning iv. Industrial Air Pollution. v. Air Pollution from Construction and Demolition Activities. vi. DG sets. vii. LPG instead of coal in restaurants/dhabas/ road side eateries.
		72	Ludhiana	PM10	
		73	NayaNangal	PM10	
		74	Pathankot/Dera Baba	PM10	
		75	Patiala	PM10	
		76	Alwar	PM10	
		77	Jaipur	PM10	
17	Rajasthan	78	Jodhpur	PM10	
		79	Kota	PM10	
		80	Udaipur	PM10	
18	Tamil Nadu	81	Tuticorin	PM10	
19	Telangana	82	Hydrabad	PM10	
		83	Nalgonda	PM10	
		84	Patencheru	PM10	
		85	Agra	PM10	
		86	Allahabad	PM10	
		87	Anpara	PM10	
		88	Bareilly	PM10	
		89	Firozabad	PM10	
		90	Gajraula	PM10	
		20	Uttar Pradesh	91	Ghaziabad
92	Jhansi			PM10	
93	Kanpur			PM10	
94	Khurja			PM10	
95	Lucknow			PM10	
96	Muradabad			PM10	
97	Noida			PM10	
98	Raebareli			PM10	
99	Varanasi			PM10	
21	Uttarakhand	100	Kashipur	PM10	
		101	Rishikesh	PM10	
22	West Bengal	102	Kolkata	PM10, NO2	

12. The above chart shows that major violation of standard is of “PM₁₀” and identified sources are vehicular, industrial, biomass burning, road dust, construction and demolition, DG sets and road side eateries. The action plan proposed by the CPCB¹³ with the timeline is as follows:

Action Plan:				
	Action	Implementati on period (Short/ Mid /Long-term)	Time target for Implement ation	Responsible agency (ies)
Source group	1. Restriction on plying and phasing out of 15 years old commercial diesel driven vehicles.	Mid	Dec. 18	Transport Department
Vehicles	2. Introduction of cleaner fuels (CNG/LPG) for vehicles.	Mid	June, 18	Transport Department & Oil companies
	3. Regular checking of vehicular emission and issue of Pollution under Control Certificate (PUC).	Short	March, 18	Transport Department & Traffic Police
	4. Good traffic management including re-direction of traffic movement to avoid.	Mid	July, 18	Traffic Police
	5. Ban on registration of Diesel driven auto-rickshaw /Tempo.	Short	April, 18	Transport Department
	6. Promotion and operationalization of E-rickshaw.	Mid	June, 18	Transport Department
	7. Development of Multi-layer parking.	Long	Dec. 18,	MC, UD&HD & District Adm
	8. Retrofitting of particulate filters in diesel driven vehicle.	Mid	Dec. 18	Transport Department
	9. Checking of fuel adulteration	Short	April, 18	District Adm & Oil Company
	10. Monitoring on vehicle fitness.	Short	April, 18	Transport Department & Traffic Police
	11. Periodic calibration test of vehicular emission monitoring instrument	Short	April, 18	SPCB & Transport Department
	Road Dust	1. Regular cleaning of road dust.	Short	April, 18

¹³presented by CPCB in chamber meeting at NGT on 05.09.2018

	2. Water spraying on road through tankers	Mid	April, 18	MC
	3. Construction of pucca pavement along the roads.	Long	Dec. 18	MC and Road Construction Department
	4. Tree plantation along the roads.	Long	Aug. 19	Department of Environment and Forest
	5. Development of green belt in open areas, gardens, parks/ community places, schools & housing societies.	Long	Aug. 19	Department of Environment and Forest
	6. Introduction of water fountains at major traffic intersection/ Golambar/circle.	Long	Aug.19	MC
Construction activities	1. Covering of construction site.	Short	April, 18	Building Construction Department and MC.
	2. Transportation of construction materials like sand, soil, stone chips etc. in covered system.	Short	April, 18	Transport Department District Adm. & Traffic Police.
	3. Restriction on storage of construction materials along the road.	Short	April, 18	MC
Biomass and garbage burning	1. Restriction on open burning of municipal solid waste, Biomass, plastic horticulture waste etc.	Short	March, 18	MC
	2. Immediate lifting of solid wastes generated from desilting and cleaning of municipal drains for its disposal.	Short	April, 18	MC
	3. Transportation of municipal solid wastes, construction materials and debris in covered system.	Short	April, 18	MC
	4. Ensuring promotion & use of cleaner fuel for commercial purposes like local Dhaba/eateries	Long	Dec.19	District Adm. & Oil Company
Industries	1. Ensuring installation and operation of air pollution control devices in industries	short	April, 18	SPCB
	2. Ensuring emission standards in industries	short	April, 18	SPCB

	3. Adoption of cleaner technology in brick kilns at five blocks of City Name Viz. city Name Sadar, Danapur, Phulwarisharif, Maner and Fatuha by 31.08.2018	Mid	Aug. 18	SPCB
	4. Shifting of polluting industries,	Long	Dec. 19	SPCB & Industry Department
	5. ban on polluting industries	Short	April, 18	SPCB & Industry Department
Strengthening of AAQ monitoring	1. Installation of four CAAQMS at City Name A. Two CAAQMS stations under CSR funds of CPSU through Central Pollution Control Board at Eco-Park and IGIMS, City Name premise. b. Two CAAQM stations under State Govt. financial assistance	Mid	Aug. 18	SPCB
	2. Source appointment study	Mid	Dec. 18	SPCB
Public Awareness	1. Issue of advisory to public for prevention and control of air pollution	Short	April, 18	SPCB & SDMA
	2. Involvement of school and other academic institution in awareness program	Mid	Aug. 18	SPCB
Others	1. Compliance of guidelines on D.G. sets and action against violation	Short	April, 18	SPCB & MC
	2. Help line to oversee non compliances on aforesaid issues.	Short	April, 18	SPCB & MC

13. The data of non-attainment cities is a matter of concern. Though, the MoEF&CC has announced NCAP, as noted earlier, the timeline for bringing down the pollution by 70-80% in next 10 years does not meet the mandate of law. The time line has to be revised. As per some studies, India ranks 177 out of 180 countries in Environmental Performance Index.¹⁴

¹⁴ <https://www.thehindu.com/sci-tech/energy-and-environment/india-ranks-177-out-of-180-in-environmental-performance-index/article22513016.ece>

14. We are thus of the view that emergent measures are required to check sources of air pollution. Once the standards have been laid down in the statutory provisions of the Air Act, 1981, all the authorities as well as citizens are statutorily bound to follow the said standards.
15. Accordingly, we consider it appropriate to take cognizance of the alarming situation and issue directions as follows:
- i. All the States and Union Territories with non-attainment cities must prepare appropriate action plans within two months aimed at bringing the standards of air quality within the prescribed norms within six months from date of finalization of the action plans.
 - ii. The Action Plans may be prepared by six-member committee comprising of Directors of Environment, Transport, Industries, Urban Development, Agriculture and Member Secretary, State Pollution Control Board or Committee of the concerned State. The Committee may be called Air Quality Monitoring Committee (AQMC). The AQMC will function under the overall supervision and coordination of Principal Secretary, Environment of the concerned State/Union Territory. This may be further supervised by the Chief Secretaries concerned or their counterparts in Union Territories by ensuring intra-sectoral co-ordination.
 - iii. The Action Plans may take into account the GRAP, the CAP and the action plan prepared by CPCB as well as all other relevant factors. The Action Plans may be forwarded to the CPCB by 31.12.2018. The same may be placed before the Committee as directed in direction no. vi. The Action Plan will include components like identification of source and its apportionment considering sectors like vehicular pollution, industrial pollution, dust pollution, construction activities, garbage burning, agricultural pollution including pollution caused by burning of crop residue, residential and indoor pollution etc. The action plan

shall also consider measures for strengthening of Ambient Air Quality (AAQ) monitoring and steps for public awareness including issuing of advisory to public for prevention and control of air pollution and involvement of schools, colleges and other academic institutions and awareness programmes.

- iv. The Action Plan will indicate steps to be taken to check different sources of pollution having speedy, definite and specific timelines for execution.
- v. The Action Plan should be consistent with the carrying capacity assessment of the non-attainment cities in terms of vehicular pollution, industrial emissions and population density, extent of construction and construction activities etc. The carrying capacity assessment shall also lay emphasis on agricultural and indoor pollution in rural areas. Depending upon assessed carrying capacity and source apportionment, the authorities may consider the need for regulating number of vehicles and their parking and plying, population density, extent of construction and construction activities etc. Guidelines may accordingly be framed to regulate vehicles and industries in non-attainment cities in terms of carrying capacity assessment and source apportionment.
- vi. The Committee comprising of (a) Shri. Prashant Gargava, Member Secretary, CPCB, (b) Dr. Mukesh Khare, Professor, IIT Delhi, and (c) Dr. Mukesh Sharma, Professor, IIT Kanpur shall examine the Action Plans and on the recommendations of the said Committee, the Chairman, CPCB shall approve the same by 31.01.2019.
- vii. The Chief Secretaries of the State and Administrators/ Advisors to Administrators of the Union Territories will be personally accountable for failure to formulate Action Plans, as directed.
- viii. The CPCB, SPCBs and State Pollution Control Committees shall develop a public grievance redressal portal for redressal of public

complaints on air pollution along with a supervisory mechanism for its disposal in a time bound manner. Any visible air pollution can be reported at such portal by email/SMS.

- ix. The CPCB and all the State Pollution Control Boards and Pollution Control Committees shall collectively workout and design a robust nationwide ambient air quality monitoring programme in a revised format by strengthening the existing monitoring network with respect to coverage of more cities/towns. The scope of monitoring should be expanded to include all twelve (12) notified parameters as per Notification No B-29016/20/90/PCI-L dated 18th November, 2009 of CPCB. The continuous Ambient Air Quality Monitoring Stations (AAQMS) should be preferred in comparison to manual monitoring stations. The CPCB and States shall file a composite action plan with timelines for its execution which shall not be more than three months. It is expected that all such AAQMS shall be connected to central server of CPCB for reporting analysis of results in a form of Air Quality Bulletin for general public at regular intervals atleast on weekly basis and ambient air quality on continuous basis on e-portal. MoEF&CC will provide requisite funds for the purpose. MoEF&CC in consultation with Ministry of Housing and Urban Affairs, MoRTH, Ministry of Petroleum and Natural Gas, Ministry of Agriculture, Cooperation and Farmers Welfare or any other Ministry to lay down such guidelines as may be considered necessary for improvement of air quality in the country.

16. A copy of this be sent by e-mail to all the concerned i.e. Ministries of Environment, Forest & Climate Change, Housing and Urban Affairs, Road Transport and Highway, Agriculture, Petroleum and the Chief Secretaries of all the States and Union Territories for compliance.

17. We understand that some of the Zonal Benches of the National Green Tribunal have also passed directions on the subject of Ambient Air Quality and the States in those Zones are in the process of implementation of such directions. Specific reference may be made in this regard to judgement dated 11.08.2016 in O.A No. 33/2018/EZ in the matter of *Subhas Datta v. State of West Bengal & Ors.* We make it clear that this order shall not be considered as an impediment to those actions but as an addition or supplement thereto for achieving the object of this order at the macro level and of the said order at the micro level in the concerned cities.
18. Needless to say, that order of National Green Tribunal is binding as a decree of Court and non-compliance is actionable by way of punitive action including prosecution, in terms of the National Green Tribunal Act, 2010.
19. The CPCB may compile the data and furnish the same to this Tribunal by email at filing.ngt@gmail.com on or before 15.2.2019.
20. Put up for consideration in the last week of February, 2019.

....., CP
(Adarsh Kumar Goel)

.....,JM
(Dr. Jawad Rahim)

.....,JM
(S.P. Wangdi)

.....,EM
(Dr. Nagin Nanda)

New Delhi
October, 08, 2018

ANNEXURE R-3/ 2

Action Plan for Clean Air, Mandi Gobindgarh

30th April 2019

Directorate of Environment and Climate Change
Department of Science, Technology and Environment,

Government of Punjab

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Chapter 1 - Introduction

1.1 About Air Pollution

- 1.1.1. Air pollutant means any solid, liquid or gaseous substance present in the atmosphere in such concentration as may be or tend to be injurious to human being or other living creatures or plants or property or environment. Air pollution means the presence of air pollutants in the atmosphere. The most common sources of air pollution include particulates, ozone, oxides of nitrogen, and sulphur dioxide.
- 1.1.2. The health effects caused by air pollution may include difficulty in breathing, wheezing, coughing, asthma and worsening of existing respiratory and cardiac conditions.

1.2 About Mandi Gobindgarh

1.2.1. History

Mandi Gobindgarh, the Steel Town was blessed by the sixth Guru Shri Guru Hargobind Sahib as "Steel City". In 1902, Maharaja Hira Singh of Nabha ordered the building of industrial units in the town. Maharaja Partap Singh conducted further industrial development. In 1928, Gobindgarh became a free trade zone for steel. As a centre for steel, the town experienced growth. The land was made available to local blacksmiths at nominal rates in early 1940, leading to the establishment of a number of workshops on both sides of the G.T. Road at Gobindgarh.

1.2.2. Area and Population

Mandi Gobindgarh falls in district Fatehgarh Sahib. The city is located in a stretch of about 10 Km. on National Highway-I, spread over an area of about 27 SqKm and currently accommodates a population of about 90,000.

1.2.3. Industry and Trade

At present, the city produces 25 percent of the total recycled steel production of India. Industrialization in Mandi Gobindgarh began at the start of the 20th century. Mandi Gobindgarh town is known as 'Steel Town of India' as various categories of steel manufacturing units are operating in this town.

1.2.4. Topography

The topography of the Mandi Gobindgarh is typical representative of an Alluvial plain, it owes its origin to the aggravation work of the Sutlej River. The alluvium deposited by the river has been worked over by the wind which gave rise to a number of small dunes and sand mounds. Most of these dunes have been levelled by the brave hard-working agriculturists of the district.

1.2.5. Climate

The climate of Mandi Gobindgarh is characterized by dryness except a brief spell of monsoon season in a very hot summer and a bracing winter. The winter season is from middle of November to the early part of March. The succeeding period up-to the end of June is the hot season. July, August and half of September constitute the south west of monsoon, the period of mid-September to about the middle of November may be termed as post monsoon or transitional period. June is generally the hottest month. Hot and scorching dust laden winds blow during summer season. December & January are the coldest months. The mean daily temperature varies in the range of 5.8 degree centigrade to 41.2 degree centigrade.

1.2.6. Rainfall

The rainfall in the city increases from south west towards the north east. About 70% of the rainfall is received during the period July to September. The rainfall during December to March accounts for 16% of the rainfall and the remaining 14% rainfall is received in other months of the year. The average annual rainfall is 681 mm.

1.3 Government's past efforts for control of Air pollution

- 1.3.1. The environment of Mandi Gobindgarh has degraded a lot during the last few years due to rapid urbanization, industrialization, increase in population, vehicles and commercialization of land available within the town. The industrial cluster of Mandi Gobindgarh had been identified as one of the critically polluted clusters by the Ministry of Environment & Forests vide office memorandum J-11013/5/2010-IA II (I) dated 13/1/2010. This had resulted in imposition of a temporary restriction of 8 months for establishment of new industrial units, which were covered in Schedule-I appended to the EIA notification dated 14/9/2006.
- 1.3.2. Punjab Pollution Control Board had taken this as a challenge and also as an opportunity in order to achieve significant improvement in environmental quality and pave the way for sustainable development in the area. A comprehensive remedial environmental action plan was prepared in consultation with all the stakeholders, including Industrial Associations. The multi-disciplinary action plan was based on Prevention, Promotion and Mitigation (PPM) principles emphasizing on a time bound implementation of effective measures.
- 1.3.3. The Action Plan was monitored by high level steering committee, to ensure collaborative efforts among various implementing agencies and industries. The first meeting of the said Action plan committee was held on November, 2010. The meetings are conducted every second month to review the progress made by various departments. After fresh monitoring of Mandi Gobindgarh area, the moratorium imposed was lifted by MoEF&CC in year 2011 due to improvement in the environment parameters.

1.4 About National Green Tribunal directions

- 1.4.1. Nine cities of Punjab namely DeraBassi, Nangal, Patiala, Mandi Gobindgarh, Khanna, Ludhiana, Jalandhar, Pathankot and Amritsar were declared non-attainment cities by Central Pollution Control Board (CPCB) on the basis of Ambient air data for the period of 2011-2015 for not meeting the annual average of 60 $\mu\text{g}/\text{m}^3$ for PM₁₀. Directions were issued to the Board by CPCB to prepare action plans for the above stated non-attainment cities of Punjab.
- 1.4.2. Subsequently, National Green Tribunal has taken cognizance of draft National Clean Air Program and passed directions in the matter of application no. 681 of 2018 dated 8/10/2018. The important points of the said directions are given as under:
- (i) Action plans to be prepared within two months aimed at bringing the standards of air quality within the prescribed norms within six months from date of finalization of the action plans.
 - (ii) The action plans may be prepared by six-member committee comprising of Director of Environment, Transport, Industries, Urban Development, Agriculture and Member Secretary, State Pollution Control Board under the overall supervision of Principal Secretary, Environment and further supervised by Chief Secretary.
 - (iii) The Action plans may take into account the GRAP, the CAP and the action plan prepared by CPCB as well as all other relevant factors.
 - (iv) The Action Plan will include components like identification of source and its apportionment considering sectors like vehicular pollution, industrial pollution, dust pollution, construction activities, garbage burning, agricultural pollution including pollution caused by burning of crop residue, residential and indoor pollution etc.
 - (v) The Action plan shall also consider measures for strengthening of Ambient Air Quality (AAQ) monitoring and steps for public awareness include issuing of advisory to public for prevention and control of air pollution and involvement of schools, colleges and other academic institutions and awareness programmes.
 - (vi) The Action plan will indicate steps to be taken to check different sources of pollution having speedy, definite and specific timelines for execution.
 - (vii) The Action plan should be consistent with the carrying capacity assessment of the non-attainment cities in terms of vehicular pollution, industrial emissions and population density, extent of construction and construction activities etc. The carrying capacity assessment shall also lay emphasis on agricultural and indoor pollution in rural areas. Depending upon assessed carrying capacity and source apportionment, the authorities may consider the need for regulating, number of vehicles and their parking and plying, population density, extent of construction and construction activities etc. Guidelines may accordingly be framed to regulate

vehicles and industries in non-attainment cities in terms of carrying capacity assessment and source apportionment.

- (viii) The CPCB and SPCBs shall develop a public grievance redressal portal for redressal of public complaints on air pollution along with a supervisory mechanism for its disposal in a time bound manner. Any visible air pollution can be reported at such portal by email/SMS.
- (ix) The CPCB and all SPCBs shall collectively workout and design a robust nationwide ambient air quality monitoring programme in a revised format by strengthening the existing monitoring network with respect to coverage of more cities / towns. The scope of monitoring should be expanded to include all twelve (12) notified parameters as per notification no. B-29016/20/90/PCI-L dated 18th November of CPCB. The Continuous Ambient Air Quality Monitoring Stations (AAQMS) should be preferred in comparison to manual monitoring stations. The CPCB and States shall file a composite action plan with timelines for its execution which shall not be more than three months.

1.4.3. Earlier, NGT had also issued various directions in OA No. 21 of 2014 titled as Vardhaman KaushikV/s Union of India and Others for combating air pollution.

Chapter 2 – Vision, Mission and Strategy

2.1 Mission Tandrust Punjab

The Government of Punjab envisions to make Punjab the healthiest State with healthy people by ensuring the quality of air, water, food and a good living Environment.

2.2 Vision for Clean Air, Mandi Gobindgarh

To restore the quality of air in Mandi Gobindgarh to the prescribed standards to ensure health of the people, ecological balance and socio-economic well-being of the people.

2.3 Mission Clean Air, Mandi Gobindgarh

To prepare and implement a comprehensive action plan for clean Mandi Gobindgarh:

- (i) Creating awareness about the adverse impact of air pollution
- (ii) Identifying the sources of airpollution, their apportionment
- (iii) Identifying action steps related to Awareness, Enforcement, Infrastructure or Policy for control of various sources of Air Pollution
- (iv) Designing effective systems for monitoring the progress of the implementation of action steps
- (v) Ensuring effective monitoring of the quality of air
- (vi) Mitigating adverse impact on health of the people due to air pollution

2.4 Strategy for Clean Air, Mandi Gobindgarh

The key elements of strategy for Clean Air campaign for Mandi Gobindgarh will include:

- (i) Identification of Government Stakeholders
- (ii) Identification of Non-Government Stakeholders
- (iii) Integration of Departmental plans – Creating synergies
- (iv) Nodal Department
- (v) Citizen Participation
- (vi) Monitoring and Governance

2.5 Identification of Government Stakeholders

In order to combat the challenges of air pollution, all the Stakeholders will have to make concerted efforts. Following Departments and agencies have been identified along with their responsibilities:

- (i) **Punjab Pollution Control Board**
 - (a) Monitoring of air pollution control devices installed by industries
 - (b) Up-gradation of existing air pollution control devices
 - (c) Monitoring of ambient air quality and stack emissions
 - (d) Provision of canopies on the existing D.G sets

- (ii) **Department of Local Government/ MC, Mandi Gobindgarh**
 - (a) Development of engineered municipal solid waste dump site
 - (b) Improvement of road infrastructure for smooth traffic movement
 - (c) Regular and mechanical cleaning of roads
 - (d) Sprinkling of in the parks and maintenance of fountains
 - (e) Increasing green cover in city
 - (f) Upgrading traffic lights for smooth traffic movement
 - (g) Provide canopies on the existing D.G sets

- (iii) **Department of Transport**
 - (a) Plan for effective traffic management
 - (b) Plan for phasing out old polluting vehicles
 - (c) Shift to cleaner fuels viz. CNG etc.
 - (d) Monitoring of vehicles without PUC certificate
 - (e) Banning of pressure horns

- (iv) **Department of Police**
 - (a) Planning and enforcement of traffic management plan
 - (b) Checking of vehicles running without PUC certificate
 - (c) Impounding and challan of vehicles running without permission/ registration.

- (v) **Department of Forests**
 - (a) Preparation of afforestation plan
 - (b) Organizing awareness camps for Greener City
 - (c) Providing green belt around the industrial areas

- (vi) **Department of Industries and Commerce / PSIEC**
 - (a) Shifting of industries from non-designated areas
 - (b) Provision of environment infrastructure in Industrial Areas

- (vii) **PWD (B&R)**
 - (a) Improving road conditions for smooth movement of traffic
 - (b) Increasing green cover on roadside under their jurisdiction

- (viii) **Punjab State Council for Science and Technology**
 - (a) Evolving cost-effective cleaner technologies

- (ix) **Department of Agriculture**
 - (a) Promotion of bio-mechanization and compost facilities for agro waste
 - (b) To provide Machinery for in-situ management
 - (c) To create awareness about ill-effects of stubble burning
 - (d) To create awareness regarding alternative crops to break wheat-rice cycle.

(x) **District Administration**

- (a) Coordination with all the Stakeholders promoting collaboration and resolving local issues
- (b) Public Awareness Campaign

2.6 **Non-Government Stakeholders**

2.6.1. There is need to involve various Industry associations of Mandi Gobindgarh in this plan. Following Industry Associations of Mandi Gobindgarh will be associated with the plan:

- (i) President, Gobindgarh Steel Chamber of Commerce & Industries, Mandi Gobindgarh.
- (ii) President, All India Steel Re-Rollers Association, Mandi Gobindgarh
- (iii) President, Small Scale Steel Re-Rollers Association, Mandi Gobindgarh
- (iv) President, Mandi Gobindgarh Induction Furnace Association, Mandi Gobindgarh

2.6.2. These association will help in the following activities:

Generic

- (i) To stabilize the vehicular movement area within premises of the industries
- (ii) To persuade the member industries to comply with emission norms by PPCB
- (iii) To evolve more efficient machinery, boiler furnace and air pollution control devices which may be adopted by all the industries for better environment

Specific

- (iv) To shift over the industries from coal / pet coke / furnace oil to CNG
- (v) To upgrade the existing APCD of Induction Furnaces consisting of canopy hood to the new APCD designed by PSCST, Chandigarh with side hood collection system & ensuring the adequacy of APCD for other coal fired industry.

2.6.3. Apart from Industry Associations, the support of various NGOs in the city such as Go Green (NGO), Mandi Gobindgarh will be sought. These NGOs will assist in the following:

- (i) To create awareness among the public regarding ill-effects of air pollution
- (ii) To motivate residents of Mandi Gobindgarh for adopting the practices to minimize the use of fresh water, planting more trees, to promote pooling by minimal use of private vehicles. Parking of vehicles in the designated zones, minimum use of electricity etc
- (iii) To give suggestions to District Level Committee to control or minimize the air pollution
- (iv) To give feedback on enforcement activities

2.7 **Nodal Department**

The clean air plan for Mandi Gobindgarh is part of State-wide campaign to control air pollution in non-attainment cities. In order to bring necessary impetus, support from other stakeholder departments, uniformity and consistency, there is need to have a Nodal

Department. The Department of Science, Technology and Environment will be the nodal department for coordinating and monitoring activities of the plan. The Department has recently set up Directorate of Environment and Climate Change, which will provide necessary support at the headquarter for coordination and oversight and PPCB will provide necessary technical and field support.

2.8 Integration of Departmental plans

The Nodal Department will integrate plans of individual departments for control of pollution from various sources and prepare a comprehensive plan.

2.9 Citizen participation

Citizen participation will be key to the success of the plan. Effort will be made to seek citizen participation in various public awareness activities, feedback and support in various enforcement related activities. A strong social media and technology driven platform will be set up to seek citizens particularly youth participation.

2.10 Design of Monitoring System

2.10.1 Various measures envisaged under the action plan for control of pollution can be classified in the following categories:

- (i) Public Awareness
- (ii) Effective Enforcement
- (iii) Creation of new Infrastructure
- (iv) Maintenance related activities
- (v) Policy Advocacy
- (vi) Technology Support

2.10.2 Monitoring of various activities of the Action Plan will be key to achieve the outcomes envisaged under the Action Plan. Different kind of monitoring systems will be required for different categories of activities:

- (i) Design of effective online platform including social media to disseminate air pollution related information and seek citizen feedback and participation in the campaign. It will have a monitoring mechanism to see the level of participation and measures to increase the same.
- (ii) Design of effective online system to capture various enforcement activities by various agencies to monitor them, evaluate them and provide feedback and enforce accountability.
- (iii) Design of an effective monitoring system to monitor the progress of various infrastructure related activities as envisaged under the plan.
- (iv) Design of an effective monitoring system for policy advocacy within the Government for expediting formulation of various policies.

- (v) Design of an effective monitoring system for various technological interventions to reduce the air pollution.

2.10.3 Directorate of Environment and Climate Change and PPCB will set up a dedicated team for design of monitoring system and setting up of IT platform for tracking progress of the plan.

2.11 **Governance**

The monitoring of progress, coordination of various activities, corrective measures required and fixing of accountability will be done by Air Quality Monitoring Committees at the District level under Deputy Commissioner, State Level under Principal Secretary, Environment and Apex Committee under Chief Secretary.

Chapter 3 – Current Status and Trends of Air Quality in Mandi Gobindgarh

3.1 Monitoring of Air Quality

Mandi Gobindgarh is the major industrial hub in the Distt. Fatehgarh Sahib and the ambient air quality monitoring is being carried out regularly at 3 no. manually operated stations installed at Mandi Gobindgarh under National Air Monitoring Programme (NAMP). The year wise data of PM₁₀, SO₂ and NO_x for the period 2014-18 is placed at **Annexure-A**. Further, the Board has also commissioned one Continuous Ambient Air Quality Monitoring Station (CAAQMS) at Mandi Gobindgarh and the real time data of the same is being displayed at National Highway-I. The AQI data of 2017 and 2018 has been given in **Annexure-B**.

3.2 CPCB's norms for Air Quality

The CPCB on 18/10/2009 has revised National Ambient Air Quality Standards (NAAQS) which are reproduced as under:

S.N.	Pollutants	Time weighted average	Concentration of Ambient Air	
			Industrial, Residential, Rural and other areas	Notified Ecologically sensitive area
1	Sulphur Dioxide (SO ₂) µg/m ³	Annual	50	20
		24 hours	80	80
2	Nitrogen Dioxide (NO ₂) µg/m ³	Annual	40	30
		24 hours	80	80
3	Particulate Matter (size<10 µm) or PM ₁₀ µg/m ³	Annual	60	60
		24 hours	100	100
4	Particulate Matter (size<2.5 µm) or PM _{2.5} µg/m ³	Annual	40	40
		24 hours	60	60
5	Ozone (O ₃) µg/m ³	8 hours	100	100
		1 hour	180	180
6	Lead (Pb), µg/m ³	Annual	0.50	0.50
		24 hours	1.0	1.0
7	Carbon Monoxide (CO), mg/m ³	8 hours	02	02
		1 hour	04	04
8	Ammonia (NH ₃), µg/m ³	Annual	100	100
		24 hours	400	400
9	Benzene (C ₆ H ₆) µg/m ³	Annual	05	05

10	Benzo (a) Pyrene (BaP)- particulate phase only ng/m ³	Annual	01	01
11	Arsenic (As) ng/m ³	Annual	06	06
12	Nickel (Ni) ng/m ³	Annual	20	20

3.3 Air Quality Index (AQI)

3.3.1. Awareness of daily levels of air pollution is important to the citizens, especially for those who suffer from illnesses caused by exposure to air pollution. Further, success of a nation to improve air quality depends on the support of its citizens who are well-informed about local and national air pollution problems and about the progress of mitigation efforts. Thus, a simple yet effective communication of air quality is important. The concept of an air quality index (AQI) that transforms weighted values of individual air pollution related parameters into a single number is widely used for air quality communication and decision making.

3.3.2. The AQI system is based on maximum operator of a function (i.e. selecting the maximum of sub-indices of individual pollutants as an overall AQI). The objective of an AQI is to quickly disseminate air quality information (almost in real-time) that entails the system to account for pollutants which have short-term impacts. Eight parameters (PM₁₀, PM_{2.5}, NO₂, SO₂, CO, O₃, NH₃, and Pb) having short-term standards have been considered for near real-time dissemination of AQI.

3.3.3. The AQI has further been classified in six categories as shown below:

AQI	Quality	Impact on health
0-50	Good	Minimal impact
51-100	Satisfactory	Minor breathing discomfort to sensitive people
101-200	Moderate	Breathing discomfort to people with lungs, asthma and heart diseases
201-300	Poor	Breathing discomfort to most people on prolonged exposure
301-400	Very poor	Respiratory illness on prolonged exposure
>401	Severe	Affects healthy people and seriously impacts those with existing diseases.

3.3.4. Based on this, the CPCB evolved a Graded Response Action plan (GRAP) which is implemented in the NCR, Delhi when the air quality deteriorates and various steps have

been mentioned in GRAP to be taken to immediately control the deterioration of the air quality.

3.4 Trends of Quality of Air

- 3.4.1. The Board has commissioned one no. Continuous Ambient Air Quality Monitoring Station (CAAQMS) at Mandi Gobindgarh and the real time data of the same is being displayed at National Highway-I. Annual average of AQI for the last 2 years is given as under:

Year	PM ₁₀ (µg/m ³)	PM _{2.5} (µg/m ³)	SO ₂ (µg/m ³)	NO _x (µg/m ³)	AQI
2017	174.16	77.40	12.41	69.59	196
2018	113.0	62.40	9.66	36.45	121

- 3.4.2. The trend of AQI in the ambient air quality shows that the concentration of SO₂, NO_x and SPM in the ambient air has decreased in 2018 as compared to 2017.

3.5 Major parameters of concern

The major concern of the air quality is PM₁₀. All other parameters are within the prescribed limits. The perusal of data in **Annexure-B** clearly indicates that air quality index of Mandi Gobindgarh generally remains moderate (101-200) and sometimes satisfactory (51-100). The sources of pollution and their apportionment are given in the next chapter.

Chapter 4 – Sources of Air Pollution in Mandi Gobindgarh

4.1 Major Sources

4.1.1 The following are the major sources of air pollution:

- (i) Vehicular Emissions
- (ii) Road Dust
- (iii) Burning of Garbage and Biomass
- (iv) Industrial Emissions
- (v) Mining
- (vi) Construction and Demolition Activities
- (vii) Other Sources

4.1.2 Due to paucity of time, detailed studies regarding source apportionment and carrying capacity could not be done, however, the Board has made some projections based on its in-house projections for Mandi Gobindgarh. The estimated contribution of various sources in air pollution is given as under:

1.	Industrial Emissions	50%
2.	Road Dust	25%
3.	Vehicular Pollution	15%
4.	Burning of Garbage and Biomass	5%
5.	Construction and Demolition Activities	4%
6.	Other Sources	1%

4.1.3 PPCB shall carry out source apportionment for the city involving Expert Agency. The estimated cost to be incurred on the Source Apportionment study is Rs. 5.00 lacs.

4.2 Vehicular Emissions

4.2.1 Transport sector is one of the significant contributors to air pollution in Mandi Gobindgarh due to movement of heavy goods vehicles carrying raw materials and products of the industries located in and around the city. At present about 15000 vehicles (heavy transport vehicles, LMVs, cars & jeeps, two wheelers and three wheelers) are plying on the roads of Mandi Gobindgarh. National Highway NH-1 passes through Mandi Gobindgarh, which is connecting tourist destination like Amritsar and industrial hubs like Ludhiana and Jalandhar.

4.3 Road Dust

4.3.1 The particles of dust that deposit from the atmosphere and accumulate along road sides are called road dust particles. Two main sources of road dust are deposition of previously suspended particles (atmospheric aerosols) and displaced soil. Some of the factors contributing to road dust are:

- (i) Emissions from the vehicular traffic,
- (ii) Construction and demolition activities, corrosion of metals structures etc.
- (iii) Presence of potholes on the road
- (iv) Absence of metaled roads / stabilized roads / un-stabilized movement area within industries
- (v) Presence of un-stabilized berms along the roads
- (vi) Movement of overloaded transport vehicles

4.4 Burning of Biomass and Garbage

4.4.1 There are only small patches of agricultural land within the Mandi Gobindgarh city, however, the city is surrounded by agricultural area and a lot of biomass is generated during post harvesting paddy and wheat seasons. During wheat season biomass burning is lesser than paddy season as the farmers use the wheat crop residue as cattle fodder. The effect of biomass burning in the paddy season is augmented due to the cold climate conditions.

4.4.2 At present, Municipal solid waste generation of the city is estimated as 45 TPD, which is being dumped unscientifically in the present dumping site along G.T. Road. The garbage burning increases during winter season as the general public tend to burn the waste for heating purposes.

4.5 Industrial Emissions

4.5.1 The main stationary sources of air pollution are the industrial units, which are emitting particulate matter, sulphur di-oxide and oxides of nitrogen etc. All the rolling mills, cupola furnaces and ceramic units are using coal / furnace oil as fuel in their furnaces emitting the aforesaid pollutants, besides the process / fugitive emissions.

4.5.2 The category wise detail of air polluting industries situated within 5 km of outskirts of MC limits of Mandi Gobindgarh are given as under:

Sr. No.	Category	Number of Units
1.	Cattle Feed/Poultry Feeds	4
2.	Ceramics/Refractory	18
3.	Cupola Furnaces	28
4.	Forging units	14
5.	Induction furnaces	79
6.	Kothali units	4
7.	Lead Smelting units	4
8.	Milk Plant/Dairy	1
9.	Ply Board units	2

Sr. No.	Category	Number of Units
10.	Pyrolysis Plant	2
11.	Rolling Mills	212
Total		378

4.5.3 It is pertinent to mention here that emission standards for most of the above industries are the most stringent for such type of industries i.e. 150 mg/Nm³.

4.6 Mining

Mining activities also contribute to the AQI, however, in Mandi Gobindgarh area, no mining activity is carried out due to absence of mining sites. As such, it has no contribution in the air quality index of Mandi Gobindgarh.

4.7 Construction and Demolition Activities

4.7.1 Mandi Gobindgarh is a small city having population of about 90,000. No major construction projects are being set up in the city. However, small construction activities are being carried out by the individual house holders / industrial units / commercial units and paving of streets by the MC on routine basis.

4.8 Others

4.8.1 Other than above mentioned sources, episodic incidents like Holi, Dushera, Diwali, Gurupurab and New Year etc. are celebrated by bursting crackers, spraying colours etc. which also contribute to the ambient air quality.

Chapter 5 –Control on Vehicular Emissions

5.1 Key Activities

5.1.1 The vehicles are major pollution contributor, producing significant amount of nitrogen oxides, carbon monoxides and other polluting gases and particulate matter. To minimize the pollution generated from the vehicles, various actions have to be taken, which have been classified into following categories:

- (a) Public Awareness related,
- (b) Enforcement related,
- (c) Infrastructure related,
- (d) Policy related

5.1.2 Some activities may have more than one category but they have been kept in the category where it has the major requirement. Following are the key activities for control on vehicular emissions:

Public Awareness

- (i) CVE 1 - Public awareness campaign for control of vehicular emissions

Enforcement Related

- (ii) CVE 2 -Remote sensor based PUC system
- (iii) CVE 3 - Extensive drive against polluting vehicles
- (iv) CVE 4 - Prevent parking of vehicles in non-designated areas
- (v) CVE 5 - Check fuel adulteration

Infrastructure Related

- (vi) CVE 6 - Widening of roads and improvement of infrastructure for decongestion of roads
- (vii) CVE 7 - Introduce intelligent traffic systems
- (viii) CVE 8 - Construction of expressways/ bypasses to avoid congestion

Policy Related

- (ix) CVE 9 – Phasing out of commercial Diesel vehicles more than 15 years old
- (x) CVE 10 – Promotion of E- vehicles
- (xi) CVE 11 – Introduction of CNG based public transport
- (xii) CVE 12 – Retrofitting of particulate filters in diesel vehicles for BS-IV fuels

5.1.3 Various actions to be taken for the above activities are given below. Further, the details such as baseline, target, timeline, milestones have been given in **Annexure – C**.

5.2 CVE 1 - Public awareness campaign for control of vehicular emissions

Public support is essential for clean air mission to be successful. As part of overarching mission of clean air, Mandi Gobindgarh, the public must be made aware of ill effects of air pollution on health and contribution of vehicular emissions in the same. The public has to be motivated to play their role in curbing the air pollution. Following action shall be taken:

- (i) Public awareness campaign in print and electronic media
- (ii) Use of Social Media Facebook, twitter, Instagram
- (iii) Jingles on air pollution on local radio and TV
- (iv) Awareness drives in educational institutions
- (v) Public meetings
- (vi) Nukarnataks

5.3 **CVE 2 - Remote sensor based PUC system**

The Department of Transport will implement remote sensor based PUC system to eliminate the malpractices in the existing system of issuing PUCs. All PUC centres will be made online.

5.4 **CVE 3 - Extensive drive against polluting vehicles**

There is need to strictly enforce checking of PUC certificates so that unauthorized vehicles could be penalized. The traffic police shall place check points (Nakas) at differed locations and the performance of such check points shall be monitored. A Whatsapp number shall be dedicated and publicized among general public so that complaints of public regarding polluting vehicles may be received and action taken.

Traffic Police and Department of Transport will be responsible for the activity.

5.5 **CVE 4 - Prevent parking of vehicles in non-designated areas**

4(a) Creating parking infrastructure: Presently, vehicles are being parked in a haphazard manner and on the roads as well, which leads to traffic congestion, thus, causing vehicular pollution. Hence, local government shall develop designated parking lots, Multi storey parking facilities, parking area for trucks/ commercial vehicles and earmark roadside parking by yellow line.

4(b) Enforcement: Traffic police shall impound vehicles parked in non-designated areas and shall compile the list of prominent areas of such violations & pay special attention to these areas. CCTV cameras shall be installed in such areas to capture the evidence. Number of challans shall be monitored.

5.6 **CVE 5 - Check fuel adulteration**

Online Automated System has been adopted by the State Level Coordinator, Oil industry, Punjab for transportation & checking the density of Petrol/Diesel. In case of complaint, Department of Food and Civil Supplies in coordination with local oil company officials shall check fuel adulteration & if any discrepancy is noticed then action against the violator shall be taken by State Level Coordinator, Oil industry, Punjab.

5.7 **CVE 6 - Widening of roads and improvement of infrastructure to decongestion of roads**

The roads constructed within the city having traffic congestion shall be identified by the MC. The major air pollution is caused by dust emission along road sides as the condition of roads is very pathetic. Due to the movement of heavy goods vehicles like Trucks, tippers etc.

carrying raw materials and final products of the industries, lot of dust / vehicular emissions are generated, which is affecting the ambient air quality of the city. Widening of Roads and construction of over-bridges, wherever possible, is required for smooth and speedy flow of traffic and the pending construction work should be completed in the time bound manner. The concerned department like PWD (B&R), PSIEC, Mandi Board and Municipal Council shall widen these roads suitably to decongest the traffic.

5.8 **CVE 7 - Introduce intelligent traffic systems**

The traffic lights installed in the area shall be synchronized in such a way so as to achieve minimal stoppage of vehicles for a stretch of at least 2 Km. The traffic lights shall be placed at various intersection, so as to avoid traffic jams and smooth operation of the vehicles. Municipal Council in consultation with Traffic Police shall identify such places and provide traffic lights.

5.9 **CVE 8 - Construction of expressways/ bypasses to avoid congestion**

PWD (B&R) shall examine the need for any expressways/by-passes to avoid congestions.

5.10 **CVE 9 – Phasing out commercial Diesel vehicles more than 15 years old**

The Department of Transport will frame policy at State level to phase out commercial vehicles more than 15 years old.

5.11 **CVE 10 - Promotion of E- vehicles**

The framing of E-Vehicle policy is at an advance stage of finalization. The Department of Transport shall notify the policy to promote battery operated vehicles.

5.12 **CVE 11 – Introduction of CNG based public transport**

11 (a) Infrastructure development: The Department of Food & Civil Supplies shall facilitate and expedite development of requisite infrastructure such as laying of pipe line and setting up of CNG filling station to promote CNG based public transport.

11 (b) CNG based City Bus Service: Local Government shall take necessary measures to promote CNG based City Bus service.

11 (c) CNG based Auto Rickshaws/Taxis: The Department of Transport shall take necessary steps to promote CNG based Auto Rickshaws/Taxis.

5.13 **CVE 12 - Retrofitting of particulate filters in diesel vehicles for BS-IV fuels**

State Level Coordinator (Oil Industry) has informed that as per Government of India guidelines, India is going to skip adopting BS-5 norms and progress directly to adopting BS-6 norms by 2020. The steps for retrofitting of particulate filters in diesel vehicles is to be undertaken by Automotive industry under directions from Government of India as and when BS-VI fuels are available.

Chapter 6—Control of Road Dust

6.1 Key Activities

- 6.1.1 The particles of dust that deposit from the atmosphere and accumulate along road sides are called road dust particles. Two main sources of road dust are deposition of previously suspended particles (atmospheric aerosols) and displaced soil. Additionally the emissions from the vehicular traffic, building construction and renovation, corrosion of metals structures etc. contribute directly to the road dust. To minimize the pollution generated from the dust emissions, following key activities are proposed:

Maintenance Related

- (i) CRD1— Maintain potholes free roads for free-flow of traffic
- (ii) CRD 2 – Water sprinkling
- (iii) CRD 3 – Mechanical sweeping

Infrastructure Related

- (i) CRD4 -Creation of green buffers along the road sides
- (ii) CRD 5 - Greening of parks open areas community places, schools and housing societies
- (iii) CRD6 - Water fountains at major traffic intersections
- (iv) CRD 7 - Blacktopping of metaled road including pavement of road sides

- 1.1.2 Various actions to be taken for the above activities are given below. Further, the details such as baseline, target, timeline, milestones have been given in **Annexure-D**.

6.2 CRD 1 – Maintain potholes free roads for free-flow of traffic

All the agencies such as MC/ PWD/PUDA/PSIEC/ NHAI will put in place a system of regular inspections to identify the potholes and ensure its filled up. It shall be monitored on regular basis. A web based/ mobile app shall be set up for Public to lodge complaint against the pothole and it shall be monitored for repair.

6.3 CRD 2 – Water sprinkling

2(a) Water sprinkling on dust prone roads: Municipal Council shall identify the dust prone roads and shall prepare schedule for regular sprinkling of water on these roads to suppress dust emissions. This activity shall be started immediately. In order to save the water, the Municipal Council shall utilize the treated wastewater of STPs installed in the city.

2(b) Procurement of Water sprinkler: Municipal Council need to make arrangements for regular sprinkling of water on dust prone roads for which it may procure suitable number of water sprinklers.

6.4 CRD 3 – Mechanical sweeping

Municipal Council shall procure adequate number of automatic sweeping machines for efficient and fast sweeping of the road / streets. The frequency of the sweeping shall be fixed appropriately by the Municipal Council.

6.5 CRD 4 – Creation of green buffers along the road sides

Municipal Council/PSIEC shall identify the trees with the help of Deptt. of Horticulture which may be grown along the roads without any obstruction to the traffic. These trees shall be planted at the suitable places. The maintenance of these trees shall be done by the Municipal Council.

6.6 CRD 5 – Greening of parks, open areas community places, schools and housing societies

In order to increase greenery in the city, the Municipal Council shall identify open areas/ lawns/ vacant lands including community places and schools in the city and these places be allocated to the NGOs or Industrial Associations for tree plantation and their maintenance. The activity of identification of the suitable sites shall be completed in a time bound manner and shall be allotted to the NGOs or Industrial Associations.

6.7 CRD 6 – Water fountains at major traffic intersections

Municipal Council shall explore the possibility of setting up of the water fountains at important traffic junctions to reduce the emission level including dust at these points.

6.8 CRD 7 – Blacktopping of roads including pavement of road sides

7 (a) Kaccha/Brick Paved Roads to be made Pucca road: Some of the city roads are not properly metalled, which are the source of dust and gaseous emissions. These roads shall be converted into metalled road. Municipal Council shall undertake this activity in a time bound manner.

7 (b) Existing roads requiring re carpeting: Roads require regular upkeep & recarpeting. The responsible agencies (MC/PWD/NHAI/PSIEC) shall ensure re carpeting of damaged existing roads.

7 (c) Pavement of road sides using interlocking tiles to prevent road dust emissions: Berms along the roads need to be stabilized with interlocking tiles to prevent road dust emissions.

Chapter 7—Control on Burning of Garbage and Biomass

7.1 Key Activities

- 7.1.1 There are only small patches of agricultural land within the Mandi Gobindgarh city, however, the city is surrounded by agricultural area and a lot of biomass is generated during post harvesting paddy and wheat seasons. During wheat season biomass burning is lesser than paddy season as the farmers use the wheat crop residue as cattle fodder. The effect of biomass burning in the paddy season is augmented due to the cold climate conditions. To minimize the pollution generated from burning of garbage and biomass, following key activities are proposed:

Enforcement Related

- (i). CBGB 1 –Control on open burning of bio-mass in City
- (ii). CBGB 2 – Control on burning of municipal solid waste
- (iii). CBGB 3 –Control on burning of agriculture waste and crop residue

- 7.1.2 Various actions to be taken for the above activities are given below. Further, the details such as baseline, target, timeline, milestones have been given in **Annexure-E**.

7.2 CBGB 1 – Control on open burning of bio-mass in City

The burning of biomass like leaves of the trees creates lot of smoke in the area particularly during winter season, as such, the open burning of these biomass must be stopped. Municipal Council shall deploy its staff to have a check on various areas so as to forbid the inhabitants and sweepers for open burning of the biomass. A Whatsapp number shall provide to the public along with the setting up of the dedicated control room for receiving complaints of public through this system. Municipal Council shall provide education to the educational institutions, government offices, residents welfare associations regarding horticulture waste collection and its benefits by way of disposing the waste in the form of composting and encouraging the organic farming in the gardens and fields.

Municipal Corporation shall provide education to the educational institutions, government offices, residents welfare associations regarding horticulture waste collection and its benefits by way of disposing the waste in the form of composting and encouraging the organic farming in the gardens and fields.

7.3 CBGB 2 – Control on burning of municipal solid waste

Presently, Municipal Council has one municipal waste dumping site along the GT Road, which has not been developed scientifically for the disposal of the municipal solid waste and consequently it has become the source of burning of waste on this dump. Lot of smoke is generated which contribute to the air pollution index. Similarly at the collection point and after sweeping the streets, the garbage collected may be burnt, instead of transporting to the dumping site.

Municipal Council shall identify and develop municipal waste dumping site as per the provisions of Municipal Solid Waste Rules, 2016 and the construction work of the said site shall be completed.

7.4 **CBGB 3 – Control on burning of agriculture waste and crop residue**

The city is surrounded by agricultural area and a lot of agricultural waste is generated during post harvesting paddy and wheat season. During wheat season stubble burning is lesser than paddy season as the farmers use the wheat crop residue as cattle fodder. Punjab Pollution Control Board shall engage Punjab Remote Sensing Centre, Ludhiana for real time monitoring and reporting of stubble burning incidents. The District Administration shall constitute District Level Committees to verify the reported sites and issue challans to the violators besides filing of proceedings u/s 133 CrPc. Necessary directions / instructions shall be issued by the District Administration u/s 144 IPC to restrict harvesting of crops between 6.00 p.m to 6.00 a.m during crop harvesting seasons and attaching of the super SMS with the combine harvesters. Department of Agriculture to promote mechanical reincorporation of paddy straw to prevent its burning.

Chapter 8 – Control on Industrial Emissions

8.1 Key Activities

- 8.1.1 The main stationary sources of air pollution are the industrial units, which are emitting particulate matter, sulphur di-oxide and oxides of nitrogen etc. All the rolling mills, cupola furnaces and ceramic units are using coal / furnace oil as fuel in their furnaces emitting the aforesaid pollutants, besides the process / fugitive emissions. To minimize the pollution generated from the industries, following key activities are proposed:

Technology Intervention

- (i). CIE 1 – Conversion to side-hood suction in furnaces
- (ii). CIE 2 – Conversion to CNG/PNG from coal

Enforcement Related

- (iii). CIE 3–Conversion of natural draft brick kilns to induced draft
- (iv). CIE 4 – Action against non-complying industrial units

Infrastructure Related

- (v). CIE 5 – Shifting of industries from non-designated areas to industrial areas

- 8.1.2 CIE 6 - Various actions to be taken for the above activities are given below. Further, the details such as baseline, target, timeline, milestones have been given in **Annexure-F**.

8.2 CIE 1 – Conversion to side-hood suction in furnaces

PPCB with the technical support from Council for Science and Technology has improvised technology to provide for side-hood suction in furnaces to reduce the emissions. The side-hood suction shall be implemented in a time bound manner and shall be monitored by the Board monthly.

8.3 CIE 2 – Conversion to CNG/ PNG from Coal

A large number of units in Gobindgarh are using coal as source of energy. With the availability of CNG in the city, PPCB will motivate the industry to convert from Coal to CNG. The State government will be approached to reduce VAT to make it viable alternative.

8.4 CIE 3 - Conversion of natural draft brick kilns to induced draft

There is no brick kiln in the city. However, Punjab Pollution Control Board has issued directions to the existing brick kilns of the State to convert their conventional brick kilns to induced draft technology. The Brick kilns located in the district will be monitored for conversion to the new technology in a time bound manner.

8.5 CIE 4 – Action against non-complying industrial units:

The regular monitoring of industries is being carried out as per the policy of the Board. In case, any industry is found violating the provisions of the Air (Prevention and Control of Pollution) Act, 1981, action under the provisions of the said Act is initiated against the violating industries. The number of inspections carried out and action taken will be monitored regularly by the District Level Committee.

8.6 CIE 5 – Shifting of industries from non-designated areas to industrial areas

There are certain industries, which are located in non-designated areas and the PSIEC/ Department of Industries and Commerce shall develop new areas to shift the industries from non-designated areas in coordination with Local Govt./Deptt. of Town & Country Planning.

Chapter 9 – Control on Construction and Demolition activities

9.1 Key Activities

9.1.1 Mandi Gobindgarh area is a small city having population about 90,000. No major construction projects are being set up in the city. However, small construction activities are being carried out by the individual house holders / industrial units / commercial units and paving of streets by the MC on routine basis. To minimize the pollution generated from the construction and demolition activities, following key activities are proposed:

- (i). CCDA 1 –Enforcement of Construction & Demolition Rules.
- (ii). CCDA 2 – Control measures for fugitive emissions
- (iii). CCDA 3 – Ensure carriage of construction material in closed/covered vessels.

9.1.2 Various actions to be taken for the above activities are given below. Further, the details such as baseline, target, timeline, milestones have been given in **Annexure-G**.

9.2 CCDA 1 –Enforcement of Construction& Demolition (C&D) Rules, 2016:

1(a)- Enforcement: The necessary provisions of the C&D Rules, 2016 shall be implemented in the city to ensure proper management of these wastes. Municipal Council shall frame mechanism for challaning the violators found dumping the C&D waste on non-designated areas. The enforcement will be monitored through the use of technology and regular review.

1 (b) – Infrastructure Development: Municipal Co shall identify suitable land and set up the processing plant for effective disposal of C&D waste.

9.3 CCDA 2 – Control measures for fugitive emissions

Municipal Council shall ensure that

- (i). The builders provide proper curtains / sheets on the construction sites to avoid spreading of dust emissions into the environment.
- (ii). No dust should be emitted during demolition.
- (iii). No construction materials should be kept on the roads. The construction material inside the plots should also be kept in covered conditions and labour should be provided with required personal protective equipment's during the course of construction to safeguard from ill effects of fugitive emissions.

9.4 CCDA 3 – Ensure carriage of construction material in closed/covered vessels

The relevant enforcement authorities will ensure that the construction material to be transported through trucks / vehicles shall be covered with tarpaulin to avoid the dust emissions.

Chapter 10 – Control through Other Steps

10.1 Key Activities

10.1.1 Apart from various measures being taken to control various sources of pollution, following activities will also be undertaken to control the pollution:

Public Awareness

(i). COS 1–Dissemination of information on Air Quality Index

Infrastructure

(ii). COS 2 – Establish an Air Quality Management Division at SPCB HQ

(iii). COS 3 – Setup helpline in each city/town as well as SPCB HQ

Enforcement

(i). COS 4 - Monitoring of DG sets and action against violations

10.1.2 Various actions to be taken for the above activities are given below. Further, the details such as baseline, target, timeline, milestones have been given in **Annexure-H**.

10.2 COS 1 – Dissemination of information on Air Quality Index

Punjab Pollution Control Board shall display the air quality index of the city at its prominent places for the awareness of the public including website, social media and print media.

10.3 COS 2 – Establish an Air Quality Management Division at SPCB HQ

There is need to strengthen technical capability pertaining to air pollution. The Board will identify the requisite skill sets and number of technical staff required along with future roadmap for the Board's activities.

10.4 COS 3 – Setup helpline in each city/town as well as SPCB HQ

The Board shall set up a helpline system at headquarter and each city to receive the complaints from public and have effective feedback system.

10.5 COS 4 - Monitoring of DG sets and action against violations

The concerned agency shall identify the commercial activities where the DG sets have been set up without fulfilling the norms for control of emissions and noise. Punjab Pollution Control Board shall identify the illegal DG sets manufacturers and necessary directions for their non-operation / closure shall be issued. Punjab Pollution Control Board shall identify the industries where the DG sets have been set up without fulfilling the norms for control of emissions and noise.

Chapter 11–Graded Response Action Plan for Mandi Gobindgarh

11.1 Graded Responses

In order to mitigate the impact of higher level of pollution when AQI crosses satisfactory level, Graded Response Action Plan has been prepared for Mandi Gobindgarh for implementation under different Air Quality Index (AQI) categories namely, Moderate & Poor, Very Poor and Severe.

11.2 Agency Responsible for Graded Response

The concerned authorities responsible for taking action when AQI reaches various levels have been indicated against the proposed action. The authorities will work in coordination with and under the overall supervision of the District Level Committee.

11.3 Action in case of Severe AQI (Value \geq 400)

11.3.1 Following action shall be taken by the concerned authorities:

S.N.	Severe (AQI value becomes 401-500)	Agency responsible / Implementing Agency
1	Temporary closure of brick kilns, hot mix plant, induction furnaces, rolling mills etc.	PPCB
2	Stop construction activity	MC, Mandi Gobindgarh
3	Alert in newspapers / local cable TV to advice people with respiratory and cardiac patients to avoid polluted areas and restrict outdoor movement.	MC, Mandi Gobindgarh, Distt. Administration & PPCB
4	Sprinkling of water at the various dust emission points	MC, Mandi Gobindgarh
5	Deploy Traffic police for smooth traffic flow at the identified vulnerable areas	Traffic Police
6	Stringently enforce / stop garbage burning in landfills and other places and impose heavy fines on person responsible.	MC, Mandi Gobindgarh
7	To increase the frequency of mechanized sweeping on roads with heavy traffic and water sprinkling also on unpaved roads.	MC, Mandi Gobindgarh
8	Stop entry of heavy good vehicles except essential commodities into Mandi Gobindgarh	Traffic Police
9	To take decision regarding closing of schools	District Administration

11.4 Action in case of Very Poor AQI (Value between 301 to 400)

11.4.1 Following action shall be taken by the concerned authorities:

S.N.	Very Poor (AQI value becomes 301-400)	Agency responsible / Implementing Agency
1	Restraining the operation of air polluting industries i.e. induction furnaces, rolling mills, brick kilns etc. for 8 hours/day	PPCB
2	Banning of construction activities	MC, Mandi Gobindgarh
3	Stop of garbage burning in the landfill areas or in the open fields	MC, Mandi Gobindgarh
4	Water sprinklings at the dust emission points etc.	MC, Mandi Gobindgarh
5	Strict vigil and enforcement of PUC norms	Traffic Police
6	Strict vigil and no tolerance for visible emissions from the vehicles and industries	PPCB and Traffic Police.
7.	Strictly enforce Supreme Court ban on fire crackers	MC, Mandi Gobindgarh & Distt. Administration
8	Strictly enforce all pollution control regulations in the air polluting industries like induction furnaces, rolling mills, brick kilns etc.	PPCB

11.5 Action in case of Poor AQI (Value between 201 to 300)

11.5.1 Following action shall be taken by the concerned authorities:

S.N.	Poor (AQI value becomes 201-300)	Agency responsible / Implementing Agency
1	Strictly enforce garbage burning in landfill and other places and impose heavy fines on person responsible	MC, Mandi Gobindgarh
2	Increase frequency of mechanized cleaning of road and sprinkling of water on roads. Identify road stretches with high dust generation.	MC, Mandi Gobindgarh
3	Stop use of coal / firewood in open eateries	MC, Mandi Gobindgarh
4	Strictly enforce rules for dust control in construction activities and close non-complaint sites.	MC, Mandi Gobindgarh
5	Close / Strictly enforce all pollution control regulations in the air polluting industries like induction furnaces, rolling mills, brick kilns etc.	PPCB
6	Restricting air polluting industries i.e. induction furnaces, rolling mills, brick kilns etc. for 12 hours/day	PPCB

11.6 Action in case of moderately polluted AQI (Value between 101 to 200)

11.6.1 Following action shall be taken:

S.N.	Moderately polluted (AQI value becomes 101-200)	Agency responsible / Implementing Agency
1	Increasing the frequency of mechanized cleaning the roads etc.	MC, Mandi Gobindgarh
2	Sprinkling of water at the dust emitting points	MC, Mandi Gobindgarh
3	To stop open burning of garbage and municipal solid waste	MC, Mandi Gobindgarh
4	Close / strictly enforce all pollution control regulations in the air polluting industries like induction furnaces, rolling mills, brick kilns etc.	PPCB

Chapter 12 –Monitoring Requirements and Formats

12.1 Monitoring Requirements

12.1.1. Following are the key components of monitoring requirements of the Plan:

- (i) Monitoring of activities for control on Vehicular Emissions
- (ii) Monitoring of activities for control on Road Dust
- (iii) Monitoring of activities for control on Burning of Garbage and Biomass
- (iv) Monitoring of activities for control on Industrial Emissions
- (v) Monitoring of activities for control on Construction and Demolition activities
- (vi) Monitoring of activities for control on other sources

12.1.2. Further, various activities can be classified into one of the following categories:

- (i) Public Awareness
- (ii) Enforcement
- (iii) New Infrastructure
- (iv) Maintenance activities
- (v) Policy Advocacy
- (vi) Technology Support

12.2 Development of Environment Protection Monitoring System (EPMS)

In order to keep track of the progress made by concerned stakeholder departments on various projects, activities and initiatives, it is proposed to develop a dedicated IT platform namely Environment Protection Monitoring System (EPMS).

12.2.1. To work out detailed formats and setting up online system to track progress of various activities, a dedicated team of PPCB and NIC is working on it.

12.2.2. The system will ensure that information is captured at source and transmitted to the System and the system will be able to analyse and report it in the prescribed format. The system will generate different reports for use at different levels. The System will also have dashboard to present the key indicators and metrics.

Chapter 13 –Governance and Supervision

13.1 Three Tier Monitoring

13.1.1. Monitoring will be done by the Departments concerned, which are executing or responsible for particular activities. In addition, there will be three level of Air Quality Monitoring Committees (AQMC) to review and monitor the status:

- (i) AQMC at District Level under Deputy Commissioner
- (ii) AQMC at State level under Principal Secretary, Environment
- (iii) Steering Committee under Chief Secretary

13.1.2. PPCB will set up a dedicated team for supporting coordination and monitoring of the Action Plan. It will also develop suitable IT platform for monitoring purposes.

13.2 AQMC at District Level

District Level Committee will be constituted under the chairmanship of Deputy Commissioner, Fatehgarh Sahib and the monthly meeting of the District Level Committee will be conducted to discuss / monitor the progress of the activities to be performed under the Action plan. The committee shall involve civil society organization and their participation will be ensured for achieving various targets mentioned in the Action plan. The district level committee shall constitute the followings:

1	The Deputy Commissioner, Fatehgarh Sahib	Chairman
2	The Senior Superintendent of Police, Fatehgarh Sahib	Member
3	The Environmental Engineer, Punjab Pollution Control Board, Regional Office, Fatehgarh Sahib	Convener
4	The Executive Officer, Municipal Council, Mandi Gobindgarh	Member
5	The Regional Transport Authority, Patiala	Member
6	The Divisional Forest Officer, Patiala	Member
7	Sub Divisional Magistrate, Amlah	Member
8	The Executive Engineer, PWD (B & R), Sirhind, Distt. Fatehgarh Sahib	Member
9	The District Town Planner, Fatehgarh Sahib	Member
10	The Executive Engineer, Punjab Small Industries & Export Corporation, 18, Himalya Marg, Udyog Bhawan, Sector-17-A, Chandigarh	Member
11	The General Manager, District Industries Centre, Fatehgarh Sahib	Member

12	The Asstt. Executive Engineer, Punjab Small Industries & Export Corporation, Mandi Gobindgarh	Member
13	The District Agriculture Officer, Deptt. of Agriculture, Fatehgarh Sahib	Member
14	The General Manager-cum- Project Director, NHAI, 17-L, Model Town, Ambala City.	Member
15	The Vertical Head – Projects, IRM Energy Pvt. Ltd., C.G. Road, Navrangpura, Ahmedabad 380009, Gujrat	Member
16	The President, Gobindgarh Steel Chamber of Commerce & Industries, Mandi Gobindgarh	Member
17	The President, All India Steel Re-Rollers Association, Mandi Gobindgarh	Member
18	The President, Small Scale Steel Re-Rollers Association, Mandi Gobindgarh	Member
19	The President, Mandi Gobindgarh Induction Furnace Association, Mandi Gobindgarh	Member

13.3 AQMC at State Level

13.3.1. State Level Air Quality Monitoring Committee (AQMC) will comprise of the following:

1	Administrative Secretary, Department of Environment	Chairman
2	Director, Local Government	Member
3	Director, Transport	Member
4	Director, Industries and Commerce	Member
5	ADGP, Traffic	Member
6	Director, Directorate of Environment & Climate Change	Member
7	Chairman, PPCB	Member
8	Representatives of NGO/ Expert Members	Member
9	Representatives of NGO/ Expert Members	Member
10	Joint Director, Directorate of Environment & Climate Change	Convener

13.3.2. The State level Committee would meet every month to review the progress of the action plan and take corrective measures and also escalate issued to the Steering committee for intervention.

13.4 Steering Committee

13.4.1. There will be a Steering Committee under Chief Secretary and comprising of Administrative Secretaries of relevant administrative departments for monitoring the progress, resolving issues and enforcing accountability.

13.4.2. The Committee will comprise of the following:

1	Chief Secretary	Chairman
2	Administrative Secretary, Environment	Member
3	Administrative Secretary, Local Government	Member
4	Administrative Secretary, Industries and Commerce	Member
5	Administrative Secretary, Transport	Member
6	Administrative Secretary, PWD	Member
7	ADGP, Traffic	Member
8	Director, Directorate of Environment & Climate Change	Member
9	Chairman, PPCB	Member
10	Additional Secretary, Environment	Convener

Chapter 14 –Risk Mitigation Plan

14.1 Identification of Major Risks

Following are the major risks:

- (i) Lack of formal source apportionment study
- (ii) Accuracy and completeness of baseline data, targets and milestones
- (iii) Lack of formal analysis of implementation barriers

14.2 Source Apportionment Study

It is important to have the assessment of various sources and their contribution to the air pollution and accordingly focus on controlling those sources. Currently no such study has been done. In order to mitigate the risk, Punjab Pollution Control Board shall get source apportionment study of the city conducted to adjudge various sources contributing air pollution in the area and mitigation thereof. The same will be incorporated in the Action Plan.

14.3 Accuracy and completeness of baseline data, targets and milestones

The baseline data, targets and milestones are not very accurate or complete. During the course of implementation detailed surveys and analysis will be carried out and the baseline data, targets and milestones will be suitably updated and same will be reviewed in the AQMC meeting at District Level.

14.4 Lack of formal analysis of implementation barriers

Various activities included in the action plan need to be carefully analysed with respect to implementation challenges so that suitable remedial measures could be envisaged. Efforts will be made to study various barriers and improving the efficacy and effectiveness of the proposed activities by overcoming the shortcomings in the present system.

Chapter 15 –Action plan for Training and Capacity Building

15.1 Importance

It is important to enhance the capability and skills of the officers of stakeholder departments for effective implementation of Air Action Plans. Therefore, training and capacity building programmes related to various technical aspects are required to be conducted for different functionaries of relevant departments & organizations at various levels of hierarchies.

15.2 Objectives

- (i) Raising awareness and changing the mindset.
- (ii) Building trust and appreciation for the purpose of various Environment Protection Plans, environmental concerns, issues, roles and responsibilities of different stakeholders.
- (iii) Improving skills regarding existing practices, procedures and methodologies.
- (iv) Promoting an integrated and holistic approach for addressing the concerns.
- (v) Enhancing core competencies of concerned stakeholders in relevant areas of environment improvement.
- (vi) Strengthening institutional arrangements
- (vii) Reinforcing accountabilities and identifying aspects that require improvement
- (viii) Understanding new challenges and requirements

15.3 Need Assessment

Specific modules for training of nodal and other responsible officers of various line departments involved in implementation of Air Action Plan are required to be developed for which need assessment would be carried out.

15.4 Involvement of Institutions and Experts

Organizations of national & international repute having expertise in the area of environment in general and air pollution in particular shall be involved for conducting need specific trainings & capacity building programmes for various target groups and officials of stakeholder departments. Experts would also be involved in developing knowledge products and information material on various issues & technologies for creating mass awareness to build a responsible society with an aim to reduce air pollution in cities. Further, the details such as baseline, target, timeline, milestones have been given in **Annexure-I**

Annexure A – Trends in Air Quality of Mandi Gobindgarh

1. Station at M/s United Steel, Mandi Gobindgarh

Month	PM ₁₀ (µg/m ³)					NO _x (µg/m ³)					SO ₂ (µg/m ³)				
	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
January	171	153	118	101	173	37	35	28	33	40	8	7	7	6	7
February	160	166	122	108	123	37	38	27	30	40	6	8	7	6	7
March	168	150	138	111	149	39	39	30	28	41	7	7	7	6	6
April	192	152	132	98	137	40	40	38	38	36	8	7	7	6	7
May	162	131	117	104	140	38	36	37	29	38	7	6	7	6	7
June	169	119	112	101	142	38	36	39	28	38	8	7	6	6	7
July	150	115	118	118	134	40	34	37	30	37	8	6	7	6	7
August	111	117	117	114	131	35	34	36	36	37	7	6	7	7	8
September	119	108	122	120	117	36	34	35	37	36	7	6	6	7	7
October	121	114	146	201	117	38	38	37	45	37	7	6	7	8	7
November	99	162	154	277	136	32	42	36	41	41	7	7	7	9	8
December	109	138	113	174	138	35	32	32	40	40	7	7	6	13	8
Annual Avg.	144	135	126	136	136	37	37	34	35	38	7	7	7	7	7

2. Station at M/s Modi Oil Mills, Shifted to Modern Automotive in Nov. 2009, Mandi Gobindgarh

Month	PM ₁₀ (µg/m ³)					NO _x (µg/m ³)					SO ₂ (µg/m ³)				
	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
January	166	146	131	123	161	36	35	27	33	41	8	8	6	6	7
February	143	159	134	110	110	36	37	26	32	42	7	7	7	6	7
March	173	155	126	103	119	37	38	30	29	38	7	8	7	6	7
April	155	158	138	104	183	38	39	37	32	35	7	7	7	6	7
May	154	125	121	102	135	39	37	37	28	39	7	7	7	6	7
June	155	132	120	103	143	37	36	38	28	37	8	7	6	6	7
July	139	123	122	122	147	39	34	37	31	39	8	6	6	6	7
August	106	127	111	106	116	38	35	34	36	38	7	7	6	7	7
September	121	111	107	112	111	38	33	35	39	38	8	7	6	7	7
October	113	115	137	205	133	35	36	36	45	38	8	7	7	9	8
November	99	142	162	277	156	32	40	36	42	38	7	7	7	9	8
December	110	140	114	195	138	35	34	33	38	41	8	7	6	8	7
Annual Avg.	136	136	127	139	138	37	36	34	34	39	8	7	7	7	7

3. Station at M/s Raj Steels, Mandi Gobindgarh

Month	PM ₁₀ (µg/m ³)					NO _x (µg/m ³)					SO ₂ (µg/m ³)				
	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
January	129	141	129	110	162	35	34	30	32	41	7	6	6	6	7
February	104	144	115	108	102	17	35	26	32	41	7	6	6	6	7
March	110	125	120	101	119	33	35	31	27	38	6	6	6	6	7
April	149	132	129	106	171	37	36	37	31	33	6	6	7	6	7
May	141	117	116	108	116	35	35	38	29	37	6	6	6	6	7
June	164	109	126	97	145	37	35	37	28	36	8	6	6	6	7
July	134	98	133	122	129	37	37	37	31	36	7	6	7	6	7
August	120	97	99	109	123	35	31	38	35	38	7	6	6	7	7
September	110	106	107	117	116	36	33	34	38	38	6	5	6	7	7
October	125	112	134	194	123	38	36	38	43	37	8	6	7	8	7
November	100	119	163	265	146	33	38	36	43	38	7	6	7	8	8
December	106	127	117	186	139	33	31	26	42	37	6	7	6	8	8
Annual Avg.	124	119	124	135	133	34	35	34	34	38	7	6	6	7	7

Annexure B – AQI data from 2017 to 2018 depicting the air quality in Mandi Gobindgarh

AQI Data for year 2017			AQI Data for year 2018		
Month	AQI	Category	Month	AQI	Category
Jan-17	164	Moderate	Jan-18	166	Moderate
Feb-17	166	Moderate	Feb-18	130	Moderate
Mar-17	152	Moderate	Mar-18	117	Moderate
Apr-17	194	Moderate	Apr-18	114	Moderate
May-17	195	Moderate	May-18	146	Moderate
Jun-17	219	Poor	Jun-18	163	Moderate
Jul-17	203	Poor	Jul-18	78	Satisfactory
Aug-17	123	Moderate	Aug-18	62	Satisfactory
Sep-17	173	Moderate	Sep-18	56	Satisfactory
Oct-17	270	Poor	Oct-18	108	Moderate
Nov-17	281	Poor	Nov-18	159	Moderate
Dec-17	209	Poor	Dec-18	154	Moderate
2017 annual Avg.	196	Moderate	2018 Annual avg.	121	Moderate

Annexure C – Action Plan for Control on Vehicular Emissions

Sr No.	Activity	Implementation period (short/mid/long term)	Responsible Agencies	Base Line	Target to be achieved	Target Date	Milestones (Monthly / Quarterly)	Financial Implications, if any (Estimated Cost)
1	CVE 1 - Public awareness campaign for control of vehicular emissions	Short term	Deptt. of Transport	Presently, awareness is being done in the Educational Institutes under SadakSurakhya Abhiyan	The public has to be motivated to play their role in curbing the air pollution	Regular Activity	<ol style="list-style-type: none"> 1. Public awareness campaign in print and electronic media-Twice a month 2. Use of Social Media Facebook, twitter, Instagram-Regular 3. Jingles on air pollution on local radio and TV-Local FM Radio will be hired 4. Awareness drives in educational institutions-Monthly 5. Public meetings-Monthly 6. Nukarnataks-Quarterly 	NIL

		Short Term	Traffic Police.	Organised 17 no. awareness camps during Jan & Feb 2019 through Traffic Education Cell	Public awareness campaigns to be continued	Regular activity	--	Nil
2	CVE 2 - Remote sensor based PUC system	Medium Term	Department of Transport	Manual checking at Pollution Checking Centre (PCC) exists	All Pollution CheckingCentres will be linked with VAHAN 4.0 software of the Transport deptt.	31.01.2020	<ol style="list-style-type: none"> 1. Preparation of RFP for selection of vendors - Under Process 2. Allotment of work after selection of vendors – 2 Months 3. Development of software solution to link all PUC centres – 9 months 4. Linking of software to VAHAN 4.0 software of the transport Deptt.- 1 Month 	Nil

3	CVE 3 - Extensive drive against polluting vehicles	Short term	Traffic Police	450 Challans were issued against polluting vehicles in 2018 and 161 challans issued upto Feb, 2019.	Regular inspection to be continued and violators to be challaned.	Regular Activity	--	Nil
4	CVE 4 (a) – Prevent parking of vehicles in non-designated areas by creating parking infrastructure	Long Term	Municipal Council	<ul style="list-style-type: none"> • 1 No. designated parking lot site identified for development - Bus stand (for commercial vehicles) • No Multi storey parking lots exists • Parking for trucks/ commercial: 1 no. transport nagar exists. 	<ul style="list-style-type: none"> • Identified site to be developed. • No requirement of Multi storey parking lot. • Existing Parking areas for trucks/ commercial vehicles to be renovated. 	31.01.2020	<ol style="list-style-type: none"> 1. Estimation- Under process 2. Tendering- After estimation 3. Work allotment- After tendering 4. Completion- Within 1 year 	Rs. 2 crore
	CVE (4b) – Enforcement	Short Term	Traffic Police.	176 no. of challans issued in the month of Jan & Feb, 2019	Regular inspection to be continued and violators to be challaned.	31.12.2019	-	Nil
		Med. Term	Municipal Council	<ul style="list-style-type: none"> • Roadside parking earmarked by yellow line : 4 	<ul style="list-style-type: none"> • Identified additional 1 km of Roadside parking for 			Rs. 7 lacs

				<p>no. (3 km existing)</p> <ul style="list-style-type: none"> "No Parking" sign Boards installed - Nil. 	<p>earmarking are- Main Bazar, HDFC bank, Motia Khan, MC office road</p> <ul style="list-style-type: none"> "No Parking" sign Boards being installed in non designated areas – 50 no. 			
5	CVE 5 - Check fuel adulteration	Short Term	Department of Food and Civil Supplies/Oil Industry	<p>As informed by Deptt.of Food & Civil Supplies, the Oil Companies have adopted Online Automated System for transportation & checking the density of Petrol/Diesel.</p>	<p>State Level Coordinator, Oil Companies will conduct inspections on annual, quarterly & random basis.</p> <p>- In case of complaint, Department of Food & Civil Supplies in coordination with local oil company officials shall check fuel adulteration & if any discrepancy is noticed then action against the violator shall be taken by State Level Coordinator of Oil Company.</p>	Regular activity	-	Nil

6	CVE 6 - Widening of road and infrastructure for decongestion of road	Short term	Municipal Council	1.5 Kms of Amloh road identified	Identified road to be widened.	30.10.2019	1. Estimation-Completed 2. Tendering and Work allotment-Under process 4. Completion-Within 6 months	Rs. 1.80 Crore
		Long term	PWD (B&R)	1.87 km road length to be widened (GT road to Ambe Majra)	Identified road to be widened.	30.03.2021	1. Identification-Complete 2. Preparation of DPR, Tendering and Work allotment after receiving administrative approval.	Rs. 3.85 Crore
7	CVE 7 - Introduce intelligent traffic systems	NA	Municipal Council	1 no. conventional traffic light exists	Intelligent traffic system not required.	NA	NA	NIL
8	CVE 8 - Construction of expressways/ bypasses to avoid congestion	NA	PWD (B&R)	Presently, six lane National Highway exists	Not required	NA	NA	NIL

9	CVE 9 – Phasing out commercial diesel vehicles more than 15 years old	Long Term	Department of Transport	New commercial diesel vehicles is registered for 2 years and thereafter, fitness certificate is being issued every year.	Matter of fixing the age of commercial diesel vehicle is being examined legally.	-	-	Nil
10	CVE 10 – Promotion of E- vehicles	Medium term	Deptt. of Transport	Presently, most of the vehicles are running on diesel and petrol. -Framing of the E-vehicle policy is in the final stages.	After approval from Competent Authority E-Vehicle policy will be notified.	31.01.2020	1. Framing & Notification of E-vehicle policy – 9 months 2. Providing public charging points for E-vehicles as per Govt. policy.	NIL
11	CVE 11 (a) – Introduction of CNG based public transport (Infrastructure development)	Medium Term	Deptt. of food & civil supplies	<ul style="list-style-type: none"> • 01 nos. of CNG Station exists • Work being executed M/s IRM 	<ul style="list-style-type: none"> • To upgrade 2 No conventional filling stations to CNG filling stations. • Deptt to follow up & facilitate Up gradation and commissioning of CNG filling stations & laying of pipeline. 	31.03.2020	Upgradation & commissioning of CNG filling stations	Nil
	CVE 11 (b) – Introduction	NA	Municipal Council	At present no CNG based city bus	CNG based city bus service not required.	-	-	Nil

	of CNG based city bus service			service exits.				
	CVE 11 (c) – Introduction of CNG based autos / taxis	Long Term	Deptt. of Transport	At present, no CNG based auto/ taxis exits. PPCB has issued direction under section 31-A of Air Act 1981 to stop registration of new diesel / petrol driven auto rickshaw (s), in 5 districts including Fatehgarh Sahib, w.e.f 01.02.2019.	To take measures to introduce CNG based auto/ taxis.	-	Implementation of PPCB orders dated 03.01.2019.	Nil
12	CVE 12 – Retrofitting of particulate filters in diesel vehicles for BS-V fuels	Long Term	Department of Transport	Presently, India is implementing BS-IV standards for diesel vehicles.	India is going to skip adopting BS-5 norms and shift directly to adopting BS-6 norms by 2020	-	The steps for retrofitting of particulate filters in diesel vehicles is to be undertaken by Automotive industry under directions from Government of India as and when BS-VI fuels will be available	NIL

Annexure D – Action Plan for Control on Road Dust

Sr No.	Activity	Implementation period (short/Medium/long term)	Responsible Agencies	Base Line	Target to be achieved	Target Date	Milestones (Monthly / Quarterly)	Financial Implications, if any (Estimated Cost)
1	CRD 1 – Maintain potholes free roads for free-flow of traffic	Short term	Municipal Council	5 Km road length has been identified as follows: (Arrey Mill Road-1.5 Km, Backside MC office, Mandi Gobindgarh-500 mtr., Under bridge road-1 Km, Road near ESI Hospital-1 Km&Radha Swami Satsang Bhawan Road- 1 Km)	Repair of 5 km of identified road length	30.10.2019	1. Identification- Completed 2. Estimation- Completed 3. Tendering- Completed 4. Work allotment- Allotted 5. To be completed- Within 6 months	Rs. 1.50 Crore
		Medium Term	PWD (B&R)	9 Km of major road length has been identified (Nabha Gobindgarh road (SH-12A)	Toll road already made pothole free		1. Tendering & Work allotment – completed	Rs. 25 lacs
2	CRD 2 (a) – Water sprinkling	Short Term	Municipal Council	5.6 km of Road length Identified for water sprinkling (Amloh	Regular Water sprinkling on identified road	Regular Activity	-	Nil

				Road-4 Kms, Service Roads and under bridge road around NH-1- 6 Kms)				
	CRD 2 (b) – Procurement of Water sprinkler	Medium Term	Municipal Council	1 No. water sprinklers- exists.	2 more sprinklers each of 5KL capacity to be procured	30.10.2019	1. Estimation- Completed 2. Tendering -Under process.	Rs.46 lacs
3	CRD 3 – Mechanical sweeping	Medium Term	Municipal Council	-Presently manual sweeping being done. -Identification of 7.5 Km roads has been done as below : (Arrey Mill Road- 1.5 Km, Jassran Road- 1 Km, Partap Mill Road- 300 mtr, Bank of India Road- 400 mtr, MC office Road- 300 mtr, Dharam Mill Road- 500 mtr, Talwara Road-1 Km, KotlaRoad- 500 mtr, Ram Nagar Mill Road- 500 mtr&Amlah Road-	Procurement of 1 no. mechanical sweeping machines for regular sweeping of identified roads.	31.03.2020	1. Estimation- Completed 2. Tendering -Under process	Rs. 55 Lacs

				1.5 Km)				
4	CRD 4 - Creation of green buffers along the road sides	Short term	Municipal Council	Identified 12 Kms of road sides for plantation as below : [Dharam Mill Road- 500 mtr, Master Colony Road- 500 mtr, Ram Nagar Mill Road- 1 Km, Talwara Road-1 Km, Bank of India Road- 500 mtr, Model Town area Road- 500 mtr, AmbeyMajra Road- 4 Km, Ajnali Road- 2 Km and Slip Road along (NH-1)- 2 Km]	-3000 trees to be planted in industrial, residential areas and along road sides.	Regular Activity	1. Identification of roads-Completed 2. Plantation to be started in Monsoon	Rs. 18.33 Lacs
		Short term	PSIEC	800 no. of plants already planted	550 no. plants to be planted in industrial areas along road sides.	Regular Activity	1. Plantation to be started in Monsoon	Rs. 10 Lacs
5	CRD 5 - Greening of parks, open areas	Short Term	Municipal Council	-Identified 5 no. sites / open areas for plantation of trees:	-3000 trees to be planted in the identified areas.	Regular activity	1. Identification of open areas- Completed 2. Plantation-To be	Rs. 4 Lacs

	community places, schools and housing societies			(Govt. Senior Secondary School for Boys, Govt. Senior Secondary School for Girls, Govt. Primary School, Ajnali, Govt. Primary School, AmbeyMajra and Primary School, Tarlokpuri) -11 nos of parks are being maintained by MC and Park Management Committees.	-To ensure all public parks have adequate green cover/ plantation.		started in rainy season	
6	CRD 6 - Water fountains at major traffic intersections	Medium Term	Municipal Council	1 no. traffic intersection point identified near Railway Station (Balu Ram Dharamshala)	To install water fountain at identified traffic intersection	30.11.2019	1. Identification- Completed 2. Estimate- Under process 3. Tendering and Work allotment will be done within 6 months after administrative approval.	Rs. 15 Lacs
7	CRD 7 (a) Kaccha/Brick	Medium Term	Municipal Council	Identified 25 Km of Kaccha roads for making pucca	Blacktopping of identified	31.03.2021	1. Estimation- Under process 2. Tendering, Work	Rs 8.20 Crore

Paved Roads to be made Pucca roads			roads. (AmbeyMajra Road- 3 Km, Ajnali Road- 3 Km, Jassran Road-3 Km, Kuchha shanti Nagar-7 Km, Iqbal Nagar- 3 Km, Sant Nagar- 2 Km, Sukha Singh Colony-3 Km and Talwara Road-1 Km)	Kaccha roads to be done for control of road dust emissions.		allotment- After estimation and necessary approvals from the house. 3. Completion-One year after laying of sewerage system which is to be completed by PWSSB.	
CRD 7 (b) Existing roads requiring recarpeting	Short Term	Municipal Council	Nil	-	--	-	
	Short term	PSIEC	Identified 9 kms of existing roads for re-carpeting	Identified roads to be re carpeted.	30.06.2019	Recarpeting to be completed under IID scheme of GOI.	Rs. 1.35 Crore
CRD 7 (c) Pavement of road side using interlocking tiles to prevent road dust emissions	Medium Term	Municipal Council	Identified 10 Kms of road length from Amloh Chowk to Canal Bridge requiring Pavement of road side	Pavement of road side using interlocking tiles to prevent road dust emissionsof identified road	31.03.2020	1. Estimation- Completed 2. Tendering- Under process. 3. Work allotment- After tendering 4. Completion- 6 months after receiving the administrative approvals.	Rs. 1.31 Crore

		Medium Term	PWD	Identified 53.84 Km of 11 existing roads and 31 new proposed roads	Pavement of road side using interlocking tiles of identified roads	31.03.2021	<ol style="list-style-type: none"> 1. Identification-Completed 2. DPR, Tendering, Work allotment and project will be completed after one year of Administrative approval 	Rs.4.23 Crore
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Annexure E – Action Plan for Control on Burning of Garbage and Biomass

Sr No.	Activity	Implementation period (short/Medium/long term)	Responsible Agencies	Base Line	Target to be achieved	Target Date	Milestones (Monthly / Quarterly)	Financial Implications, if any (Estimated Cost)
1	CBGB 1 – Control on open burning of bio-mass in City	Medium Term	Municipal Council	- 27 Kaccha pits have been made in different parks for collection of horticulture waste to avoid burning of Bio Mass. - 11 No. Parks under Mc	48 nos. of Pucca compost pits are to be constructed in parks and green belts	30.10.2019	i) Estimate : Completed ii) Tender : Under process	Rs. 4.80 Lacs
2	CBGB 2 – Control on burning of municipal solid wastes	Medium Term	Municipal Corporation	-No. of inspections – 11 -No. of Challans issued - NIL -No. of awareness camps – 10 -Burning of municipal solid wastes stands prohibited.	Regular inspections to be continued for Control on burning of municipal solid wastes and Challans to be issued to the violators.	Regular Activity	-	Nil

3	CBGB 3 – Control on burning of agriculture waste and crop residue	Short term	District Administration, Department of Agriculture, Police, PSPCL, Revenue Department & PPCB	<ul style="list-style-type: none"> • Identification of sites by PRSC (PAU) • Regular monitoring under supervision of DC • 182 challans issued in which total amount of Rs 5,87,500/- imposed as Environmental compensation in year 2018 by PPCB • Rs.37,500/- Environmental compensation recovered upto Dec 2018. 	Enforcement by Team	During wheat/rice harvesting season	<ol style="list-style-type: none"> 1. To create awareness among farmers regarding health effects of residue burning 2. Deptt. of Agriculture to provide subsidy for equipment/machinery as per Govt. policy 3. Teams will be constituted one month prior to start of each harvesting season. 4. Identification of no. of fire incidents by PRSC. 5. Visit to identified sites 6. Imposing Environmental compensation on defaulters 	NIL
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							<p>7. PSPCL shall ensure electricity for in-situ management</p> <p>8. Progress review in District Level Air Quality Monitoring Committee meeting</p> <p>9. Recovery of Environmental compensation</p>	
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Annexure F – Action Plan for Control on Industrial Emissions

Sr No.	Activity	Implementation period (short/Medium/long term)	Responsible Agencies	Base Line	Target to be achieved	Target Date	Milestones (Monthly / Quarterly)	Financial Implications, if any (Estimated Cost)
1	CIE 1 – Conversion to Side Hood suction in furnaces	Short Term	PPCB	Total 69 induction furnace to be converted. 19 nos. Induction furnace have already converted.	50 Induction furnaces are required to be converted.	30.9.2019	-	NIL
2	CIE 2 – Conversion to CNG from coal	Long term	PPCB	6 nos. industries have converted their furnace from coal to CNG fuel	220units will shift to cleaner fuel	31.03.2021	<ol style="list-style-type: none"> 1. The matter to be taken with State Government. 2. Providing pipeline for transportation of CNG-One year. 3. Procurement of instruments 4. Installation 5. Commissioning 	NIL

3	CIE 3 - Conversion of natural draft brick kilns to induced draft.	Short Term	PPCB	No brick kiln	NIL	NIL	NIL	NIL
4	CIE 4 – Action against non-complying industrial units	Short term	PPCB	Regular inspection as per policy of the Board	<ul style="list-style-type: none"> • Action against defaulting industries • Checking the adequacy of APCD installed by the industries 	Regular activity	<ul style="list-style-type: none"> -Identification of industries in which APCD is installed. - Checking the adequacy of APCD already installed. - Issuing show cause notice to the industries violating norms. -Facilitating industry to get set right the inadequate APCD. 	Nil
5	CIE 5 – Shifting of industries from non-designated areas to industrial areas	Long Term	Local Govt. / Deptt of Town & CountryPlanning/ Deptt of Industries.	Industries located in non designated areas need to be identified for shifting.	Identified Industries required to be shifted to the designated industrial	Upto 2031	- Timeline for shifting the industry as per provision of notified Master Plan	Nil

Annexure G– Action Plan for Control on Construction and Demolition Activities

Sr No.	Activity	Implementation period (short/Medium/long term)	Responsible Agencies	Base Line	Target to be achieved	Target Date	Milestones (Monthly / Quarterly)	Financial Implications, if any (Estimated Cost)
1	CCDA 1 (a) – Enforcement of Construction & Demolition Rules.	Short Term	Municipal Council	Inspection is being carried out as per need for bigger/commercial & road projects.	-Regular inspection will be made for Control of Construction & Demolition waste. -Counter verification to be done by ATP/EO.	Regular Activity	--	Nil
	CCDA 1 (b) – Infrastructure of Construction & Demolition waste	Long Term	Municipal Council	Presently no site for C&D waste disposal exists	Identification of site & setting up of processing plant for C& D Waste	31.03.2022	DPR – Under Process Tendering – After estimation Work Allotment- After Tendering	NIL
2	CCDA 2 – Control measure for fugitive measures	Short Term	Municipal Council	At present, minimal measures being taken by the building contractors.	-Proper curtains / sheets on the construction sites to be provided & the construction material be kept in covered conditions -Regular inspection	Regular activity	Regular inspections	Nil

					to be made and challan issued to violators			
3	CCDA 3 – Ensure carriage of construction material in closed/covered vessels.	Short Term	Municipal Council	MC has already directed all contractors to carry building materials and malba in enclosed/ covered vessels.	Regular inspection will be made to ensure implementation of directions given to contractors to carry the building materials and malba in enclosed/ covered vessels.	Regular Activity	-	Nil

Annexure H – Action Plan for Control through Other Steps

Sr No..	Activity	Implementation period (short/Medium/long term)	Responsible Agencies	Base Line	Target to be achieved	Target Date	Milestones (Monthly / Quarterly)	Financial Implications, if any (Estimated Cost)
1	COS 1 – Dissemination of Air Quality Index	NA	PPCB	1 no. CAAQMS installed.		--	Public awareness	NA
2	COS 2 – Establish an Air Quality Management Division at SPCB HQ	Medium Term	PPCB	No such division exists	One required	31.03.2020	<ol style="list-style-type: none"> 1. Develop methodology-Three months 2. Providing infrastructure-Six months 3. Implementation-Three months 	Rs. 2 lacs
3	COS 3 – Setup helpline in each city/town as well as SPCB HQ	Medium Term	PPCB	No helpline exists	One help line number required	31.03.2020	<ol style="list-style-type: none"> 1. Develop methodology-Three months 2. Providing infrastructure-Six months 3. Implementation-Three months 	Rs 0.5 Lacs

4	COS 4 - Monitoring of DG sets and action against violations	Short term	PPCB	Punjab Pollution Control Board	Manual monitoring exists	No non-complying DG set to be operated	Regular Activity	NIL
6	COS 5 – Source Apportionment Study	Short Term	PPCB	Source Apportionment Study not carried out	Source Apportionment Study to be carried out through selected Agency.	31.03.2020	Selection of Agency Develop scope of work Allotment of work	Rs.5.00 lacs

Annexure I – Action Plan for Training & Capacity Building Programmes

Sr. No.	Activity	Implementation period (Short/ Medium/ Long term)	Responsible Agencies	Base Line	Target to be achieved	Target Date	Milestones (Monthly / Quarterly)	Financial Implications, if any (Estimated Cost)
1	TCB1 – Training & Capacity Building Programmes	Short Term	PPCB	Officers get trainings under various programmes organized by the concerned departments	<ul style="list-style-type: none"> • District/City level training programmes – 1 Nos. • State level training programmes – 1 Nos. 	31.03.2020	Selecting agencies/ experts for organizing theme specific trainings. Organization of programmes at City/District and level.	Rs.2.00 lacs

Note: 'Short Term' refers to activities to be carried out during next 6 months, 'Medium Term' refers to activities to be carried out during next 2 years and 'Long Term' refers to activities to be carried out in more than 2 years time period.

ANNEXURE R-3/3

Item No. 08

Court No. 1

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

(By Video Conferencing)

Original Application No. 924/2019

(With reports dated 14.03.2020, 14.05.2020, 14.07.2020 and
26.09.2020)

Neeraj Goyal

Applicant

Versus

State of Punjab

Respondent

Date of hearing: 01.10.2020

**CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON
HON'BLE MR. JUSTICE S. P. WANGDI, JUDICIAL MEMBER
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER**

Respondent: Ms. Anusha Nagarajan, Advocate for PPCB

ORDER

1. The issue for consideration is remedial action against illegal polluting activities by the motor scraping units in Mandi Gobindgarh, Punjab.

2. The Tribunal considered the matter earlier on 11.02.2020 in light of report dated 27.01.2020 furnished by the joint Committee comprising the Central Pollution Control Board, State Pollution Control Board (SPCB) and the Municipal Council, Mandi Gobindgarh. The Committee was constituted to examine the compliance of the Hazardous and Other Waste (Management & Transboundary Movement) Rules, 2016, apart from the provisions of the Air (Prevention and Control of Pollution) Act,

1981 and Standard Operating Procedure (SOP) to deal with the metal and other scraps.

3. The Committee found serious violations and taking note of the findings of the Committee which were quoted in the order dated 11.02.2020, the Tribunal observed:-

“4. The above report does not effectively deal with the serious problem and is not, thus, satisfactory. More units should have been monitored having regard to the adverse consequences on the health of the inhabitants in violation of Fundamental Right to breathe clean air and to clean environment. Continuous and stringent action is required which has not yet been taken. Let the Committee file a fresh and detailed report by covering large number of units.

We also direct that carrying capacity of the area to sustain such activities may be conducted by the Committee in terms of number of such units which can be sustained to give effect to ‘Sustainable Development’ principle and to enable the regulatory authorities to ensure steps for preventing pollution.

5. Accordingly, we direct the State PCB to take further stringent measures by way of stopping the polluting activities and recovering compensation on ‘Polluter Pays’ principle, apart from any other statutory action as may be warranted in the situation.”

4. In compliance of the above, the joint Committee has filed interim reports dated 14.03.2020, 14.05.2020, 14.07.2020 and 26.09.2020. It would suffice to refer to the last report as follows:-

“5. In compliance to order dated 11/2/2020, the Committee carried out field study by taking the assistance of additional manpower from CPCB and PPCB. The following additional officials from CPCB and PPCB provided support to the Committee:

- 1. Ms. P.K Selvi, Scientist 0', CPCB, Delhi.*
- 2. Sh. Sahil Patel, Scientist 93', CPCB, Delhi.*
- 3. Sh. Mohit Singla, Assistant Environmental Engineer, PPCB.*
- 4. Sh. Rubal Goyal, Assistant Environmental Engineer, PPCB.*
- 5. Sh. Dharamvir Singh. Junior Environmental Engineer, PPCB*

6. The Committee referred to above inspected 150 units covering different industrial activities such as Induction furnace, Rolling Mill, Importers/Dismantling units/Local scrap traders during 21.02.2020 to 02.03.2020. PPCB being nodal agency

submitted interim report on 14.03.2020 before Honble NGT. The violations observed during the inspections carried out from 21/02/2020 to 02/03/2020 in the area of Mandi Gobindgarh were conveyed to PPCB vide CPCB's letter no. 2543 dated 15/07/2020. Action in the form of closure, imposition of Environment compensation and issuance of advisory has been taken. The Action taken report with regard to 32 units wherein major violations were observed by the team is attached as **Annexure-1**.

7. Apart from the above, PPCB has carried out following activities to control air pollution in the area of Mandi Gobindgarh:

a) 252 number of units were inspected by PPCB for the period from 1/11/2019 to 31/8/2020, out of 252 units, 184 units were found in compliance of various Pollution Control Laws i.e. the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981 and the Hazardous and Other Wastes Management Rules, 2016. A list of 184 units is enclosed herewith as **Annexure-2**. Minor violations were observed in the 50 cases, out of remaining 68 units. **Show cause notices were issued, opportunity of hearing was extended and time was given for making compliance.** The list of 50 units is enclosed as **Annexure-3**. Action was taken in the remaining **18** units having major violations i.e. **Environmental compensation upon 16 units amounting to Rs. 22 lacs was imposed and Bank guarantee amounting to Rs. 2.50 lacs was imposed on 2 units.** The list of 16 units upon which EC was imposed is enclosed herewith as **Annexure-4** and the list of 2 units upon which bank guarantee was imposed is enclosed as **Annexure-5**.

b) In order to contain the cause of air pollution arising from the burning of scrap, the Board vide Office Order no. 475 dated 21/8/2020 has cancelled all the one time authorizations granted before 31/1/2019 for import of iron and steel scrap and amended the procedure for obtaining one-time authorization under rule-13 to import other waste listed in part-D of Schedule-III, on behalf of actual users. Copy of Office Order is enclosed herewith as **Annexure-6**.

c) **Further, it is submitted that there are 190 no. of rolling mills operating in Mandi Gobindgarh area, which are using pulverized coal as fuel in their re-heating furnace. Directions have been issued by the Board to all the rolling mills to shift from coal to PNG by 31/12/2020** (copy of Public Notice issued by the Board is enclosed as **Annexure-7**) in compliance of Action plan prepared for non-attainment city of Mandi Gobindgarh in the matter of O.A. no. 681 of 2018. Presently, 24 no. of industries have successfully converted their re-heating furnace from coal to PNG and in addition to this 25 no. of more industries have made agreement with PNG provider and are in the process of shifting from coal to PNG. The list

of industries entered into the agreement with the gas provider i.e. M/s IRM Energy Pvt. Ltd. is enclosed as Annexure-8.

- d) As part of compliance to the Action plan prepared for non-attainment city of Mandi Gobindgarh, Punjab Pollution Control Board has successfully upgraded **the air pollution control devices of nearly 100 induction furnaces in Mandi Gobindgarh of capacities varying from 2 TPH to 10 TPH from top hood followed by wet scrubber to side hood technology followed pulse jet bag house filters**. As a result, the induction furnace units which were earlier generating APCD dust of about 10-15 kg/Day are now generating APCD dust @ 200-250 kg/Day. It is relevant to mention here that the APCD dust, which was earlier disposed off to common Treatment, Storage Disposal Facility (TSDF) for landfill purpose is now being sold to a waste recycling unit set up with the help of PPCB for extraction of zinc. The units are now earning about Rs. 8 per Kg for the ash being lifted by the recycling unit and creating wealth from waste.
- e) Apart from the industrial pollution, the road dust due to heavy vehicular movement becomes air borne and contributes to major part of air pollution in Mandi Gobindgarh area. In order to control the same, **interlocking tiles have been provided on the entry / exit points of the industry/ vehicular movement area and entry exit points of weigh bridges** as per directions issued by Punjab Pollution Control Board. However, major and slip roads in the area of Mandi Gobindgarh, which are in bad shape contributes towards the cause of dust emissions due to heavy vehicular movement and parking. The major and link roads are required to be overhauled by Municipal authorities.
8. In compliance to the directions of the Hon'ble Tribunal relating to the carrying capacity of the area as contained in order dated 11/2/2020, it is respectfully submitted that expert members of IIT, Delhi have been engaged by the Board to calculate carrying capacity of all the nine non-attainment cities including Mandi Gobindgarh. As per the signed documents / agreement of PPCB and expert members of IIT, Delhi, it was decided that IIT, Delhi shall complete and submit carrying capacity of all the 9 cities by end of October, 2020 (copy of MOU signed by IIT, Delhi is enclosed as Annexure-9).
9. Further, it is submitted that **inspection of the remaining industries, by joint team of PPCB and CPCB could not be completed due to COVID-19 situation, as physical visits and meetings are still restricted as per Ministry of Home Affairs guidelines dated 29.06.2020**. The remaining monitoring will be carried out after normal operation of the industries possibly in the month of November or December, 2020.

Prayer:

In view of the above facts, it is humbly prayed that:

1. *45 days time period is required for completing Stack and fugitive emission monitoring and analysis in the remaining units after visit of the joint team to Mandi Gobindgarh.*
2. *Compilation of analysis results and preparation of final report will take additional 30 days as carrying capacity on the basis of the analysis results is also to be evaluated.*
3. *Suitable directions may be issued to MC, Mandi Gobindgarh to provide Action plan for:*
 - a) *Stabilization of major / link roads in Mandi Gobindgarh area and alongside the National Highway-44 to minimize dust emission*
 - b) *Providing dedicated parking area for the industrial vehicles.*

Therefore, 4 months extension may kindly be granted for submission of Final report to Hon%le NGT after the completion of the inspections to be carried out by the joint of CPCB and PPCB.”

5. It is clear from the above that there are serious violation of environmental norms and inadequate monitoring by the statutory authorities. Remedial action taken even after intervention of this Tribunal is hardly adequate. Further serious steps are required to be taken for upholding the rule of law and protection of environment and public health. Let further meaningful action be taken and a compliance report filed before the next date. In the context of directions to shift rolling mills from coal to PNG, we direct the State PCB to ensure that if such shifting does not take place, the non-compliant units be closed till compliance. This should apply not only to rolling mills but also to other similarly placed industries operating on coal. Wherever there is non-compliance, the State PCB may take coercive measurers, including closure, recovery of compensations and initiating prosecution, following due process of law. The Tribunal, vide order dated 06.03.2019 in OA No. 20/2017 (WZ), *Babubhai Ramubhai Saini v. Gujarat Pollution Control*

Board & Ors., considered identical situation at Morbi in Gujarat and observed:

“25. Accordingly, we allow the applications and direct the GPCB to close all coal gasifiers industries and units operating with the help of coal gasifiers without prejudice to such units switching over to non-coal gasifiers or PNG or technology consistent with the above report. The GPCB must initiate immediate steps for prosecution of the industries which have operated in violation of law and recover compensation for causing damage to the environment and public health. This amount may be assessed by a Committee with representatives of CPCB, GPCB and NEERI. The CPCB will be the nodal agency for coordination and compliance. The Committee may suggest restoration plan.

26. xx

xx

xx

27. The Committee may take into account the cost of reversing the damage caused and also the amount to be recovered which will operate as deterrent and render any polluting activity non-profitable.

28. To oversee the execution of this order by the GPCB, we appoint an Oversight Committee headed by Justice B.C. Patel, former Chief Justice of Delhi High Court and former Judge of Gujarat High Court who is already heading an Oversight Committee constituted by this Tribunal vide order dated 16.01.2019 in O.A. 606/2018. He will also be assisted by a representative of CPCB. The GPCB will provide all logistics to Justice Patel. Any person concerned with execution of this order will be at liberty to represent to the said Oversight Committee.”

6. Further, Punjab State PCB may complete the study on assessment of carrying capacity of the region as per the schedule and prepare an action plan for improvement of environment. There has to be proper management of hazardous waste generated by the industries, providing raw material in the form of scrap, for further processing. The entire mechanism should have proper manifest system. As per information provided by CPCB in OA No. 1038/2018, News item published in "The Asian Age" Authored by Sanjay Kaw Titled "CPCB to rank industrial units on pollution levels", order dated 10.07.2019, the Comprehensive Environmental Pollution Index (CEPI) with respect to air is 23.7 at Gobindgarh which does not appear to be correct in view of pollution level,

as shown by the report. CPCB may reverify this index considering entire industrial development in the region and rectify its index.

Import of hazardous waste needs to be strictly regulated as per laws, to avoid import of such waste illegally.

Illegal dismantling units may be closed and only authorized and complying units be allowed to operate.

Non-recyclable waste be disposed properly.

Ground water extraction may be regulated in accordance with order passed by this Tribunal on 20.07.2020 in OA No. 176/2015 *Shailesh Singh v. Hotel Holiday Regency, Moradabad & Ors.*

6. Interim report in the matter may be furnished by 31.12.2020 and final report may be furnished by 28.02.2021 by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/ OCR Support PDF and not in the form of Image PDF.

List for further consideration on 08.03.2021.

A copy of this order be sent to the CPCB, the State PCB and the Municipal Council, Mandi Gobindgarh by e-mail for compliance.

Adarsh Kumar Goel, CP

S. P. Wangdi, JM

Dr. Nagin Nanda, EM

October 01, 2020
Original Application No. 924/2019
SN

ANNEXURE R-3/4

Item No. 04

Court No. 1

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

(By Video Conferencing)

Original Application No. 924/2019

(With reports dated 25.03.2021 and 01.04.2021)

Neeraj Goyal

Applicant

Versus

State of Punjab

Respondent(s)

Date of hearing: 06.04.2021

**CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON
HON'BLE MR. JUSTICE SUDHIR AGARWAL, JUDICIAL MEMBER
HON'BLE MR. JUSTICE BRIJESH SETHI, JUDICIAL MEMBER
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER**

Respondents: Ms. Anusha Nagarajan, Advocate for PPCB
Mr. Balendu Shekhar, Advocate for CPCB

ORDER

1. The issue for consideration is remedial action against polluting activities by the motor scraping units in Mandi Gobindgarh, Punjab.
2. The Tribunal considered the matter earlier on 11.02.2020 in light of report dated 27.01.2020 furnished by the joint Committee comprising the Central Pollution Control Board (CPCB), State Pollution Control Board (SPCB) and the Municipal Council, Mandi Gobindgarh. The Committee was constituted to examine the compliance of the Hazardous and Other Waste (Management & Transboundary Movement) Rules, 2016, apart from the provisions of the Air (Prevention and Control of Pollution) Act, 1981 and Standard Operating Procedure (SOP) to deal with the metal and other scraps.

3. The Committee found serious violations and taking note of the findings of the Committee which were quoted in the order dated 11.02.2020, the Tribunal observed:-

“4. The above report does not effectively deal with the serious problem and is not, thus, satisfactory. More units should have been monitored having regard to the adverse consequences on the health of the inhabitants in violation of Fundamental Right to breathe clean air and to clean environment. Continuous and stringent action is required which has not yet been taken. Let the Committee file a fresh and detailed report by covering large number of units.

We also direct that carrying capacity of the area to sustain such activities may be conducted by the Committee in terms of number of such units which can be sustained to give effect to ‘Sustainable Development’ principle and to enable the regulatory authorities to ensure steps for preventing pollution.

5. Accordingly, we direct the State PCB to take further stringent measures by way of stopping the polluting activities and recovering compensation on ‘Polluter Pays’ principle, apart from any other statutory action as may be warranted in the situation.”

4. The matter was last considered on 01.10.2020 in the light of interim reports dated 14.03.2020, 14.05.2020, 14.07.2020 and 26.09.2020 mentioning the details of the action taken. The Tribunal found that serious violations of environmental norms were continuing and the monitoring was inadequate. Thus, meaningful remedial action was required, including shifting of the fuel to Piped Natural Gas (PNG) and wherever such shifting was not done, to close the units. Further direction was to complete study on carrying capacity and monitor compliance of hazardous waste management norms, including regulation of import, closing of illegal dismantling units, disposal of non-recyclable waste and extraction of groundwater. Operative part of the order is as follows:

“4. In compliance of the above, the joint Committee has filed interim reports dated 14.03.2020, 14.05.2020, 14.07.2020 and 26.09.2020. It would suffice to refer to the last report as follows:-

“5. In compliance to order dated 11/2/2020, the Committee carried out field study by taking the assistance of additional manpower from CPCB and PPCB. The following additional officials from CPCB and PPCB provided support to the Committee:

1. Ms. P.K Selvi, Scientist 0', CPCB, Delhi.
 2. Sh. Sahil Patel, Scientist 93', CPCB, Delhi.
 3. Sh. Mohit Singla, Assistant Environmental Engineer, PPCB.
 4. Sh. Rubal Goyal, Assistant Environmental Engineer, PPCB.
 5. Sh. Dharamvir Singh. Junior Environmental Engineer, PPCB
6. The Committee referred to above inspected 150 units covering different industrial activities such as Induction furnace, Rolling Mill, Importers/Dismantling units/Local scrap traders during 21.02.2020 to 02.03.2020. PPCB being nodal agency submitted interim report on 14.03.2020 before Honble NGT. The violations observed during the inspections carried out from 21/02/2020 to 02/03/2020 in the area of Mandi Gobindgarh were conveyed to PPCB vide CPCB's letter no. 2543 dated 15/07/2020. Action in the form of closure, imposition of Environment compensation and issuance of advisory has been taken. The Action taken report with regard to 32 units wherein major violations were observed by the team is attached as **Annexure-1**.
7. Apart from the above, PPCB has carried out following activities to control air pollution in the area of Mandi Gobindgarh:
- a) 252 number of units were inspected by PPCB for the period from 1/11/2019 to 31/8/2020, out of 252 units, 184 units were found in compliance of various Pollution Control Laws i.e. the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981 and the Hazardous and Other Wastes Management Rules, 2016. A list of 184 units is enclosed herewith as **Annexure-2**. Minor violations were observed in the 50 cases, out of remaining 68 units. **Show cause notices were issued, opportunity of hearing was extended and time was given for making compliance**. The list of 50 units is enclosed as **Annexure-3**. Action was taken in the remaining **18** units having major violations i.e. **Environmental compensation upon 16 units amounting to Rs. 22 lacs was imposed and Bank guarantee amounting to Rs. 2.50 lacs**

was imposed on 2 units. The list of 16 units upon which EC was imposed is enclosed herewith as **Annexure-4** and the list of 2 units upon which bank guarantee was imposed is enclosed as **Annexure-5.**

- b) In order to contain the cause of air pollution arising from the burning of scrap, the Board vide Office Order no. 475 dated 21/8/2020 has cancelled all the one time authorizations granted before 31/1/2019 for import of iron and steel scrap and amended the procedure for obtaining one-time authorization under rule-13 to import other waste listed in part-D of Schedule-III, on behalf of actual users. Copy of Office Order is enclosed herewith as **Annexure-6.**
- c) **Further, it is submitted that there are 190 no. of rolling mills operating in Mandi Gobindgarh area, which are using pulverized coal as fuel in their re-heating furnace. Directions have been issued by the Board to all the rolling mills to shift from coal to PNG by 31/12/2020** (copy of Public Notice issued by the Board is enclosed as **Annexure-7**) in compliance of Action **plan** prepared for non-attainment city of Mandi Gobindgarh in the matter of O.A. no. 681 of 2018. Presently, 24 no. of industries have successfully converted their re-heating furnace from coal to PNG and in addition to this 25 no. of more industries have made agreement with PNG provider and are in the process of shifting from coal to PNG. The list of industries entered into the agreement with the gas provider i.e. M/s IRM Energy Pvt. Ltd. is enclosed as Annexure-8.
- d) As part of compliance to the Action plan prepared for non-attainment city of Mandi Gobindgarh, Punjab Pollution Control Board has successfully upgraded **the air pollution control devices of nearly 100 induction furnaces in Mandi Gobindgarh of capacities varying from 2 TPH to 10 TPH from top hood followed by wet scrubber to side hood technology followed pulse jet bag house filters.** As a result, the induction furnace units which were earlier generating APCD dust of about 10-15 kg/Day are now generating APCD dust @ 200-250 kg/Day. It is relevant to mention here that the APCD dust, which was earlier disposed off to common Treatment, Storage Disposal Facility (TSDF) for landfill purpose is now being sold to a waste recycling unit set up with the help of PPCB for extraction of zinc. The units are now earning

about Rs. 8 per Kg for the ash being lifted by the recycling unit and creating wealth from waste.

- e) Apart from the industrial pollution, the road dust due to heavy vehicular movement becomes air borne and contributes to major part of air pollution in Mandi Gobindgarh area. In order to control the same, **interlocking tiles have been provided on the entry / exit points of the industry/ vehicular movement area and entry exit points of weigh bridges** as per directions issued by Punjab Pollution Control Board. However, major and slip roads in the area of Mandi Gobindgarh, which are in bad shape contributes towards the cause of dust emissions due to heavy vehicular movement and parking. The major and link roads are required to be overhauled by Municipal authorities.
8. In compliance to the directions of the Hon'ble Tribunal relating to the carrying capacity of the area as contained in order dated 11/2/2020, it is respectfully submitted that expert members of IIT, Delhi have been engaged by the Board to calculate carrying capacity of all the nine non-attainment cities including Mandi Gobindgarh. As per the signed documents / agreement of PPCB and expert members of IIT, Delhi, it was decided that IIT, Delhi shall complete and submit carrying capacity of all the 9 cities by end of October, 2020 (copy of MOU signed by IIT, Delhi is enclosed as Annexure-9).
9. Further, it is submitted that **inspection of the remaining industries, by joint team of PPCB and CPCB could not be completed due to COVID-19 situation, as physical visits and meetings are still restricted as per Ministry of Home Affairs guidelines dated 29.06.2020.** The remaining monitoring will be carried out after normal operation of the industries possibly in the month of November or December, 2020.

Prayer:

In view of the above facts, it is humbly prayed that:

1. 45 days time period is required for completing Stack and fugitive emission monitoring and analysis in the remaining units after visit of the joint team to Mandi Gobindgarh.
2. Compilation of analysis results and preparation of final report will take additional 30 days as carrying capacity on the basis of the analysis results is also to be evaluated.
3. Suitable directions may be issued to MC, Mandi Gobindgarh to provide Action plan for:

dated 16.01.2019 in O.A. 606/2018. He will also be assisted by a representative of CPCB. The GPCB will provide all logistics to Justice Patel. Any person concerned with execution of this order will be at liberty to represent to the said Oversight Committee.”

6. Further, Punjab State PCB may complete the study on assessment of carrying capacity of the region as per the schedule and prepare an action plan for improvement of environment. There has to be proper management of hazardous waste generated by the industries, providing raw material in the form of scrap, for further processing. The entire mechanism should have proper manifest system. As per information provided by CPCB in OA No. 1038/2018, News item published in "The Asian Age" Authored by Sanjay Kaw Titled "CPCB to rank industrial units on pollution levels", order dated 10.07.2019, the Comprehensive Environmental Pollution Index (CEPI) with respect to air is 23.7 at Gobindgarh which does not appear to be correct in view of pollution level, as shown by the report. CPCB may reverify this index considering entire industrial development in the region and rectify its index.”

5. Accordingly, reports have been filed by CPCB on 25.03.2021 and by the State PCB on 01.04.2021 which also response to the observations in the report of the CPCB. Prior to its report filed on 01.04.2021, the State PCB filed an action taken report on 05.03.2021. However, it will be enough to refer to the later updated report.

6. The report of CPCB mentions the steps taken in pursuance of order dated 11.02.2021, including the steps taken by the State PCB. Details of inspections of individual units have been given. In Chapter 3, the Committee has mentioned the ambient air quality data at six different locations and it has been found that the prescribed air quality standards are exceeding at all locations. The reason for deterioration includes coal burning as fuel without APCDs, non-usage of APCD at induction furnaces, burning of plastic in scrap, etc. The conclusion is quoted below:

“... reveals that values of Particulate matter 10 and 2.5 are exceeding the permissible limits as prescribed in National Ambient Air Quality Standards, 2006 at all the locations and concentration of SOx is also exceeding the prescribed limit at 01

location (i.e. Madhav Stelco Pvt Ltd) which shows that the air quality of Mandi Gobindgarh has been deteriorated due to various potential factors like coal burning in rolling mills as fuel without appropriate functioning of APCD, emissions due to non-usage of APCD regularly at Induction furnaces during the charge of scrap in to the furnace, heavy vehicular movement in the highway which passes through Mandi Gobindgarh, dust from the unpaved roads, burning of plastic in the scrap in an unorganised manner, etc.”

Thereafter, observations and recommendations have been made as follows:

“Observations/Conclusion:

Apart from the unit specific observations as mentioned in section 2.1, 2.2, 2.3 and 2.5 of this report, based on inspection of majority of units in Mandi Gobindgarh, the committee made following general observations:

- 1. During the visit of the committee, it was observed that 27 out of 59 Induction Furnaces, 41 out of 45 Hot Rolling mills and 30 out of 50 importers were operating without valid Air/Water Act and/or Authorization under HOWM Rules, 2016.*
- 2. It was found that category of Hazardous and other wastes i.e. Mill scales, used/waste oil generated from industrial operation, residue from gasifiers, sludge from recirculation water tank, quantity and disposal method is not defined clearly in the authorization granted by PPCB.*
- 3. During the visit of the committee, it was observed that 58 out of 59 Induction furnaces and 39 out of 45 hot rolling mills were violating Hon'ble Supreme Court orders dated 14.10.2003 in the matter of W.P (C) 657/1995 w.r.t Installation of Display Board in the front gate of unit premises where it can be easily visible and regular updation of the same.*
- 4. At the time of visit all the Hot rolling mills were found to be violating the directive of PPCB w.r.t shifting to PNG and were observed to be using Coal and/or furnace oil as fuel in reheating furnace.*
- 5. Hood and suction arrangement provided to trap the emissions from induction furnace were found inadequate in result of which flue gases were accumulating in the work zone and ultimately escaping into the environment in haphazard manner. This is causing adverse impact on the workers and environment in the nearby vicinity of such units.*

6. *The induction furnaces are operating for single shift (i.e. 12 hrs) during the night time to mislead the regulatory agencies as they are not operating APCD system in night.*
7. *Traders/Importers of metal scrap have obtained one-time authorization for import of metal scrap listed under Schedule III-part D of HOWM Rules, 2016 on behalf of actual users. However, the imported metal scrap is being sold in local market or to users other than actual users in violation of HOWM Rules, 2016.*
8. ***The importers/traders have been granted permission to import only Iron and Steel scrap. But they are also importing combination of other waste like Copper, Aluminium, Plastic, Rubber etc. along with Iron and Steel scrap without permission.***
9. ***After importing the combined waste like copper, aluminium, plastic etc, traders/importers illegally sell the same to local dismantling units. The dismantling units or the traders/importers use crude methods such as open burning to extract valuable materials (copper from PVC copper wires) and dispose of unwanted material (plastic and rubber) during night hours.***
10. ***Induction furnaces, Hot Rolling Mills and Importers/Traders are not following/adhering to various provisions of HOWM Rules, 2016 including safe handling and managing hazardous and other waste (Rule 4); Storage of hazardous & other waste (Rule 8); Packaging and labelling (Rule 17); Transportation (Rule 18); Manifest system (Rule 19); Records and Returns (Rule 20) etc.***
11. ***All the Induction furnaces and Hot Rolling Mills are extracting ground water through borewells/submersibles without obtaining NOC from CGWA for the same and also have not installed flow meters to quantify the extraction of water.***
12. *The water being used for cooling purposes is being recirculated, the same were contaminated with mill scales and used oil. No provision for disposal of the sludge generated from recirculation tank has been found. It is evident that the same is being disposed illegally as it contains mill scales which is classified as other waste as per HOWM Rules, 2016.*
13. *All the Induction furnaces and Hot Rolling Mills do not have stack monitoring arrangements as per CPCB's Emission Regulations (Part-III) and also not found feasible arrangements for stack monitoring. Further, in this regard CPCB requested PPCB to direct units to provide adequate arrangements. However, no Induction Furnace or Hot Rolling Mill provided the same.*

14. *Most of the industrial workers/labourers involved in the operation were found working without personal protective equipment (PPE).*
15. *Due to unpaved road network in the industrial areas and movement of heavy vehicles contributing towards increased suspended particulate matter of the entire area of Mandi Gobindgarh.*
16. **PPCB has already engaged IIT Delhi to carryout source apportionment study and calculate Carrying capacity for 09 non-attainment cities in Punjab including Mandi Gobindgarh, the same will be completed by July 2021.**
17. *CPCB has already invited quotations from EPA recognised laboratory for sampling and analysis of ambient air quality parameters and water quality parameters. After monitoring for deciding Comprehensive Environmental Pollution Index (CEPI) of Mandi Gobindgarh and same will be submitted in April 2021.*

Recommendations:

1. **PPCB shall ensure that all the units (i.e. Induction Furnaces. Hot Rolling Mills and Importers/Traders) should operate with valid consent and authorization. If any such units found operating without valid consent/authorization same should be closed down.**
2. *PPCB shall grant and issue integrated Consent under Air/Water Act and Authorization under HOWM Rules, 2016 at the same time, clearly defining category, quantity and method for disposal of hazardous and other waste.*
3. **PPCB shall ensure that all the units engaged in generation and management of hazardous waste must install Environmental data display board at the main gate of the factory premises where it can be easily visible and same is being updated on regular basis in compliance of Hon'ble Supreme Court orders dated 14.10.2003 in the matter of W.P (C) 657/1995.**
4. **All the hot rolling mills and Induction furnaces must shift to PNG instead of using Coal/Furnace Oil/Wood as fuel in reheating furnace/Pre-heating of ladle as directed by PPCB. If the units have not yet shifted to PNG, PPCB shall ensure to close down operation of such units.**
5. *All the induction furnaces should provide technically adequate suction arrangements including hood to trap 100% fugitive emissions and ensure its continuous operation. In addition to this, it is recommended that all the units shall ensure to install OCEMS in all stacks of Induction furnaces/Hot Rolling Mills and same should be connected to CPCB and PPCB servers.*

6. ***PPCB shall review/cancel authorization granted to importer/ traders which are violating terms and conditions of authorization/import license by importing all king of metal scrap against the permission of iron and steel scrap. And selling the same to unauthorised dismantlers.***
7. ***It is recommended that PPCB shall close down all the dismantling units operated by importers/traders /unauthorised dismantlers without consent /authorization from PPCB for dismantling.***
8. ***PPCB shall impose Financial Penalty and Environmental compensation on defaulting units for violating various provisions of HOWM Rules, 2016 including safe handling and managing hazardous and other waste (Rule 4); Storage of hazardous & Other waste (Rule 8); Packaging and labelling (Rule 17); Transportation (Rule 18); Manifest system (Rule 19); Records and Returns (Rule 20) etc.***
9. ***All the operating units should obtain NOC from CGWA and install flowmeter to quantify the extraction of groundwater.***
10. *PPCB shall ensure that all the units must provide stack monitoring arrangements as per Emission Regulations Part-III for conducting stack monitoring for compliance verification.*
11. *All the units must provide proper PPEs to all workers and also ensure safety of workers in the work zone areas as they are working in highly hazardous conditions.*
12. ***PPCB shall ensure adequate number of Continuous Ambient Air Quality Monitoring station as per CPCB guideline in the Mandi Gobindgarh area.***
13. ***Municipal Council of Mandi Gobindgarh shall provide paved road network as well as adequate sewerage network in the Industrial area of Mandi Gobindgarh.***
14. ***It is recommended that PPCB shall develop an action plan on the basis of findings of carrying capacity and Comprehensive Environmental Pollution Index (CEPI) score of Mandi Gonbindgarh. Further, PPCB shall also constitute a Monitoring Committee comprising of officials from PPCB, Municipal Council and District Administration to monitor implementation of drawn action plan in time bound manner.***

As per Hon'ble NGT orders dated 01/10/2020, PPCB being the nodal agency has to submit the Final Action Taken Report of committee as constituted by Hon'ble NGT. The 02 members of the said committee namely Punjab Pollution Control Board and

Municipal Council of Mandi Gobindgarh have submitted interim report on 05/03/2021 despite of CPCB's request to submit this final Action Taken Report which was communicated by CPCB to PPCB vide e-mail dated 26/02/2021.”

7. In the report of the State PCB dated 01.04.2021, action taken is summed up as follows:

“4. xxx.....xxx.....xxx

a) CONVERSION OF INDUSTRIES FROM COAL TO PNG

*239 number of industries operating in Mandi Gobindgarh area are using coal as fuel in their furnaces. Presently, 48 number of industries have successfully converted their re-heating furnace from coal to PNG and in addition to this 160 number of more industries have made agreement with PNG provider and are in the process of shifting from coal to PNG. The status report of all the industries with regard to PNG status is attached herewith as **Annexure 1**.*

It is relevant to mention here that the Board has issued show cause notices for cancellation of consent under the Air (Prevention & Control of Pollution) Act, 1981 to all the industries, who have failed to shift their units from coal to PNG upto 31/12/2020.

It is further relevant to mention here that the Board had issued notice to issue directions u/s 31-A of the Air (Prevention and Control of Pollution) Act, 1981 to 31 number of units who have failed to obtain valid consent of the Board and have also not converted their units from coal to PNG.

It is pertinent to mention here that Punjab Pollution Control Board is sincerely making continuous and earnest efforts to shift the industries to PNG. Various meetings have been taken with All India Steel Re-Roller Association (AISRA) and AISRA has requested the Board to extend the timeline upto 30/6/2021 as shifting of industries from coal to PNG involves high financial cost of Rs. 25-30 lacs per unit and it also take about 3 months' time to switch to PNG by making necessary modifications in the existing industries.

To facilitate AISRA, a meeting was arranged by the Board on 10/2/2021 with the members of All India Steel Re-Rolling Association (AISRA) and

representatives of M/s IRM Energy Pvt. Ltd. to resolve some issues regarding the clauses of the agreement made between industries and the gas provider agency. During the meeting, the issues regarding the clauses, of the agreement and gas price mechanism were got resolved.

b) THE STUDY ON ASSESSMENT OF CARRYING CAPACITY

*IIT, Delhi through its Centre of the Consultant In-charge (CO-CI) has been engaged by the Board to calculate carrying capacity of all the nine non-attainment cities in the State of Punjab including Mandi Gobindgarh (copy of MOU signed is enclosed as **Annexure-1-A**). The data required for calculating carrying capacity of Mandi Gobindgarh has already been provided to the expert members and the Board is continuously requesting IIT, Delhi to submit source apportionment study and calculate carrying capacity of all the nine non-attainment cities. IIT, Delhi has requested the Board that the study will further take 3-4 months' time and report shall be submitted on or before **30/6/2021**. After the receipt of the report of the said study from IIT, Delhi, an action plan will be prepared based on the recommendations of the report for the improvement of environment in all the non-attainment cities of the State of Punjab including Mandi Gobindgarh.*

c) IMPORT OF HAZARDOUS WASTE

Import, of hazardous waste is regulated as per law and a mechanism is already in place to grant authorization for import of Other waste (scrap) after duly scrutinizing the documents and the inspection of the site in question at the level of Regional Offices of the Board. Non-recyclable 'hazardous waste is being scientifically disposed off at a designated place namely. TSDF, Nimbua, Dera Bassi, District SAS Nagar, Punjab. The APCD dust of Induction furnace units are being recycled by M/s Madhav Alloys Recycling unit at Amloh, Distt. Fatehgarh Sahib for the recovery of zinc and the residue is used for landfilling purpose.

d) NON-RECYCLABLE WASTE

Non-recyclable waste is also being managed as per Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and is being scientifically disposed of at TSDF, Dera Bassi, SAS Nagar, Punjab as already explained in sub para (c) above.

e) INSPECTION OF UNITS

538 number of units were inspected by PPCB for the period from 1/11/2019 to 29/3/2021, out of which 444 units were found in compliance of various Pollution Control Laws i.e. the Water (Prevention 86 Control of

Pollution) Act, 1974, the Air (Prevention 86 Control of Pollution), Act, 1981 and the Hazardous and Other Wastes Management Rules, 2016. The list of 444 units is enclosed as Annexure-2.

Show cause notices with opportunity of hearing were issued to remaining 94 no. of units. The list of 94 units is enclosed as Annexure-3.

Action was taken against the units found with major violations and Environmental compensation amounting to Rs. 29,16,250/- was imposed upon 24 units, out of which Rs. 25,11,250/- was recovered by the Board. The list of 24 units upon which EC was imposed/recovered for the period from 1/11/2019 to 20/2/2021 is enclosed herewith as Annexure-4.

Bank guarantee amounting to Rs. 1.15 crores was also imposed on 17 units. The list of 17 units upon which bank guarantee was imposed is enclosed as Annexure-4-A.

Further, Directions for closure u/s 31-A of the Air (Prevention 86 Control of Pollution) Act, 1981 were also issued to 9 number of units and a list of the same is attached as Annexure-5.

f) BURNING OF SCRAP

*In order to contain the cause of air pollution arising from the burning of scrap, the Board vide Office Order no. 475 dated 21/8/2020 has cancelled all the one time authorizations granted before 31/1/2019 for import of iron and steel scrap and amended the procedure for obtaining one-time authorization under rule-13 to import other wastes as listed in Part-D of Schedule-III of the Hazardous and Other Wastes (Management, .Handling and Transboundary Movement) Rules, 2016, on behalf of actual users. Copy of Office Order is enclosed as **Annexure-6**.*

As of now, no burning activity of scrap is carried out in the area of Mandi Gobindgarh as verified during various inspections carried out by the Board officers in the odd hours. No complaint is being received in the office of the Board at Mandi Gobindgarh with regard to burning activity.

g) GENERATION OF ROAD DUST

Apart from the industrial pollution, the cause of generation of road dust due to heavy vehicular movement was also considered and in order to control the same, interlocking tiles have been provided on the entry / exit points of the industries / vehicular movement area and entry, exit points of weigh bridges as per directions issued by Punjab Pollution Control Board. Municipal Council, Mandi Gobindgarh has also

been directed to repair the major and slip roads, so as to minimize the cause of dust emissions.

h) EXTRACTION OF GROUND WATER

In order to regulate the extraction of ground water, the Board is imposing a condition in consent letters issued to the industries with the advisory to obtain necessary clearance for abstraction of ground water from the Punjab Water Regulation and Development Authority (PWRDA).

5. *That CPCB vide its email dated 15/07/2020 had sent a list of only 32 number of industries in which major violations were observed during the joint inspection carried out in Mandi Gobindgarh. The Board has already taken action against these units as per the provisions of the pollution control Laws/ Rules. Thereafter, a list of 154 industries has been forwarded by Central Pollution Control Board to the Punjab Pollution Control Board through e-mail dated 26.2.2021. The report dated 26.2.2021 of the CPCB is enclosed herewith as **Annexure-7.***
6. *That the Punjab Pollution Control Board was continuously working on the sidelines of the Joint Committee and was taking appropriate action so as to make compliance of the shortcomings and deficiencies. The work carried out and action taken by the Punjab Pollution Control Board has been reflected in the Annexures enclosed herewith the report as **Annexure-1 to Annexure-6.***
7. *Apart from the above Annexures, the Action taken by the Board and compliances made by the industries alongwith present status in respect of Rolling Mills is enclosed as **Annexure-8**, status of Induction Furnaces is enclosed as **Annexure-9** and that of Importers / Traders / Local scrap dealers / Godowns in reference to the report of the CPCB is enclosed herewith as **Annexure-10.**"*

8. While taking on record the action taken so far, we direct that further remedial action be continued which may be periodically reviewed by the same Committee for atleast one year and thereafter as per decision of the Chairman, CPCB. The Committee may particularly ensure that carrying capacity studies completed and CEPI reaches the acceptable range. Monitoring may also be done for new industrial activities and expansion as per norms, since the area is environmentally non-compliant.

9. With regard to extraction of groundwater, the report merely mentions that the State PCB is issuing advisory to obtain necessary clearance. This does not meet the mandate of law. Instead of issuing such advisory, such clearance must be made mandatory and condition precedent for functioning of any unit, as required in terms of order of this Tribunal dated 20.07.2020 in OA 176/2015, *Shailesh Singh v. Hotel Holiday Regency, Moradabad & Ors.*

10. Since 48 units have been given PNG, applications of 160 more units are in the process of getting PNG and 31 units have yet to initiate the process, the State of Punjab as well as the Ministry of Petroleum may take expeditious steps in the matter. The Chief Secretary, Punjab may facilitate the project of laying of necessary infrastructure which is necessary for protection of environment and public health.

The application is disposed of.

A copy of this order be forwarded to the Ministry of Petroleum and Natural Gas, GoI, CPCB, the Chief Secretary, Punjab, State PCB and the Municipal Council, Mandi Gobindgarh by e-mail for compliance.

Adarsh Kumar Goel, CP

Sudhir Agarwal, JM

Brijesh Sethi, JM

Dr. Nagin Nanda, EM

April 6, 2021
Original Application No. 924/2019
DV

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Particulars	Note No.	As at March 31, 2022	As at March 31, 2021
ASSETS			
Non-current assets			
(a) Property, plant and equipment	3.1	2,848.19	2,307.99
(b) Capital work-in-progress	3.2	522.84	197.02
(c) Intangibles assets	3.3	26.54	26.48
(d) Right to Use Assets	3.4	129.43	71.47
(e) Intangibles under Development	3.5	1.93	1.93
(f) Financial assets			
(i) Investments	4A	114.82	64.01
(ii) Loans	5A	77.42	-
(iii) Other financial assets	5B	181.75	42.23
(g) Other non-current assets	6	88.31	95.19
(h) Current Tax Asset (Net)			
		3,991.23	2,806.32
Current assets			
(a) Inventories	7	17.16	8.05
(b) Financial assets			
(i) Investments	4B	102.78	13.76
(ii) Trade receivables	8	227.12	111.86
(iii) Cash and cash equivalents	9A	591.49	257.52
(iv) Bank balances other than (iii) above	9B	405.56	156.74
(v) Loans	10	26.50	6.09
(vi) Other financial assets	11	44.17	23.40
(c) Other current assets			
		1,414.78	577.42
		5,406.01	3,383.74
Total Assets			
EQUITY AND LIABILITIES			
Equity			
(a) Equity share capital	12	293.70	289.99
(b) Other equity	13	2,001.47	888.69
Total equity		2,295.17	1,178.68
Liabilities			
Non-current liabilities			
(a) Financial Liabilities			
(i) Borrowings	14A	1,867.60	1,581.82
(ii) Trade payables	16	303.45	193.09
(iii) Other financial liabilities	17A	9.35	7.00
(b) Provisions	19	147.12	93.58
(c) Deferred tax liabilities (Net)			
		2,327.52	1,875.49
Current liabilities			
(a) Financial Liabilities			
(i) Borrowings	14B	158.32	51.69
(ii) Trade payables	15		
- total outstanding dues of micro enterprises and small enterprises		2.43	11.21
- total outstanding dues of creditors other than micro enterprises and small enterprises		248.50	89.39
(iii) Other financial liabilities	16	228.00	147.45
(b) Provisions	17B	0.41	0.11
(c) Other current liabilities	18	61.41	29.72
(d) Current tax liabilities (Net)			
		84.25	-
		783.32	329.57
		5,406.01	3,383.74
Total Equity and Liabilities			

See accompanying notes to the financial statements

As per audit report of even date

For Mukesh M. Shah & Co.

Chartered Accountants

Firm Registration No: 106625W

7, Heritage Chambers, Nehru Nagar, Ahmedabad-15

Mukesh M. Shah & Co. Chartered Accountants

Harsh Kejriwal

Partner

Membership Number: 128670

Ahmedabad, Dated: 19th May, 2022

For and on behalf of the Board

M. Sahu

Chairman

Karan Kaushal

CEO

Vinod Jain

Director

Harshat Anjarlo

CFO

Shikha Jain

Company Secretary

Ahmedabad, Dated: 19th May, 2022

IRM ENERGY LIMITED

SEPARATE PROFIT AND LOSS STATEMENT FOR THE PERIOD ENDED MARCH 31, 2022

(Unless otherwise stated all amounts are in Million Indian Rupees)

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Particulars	Note No.	For the year ending March 31, 2022	For the year ending March 31, 2021
REVENUE :			
Revenue from Operations	20	5,461.42	2,118.09
Other Non-operating Income	21	30.50	7.33
		5,491.92	2,125.42
EXPENSES :			
Purchases of stock-in-trade of natural gas	22	2,492.27	770.86
Changes in Inventories of Finished goods, Work-in-progress and Stock-in-Trade	23	(9.96)	(0.20)
Excise Duty on Sale of Compressed Natural Gas		389.98	222.44
Employee Benefits Expense	24	71.58	41.11
Finance Costs	25	220.77	158.55
Depreciation and Amortisation expense	26	150.37	120.00
Other Expenses	27	653.27	351.79
		3,968.28	1,664.55
		1,523.64	460.87
Profit before Tax			
Tax Expense		334.50	89.89
- Corporate Tax	28	53.54	19.72
- Deferred Tax			
		1,135.60	351.26
Profit for the year			
Other Comprehensive income			
Items that will not be reclassified to profit or loss			
a. Remeasurements of the defined benefit asset		(0.15)	0.18
b. Income tax related to this items		(0.15)	0.18
		1,135.75	351.08
Total comprehensive income			
Earnings Per Share (Face Value of Rs. 10 each)	34		
Basic		38.92	12.47
Diluted		38.92	12.47

See accompanying notes to the financial statements

As per our report of even date
 For Mukesh M Shah & Co.
 Chartered Accountants
 Firm Registration No: 106625W
 Harsh Kejriwal
 Partner
 Membership Number : 128670
 Ahmedabad, Dated : 19th May, 2022



For and on behalf of the Board

M. Sghu
 Chairman
 Karan Kaushal
 Karan Kaushal
 CEO

Vinod Jain
 Director
 Harshal Anjaria
 CFO
 Shikha Jain
 Company Secretary

Ahmedabad, Dated : 19th May, 2022

Particulars	For the period ending	
	Mar- 2022	Mar- 2021
A. Cash flow from operating activities		
Net profit before tax and extraordinary items	1,523.64	460.70
Adjustment for:		
Interest Income	(29.29)	(7.03)
Interest and Finance Charges	220.77	158.55
Provision for Income	(11.83)	(1.83)
Depreciation and Amortisation expense	150.37	120.00
Operating profit before working capital changes	1,853.66	730.39
(Increase)/Decrease in Other Assets	(413.78)	(292.01)
(Increase)/Decrease in Inventories	(9.11)	(1.10)
(Increase)/Decrease in Trade Receivable	(115.26)	(63.06)
Increase/(Decrease) in Trade Payables	150.33	28.50
Increase/(Decrease) in Financial Liabilities	130.08	63.28
Increase/(Decrease) in Other Liabilities	2.61	124.25
Cash generated from operation	1,598.53	590.26
Direct taxes paid (incl TDS)	(218.37)	(91.47)
Cash flow before extraordinary items	1,380.16	498.79
Net cash from operating activities (d)	1,380.16	498.79
B. Cash flow from investing activities		
Interest Income	28.75	6.46
Investment	(139.84)	(76.27)
Inter Company Loan	(77.42)	-
Purchase of Fixed Assets (incl. capital work in progress)	(1,008.68)	(464.39)
Net cash used in investing activities (b)	(1,197.18)	(534.19)
C. Cash flow from financing activities		
Proceeds from equity shares issued	15.73	43.55
Proceeds from Banks Borrowings	375.69	172.10
Interest and Finance Cost	(193.54)	(136.67)
Lease cost	(11.90)	(9.33)
Stamp duty on issue of shares	-	(1.13)
Dividend	(35.00)	-
Proceeds from preference shares issued	-	34.14
Net cash from financing activities (c)	150.99	102.67
Net increase / (decrease) in cash and cash equivalents (a+b+c)		
Cash and cash equivalents — opening balance	333.97	67.27
Cash and cash equivalents — closing balance	257.52	190.25
	591.49	257.52
Reconciliation of cash and cash equivalents with the Balance sheet:		
Cash and cash equivalents at the end of the year comprises		
(a) Balance with banks		
Balance in Current Accounts		
(b) Cash on hand	591.17	257.27
	0.32	0.25
	591.49	257.52
Notes:		
(i) The cash flow statement reflects the cash flows pertaining to continuing operations.		
(ii) The cash flow statement has been prepared under the "Indirect Method" as set out in IND AS - 7 Cash Flow Statement"		
(iii) Disclosure of changes in liabilities arising from financing activities, including both changes arising from cash flows and non-cash changes		



Particulars	As at March 31, 2021	Cash Flows	Change in fair value/accruals	As at March 31, 2022
Non Current Borrowings	1458	285.78	-	1,867.60
Current maturity of Non-Current borrowings		56.64	-	108.84
Current Borrowings		49.98	-	6.78
Total	1,633.51	392.40	-	2,025.91

As at March 31, 2021				
Particulars	As at March 31, 2020	Cash Flows	Change in fair value/accruals	As at March 31, 2021
Non Current Borrowings	1,449.25	132.57	-	1,581.82
Current maturity of Non-Current borrowings	-	51.69	-	51.69
Current Borrowings	-	-	-	-
Total	1,449.25	184.26	-	1,633.51

See accompanying notes to the financial statements

As per our report of even date

For Mukesh M Shah & Co.
Chartered Accountants
Firm Registration No: 106625W

Harsh Kejriwal
Harsh Kejriwal
Partner
Membership Number : 128670
Ahmedabad, Dated : 19th May, 2022



For and on behalf of the Board

M. Sahu
M. Sahu
Chairman
Karan Kaushal
Karan Kaushal
CEO

Vinod Jain
Vinod Jain
Director
Harshat Anjaria
Harshat Anjaria
CFO
Shikha Jain
Shikha Jain
Company Secretary

Ahmedabad, Dated : 19th May, 2022

IRM ENERGY LIMITED

Statement of changes in equity
(a) Equity Shares Capital

Particulars	No. of Shares	INR
Equity Shares of INR 10/- each, Issued, Subscribed and Fully Paid-up:		
As of April 01, 2020	2,71,25,000	271.25
As issued during the year	18,74,471	18.74
As of March 31, 2021	2,89,99,471	289.99
As issued during the year	3,70,206	3.70
As of March 31, 2022	2,93,69,677	293.70

(Unless otherwise stated, all amounts are in Million Indian Rupees)

(b) Other equity

(Unless otherwise stated, all amounts are in Million Indian Rupees)

Particulars	Equity component of compound financial instruments	Reserves and Surplus				Other Comprehensive Income			Total
		General reserve	Securities Premium	Share Application Money	Profit and Loss account	Remeasurement of defined benefit plans	Equity Instruments through other comprehensive income		
Balance as at 31 March 2020	173.47	-	18.57	-	284.80	(0.49)	-	-	474.34
Profit for the year	-	-	-	-	351.26	-	-	-	351.26
Equity Component of Preference Shares	37.58	-	-	-	-	-	-	-	37.58
Remeasurements of the defined benefit asset (net of tax)	-	-	-	-	-	(0.18)	-	-	(0.18)
Share Application Money Received	-	-	-	-	-	-	-	-	-
Dividend Distribution Tax	-	-	-	-	-	-	-	-	-
Corporate Dividend	-	-	(1.13)	-	-	-	-	-	(1.13)
Stamp duty on issue of shares	-	-	24.81	-	-	-	-	-	24.81
Share Premium	-	-	-	-	-	-	-	-	-
Balance as at 31 March 2021	211.05	-	42.25	-	634.04	(0.67)	-	-	886.68
Profit for the year	-	-	-	-	1,135.40	-	-	-	1,135.40
Equity Component of Preference Shares	-	-	-	-	-	-	-	-	-
Remeasurements of the defined benefit asset (net of tax)	-	-	-	-	-	-	0.15	-	0.15
Share Application Money Received	-	-	-	-	-	-	-	-	-
Dividend Distribution Tax	-	-	-	-	-	-	-	-	-
Corporate Dividend	-	-	-	-	(35.00)	-	-	-	(35.00)
Stamp duty on issue of shares	-	-	-	-	-	-	-	-	-
Share Premium	-	-	12.04	-	-	-	-	-	12.04
Balance as at 31 March 2022	211.05	-	54.29	-	1,738.44	(0.52)	-	-	2,001.47

For and on behalf of the Board



M. Shah & Co.
Chartered Accountants
Firm Registration No. 106825W
Mumbai
Membership Number: 128670
Ahmedabad Dated: 19th May, 2022

(Signature)
Vishal Jain
Director
(Signature)
Shubha Jain
Company Secretary

(Signature)
Karan Kaul
Chairman
(Signature)
Harshad Anjona
CEO
M. Sahu
Charman
Karan Kaul
CEO
Harshad Anjona
CEO

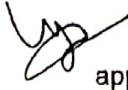
Ahmedabad Dated: 19th May 2022

Sub: **ANNEXURE R-3/6**
 Proceedings of the meeting held under the Chairmanship of Shri Vijay Kumar Janjua, Chief Secretary, Punjab with the representatives of rolling mills operating in Mandi Gobindgarh Area on 30/12/2022 at 12:00 noon regarding their conversion of fuel from Coal/ Furnace Oil to PNG.

The list of participants is enclosed as Annexure- A.

The Secretary, Science, Technology and Environment briefed the Chair about background of the matter vis-à-vis Action Plans prepared for Non-Attainment Cities alongwith orders passed by Hon'ble NGT in one of the case relating to Mandi Gobindgarh area.

The representatives of the industries representing rolling mills of Mandi Gobindgarh area raised the issue regarding non-grant of Consent to Operate by Punjab Pollution Control Board beyond 31/12/2022 due to their non-conversion from conventional fuels to PNG by some of their units. They apprised that Punjab Pollution Control Board is pressurizing them to convert from their conventional fuels to PNG. However, the cost of PNG has risen from Rs. 18 to Rs. 54 during past few months due to Ukraine-Russia War Scenario. This has made the use of PNG uneconomical due to which many of their units are shutting down. As such, the conversion to PNG may not be stressed upon and they may be allowed to use alternate cleaner fuels. The neighbouring State i.e. Himachal Pradesh has already notified their fuel policy, wherein the industry has been allowed use of LSHS/LSFO as fuel and the conversion to PNG is not being stressed. Due to this, their industry has been placed at a disadvantage as compared to their counter-parts in Himachal Pradesh. Further, one particular company is allotted an area to supply PNG where they have monopoly of fixing prices of PNG.

 The Chief Environmental Engineer, Punjab Pollution Control Board apprised the Chair about the orders passed by Hon'ble NGT in OA no. 924/2019 and confirmed that the price of PNG has increased post Ukraine-Russia War Scenario. Moreover, there is also a price difference with regard to PNG being offered by different suppliers in their respective allotted geographical areas (GAs). The State Govt. has no control over the price mechanism/ area allotted to different suppliers. Further, the State is in the process of finalizing fuel policy of the State which may be notified soon. In the fuel policy, the State is giving preference to switching over to cleaner fuels by the industry from their conventional fuels. Keeping the above factors in view, Hon'ble Cabinet Minister, Science, Technology and Environment, had taken a meeting with industries of Amritsar a couple of months back, wherein keeping in view the difficulties faced by the industry post Ukraine-Russia War Scenario, it was decided that the industries be given relaxation till the prices of CNG/ PNG are brought under control and normal supply of CNG/ PNG is ensured post normalization of situation due to Ukraine-Russia War.

The demands raised by the representatives of the industry were discussed in detail vis-à-vis legal position in this regard. After discussion, It was unanimously decided that the rolling mills operating in Mandi Gobindgarh area may be granted relaxation for some time for converting from their conventional fuels to cleaner fuels and the Competent Authority of the Board may consider/ decide regarding extending the validity of the Consents to Operate till finalization of State Fuel Policy or 31/12/2023, whichever is earlier subject to suitable conditions.

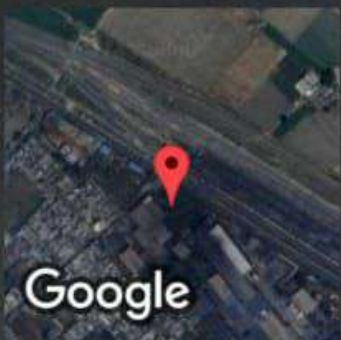
The meeting ended with the vote of thanks to the Chair.

A handwritten signature in black ink, appearing to be 'Gyan' followed by a flourish.



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1463

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 **GPS Map Camera**


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147301, India
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1464

141



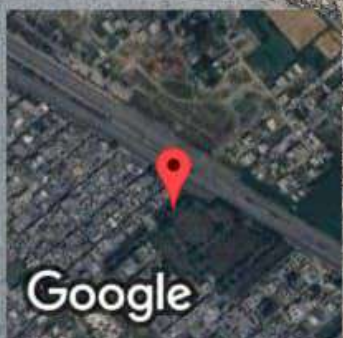
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 **GPS Map Camera**



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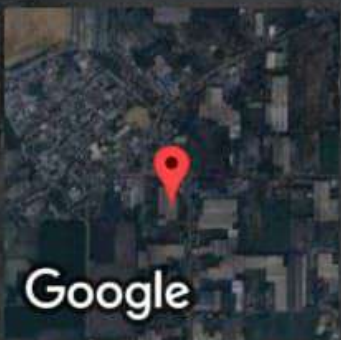
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 **GPS Map Camera**

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Google

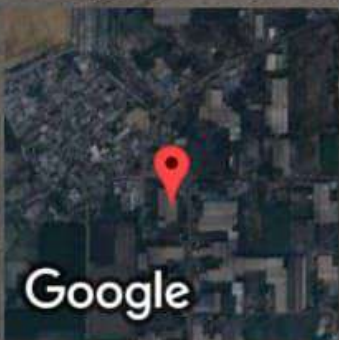
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 **GPS Map Camera**

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 GPS Map Camera

Ludhiana, Punjab, India
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 **GPS Map Camera**

Bhadla Uncha, Punjab, India
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1471

148



 **GPS Map Camera**

Bhadla Uncha, Punjab, India
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**ANNEXURE R-3/8**

**Government of Punjab
Department of Science, Technology & Environment
(STE Branch)**

NOTIFICATION

No. 10/64/2020-STE4/469

Dated, Chandigarh: 04/10/2023

FUEL POLICY FOR THE INDUSTRIES OF STATE OF PUNJAB

In order to address the problem of air pollution in the State of Punjab in accordance with the provisions of the Air (Prevention & Control of Pollution) Act, 1981, the Govt. of Punjab in consultation with Punjab Pollution Control Board (PPCB) has declared whole of the State of Punjab as 'Air Pollution Control Area' under section 19(1) of the Air (Prevention & Control of Pollution) Act, 1981 vide Notification No. SO21/C.A.14/81/S.19/88 dated 02.03.1988;

And whereas, the Govt. of Punjab, vide Notification No.4/46/92-3ST/2839 dated 29.12.1993 has banned the use and burning of rubber scrap, tyre, oil sludge, acid sludge and loose rice husk as fuel, in the State of Punjab, as detailed below:

- (I) Rubber in any form with effect from 1.4.1994;
- (II) Process waste containing Sulphur and toxic substances with effect from 1.4.1994;
- (III) Rice Husk (except in the form of fuel briquettes and use of rice husk in fluidized bed combustion) as fuel in the air pollution control area with effect from 1.4.1994.

And whereas, the Govt. of Punjab & Punjab Pollution Control Board, from time to time, are taking all such measures which are required for the reduction and control of air pollution in the State of Punjab including the regulation and use of such fuels which may or may have an adverse impact on the quality of environment in the State;

And whereas, the usage of coal, pet coke, furnace oil and other fuels in the boilers/ furnaces or in any other form by the industry, needs to be regulated due to presence of higher sulphur content leading to Sulphur Dioxide (SO₂) emissions in the ambient air, which may adversely affect the environment;

And whereas, the Hon'ble Supreme Court of India and the Hon'ble National Green Tribunal had also considered the matter relating to the use of pet coke and furnace oil and issued certain directions for compliance, whereupon the Central Pollution Control Board vide letter dated 23.8.2019 had issued directions under section 5 of the Environment (Protection) Act, 1986, to all the States and Union Territories including the State of Punjab for formulating and enforcing fuel policy regarding use of pet coke and furnace oil in the States/ UTs in light of various orders passed by Supreme Court regarding use of Pet Coke and Furnace Oil in Writ Petition (C) no. 13029/1985;

And whereas, according to the provisions of the Section 19(3) of the Air (Prevention & Control of Pollution) Act, 1981, if the State Government after consultation with the State Pollution Control Board, is of the opinion that the use of any fuel, other than an approved fuel, in any air pollution control area or part thereof, may cause or is likely to cause air pollution, it may, by notification in the Official Gazette, prohibit the use of such fuel in such area or part thereof with effect from such date as may be specified in the notification;

And whereas, the State Government has considered the matter in the above background of the case in consultation with the Punjab Pollution Control Board and other stakeholder departments and is satisfied that the use of pet coke, furnace oil and other fuels is required to be regulated, so as to ensure that there is no adverse impact on the environment;

And whereas, the draft of Policy to prohibit the furnace oil and to regulate the use of pet coke and other fuels was considered at the highest level of the Government, wherein, the Hon'ble Chief Minister, Punjab has desired that final draft be put up after obtaining comments of all the stakeholders, concerned Departments/Agencies as well as general public;

And whereas, meetings/discussions were held with primary stakeholders (various Industrial Associations, Brick Kiln Associations, Thermal Plants operating in the State, M/s Guru Gobind Singh Refinery (Unit of HPCL Mittal Energy Ltd.), Talwandi Sabo Bathinda, Briquettes manufacturers, Brick kilns owners using briquettes & Boiler manufacturers for conversion of furnaces compatible for usage of alternative fuels). The suggestions/ inputs in the matter were also sought from the stakeholder departments/

reputed institutes (Department of Industries & Commerce/ Transport/Agriculture/Food Supplies & Consumer Affairs/Power/New and Renewable Energy Resources/PSIEC/ DECC/ PSCST/State Level Co-ordinator, IOCL/ Custom Commissioner-ate Amritsar/ Ludhiana, IIT Roorkee/Ropar/Delhi/TIET/CSIR-IIP & CPCB);

And whereas, after considering the suggestions/inputs of various stakeholders, the draft fuel Policy to prohibit the furnace oil and to regulate the use of Pet Coke and other fuels in the State was published by the Government of Punjab, Department of Science, Technology & Environment vide Notification No. STE-STE-010/64/2020-STE (5/4) 455004 dated the 9th Nov, 2022, thereby inviting objections or suggestions on the proposal contained in the draft notification from all the stakeholders and persons likely to be affected thereby, within a period of 30 days from the date of publication of the said notification;

And whereas, the objections or comments received from various stakeholders including Industrial Associations/Individual Industries/CNG/PNG Supplier Companies and Government Departments within the stipulated period, were duly considered and amended policy by incorporating the suggestions/objections/ comments received was put and displayed on the website of the Punjab Pollution Control Board for inviting objections or suggestions, within a period of 15 days. A public notice was also published in leading newspapers/vernacular dailies on 15.07.2023 in this regard;

And whereas, the additional objections or comments received within the stipulated period were duly considered by the State Government;

Now, the Government of Punjab after consultation with the Punjab Pollution Control Board, in exercise of the powers conferred under section 19(3) of the Air (Prevention & Control of Pollution) Act, 1981, hereby, issue the following fuel policy and guidelines for the prohibition of furnace oil, regulation of the use of pet coke and for promoting the cleaner fuels in the State of Punjab:

Guidelines for regulation and monitoring of Imported Pet Coke (IPC)

- (I) The guidelines issued by the Government of India, Ministry of Environment, Forest & Climate Change vide office memorandum No. Q-18011/54/2018-CPA dated 10.09.2018 for regulation and monitoring of imported pet coke in India in compliance to the directions of the Hon'ble Supreme Court of India in Writ Petition (Civil) No. 13029 of 1985 in the matter of M.C Mehta v/s Union of India and Others and in the exercise of the powers conferred under the Environment (Protection) Act, 1986 shall be applicable.

- (II) The import of pet coke for use as fuel is prohibited.
- (III) The import of pet coke is allowed to be used by the industries namely cement, lime kiln, calcium carbide and gasification for use as feedstock or in the manufacturing process only on actual user basis as per the conditions stipulated below:
- a) Pet coke importing industries namely, cement, lime kiln, calcium carbide and gasification shall obtain the consent and registration from the State Pollution Control Board (SPCB).
 - b) Consent issued by the State Pollution Control Board shall clearly specify the quantity permitted for import and its use on a per month and per annum basis.
 - c) Only registered industrial units with valid consent from State Pollution Control Board as per clause (a) shall be permitted to directly import pet coke and consignment shall be in the name of user industrial units for their own use only.
 - d) Import of pet coke for the purpose of trading shall not be permitted.
 - e) Authorized importers of Pet coke shall furnish opening and closing stock of imported pet coke to the State Pollution Control Board on quarterly basis.
 - f) The State Pollution Control Board shall develop an electronic record system for uploading of consents, registration and record of use of imported Pet coke by industrial units, as mentioned above and the Board shall share this data with the Central Pollution Control Board on quarterly basis.
- (IV) The Supreme Court of India has further allowed the use of pet coke vide various orders passed in Writ Petition (Civil) no. 13029 of 1985 as under:
- a) Import of needle pet coke is allowed for use in graphite electrode industry (order dated 6.9.2018);
 - b) Calcined Pet Coke (CPC) domestic as well as imported can be used as raw material for anode making in aluminum industry with revised BIS specifications and subject to condition that imported raw material cannot exceed 0.5 MT per annum in total (order dated 9.10.2018);
 - c) Raw Pet Coke (domestic and imported) can be used as feed stock for producing Calcined Pet Coke (CPC) and the quantity for this purpose cannot exceed 1.4 MT/annum in total (order dated 9.10.2018);
- (V) Anyone using pet coke in consequence to the orders of Hon'ble Supreme Court given in point (IV) above shall comply with all conditions laid by Hon'ble Supreme Court for using such pet coke as well as notified by the PPCB from time to time.

Guidelines for use of Pet Coke for Boilers/ Furnaces

- (I) The industry shall provide well designed two stages desulphurization i.e. at combustion stage and of flue gas emissions and install adequate air pollution control device so as to contain the Particulate Matter (PM) and gaseous emissions specifically Sulphur Dioxide (SO₂) as per the limits mentioned below:
- a) Particulate Matter (PM): as prescribed by the MoEF&CC depending upon the source (Boiler or type of industry)
 - b) Sulphur Dioxide (SO₂): 400 mg/Nm³ Wherever, any industry specific standards are prescribed by the MoEF&CC/CPCB/State Govt./PPCB same shall prevail.

- c) Mitigation measures to contain SO₂, NO_x, particulate matter and other parameters shall remain applicable for Thermal Plants and other industries for which industry specific standards/guidelines have been laid down by the MoEF&CC/Central Government.
- (II) The industry shall install online monitor for SO₂ with the stack equipped with an alarm system to alert the boiler/APCD operator, in case, the concentration of SO₂ increases beyond the prescribed standard of 400 mg/Nm³ so as to take necessary mitigation measures to bring the SO₂ emission within the prescribed limits.
- (III) The industry shall provide a stack of height calculated by using the formula $H=14Q^{0.3}$, where Q is the emission rate of SO₂ in kg/hr and should be calculated by using the volume of flue gas emissions and the standards for SO₂ (400 mg/Nm³) or 30 meter, whichever is higher.
- (IV) The industry shall provide adequate and appropriate treatment to the bleed off/ purge wastewater being discharged from the scrubber. The sludge produced in the recirculation tank of the scrubbing liquor shall be disposed of in an environmentally sound manner.
- (V) The industry shall follow the standard operating practices prescribed by MoEF&CC/CPCB/PPCB issued from time to time to contain SO₂, particulate matter and other parameters within the prescribed limit.

Prohibition on the use of Furnace Oil and alternate fuels

- (I) Furnace oil and any other liquid oil containing high Sulphur contents (exceeding 1.8% by weight) shall not be allowed to be used as fuel.
- (II) Only specified liquid fuels marketed and supplied by the oil companies authorized by the Government of India, including Low Sulphur Heavy Stock (LSHS), Light Diesel Oil (LDO) and Propane, Butane etc. having sulphur content not exceeding 1.8% by weight shall be allowed.
- (III) No oil company shall supply furnace oil and any liquid fuel having high sulphur content in the State except the liquid fuels/ oil allowed at Sr. No. (II) above.
- (IV) The industry shall provide a stack of adequate height calculated by using the formula $H=14Q^{0.3}$, where Q is the emission rate of SO₂ in kg/hr. Where providing all stacks are not feasible using above formula, a minimum stack height of 11 meters is to be provided considering the emission standards for SO₂ as 400 mg/Nm³.
- (V) The industry shall follow the standard operating practices prescribed by MoEF&CC/CPCB/PPCB issued from time to time and provide appropriate and adequate emission control/treatment systems so as to contain SO₂, particulate matter and other parameters within the prescribed limit.
- (VI) Carbon Black Feed Stock (CBFS) or its sub types including acetylene black, channel black, furnace black, lamp black and thermal black etc. shall not be used as fuel in boilers, furnaces, brick kilns or anywhere as a source of energy generation.

Cleaner and Eco-Friendly Fuels

- (I) State Government/PPCB in its endeavor to save natural resources shall take appropriate steps for replacement of its conventional natural energy resources like coal, wood etc. in phased manner with cleaner fuels (CNG/PNG/LPG/CBG/

electricity/solar/wind etc.), biomass fuels and fuels having low sulphur content in industrial units as well as in brick kilns, wherever possible.

- (II) Upon the availability of supply of CNG / PNG / CBG etc. in various geographical areas of the state by the respective licensees authorized by the Petroleum and Natural Gas Regulatory Board (PNGRB), the State Government in consultation with the State Pollution Control Board shall issue appropriate directions and timelines to the industries and other stakeholders for conversion to such cleaner fuels considering techno-economic and legal feasibility.
- (III) Use of bio-mass specifically paddy stubble in raw form, torrefied form, briquettes, palettes, or any other modified form including blending with other acceptable fuels shall be encouraged for their use as fuel for boilers/ furnaces in controlled/regulated conditions as approved by the State Pollution Control Board on case to case basis.
- (IV) Renewable energy sources like solar/ wind energy etc. shall be incentivized, wherever possible by the concerned departments.
- (V) Provisions of notification issued by the Department of Science, Technology & Environment vide notification no. 10/512/2021-STE(3)/2075 dated 27.8.2021 as amended and subsequent notifications issued by various departments of the Government of Punjab with regard to the encouragement of the usage of paddy straw as fuel shall be applicable.
- (VI) All industrial units using solid fuel and located within one hundred km from a solid waste based Refused Derived Fuel (RDF) plant shall make arrangements to replace at least five percent of their fuel requirement by RDF so produced (torrified, non-torrified, fuel briquettes, pellets or loose form as per feasibility), as prescribed under the Solid Waste Management Rules 2016.
- (VII) Due to dynamics of cost and availability of fuels based on international markets, State Government in consultation with PPCB shall be empowered to permit usage of alternative fuels for a limited period based on techno-economic feasibility as per the prevailing scenario to ensure the sustainability of industrial sector in the State.

And whereas, this Fuel Policy of the State shall be subject to the compliance of further orders of the Hon'ble Supreme Court of India in WP(C) no. 13029 of 1985, judgements and orders passed by Hon'ble National Green Tribunal or any other judicial/ quasi-judicial authority from time to time, office memorandums, guidelines and notifications issued by the Ministry of Environment, Forest & Climate Change (MOEF&CC), Central Pollution Control Board (CPCB) and the Commission for Air Quality Management in National Capital Region (NCR) and Adjoining Areas (CAQM), State Government or Punjab Pollution Control Board including those issued under National Clean Air Programme (NCAP) and under the action plans prepared by the State/Central Government for the clean air.

Needless to say that any order already passed or to be passed by the Hon'ble Supreme Court of India, Hon'ble High Court or Hon'ble National Green Tribunal shall supersede any provision of this policy, if such provision is not in consonance with such order.

In case of failure to comply with the provisions of this notification, action in accordance with the provisions laid down under Air (Prevention & Control of Pollution) Act, 1981, Environment (Protection) Act, 1986 and under other relevant environmental laws shall be taken against the violators.

That provisions of Air (Prevention & Control of Pollution) Act, 1981 shall be applicable on this policy.

Dated...04.10.2023

Chandigarh



Secretary to Government of Punjab,
Department of Science, Technology & Environment

Endst.No.10/64/2020-STE4/470

Dated...04.10.2023

A copy of the above is forwarded to the Special Principal Secretary to the Chief Minister, Punjab for information.

Endst.No.10/64/2020-STE4/471-480

Secretary
Dated...04.10.2023

A copy of the above is forwarded to the following for information and necessary action:

1. The Chief Secretary, Punjab.
2. The Special Chief Secretary Department of Agriculture & Farmers Welfare, Govt. of Punjab, Chandigarh.
3. The Principal Secretary, Department of Power, Govt. of Punjab, Chandigarh.
4. The Principal Secretary, Department of Industries & Commerce, Government of Punjab, Chandigarh.
5. The Principal Secretary, Department of Food, Civil Supplies and Consumers Affairs, Government of Punjab, Chandigarh.
6. The Secretary, Department of New and Renewable Energy Sources, Government of Punjab, Chandigarh.
7. The Secretary, Department of Transport; Government of Punjab, Chandigarh.
8. The Chairman, Punjab Pollution Control Board, Patiala.
9. The Chief Executive Officer, Punjab Bureau of Investment Promotion, Chandigarh.
10. The Director, Directorate of Environment & Climate Change, Punjab.

Secretary

Endst.No.....10/64/2020-STE4/481

Dated...04.10.2023

A copy of the above is forwarded to the Controller, Department of Printing & Stationary, Punjab to print the 100 copies of this notification.

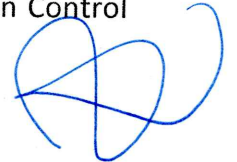


Secretary

Dated...04.10.2023

Endst.No.....10/64/2020-STE4/482

A copy of the above is forwarded to the Chairman, Central Pollution Control Board, New Delhi for information and necessary action.

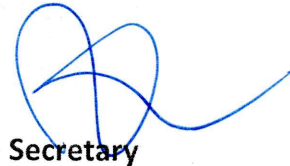


Secretary

Dated...04.10.2023

Endst.No.....10/64/2020-STE4/483

A copy of the above is forwarded to all the Deputy Commissioners of the State of Punjab for information and necessary action.



Secretary

स. सं. NISST/DIR/TECH/ 8869

दिनांक 06-12-23

To,

Sh Vinod Vashisht,
President,
All India Steel Re-Rollers Association,
Mandi Gobindgarh-147301

Sub: Emission contribution of re-rolling mills in Mandi Gobindgarh

Dear Sir,

This refers to your email dated:04-12-23 asking for data on comparative emissions from Re-rolling Mills in Mandi Gobindgarh as per the information given in report of Joint Committee constituted by Hon'ble NGT and NISST's expertise. We have gone through the report and analysed the data given there off. Based on above, following submissions are made:

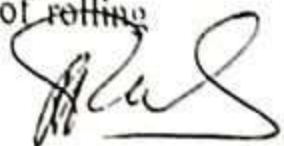
1. As per Source Apportionment Study Report of IIT, Delhi, engaged by PPCB for the purpose, contribution of PM_{2.5} and PM₁₀ in the ambient air quality of Mandi Gobindgarh by Industries is 23-24% only. Major pollution is caused by road dust and vehicles to the tune of 65-70%.
2. As steel processing units are estimated to contribute 75% of the pollution caused by industries in Mandi Gobindgarh, the total contribution of steel processing units in causing air pollution in Mandi Gobindgarh is approx. 17% (23%x0.75) only.
3. The comparative emissions of particulate matter (SPM) from re-rolling mills, Induction furnace and Forging units are tabulated below:

S No.	Type of industry (a)	No. of units in Mandi Gobindgarh (b)	% of total steel processing units (c)	*Pollution multiplier (d)	Relative contribution (e)=c x d	Overall % contribution in Mandi Gobindgarh (d)=ex17%/ 41.5
1	Induction Furnace Units	100	30%	1	30	12.4%
2.	Rolling Mills	200	61%	1/6	10	4%
3.	Forging units	30	9%	1/6	1.5	0.6%
	Total	330	100	----	---	17%

* The SPM generation from IF units per ton of steel produced is approximately 6 times that generated in Rolling Mills

From the analysis given in above table, it is estimated that contribution of rolling mills in total air pollution of Mandi Gobindgarh is less than 4%.

Thanking You,


(R.K.Paul) 06/12/2023
Director

पोस्ट बॉक्स नं. 92, सरहिन्द साइड, जी.टी. रोड, मण्डी गोबिन्दगढ़, पंजाब - 147 301

Post Box No. 92, Sirhind Side, G.T. Road Mandi Gobindgarh, Punjab-147 301 Ph. No. :- 01765-510141,511142

Ph 91 (1765) 262222, 262223, 262224, 262225, 262226, 262227, 262228, 262229, 262230, 262231, 262232, 262233, 262234, 262235, 262236, 262237, 262238, 262239, 262240, 262241, 262242, 262243, 262244, 262245, 262246, 262247, 262248, 262249, 262250, 262251, 262252, 262253, 262254, 262255, 262256, 262257, 262258, 262259, 262260, 262261, 262262, 262263, 262264, 262265, 262266, 262267, 262268, 262269, 262270, 262271, 262272, 262273, 262274, 262275, 262276, 262277, 262278, 262279, 262280, 262281, 262282, 262283, 262284, 262285, 262286, 262287, 262288, 262289, 262290, 262291, 262292, 262293, 262294, 262295, 262296, 262297, 262298, 262299, 262300, 262301, 262302, 262303, 262304, 262305, 262306, 262307, 262308, 262309, 262310, 262311, 262312, 262313, 262314, 262315, 262316, 262317, 262318, 262319, 262320, 262321, 262322, 262323, 262324, 262325, 262326, 262327, 262328, 262329, 262330, 262331, 262332, 262333, 262334, 262335, 262336, 262337, 262338, 262339, 262340, 262341, 262342, 262343, 262344, 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CENTRAL POLLUTION CONTROL BOARD
1481
CONTINUOUS AMBIENT AIR QUALITY

158

ANNEXURE R-3/10

Date: Saturday, Mar 09 2024

Time: 07:11:30 PM

Station: RIMT University, Mandi Gobindgarh - PPCB
Parameter: PM2.5,PM10,SO2
AvgPeriod: Annual Average
From: 01-01-2018 T00:00:00Z 00:00
To: 31-12-2023 T23:59:59Z 00:00

		RIMT University		
From Date	To Date	PM2.5	PM10	SO2
01-01-2018 00:00	01-01-2019 00:00	68.98	116.94	12.72
01-01-2019 00:00	01-01-2020 00:00	61.36	131.89	14.79
01-01-2020 00:00	01-01-2021 00:00	62.0	123.28	16.54
01-01-2021 00:00	01-01-2022 00:00	64.69	132.19	11.04
01-01-2022 00:00	01-01-2023 00:00	72.39	141.15	10.75
01-01-2023 00:00	01-01-2024 00:00	66.21	129.13	16.97

ANNEXURE R-3/11

**MINISTRY OF ENVIRONMENT AND FORESTS
NOTIFICATION**

New Delhi, the 31st March 2012

G.S.R. 277(E)-- In exercise of the powers conferred by Sections 6 and 25 of the Environment (Protection) Act, 1986 (29 of 1986), the Central Government hereby makes the following Rules further to amend the Environment (Protection) Rules, 1986, namely:-

1. (1) These Rules may be called the Environment (Protection) (Third Amendment) Rules, 2012.
- (2) They shall come into force on the date of their publication in the Official Gazette.
2. In the Environment (Protection) Rules, 1986, in Schedule-I,-
 - (a) (i) serial number 12 relating to "Coke Ovens" and entries relating thereto shall be omitted;
 - (ii) for serial number 24 relating to "Iron and Steel (Integrated)" and entries relating thereto, the following serial number and entries shall be substituted, namely:-

S. No.	Industry	Parameter	Standard			
(1)	(2)	(3)	(4)			
"24.	Integrated Iron and Steel Plant	A.- Coke Oven (by-product type)				
		a. Effluent Standards				
			Limiting concentration in mg/l, except for pH			
		pH	6.0-8.50			
		Suspended Solids	100			
		BOD, 3 days at 27 ⁰ C	30			
		COD	250			
		Oil and Grease	10			
		Ammonical Nitrogen, as N	50			
		Cyanide (as CN)	0.2			
		Phenol	1.0			
			b. Emission Standards			
			New Batteries (at green field site)	Rebuild Batteries	Existing Batteries	
			(i) Fugitive Visible Emissions			
		Leakage from door	5(PLD)*	10(PLD)*	10(PLD)*	
		Leakage from charging lids	1(PLL)**	1(PLL)**	1(PLL)**	
		Leakage from AP Covers	4(PLO) [†]	4(PLO) [†]	4(PLO) [†]	
		Charging emission (Second/charge)	16 (with HPLA) [#]	50 (with HPLA) [#]	75	
			*PLD – Percent Leaking Doors; **PLL – Percent Leaking Lids;			
			[†]PLO – Percent Leaking off takes and [#]HPLA - Aspiration through high pressure liquor injection in gooseneck.			
			(ii) Stack Emission Standards			
SO ₂ (mg/Nm ³)	800	800	800			
NO _x (mg/Nm ³)	500	500	500			
Particulate Matter (mg/Nm ³)	50	50	50			
Particulate Matter during charging of stamp charging batteries (mg/Nm ³)	25	25	25			
Sulphur in Coke Oven gas used for heating (mg/Nm ³)	800	-	-			
(1)	(2)	(3)	(4)			

(iii) Fugitive Emissions: Benzo (a) Pyrene (BaP)			
Battery area (top of the battery) ($\mu\text{g}/\text{m}^3$)	5	5	5
Other units in Coke Oven Plant ($\mu\text{g}/\text{m}^3$)	2	2	2
B.- Sintering Plant			
a. Effluent Standards			
	Limiting concentration in mg/l, except for pH		
pH	6.0-8.50		
Suspended Solids	100		
Oil and Grease	10		
b. Emission Standards			
Particulate Matter (mg/Nm^3)	150		
C.- Blast Furnace			
a. Effluent Standards			
	Limiting concentration in mg/l, except for pH		
pH	6.0-8.5		
Suspended Solids (mg/l)	50		
Oil and Grease (mg/l)	10		
Cyanide as CN (mg/l)	0.2		
Ammonical Nitrogen as $\text{NH}_3\text{-N}$ (mg/l)	50		
b. Emission Standards			
(i) Stack Emissions			
	Existing Units	New Units	
BF Stove			
Particulate Matter (mg/Nm^3)	50	30	
SO_2 (mg/Nm^3)	250	200	
NO_x (mg/Nm^3)	150	150	
CO (Vol/Vol)	1% (max.)	1% (max.)	
(ii) Space Dedusting / Other stacks of BF area			
Particulate Matter (mg/Nm^3)	100	50	
(iii) Fugitive Emission			
	Existing Units	New Units	
Particulate Matter (Size less than 10 microns) PM_{10} ($\mu\text{g}/\text{m}^3$)	4000	3000	
SO_2 ($\mu\text{g}/\text{m}^3$)	200	150	
NO_x ($\mu\text{g}/\text{m}^3$)	150	120	
Carbon Monoxide ($\mu\text{g}/\text{m}^3$)			
- 8 hours	5000	5000	
- 1 hours	10,000	10,000	
Lead, as Pb in fugitive dust ($\mu\text{g}/\text{m}^3$) at Cast House.	2	2	
D.- Steel Making Shop – Basic Oxygen Furnace			
a. Effluent Standards			
pH (mg/l)	6.0-8.5		
Suspended Solids (mg/l)	100		
Oil and Grease (mg/l)	10		
(1)	(2)	(3)	(4)

<i>(i) Stack Emissions</i>		
	Existing Units	New Units
• Converters		
Particulate Matter (mg/Nm ³)		
- Blowing/Lancing operation	300	Should be with gas recovery
- Normal operation	150	Should be with gas recovery
▪ Secondary Emission Stack: De-dusting of de-sulphurisation, Secondary refining etc.		
Particulate Matter (mg/Nm ³)	100	50
<i>(ii) Fugitive Emissions</i>		
	Existing Units	New Units
Particulate Matter (size less than 10 microns) PM ₁₀ (µg/m ³)	4000	3000
SO ₂ (µg/m ³)	200	150
NO _x (µg/m ³)	150	150
CO (µg/m ³)		
- 8 hours	5,000	5,000
- 1 hours	10,000	10,000
Lead, as Pb in dust at Converter floor (µg/m ³)	2	2
E.- Rolling Mills		
a. Effluent Standards		
pH	6.0-9.0	
Suspended Solids (mg/l)	100	
Oil and Grease (mg/l)	10	
b. Emission Standards		
Particulate Matter (mg/Nm ³)	150	
Re-Heating (Reverberatory) Furnaces		
	Sensitive area	Other area
Particulate Matter (mg/Nm ³)	150	250
F.- Arc Furnaces		
Emission Standards		
Particulate Matter (mg/Nm ³)	150	
G.- Induction Furnaces		
Emission Standards		
Particulate Matter (mg/Nm ³)	150	
H.- Cupola Foundry		
Emission Standards		
	Melting capacity less than 3 tonne/hr	Melting capacity 3 tonne/hr and above
Particulate Matter (mg/Nm ³)	450	150
SO ₂ (mg/Nm ³)	300, corrected at 12% CO ₂	

(1)	(2)	(3)	(4)
-----	-----	-----	-----

I.- Calcination Plant/ Lime Kiln/ Dolomite Kiln		
Emission Standards		
	Capacity upto 40 t/day	Capacity above 40 t/day
Particulate Matter (mg/Nm ³)	500	150
J.- Refractory Unit		
Emission Standards		
Particulate Matter (mg/Nm ³)	150	
Note:		
<ol style="list-style-type: none"> The height of the each process stack shall be a minimum of 30 meters or as per the formula $H = 14 (Q)^{0.3}$ (Whichever is more), where “H” is the height of stack in meters; and “Q” is the maximum quantity of SO₂ in kg/hr expected to be emitted through the stack at rated capacity of the plant(s) and calculated as per the norms of gaseous emission. The plants having separate stack for gaseous emission for the scrubbing unit, the height of this stack shall be equal to main stack of the plant or 30 meters, whichever is higher. It is essential that stack constructed over the cupola beyond the charging door and emissions shall be directed through the stack which should be atleast six times the diameter of cupola. In respect of Arc Furnaces and Induction Furnaces, provision shall be made for collecting the fumes before discharging the emission through the stack. Foundries shall install scrubber, followed by a stack of height atleast six times the diameter of the Cupola beyond the charging door. Recovery type converters shall be installed in new plants or expansion projects. 		
Stormwater		
Note:		
<ol style="list-style-type: none"> Stormwater shall not be allowed to mix with effluent, scrubber water and/or floor washings. Stormwater shall be channellized through separate drains as per natural gradient, passing through High Density Polyethylene (HDPE) lined pits, each having holding capacity of 10 minutes (hourly average) of rainfall.” 		

- (iii) Serial number 30 relating to “Integrated Iron and Steel Plants” and the entries relating there to shall be omitted;
- (iv) Serial number 79 relating to “Coke Oven Plants” and the entries relating there to shall be omitted.
- (b) In Schedule VI, General Emission Standards Part D, III, Load/ Mass based standards, for serial number 5, Coke Oven and entries relating thereto, the following serial number and entries shall be inserted, namely:-

(1)	(2)	(3)	(4)
“5.	Integrated Iron and Steel Plant	Carbon Monoxide in coke oven	3 Kg/tonne of coke produced
		Particulate matter during coke pushing in coke oven	5 gramme/tonne of coke produced
		Particulate matter for quenching operation in Coke Oven	50 gramme/tonne of coke produced.”


सत्यमेव जयते

भारत का राजपत्र

The Gazette of India

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असाधारण
EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (ii)
PART II—Section 3—Sub-section (ii)

प्राधिकार से प्रकाशित
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पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय

अधिसूचना

नई दिल्ली, 7 जून, 2024

का. आ. 2215(अ).—भारत सरकार के तत्कालीन पर्यावरण और वन मंत्रालय की अधिसूचना को भारत के राजपत्र, असाधारण, भाग II, खंड 3, उप-खंड (ii) में क्रमांक का.आ. 1533 (अ), तारीख 14 मितंबर, 2006 द्वारा प्रकाशित किया गया था जिसमें (जिसे इसमें इसके पश्चात उक्त अधिसूचना कहा गया है) की अनुमूची के अधीन विनिर्दिष्ट परियोजनाओं या क्रियाकलापों के लिए पूर्व पर्यावरणीय मंजूरी अपेक्षित है;

और, राष्ट्रीय हरित अधिकरण, तारीख 12 फरवरी, 2020 के अपने आदेश के द्वारा, मूल आवेदन संख्या 55/2019 (डब्ल्यूजेड), (गजुभा जेसर जाडेजा बनाम भारत संघ और अन्य) में अन्य बातों के साथ-साथ यह अवलोकन किया है कि कोल्ड रोलड स्टेनलेस स्टील विनिर्माण उद्योगों को पूर्व पर्यावरण मंजूरी की अपेक्षा होती है;

और, केंद्रीय सरकार ने उक्त अधिसूचना के अधीन पूर्व पर्यावरणीय मंजूरी प्राप्त करने के लिए ऐसे कोल्ड रोलड स्टेनलेस स्टील विनिर्माण उद्योगों हेतु एक निश्चित अवधि प्रदान करने के लिए राष्ट्रीय हरित अधिकरण के उपर्युक्त उक्त आदेश के अनुरूप एक सुविचारित विनिश्चय लिया था;

और, उक्त अधिसूचना में संशोधन करने के लिए प्रारूप अधिसूचना भारत के राजपत्र, असाधारण, भाग II, खंड 3, उप-खंड (ii) क्रम संख्यांक का.आ. 5020 (अ) तारीख 22 नवंबर, 2023 द्वारा प्रकाशित किया गया था जिसमें उन सभी

व्यक्तियों से जिनकी उनसे प्रभावित होने की संभावना थी उस तारीख से साठ दिन की अवधि के भीतर जिसको उक्त प्रारूप अधिसूचना में अंतर्विष्ट राजपत्र की प्रतियां जनता को उपलब्ध कराई गई थी, आक्षेप और सुझाव आमंत्रित किए गए थे;

और उक्त प्रारूप अधिसूचना के प्रतिउत्तर में प्राप्त आक्षेप और सुझाव पर केंद्रीय सरकार द्वारा मध्यक रूप में विचार किया गया;

अतः अब, केंद्रीय सरकार, पर्यावरण (संरक्षण) नियम, 1986 के नियम 5 के उप-नियम (3) के खंड (घ) के माथ पठित पर्यावरण (संरक्षण) अधिनियम, 1986 की धारा 3 की उप-धारा (1) और उप-धारा (2) के खंड (v) द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए, तत्कालीन पर्यावरण और वन मंत्रालय, भारत सरकार का.आ. 1533 (अ) तारीख 14 सितंबर, 2006 की अधिसूचना में निम्नलिखित और संशोधन करती है अर्थात्:-

उक्त अधिसूचना में, अनुसूची में, -

(क) मद 2 (ख) और उससे संबंधित प्रविष्टियों के पश्चात् निम्नलिखित मद और प्रविष्टियां अंतःस्थापित की जाएंगी, अर्थात् :-

परियोजना या क्रियाकलाप	निर्धारित सीमा के साथ श्रेणी		शर्तें यदि कोई हों
	क	ख	
2	प्राथमिक प्रसंस्करण		
"2(ग)	पेलेट संयंत्र	क्षमता पर ध्यान दिए बिना सभी स्टैंडअलोन पेलेट संयंत्र	साधारण शर्त लागू होगी";

(ख) मद 3 और उससे संबंधित प्रविष्टियों के स्थान पर निम्नलिखित मद और प्रविष्टियां रखी जाएंगी, अर्थात्:-

परियोजना या क्रियाकलाप	निर्धारित सीमा के साथ श्रेणी		शर्तें यदि कोई हों	
	क	ख		
(1)	(2)	(3)	(4)	(5)
"3	सामग्री उत्पादन			
3(क)	धातु कर्मीय उद्योग (लौह और अलौह)	(क) प्राथमिक धातु कर्मीय उद्योग-सभी परियोजनाएं	- स्पंज आयरन निर्माण <200 टीपीडी (<0.06 मिलियन टन प्रति वर्ष- एमटीपीए) द्वितीयक धातु कर्मीय उद्योग:	सामान्य शर्त लागू होगी. टिप्पण: i. निम्नलिखित नियमों के अधीन रजिस्टर्ड

[भाग II—खण्ड 3(ii)]

भारत का राजपत्र : असाधारण

	<p>(ख) स्पंज आयरन विनिर्माण \geq 200 टीपीडी (≥ 0.06 एमटीपीए)</p> <p>(ग) द्वितीयक धातु कर्मीय उद्योग: ≥ 0.02 एमटीपीए</p> <p>क्षमता वाली जहरीली धातु (लैड, कैडमियम, आर्सेनिक, मरकरी, क्रोमियम) उत्पादक इकाइयाँ</p>	<p>(i) < 0.02 एमटीपीए क्षमता वाली जहरीली धातु (लैड, कैडमियम, आर्सेनिक, मरकरी, क्रोमियम) उत्पादक इकाइयाँ</p> <p>(ii) गैर विषैली धातुओं के पिघलने से जुड़ी प्रक्रियाएं</p> <table border="1" data-bbox="624 600 1101 1064"> <thead> <tr> <th>भट्टी में ईंधन</th> <th>श्रेणी बी2</th> <th>श्रेणी बी1</th> </tr> </thead> <tbody> <tr> <td>1. ठोस या तरल ईंधन</td> <td>≥ 0.03 एमटीपीए से < 0.06 एमटीपीए</td> <td>≥ 0.06 एमटीपीए</td> </tr> <tr> <td>2. गैस ईंधन या बिजली</td> <td>≥ 0.06 एमटीपीए से < 0.12 एमटीपीए</td> <td>≥ 0.12 एमटीपीए</td> </tr> </tbody> </table> <p>(iii) ऐसी प्रक्रियाएं जिनमें केवल पिकलिंग के साथ गैर विषैली धातुओं को गर्म करना शामिल हैं</p> <table border="1" data-bbox="624 1189 1101 1664"> <thead> <tr> <th>भट्टी में ईंधन</th> <th>श्रेणी बी2</th> <th>श्रेणी बी1</th> </tr> </thead> <tbody> <tr> <td>1. ठोस या तरल ईंधन</td> <td>≥ 0.06 एमटीपीए से < 0.12 एमटीपीए</td> <td>≥ 0.12 एमटीपीए</td> </tr> <tr> <td>2. गैस ईंधन या बिजली</td> <td>≥ 0.12 एमटीपीए से < 0.18 एमटीपीए</td> <td>≥ 0.18 एमटीपीए</td> </tr> </tbody> </table>	भट्टी में ईंधन	श्रेणी बी2	श्रेणी बी1	1. ठोस या तरल ईंधन	≥ 0.03 एमटीपीए से < 0.06 एमटीपीए	≥ 0.06 एमटीपीए	2. गैस ईंधन या बिजली	≥ 0.06 एमटीपीए से < 0.12 एमटीपीए	≥ 0.12 एमटीपीए	भट्टी में ईंधन	श्रेणी बी2	श्रेणी बी1	1. ठोस या तरल ईंधन	≥ 0.06 एमटीपीए से < 0.12 एमटीपीए	≥ 0.12 एमटीपीए	2. गैस ईंधन या बिजली	≥ 0.12 एमटीपीए से < 0.18 एमटीपीए	≥ 0.18 एमटीपीए	<p>पुनर्चक्रण औद्योगिक इकाइयों को छूट दी गई है, अर्थात्: -</p> <p>(क) खतरनाक और अन्य अपशिष्ट (प्रबंधन और सीमापार संचलन) नियम, 2016;</p> <p>(ख) ई-कचरा (प्रबंधन) नियम, 2016;</p> <p>(ग) बैटरी कचरा प्रबंधन नियम, 2022.</p> <p>(ii) धातु कर्मीय उद्योगों के भीतर स्थापित निम्नलिखित ताप विद्युत संयंत्रों को छूट दी गई है, अर्थात्: -</p> <p>(क) मद 1(घ) में विनिर्दिष्ट विद्युत संयंत्र के सिवाए संयंत्र या इकाई</p> <p>(ख) नगर पालिका ठोस अपशिष्ट (गैर खतरनाक) पर आधारित ताप विद्युत संयंत्र ।</p>
भट्टी में ईंधन	श्रेणी बी2	श्रेणी बी1																			
1. ठोस या तरल ईंधन	≥ 0.03 एमटीपीए से < 0.06 एमटीपीए	≥ 0.06 एमटीपीए																			
2. गैस ईंधन या बिजली	≥ 0.06 एमटीपीए से < 0.12 एमटीपीए	≥ 0.12 एमटीपीए																			
भट्टी में ईंधन	श्रेणी बी2	श्रेणी बी1																			
1. ठोस या तरल ईंधन	≥ 0.06 एमटीपीए से < 0.12 एमटीपीए	≥ 0.12 एमटीपीए																			
2. गैस ईंधन या बिजली	≥ 0.12 एमटीपीए से < 0.18 एमटीपीए	≥ 0.18 एमटीपीए																			

				(iii). स्टैंडअलोन रोलिंग या री रोलिंग एक्स्चुस्सन या पिण्डिंग या फोर्जिंग या ड्राइंग इकाइयाँ जिसमें किसी भी प्रकार के पिघलने या पिक्लिंग को छूट दी गई है।
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[फा. सं. आईए-जेड-11013/83/2022—आईए-II(आईएनडी-I)]

डॉ. सुजीत कुमार बाजपेयी, संयुक्त सचिव

टिप्पण: मूल अधिसूचना भारत के राजपत्र में संख्यांक का.आ. 1533(अ), तारीख 14 सितंबर, 2006 द्वारा प्रकाशित की गई थी और अधिसूचना संख्यांक का.आ. 3840(अ) तारीख 30 अगस्त, 2023 द्वारा अंतिम बार संशोधित किया गया था।

MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

NOTIFICATION

New Delhi, the 7th June, 2024

S.O. 2215(E).— Whereas the notification of the Government of India in the erstwhile Ministry of Environment and Forest was published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (ii) vide number S.O. 1533 (E), dated the 14th September, 2006, requires prior environmental clearance for the projects or activities specified under Schedule there of (hereinafter referred to as the said notification);

And whereas the National Green Tribunal vide its order, dated the 12th February, 2020, in Original Application No. 55/2019 (WZ), (Gajubha Jesar Jadeja vs Union of India & Ors.), has, *inter alia*, observed that cold rolled stainless steel manufacturing industries require prior environment clearance;

And whereas the Central Government, had taken a considered decision in line with the above said order of the National Green Tribunal to provide a window period for such cold rolled stainless manufacturing industries to obtain prior environmental clearance under the said notification;

And whereas a draft notification for making amendments in the said notification was published in the Gazette of India, Extraordinary, Part-II, Section 3, Sub-section(ii), vide number S.O. 5020(E), dated the 22nd November, 2023, inviting objections and suggestions from all the persons likely to be affected thereby, within a period of sixty days from the date on which copies of the Gazette containing the said draft notification were made available to the Public;

And whereas the objections and suggestions received in response to the said draft notification have been duly considered by the Central Government;

Now, therefore, in exercise of powers conferred by sub-section (1) and clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986), read with clause (d) of sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986, the Central Government hereby makes the following further amendments in

the notification of the Government of India in the erstwhile Ministry of Environment and Forests, number S.O.1533(E), dated the 14th September, 2006, namely: -

In the said notification, in the Schedule-

(a) after item 2(b) and entries relating thereto, the following item and entries shall be inserted, namely: -

Project or Activity	Category with threshold limit		Conditions if any
	A	B	
2	Primary Processing		
"2(c)	Pellet plant	-	All standalone pellet plant irrespective of capacity
			General condition shall apply";

(b) for item 3 and entries relating thereto, the following item and entries shall be substituted, namely:-

Project or Activity		Category with threshold limit		Conditions if any									
		A	B										
(1)	(2)	(3)	(4)	(5)									
"3	Materials Production												
3(a)	Metallurgical industries (ferrous & nonferrous)	(a) Primary metallurgical industry-All projects (b) Sponge iron manufacturing \geq 200TPD (\geq 0.06MTPA) (c) Secondary metallurgical industry: Toxic metals (Lead, Cadmium, Arsenic Mercury, Chromium) producing units with capacity \geq 0.02MTPA	- Sponge iron manufacturing <200TPD (<0.06 Million Tonnes Per Annum-MTPA) Secondary metallurgical industry: (i) Toxic metals (Lead, Cadmium, Arsenic, Mercury, Chromium) producing units with capacity < 0.02MTPA (ii) Processes involving melting of nontoxic metals <table border="1"> <thead> <tr> <th>Fuel in the furnace</th> <th>Category B2</th> <th>Category B1</th> </tr> </thead> <tbody> <tr> <td>1. Solid or liquid fuel</td> <td>\geq 0.03 MTPA to < 0.06 MTPA</td> <td>\geq 0.06 MTPA</td> </tr> <tr> <td>2. Gas fuel or electricity</td> <td>\geq 0.06 MTPA to < 0.12 MTPA</td> <td>\geq 0.12 MTPA</td> </tr> </tbody> </table> (iii) Processes involving only heating of nontoxic metals with pickling	Fuel in the furnace	Category B2	Category B1	1. Solid or liquid fuel	\geq 0.03 MTPA to < 0.06 MTPA	\geq 0.06 MTPA	2. Gas fuel or electricity	\geq 0.06 MTPA to < 0.12 MTPA	\geq 0.12 MTPA	General Condition shall apply. Note: (i) The recycling industrial units registered under following rules are exempted, namely:- (a) the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016; (b) the E-Waste (Management) Rules, 2016; (c) the Battery Waste Management Rules, 2022. (ii).The following thermal power plants setup within metallurgical industries are exempted, namely:- (a) plants or units, other than power plants referred to in the item 1(d); (b) thermal power plants based on municipal solid waste (non-hazardous).
Fuel in the furnace	Category B2	Category B1											
1. Solid or liquid fuel	\geq 0.03 MTPA to < 0.06 MTPA	\geq 0.06 MTPA											
2. Gas fuel or electricity	\geq 0.06 MTPA to < 0.12 MTPA	\geq 0.12 MTPA											

Fuel in the furnace	Category B2	Category B1	(iii). The Standalone rolling or re-rolling or extrusion or piercing or forging or drawing units not involving any type of melting or pickling are exempted".
1. Solid or liquid fuel	≥ 0.06 MTPA to < 0.12 MTPA	≥ 0.12 MTPA	
2. Gas fuel or electricity	≥ 0.12 MTPA to < 0.18 MTPA	≥ 0.18 MTPA	

[F. No. IA-Z-11013/83/2022-IA-II(IND-I)]

Dr. SUJIT KUMAR BAJPAYEE, Jt. Secy.

Note: The principal notification was published in the Gazette of India, vide number S.O. 1533(E), dated the 14th September, 2006 and was last amended vide the notification number S.O. 3840(E), dated the 30th August, 2023.

ANNEXURE R-3/13

विशिष्ट सं. डी-एल-33004/99

REGD. NO. D. L. 33004/99

भारत का राजपत्र

The Gazette of India

असाधारण

EXTRAORDINARY

भाग III—खण्ड 4

PART III—Section 4

प्रधिकार से प्रकाशित

PUBLISHED BY AUTHORITY

सं. 217]

नई दिल्ली, बुधवार, नवम्बर 18, 2009/कार्तिक 27, 1931

No. 217]

NEW DELHI, WEDNESDAY, NOVEMBER 18, 2009/KARTIKA 27, 1931

राष्ट्रीय पर्यावरणीय वायु गुणवत्ता मानक

केन्द्रीय प्रदूषण नियंत्रण बोर्ड

अधिसूचना

नई दिल्ली, 18 नवम्बर, 2009

सं. सी-29016/20/90/पी.सं.आर्.-1.—वायु (प्रदूषण निवारण एवं नियंत्रण) अधिनियम, 1981 (1981 का 14) की धारा 16 की उपधारा (2) (एच) द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए तथा अधिसूचना संख्या का.आ. 384(डी), दिनांक 11 अप्रैल, 1994 और का.आ. 935 (डी) दिनांक 14 अक्टूबर, 1998 के अतिक्रमण में केन्द्रीय प्रदूषण नियंत्रण बोर्ड इसके द्वारा तत्काल प्रभाव से राष्ट्रीय पर्यावरणीय वायु गुणवत्ता मानक अधिसूचित करता है, जो इस प्रकार है-

राष्ट्रीय पर्यावरणीय वायु गुणवत्ता मानक

क्र. सं.	प्रदूषक	समय आधारित औसत	पर्यावरणीय वायु में सामान्य		
			औद्योगिक, शिल्पकारी, ग्रामीण और अन्य क्षेत्र	पारिस्थितिकीय संवेदनशील क्षेत्र (केन्द्र सरकार द्वारा अधिसूचित)	प्रयोग की पद्धति
(1)	(2)	(3)	(4)	(5)	(6)
1	सल्फर डाई आक्साइड (SO ₂), µg/m ³	वार्षिक* 24 घंटे**	50 80	20 80	-उन्नत वेस्ट और गार्डक -पर्यावरणीय परिसीमा
2	नाइट्रोजन डाई आक्साइड (NO ₂), µg/m ³	वार्षिक* 24 घंटे**	40 80	30 80	-उपरोक्त क्षेत्रों और हीवाइजर (सोडियम-आर्सेनाइट) -सांख्यिक संक्षेप
3	विभिन्न पदार्थ (10माइक्रोन से कम आकार) का PM ₁₀ , µg/m ³	वार्षिक* 24 घंटे**	60 100	60 100	-हरातीक विश्लेषण -टोयम -बीटा समुदाय पद्धति

4187 01/2009

(1)

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THE GAZETTE OF INDIA: EXTRAORDINARY

(PART III—Sec. 4)

4	विशिक्त पदार्थ (2.5 माइक्रान से कम आकार या $PM_{2.5}$, $\mu g/m^3$)	वार्षिक* 24 घंटे**	40 60	40 60	-इसत्यक्त विरलेषण -टोयम -बीटा तनुकरण पद्धति
5	ओजोन (O_3) $\mu g/m^3$	8 घंटे** 1 घंटा**	100 180	100 180	-परबैग्नी द्वीपिकाल -रासायनिक संदीप्ति -रासायनिक पद्धति
6	सीसा (Pb) $\mu g/m^3$	वार्षिक* 24 घंटे**	0.50 1.0	0.50 1.0	ई.पी.एम. 2000 या समरूप फिल्टर पेपर का प्रयोग करके AAS/ICP पद्धति -टेफ्लॉन फिल्टर पेपर का प्रयोग करते हुए ED-XRF
7	कार्बन मोनोक्साइड (CO) mg/m^3	8 घंटे** 1 घंटा**	02 04	02 04	-अविषेधी अवरक्त (NDIR) स्पेक्ट्रम मापन
8	अमोनिया (NH_3) $\mu g/m^3$	वार्षिक* 24 घंटे**	100 400	100 400	-रासायनिक संदीप्ति -इम्प्लेफिनॉल ब्ल्यू पद्धति
9	बैन्जीन (C_6H_6) $\mu g/m^3$	वार्षिक*	05	05	- गैस क्रोमेटोग्राफी आधारित सतत विश्लेषक -अधिशोषण तथा निशोषण के बाद गैस क्रोमेटोग्राफी
10	बैन्जो (ए) पाईरीन (BaP) केवल विशिक्त रूप, ng/m^3	वार्षिक*	01	01	-विलायक निष्कर्षण के बाद HPLC/GC द्वारा विरलेषण
11	आर्सेनिक (As) ng/m^3	वार्षिक*	06	06	-असंक्षिप्त अवरक्त स्पेक्ट्रोमिती ई.पी.एम. 2000 या समरूप फिल्टर पेपर का प्रयोग करके ICP/AAS पद्धति
12	निकिल (Ni) ng/m^3	वार्षिक*	20	20	ई.पी.एम. 2000 या समरूप फिल्टर पेपर का प्रयोग करके ICP/AAS पद्धति

* वर्ष में एक समान अंतरालों पर सप्ताह में दो बार प्रति 24 घंटे तक किसी एक स्थान विशेष पर लिये गये न्यूनतम 104 मापों का वार्षिक अंकगणीतीय औसत ।

** वर्ष में 99 प्रतिशत समय पर 24 घंटे या 8 घंटे या 1 घंटा के मानीटर मापमान, जो लागू हो, अनुपालन किये जाएंगे । दो प्रतिशत समय पर वह मापमान अधिक हो सकता है, किन्तु क्रमिक दो मानीटर करने के दिनों पर नहीं ।

टिप्पणी:

1. जब कभी और जहां भी किसी अपने-अपने प्रवर्ग के लिये दो क्रमिक प्रबोधन दिनों पर मापित मूल्य, ऊपर विनिर्दिष्ट सीमा से अधिक हो तो इसे नियमित या निरंतर प्रबोधन तथा अतिरिक्त अन्वेषण करवाने के लिये पर्याप्त कारण समझा जायेगा ।

संत प्रसाद शर्मा, अध्यक्ष

[विज्ञापन-III/4/184/09/अस.]

टिप्पणी: राष्ट्रीय परियोजना वायु गुणवत्ता मानक संबंधी अधिसूचनाएँ, केन्द्रीय प्रदूषण नियंत्रण बोर्ड द्वारा भारत के राजपत्र आसाधारण में अधिसूचना संख्या का.आ. 384 (ई), दिनांक 11 अप्रैल, 1994 एवं का. आ. 935 (ई), दिनांक 14 अक्टूबर, 1998 द्वारा प्रकाशित की गयी थी ।

NATIONAL AMBIENT AIR QUALITY STANDARDS
CENTRAL POLLUTION CONTROL BOARD
NOTIFICATION

New Delhi, the 18th November, 2009

No. B-29016/20/90/PCI-L—In exercise of the powers conferred by Sub-section (2) (h) of section 16 of the Air (Prevention and Control of Pollution) Act, 1981 (Act No.14 of 1981), and in supersession of the Notification No(s). S.O. 384(E), dated 11th April, 1994 and S.O. 935(E), dated 14th October, 1998, the Central Pollution Control Board hereby notify the National Ambient Air Quality Standards with immediate effect, namely:-

NATIONAL AMBIENT AIR QUALITY STANDARDS

S. No.	Pollutant	Time Weighted Average	Concentration in Ambient Air		
			Industrial, Residential, Rural and Other Area	Ecologically Sensitive Area (notified by Central Government)	Methods of Measurement
(1)	(2)	(3)	(4)	(5)	(6)
1	Sulphur Dioxide (SO ₂), µg/m ³	Annual* 24 hours**	50 80	20 80	- Improved West and Gaeke - Ultraviolet fluorescence
2	Nitrogen Dioxide (NO ₂), µg/m ³	Annual* 24 hours**	40 80	30 80	- Modified Jacob & Hochheiser (Na-Arsenite) - Chemiluminescence
3	Particulate Matter (size less than 10µm) or PM ₁₀ µg/m ³	Annual* 24 hours**	60 100	60 100	- Gravimetric - TOEM - Beta attenuation
4	Particulate Matter (size less than 2.5µm) or PM _{2.5} µg/m ³	Annual* 24 hours**	40 60	40 60	- Gravimetric - TOEM - Beta attenuation
5	Ozone (O ₃) µg/m ³	8 hours** 1 hour**	100 180	100 180	- UV photometric - Chemiluminescence - Chemical Method
6	Lead (Pb) µg/m ³	Annual* 24 hours**	0.50 1.0	0.50 1.0	- AAS/ICP method after sampling on EPM 2000 or equivalent filter paper - ED-XRF using Teflon filter
7	Carbon Monoxide (CO) mg/m ³	8 hours** 1 hour**	02 04	02 04	- Non Dispersive Infra Red (NDIR) spectroscopy
8	Ammonia (NH ₃) µg/m ³	Annual* 24 hours**	100 400	100 400	- Chemiluminescence - Indophenol blue method

(1)	(2)	(3)	(4)	(5)	(6)
9	Benzene (C ₆ H ₆) µg/m ³	Annual*	05	05	- Gas chromatography based continuous analyzer - Adsorption and Desorption followed by GC analysis
10	Benzo(a)Pyrene (BaP) - particulate phase only, ng/m ³	Annual*	01	01	- Solvent extraction followed by HPLC/GC analysis
11	Arsenic (As), ng/m ³	Annual*	06	06	- AAS /ICP method after sampling on EPM 2000 or equivalent filter paper
12	Nickel (Ni), ng/m ³	Annual*	20	20	- AAS /ICP method after sampling on EPM 2000 or equivalent filter paper

* Annual arithmetic mean of minimum 104 measurements in a year at a particular site taken twice a week 24 hourly at uniform intervals.

** 24 hourly or 08 hourly or 01 hourly monitored values, as applicable, shall be complied with 98% of the time in a year. 2% of the time, they may exceed the limits but not on two consecutive days of monitoring.

Note. — Whenever and wherever monitoring results on two consecutive days of monitoring exceed the limits specified above for the respective category, it shall be considered adequate reason to institute regular or continuous monitoring and further investigation.

SANT PRASAD GAUTAM, Chairman
[ADVT-III/4/18409/Exy.]

Note: The notifications on National Ambient Air Quality Standards were published by the Central Pollution Control Board in the Gazette of India, Extraordinary vide notification No(s). S.O. 384(E), dated 11th April, 1994 and S.O. 935(E), dated 14th October, 1998.



पेट्रोलियम एवं प्राकृतिक गैस विनियामक बोर्ड
Petroleum and Natural Gas Regulatory Board
 प्रथम-तल, वर्ल्ड ट्रेड सेंटर, बाबर रोड, नयी दिल्ली -110001
 1st Floor, World Trade Centre, Babar Road, New Delhi -110001
 फैक्स नं./Fax No. 91 11 23709151; E-mail contact@pngrb.gov.in

Ref: PNGRB/Monitoring/1/CGD-COVID-19/2022

Dated: 17.05.2022

To,

Shri Maheshwar Sahu, Chairman,

IRM Energy Private Limited

4th Floor, Building No. - 08, Magnet Corporate Park,

Near Sola Bridge, Sarkhej Gandhinagar Highway,

Thaltej, Ahmedabad Gujarat - 380054

Subject: Suspension of relative obligations towards MWP and extension of exclusivity for exemption from the purview of common carrier/contract carrier on account of restrictions imposed by the respective Government due to Covid-19 pandemic in India. **(Fatehgarh Sahib District GA (ID: 6.12))**

Sir,

This is in supersession of PNGRB's letter No.: PNGRB/ Monitoring/ 1/CGD-COVID-19/2020/Vol-II(P-1804) dated 24th November 2020 on the above subject. Your communications requesting for relief on account of difficulties faced by you due to Covid-19 pandemic have been examined based on the documents submitted in accordance with the provisions of definitions of Force Majeure [Regulations 2(1)(ga)] and as per the provisions of Regulations 14(11) to 14(13) of Petroleum and Natural Gas Regulatory Board (Authorizing Entities to Lay, Build, Operate or Expand City or Local Natural Gas Distribution Networks) Regulations, 2008 ("CGD Authorization Regulations")

2. In accordance with the aforesaid provisions, the number of days of Force Majeure (FM) Extension comes to approximately 262 days based on the various circulars/notifications issued by the Central/State Government Authorities. However, taking into consideration the various issues and the difficulties faced in totality in implementation of the CGD networks on account of restrictions imposed

वन्दना शर्मा / VANDANA SHARMA
 सचिव / Secretary
 पेट्रोलियम और प्राकृतिक गैस विनियामक बोर्ड
 Petroleum & Natural Gas Regulatory Board
 प्रथम तल, वर्ल्ड ट्रेड सेंटर,
 1st Floor, World Trade Centre,
 बाबर रोड, नई दिल्ली-110001
 Babar Road, New Delhi-110001

by the Central and State Governments due to all waves of the COVID-19 Pandemic, and the discussions held with the authorized CGD entities, the Board has decided the following:

- i) The entire period of Force Majeure for all waves of Covid-19 pandemic shall be considered en-bloc from 24.03.2020 onwards in totality
 - i) The relative obligations of the entities towards their work program to be suspended for a period of 24 (twenty-four) months w.e.f. 24th March 2020.
 - ii) The extension of exclusivity for exemption from the purview of Common carrier/Contract Carrier for an identical period of 24 months w.e.f. 24th March 2020.
3. It may be noted that any other extension granted which falls within the period of 24 months extension w.e.f. 24th March, 2020 on account of Covid-19 pandemic shall run concurrently.
4. Based on the above, the duration of "Contract Year" for achieving Minimum Work Program targets for Fatehgarh Sahib District GA has been revised and is enclosed at **Annexure-I**.
5. All other terms and conditions of Schedule D shall remain unchanged and the decision of the Board in this regard shall be final and binding on the entity.

Yours faithfully,

Vandana Sharma.

(Vandana Sharma)

Secretary

वन्दना शर्मा / VANDANA SHARMA
सचिव / Secretary
पेट्रोलियम और प्राकृतिक गैस विनियामक बोर्ड
Petroleum & Natural Gas Regulatory Board
प्रथम तल, वर्ल्ड ट्रेड सेंटर,
1st Floor, World Trade Centre,
बाबर रोड, नई दिल्ली-110001
Babar Road, New Delhi-110001

Annexure-I

Fatehgarh Sahib District (GA ID 6.12)					
Authorization Date - 05th July, 2016					
Contract Years	Start Date	Extended Period	End Date	Cumulative Number at the end of the Year	
				PNG Domestic Connections (% of work program)	Inch-Km Pipeline (% of work program)
MWP Targets for 5 Years as per Authorization Letter				5,905	650
1st	01-Oct-16		30-Sep-17	0	20
2nd	01-Oct-17		30-Sep-18	15	50
3rd	01-Oct-18		30-Sep-19	50	80
4th	01-Oct-19	24 Months	30-Sep-22	70	90
5th	01-Oct-22		30-Sep-23	100	100

Note: In case derived numbers are in fraction, the same shall be rounded off to the nearest whole number and 0.5 shall be rounded off to next higher whole number

Vandana Sharma.

वन्दना शर्मा / VANDANA SHARMA
 सचिव / Secretary
 पेट्रोलियम और प्राकृतिक गैस विनियामक बोर्ड
 Petroleum & Natural Gas Regulatory Board
 प्रथम तल, वर्ल्ड ट्रेड सेंटर,
 1st Floor, World Trade Centre,
 बाबर रोड, नई दिल्ली-110001
 Babar Road, New Delhi-110001



ALL INDIA STEEL REROLLERS ASSOCIATION

(Registered Under the Societies Registration Act. 1860)

Regional Office (North)
G. T. Road, Near Bhodey Kand
Bhadla Road, MANDI GOBINDGARH-147301 (Pt)
M. : 098556-58060, E-mail : aisramgg@gmail.co
E-mail : aisramgg@rediffmail.co

AISRA/PNG/2024-25/011 DT : 28.06.2024


Dr. Anil Kumar Jain
Chairperson, PNGRB
Chmn-pngrb@nic.in , megha.s@pngrb.gov.in

Sub: Request to Declare CGD Network of IRM ENERGY PVT LTD as COMMON CARRIER OR CONTRACT CARRIER (Fatehgarh Sahib GA (ID:6.12) Punjab State

Dear Sir

1. With due respect We want to bring in your Kind knowledge that We are an Association of MSMEs. Our Member Units are the Consumers of PNG in Fatehgarh Sahib GA. But due to Monopoly of IRM ENERGY PVT LTD. Our Units are shutting down their Operations due to High, Non transparent and arbitrary Pricing Policy of the Authorized entity of GA Fatehgarh Sahib I.e IRM ENERGY PVT LTD
2. Now we have come to know that the Marketing Exclusivity Period of IRM ENERGY PVT LTD for GA FATEHGARH SAHIB has ended on 30/9/2023. (Copy of Revised Authorisation Period is enclosed)
3. PNGRB has notified Petroleum and Natural Gas Regulatory Board (Guiding Principles for Declaring City or Local Natural Gas Distribution Networks as Common Carrier or Contract Carrier) Regulations, 2024.
4. It is requested to declare the CGD Network of IRM ENERGY PVT LTD of FATEHGARH SAHIB GA as COMMON or Contract Carrier to achieve the objectives as are laid down in Regulation 4 of newly enacted PNGRB (Guiding Principles for Declaring City or Local Natural Gas Distribution Networks as Common Carrier or Contract Carrier) Regulations, 2024

Hope that Your Good self will evaluate our demand positively
Thanks and Regards


(Vinod Vashisht)
National President
M : 78371-00415

Copy to :-

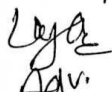
Shri Hardeep Singh Puri, Honble Minister of Petroleum & Natural Gas
Shashtri Bhawan New Delhi-110001
Min.png@nic.in

Head Office :

Sagar Apartments, 6, Tilak Marg, New Delhi-110001
Telephones : 65363874, 23389957, Fax : 011-23383142
E-mail : aisra2003@yahoo.com, aisra2003@gmail.com
Website : www.allindiasteelra.com

Regional Office (East)

Chatterjee International Centr
12-A (4th Floor), 33-A, J.N. Roa
Kolkatta-70007
Phone : 033-228818f

True copy

Adv.

BEFORE THE NATIONAL GREEN TRIBUNAL AT NEW DELHI.

O.A NO. 295/2023

IN THE MATTER OF:
DIMPAL KUMAR.

...APPLICANT

VERSUS

GOVT. OF PUNJAB & ORS.

...RESPONDENTS

KNOW ALL to whom these present shall come that I/We the above named Respondent No 3 (All India Steel Rollers Association) do hereby appoint, ARTLO/ SH. A.R.TAKKAR & Below Mentioned Advocates to be the Advocates for Respondent No 3 in the above noted case authorize him :-

To act, appear and plead in the above-noted case in this Court or in any other Court in which the same may be tried or heard and also in the appellate Court including High Court subject to payment of fees separately for each Court by me/ us.

To sign, file verify and present pleadings, appeals cross objections or petitions for execution review, revision, withdrawal, compromise or other petitions or affidavits or other documents as may be deemed necessary or proper for the prosecution of the said case in all its stages.

To file and take back documents to admit and/or deny the documents of opposite party. To withdraw or compromise the said case or submit to arbitration any differences or disputes that may arise touching or in any manner relating to the said case. To take execution proceedings.

The deposit, draw and receive money, cheques, cts thereof and to do all other acts and things which may be necessary for the progress and in the course of the prosecution of the said case.

To appoint and instruct any other Legal Practitioner, authorizing him to exercise the power and authority hereby conferred upon the Advocate whenever he may think it to do so and to sign the Power of Attorney on our behalf.

And I/We the undersigned do hereby agree to ratify and confirm all acts done by the Advocate or his substitute in the matter as my/our own acts, as if done by me/us to all intents and purposes.

And I/We undertake that I / we or my /our duly authorized agent would appear in the Court on all hearings and will inform the Advocates for appearance when the case is called.

And I /we undersigned do hereby agree not to hold the advocate or his substitute responsible for the result of the said case. The adjournment costs whenever ordered by the Court shall be of the Advocate which he shall receive and retain himself.

And I /we the undersigned do hereby agree that in the event of the whole or part of the fee agreed by me/us to be paid to the Advocate remaining unpaid he shall be entitled to withdraw from the prosecution of the said case until the same is paid up. The fee settled is only for the above case and above Court. I/We hereby agree that once the fee is paid. I /we will not be entitled for the refund of the same in any case whatsoever. If the case lasts for more than three years, the advocate shall be entitled for additional fee equivalent to half of the agreed fee for every addition three years or part thereof.

IN WITNESS WHEREOF I/We do hereunto set my /our hand to these presents the contents of which have been understood by me/us on this 14 day of December, 2024

Accepted

(A.R. TAKKAR, SHRIYA TAKKAR, ASMITA DUGGAL, UNNATI ANAND, ASHUTOSH BHARDWAJ)

KAPIL BAKSHI, AASTHA TYAGI AND MANAN TAKKAR
ARTLO
#P-6/2E, DLF PHASE-2, GURUGRAM-122002
MOB.: 9582209633

(Signature or thumb impression)

ADDITIONAL REPLY IN OA-295/2023 DIMPAL KUMAR VS GOVERNMENT OF PUNJAB & ORS

From Prince <prince@artlo.in>

Date Mon 12/16/2024 12:17 PM

To KAPILAIK@YAHOO.CO.IN <KAPILAIK@YAHOO.CO.IN>; PPCBZOP2@GMAIL.COM <PPCBZOP2@GMAIL.COM>;
adc.fth@punjab.gov.in <adc.fth@punjab.gov.in>; mcgvg@ymail.com <mcgvg@ymail.com>;
jagdish_cpcb@rediffmail.com <jagdish_cpcb@rediffmail.com>

Cc Aastha Tyagi <aastha@artlo.in>; Unnati <Unnati@artlo.in>; Manan Takkar <manantakkar@artlo.in>

 1 attachment (20 MB)

organized (86)_merged_pagenummer (1).pdf;

Dear Sir/Ma'am,

Please find attached herewith scanned copy of Additional reply filed by Respondent No 3 i.e. **ALL INDIA STEEL ROLLERS ASSOCIATION**, in O.A. No 295/2023 Tited as Dimpal Kumar vs Government of Punjab & Ors.