



HARYANA STATE POLLUTION CONTROL BOARD

SCO No.55, SECTOR-25, HUDA, PANIPAT

Ph. - (0180) 2672037, E-mail: hspcbopr@gmail.com

No. HSPCB/PR/2021/ 364
To

Dated 20/05/2021

The Chairperson,
Haryana State Pollution Control Board,
Panchkula

Kind Attn: Sr. Scientist (Air Cell)

Sub: Regarding Action Plan of District Panipat in the compliance of O.A. No.1038 of 2018 in the matter of "News item published in "The Asian Age" authored by Sanjay Kaw titled "CPCB to rank industrial units on pollution level".

Ref: Environment Department letter No.16/21/2019-3ENV dated 02/12/2019.

In this connection, it is submitted that Hon'ble NGT in O.A. 1038 of 2018 in the matter of "News item published in "The Asian Age" authored by Sanjay Kaw titled "CPCB to rank industrial units on pollution level" directed to constitute State Level Committee and District Level Committee for the District of Faridabad, Gurugram and Panipat for preparation, finalization, implementation and review of progress of action plan for the District and accordingly State Level and District Level Committees have been constituted vide order dated 29/11/2019 (Copy enclosed).

The Action Plan for the District Panipat has been prepared after obtaining inputs from the different departments, public sectors as well as private sector undertaking.

Thereafter, action plan has been approved by the Deputy Commissioner, Panipat on 03/05/2021 and the same is submitted for information and further necessary action, please.

Regional Officer
Panipat Region

Endst.No.HSPCB/PR/2021/ 365-90

Dated

A copy of the above is forwarded to the following for information and further necessary action, please.

1. The Deputy Commissioner, Panipat
2. The Additional Deputy Commissioner, Panipat
3. The Sub Divisional Magistrate, Panipat
4. The Estate Officer, HUDA, Panipat
5. The Executive Engineer, Div. No.1, PHED, Panipat
6. The Executive Engineer, Div. No.2, PHED, Panipat
7. The Executive Engineer, HUDA, Panipat
8. The Executive Officer, Municipal Corporation, Panipat
9. The Dy. Director, HSIIDC, Corporation, Panipat
10. The Chief Manager, NHAI, Rohtak
11. The Executive Engineer, PWD (B&R Branch), Provisional Division.
12. The Secretary, Regional Transportation Authority (RTA), Pnaipat
13. The Joint Director, District Industries Centre, Panipat
14. The Chief Engineer, Panipat Thermal Power Station, Panipat
15. The Chief Manager, National Fertilizers Limited, Panipat
16. The Executive Director, IOC Ltd, Panipat Refinery, Panipat
17. The Executive Director, IOC Ltd, Naphtha Cracker Project, Panipat
18. The Joint Director, Panipat Co-operative Sugar Mill, Panipat
19. The Executive Engineer, Irrigation Department, Panipat
20. The District Forest Officer, Forest Department, Panipat
21. The District Town Planner, Panipat
22. The Chief Medical Officer, Panipat
23. The Station Superintendent, Railway Department, Panipat
24. M/s Haryana Organics, Chulkana Road, Samalkha, Panipat
25. M/s Shree Cement Ltd. (Jay Pee Cement Grinding Unit), Village Khukhrana, Post Office Assan Kalan, Madlauda, Panipat
26. M/s Ultra Tech Cement Ltd., Village Karad, Israna-Pardana Road, Panipat

Regional Officer
Panipat Region

1x 2x **Note # 1**


Sub- Regarding Action Plan of District Panipat in the compliance of O.A. No. 1038 of 2018 in the matter of "News item published in "The Asian Age" authored by Sanjay KAW titled "CPCB to rank industrial units on pollution level".

Ref: Environment Department letter No.16/21/2019-3ENV dated 02/12/2019.

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The Action Plan for the District Panipat has been prepared after obtaining inputs from the different departments, public sectors as well as private sector undertaking.

The Action Plan for the District Panipat is submitted for approval & kind perusal, please.

 [Final Panipat Action Plan 2021-22-Air Act.pdf](#)

30/04/2021 3:22 PM

KAMALJIT SINGH
(REGIONAL OFFICER PANIPAT)

Note # 2
Approved.

03/05/2021 3:22 PM

DHARMENDER SINGH IAS
(DEPUTY COMMISSIONER ,PANIPAT)

**Action Plan
for
Abatement of
Pollution
in respect of
Panipat Town**



**Prepared by
Haryana State Pollution Control Board**

I. INTRODUCTION

LIST OF ABBREVIATIONS USED

CPCB	Central Pollution Control Board
HSPCB	Haryana State Pollution Control Board
CEPI	Comprehensive Environmental Pollution Index
HUDA	Haryana Urban Development Authority
RTA	Regional Transport Authority
NHAI	National Highway Authority of India
NFL	National Fertilizer Limited
MCP	Municipal Corporation Panipat
HSIIDC	Haryana State Industrial Infrastructure Development Corporation
PHED	Public Health Engineering Department
PTPS	Panipat Thermal Power Station
HEMS	Haryana Environment Management Society
HWTSDf	Hazardous Waste Treatment Storage and Disposal Facility
MSW	Municipal Solid Waste
BMW	Bio Medical Waste
ECBC	Energy Conservation Building Code
ETP	Effluent Treatment Plant
STP	Sewerage Treatment Plant
CETP	Common Effluent Treatment Plant
CNG	Compressed Natural Gas
PNG	Pipe Natural Gas
BOD	Bio Chemical Oxygen Demand
COD	Chemical Oxygen Demand

1.1 AREA DETAILS INCLUDING BRIEF HISTORY (BACKGROUND INFORMATION)

Panipat is an ancient and historic city in Panipat district, Haryana State, India. According to the mythology, Panipat was one of the five cities (Prasthas) founded by the Pandava brothers during the period of the Mahabharata; the historic name of Panipat was **Panduprastha**.

Three battles fought at the city were pivotal in Indian History. Panipat is well known city for textiles and carpets. It is the biggest centre for quality blankets and carpets in India and famous for handloom weaving. The "Achar Pachranga" is a well known Indian Pickle since 1925. The company was brought to Panipat in 1947 after the partition of India.

Heavy industries with national importance viz. Refinery of the Indian Oil Corporation Limited, Power Plant of Haryana Power Generation Corporation Limited, Urea Manufacturing Facility of National Fertilizers Limited, Sugar Mill and Distillery of Panipat Co-operative Sugar Mills are located in Panipat

The climate of Panipat being Gangetic Type is hot in summer and cold in winter. The coldest month is January and the hottest is June. Most of the annual rainfall about 80% occurs between July and September. Annual rainfall in the study area is 500 mm to 1000 mm. The remaining months are almost dry except January, which notable Wild Life Population. The main crops are paddy, maize, wheat, gram and sugarcane. Panipat District is one of the fertile and agriculturally rich districts of the region. occasionally receives light showers of winter rains. Panipat District does not have

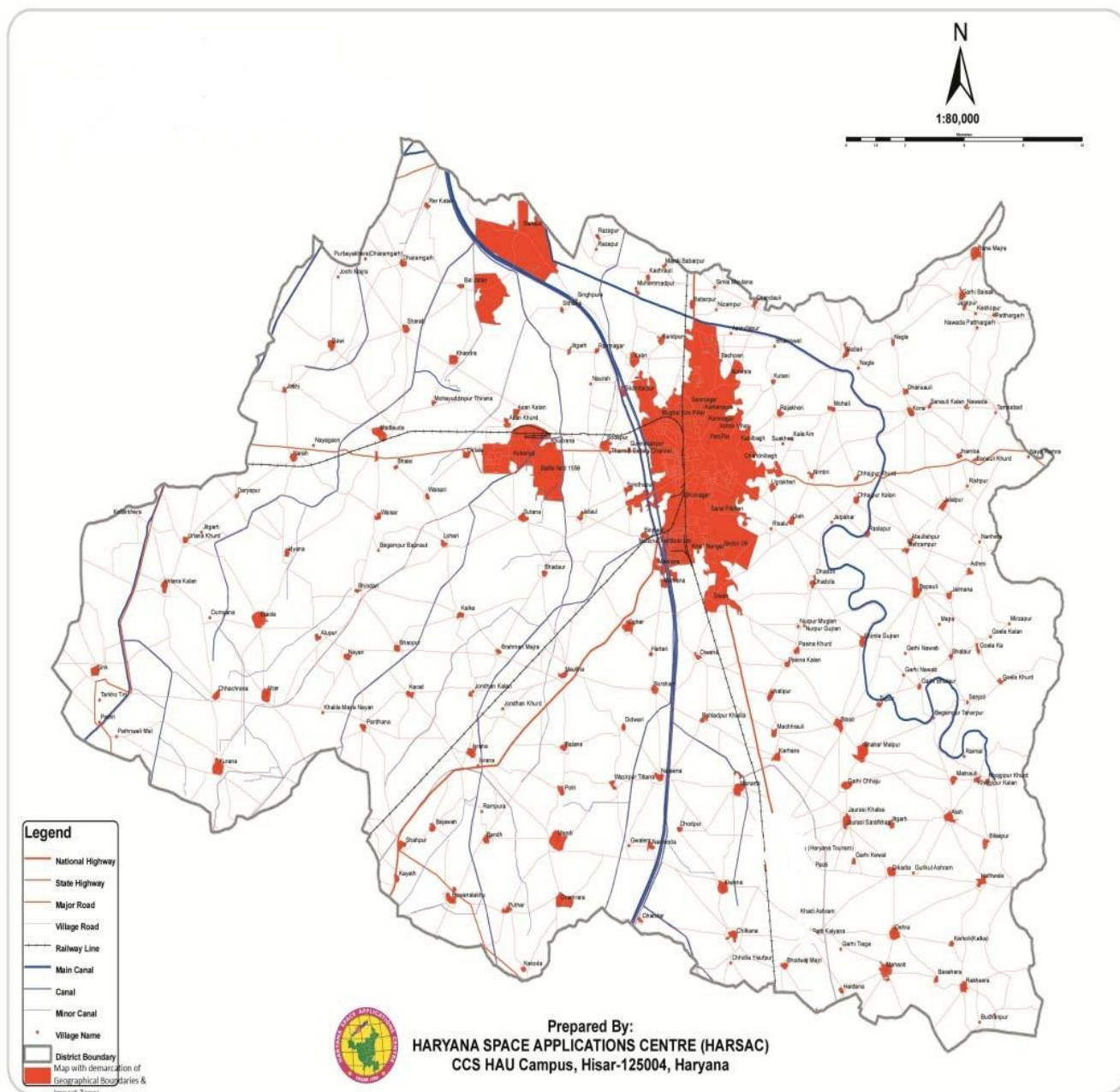
1.2 LOCATION

Panipat is located geographically between 29°23'N 76°58'E and 29.39°N 76.97°E at an average altitude of 219 Metres from the Sea Level. It is located 90 KM away from the National Capital, New Delhi on NH - 1 and falls under the National Capital Region of Delhi. Panipat District is spread in an area of 1300.38 KM².

On three sides, Panipat District Boundaries touch other Districts of Haryana - Karnal in the North, Jind in the West and Sonapat in the South. The East side of the Panipat finds the state of Uttar Pradesh across Yamuna. The distance of River Yamuna from Panipat City is about 18 KM.

1.3 MAP WITH DEMARCATION OF GEOGRAPHICAL BOUNDARIES AND IMPACT ZONES

Detailed Map of the Study area is enclosed as Annexure – A



1.4 CEPI SCORE (AIR, WATER, LAND AND TOTAL)

The Central Pollution Control Board carried out Comprehensive Environmental Pollution Index Assessment (CEPI) Study in association with Indian Institute of Technology, Delhi. Based on the study, 43 Industrial Clusters out of 88 listed have been declared as Critically Polluted areas having CEPI of more than 70, which includes Panipat City.

Haryana State Pollution Control Board prepared this Comprehensive Environmental Pollution Abatement Action Plan in order to make Panipat a better place to live and work.

1.5 TOTAL POPULATION AND SENSITIVE RECEPTORS (HOSPITALS, EDUCATIONAL INSTITUTIONS, COURT, ETC.) RESIDING IN THE AREA COMPRISING OF GEOGRAPHICAL AREA OF THE CLUSTER AND ITS IMPACT ZONE (MINIMUM 2 KM)

Haryana Government has recently converted the Municipal Council of Panipat into Municipal Corporation, Panipat and the Municipal Limits has been revised and accordingly the area has been increased from 22 KM² to 52 KM². The city was having a total population of 261,665 on records in the year 2001 and the roughly estimated population as on date is about 550,000 due to Municipal Area Expansion, Urban Development and Industrial Activities.

The Sensitive Receptors located in Panipat are listed below:

i)	Hospitals (Above 50 Beds)	-	12
ii)	Educational Institutions (Major)	-	15
iii)	Court	-	2

1.6 ECO-GEOLOGICAL FEATURES OF IMPACT ZONES [THE AREA COMPRISING OF GEOGRAPHICAL AREA OF THE CLUSTER AND ITS IMPACT ZONE (MINIMUM 2 KM)]

1.6.1 Major water bodies (rivers, lakes, ponds etc.)

River Yamuna located at a Distance of 18 KM from Panipat and West Jamuna Canal located within the Study Area are major water bodies. The fertility and type of soil are the derivatives of the study area contributed by River Yamuna. Alluvial type of soil is present in this area.

There are no Lakes exist in the study area.

Five villages located inside the Municipal Limit have Ponds and a Religious Spot called Devi Tala inside Panipat City receives water only in the monsoon period and remains dry in the rest of the year.

1.6.2 Ecological parks, sanctuaries, flora and fauna or any eco sensitive zones

There are no Ecological Parks, Wild Life and Bird Sanctuaries and any Eco Sensitive Zones exist in Panipat.

FLORA

The natural vegetation in the study area is sparse. Various kinds of trees and shrubs are found growing indigenously. On account of the pressure of population and extensive cultivation, very little land has been left under natural forest cover.

Strip forests along the roads and canals and block forests of Babool (Kikar) are on the forest record. Most of the area is occupied by agriculture fields. Wherever the forests are present, they are of open evergreen scrub or thorn type comprising mainly of:

- Butea Monosperma (Dhak)
- Prosopis Cineraria (Jand)
- Capparis Deciduas (Kaur)
- Capparis Separia (Hins)

According to the revised survey of forest types in India, the natural vegetation is of the study area falls under "Tropical Dry Deciduous Forests" with sub-type: Northern Dry Mixed Deciduous type.

Nearby villages and along avenues several ornamental trees are found. Most of these have been planted with the help of the Forest Department. These include:

- Acacia Nilotica (Babul)
- Albizzia Lebbek (Siris)
- Azadirachta Indica (Nim)
- Bauhinia Variegata (Kachnar)
- Butea Monsperma (Dhak)
- Cassia Fistula (Amaltash)
- Crataeva Nurvala (Barna)
- Dalbergia Sissoo (Shisham)
- Moringa Oleifera (Sohanjna)
- Morus Alba (Sahtoot)
- Saraca Indica (Ashok)

Among the fruit trees the important are Mangifera Indica (Mango) and Syzygium Cumini (Jamun).

Some of the important medicinal plants in the study area are Achyranthes Aspera, Argemone Mexicana, Croton Sparcifours, Euphorbia Hirta, Solanum Xanthocarpum, Tribulus Terristris, Vitex Negundo, Abrus Precatorius, Abutilon Indicum and Adhatoda Vasica.

FAUNA

The majority domestic animals are Cow, Buffalo, Horse, Donkey, Goat, Pig, Dog.

The main Birds are Pintail, Coot, House Sparrow, Myna, Cattle Egret, Little Egret, Pond Heron, Indian Ring Dove, Blue Rock Pigeon, etc

1.6.3 BUILDINGS OR MONUMENTS OF HISTORICAL/ ARCHAEOLOGICAL / RELIGIOUS IMPORTANCE

The main places of attraction in Panipat are:

- Battles Museum
- Hemu's 'Samadhi-Sthal'
- Camp Site of Babur and Akbar at Village Sodhapur Grave of Ibrahim Lodhi
- Kabuli Bagh

- Devi Mandir Kala Amb
- Salar Gunj Gate
- Tomb of the Thirteenth Century Sufi Saint Bu Ali Shah Qalandar

All the places listed above except Kala Amb are within the Municipal Limits of Panipat. Kala Amb located just outside the Municipal Limit but within two kilo metres of the study area.

1.7 INDUSTRY CLASSIFICATION AND DISTRIBUTION NUMBER OF INDUSTRIES PER 10 KM2 AREA OR FRACTION)

1.7.1	Highly Polluting Industries (17 Categories)	07
1.7.2	Red Category Industries	275
1.7.3	Orange and Green Category Industries	140
1.7.4	Grossly Polluting Industries	09

Details regarding existing functional units are tabulated below:

Sr. No.	Type of Unit	Size	Quantity	Location
1.	Fertilizer	Large	1	Between G.T. Road and Gohana Road within Municipal Area, Panipat
2.	Sugar	Medium	1	Within Panipat Town located on Gohana Road, Panipat
3.	Distillery	Medium	2	01 nos Within Panipat Town located on Gohana Road, Panipat and 01 No. located outside.
4.	Oil Refinery	Large	1	Located outside the critical polluted area in the effect zone
5.	Naphtha Cracker	Large	1	Located outside the critical polluted area in the effect zone
6.	Thermal Power Plant	Large	1	Located outside the critical polluted area in the effect zone
7.	Shree Cement	Large	2	Located outside the critical polluted area in the effect zone
8.	Foundries	Small	8	6 units are in Industrial Area and 2 units are located outside Industrial Area.

~~703009(2020)SSC~~ REGION PANIPAT

9.	Textile Processing	Large and Medium	34	213 units are located in Industrial Areas
		Small	223	Remaining 44 units are located outside industrial area
		Total	257	
10.	Food Processing	Large and Medium	1	Located on G T Road within Municipal area
		Small	0	Within Panipat Town
		Total	1	--
11.	Rice Sheller	Large and Medium	2	Located within Municipal Area of Panipat
		Small	2	
		Total	4	
12.	Others	Large and Medium	40	Located within Municipal Area of Panipat
		Small	109	
		Total	149	

ABSTRACT

Large and Medium Units	84
Small Scale Units	342
Total operating units	426

II. AIR ENVIRONMENT

3.1 PRESENT STATUS OF AIR ENVIRONMENT SUPPORTED WITH MINIMUM ONE YEAR ANALYTICAL DATA

3.1.1 CRITICAL LOCATIONS FOR AIR QUALITY MONITORING

1. Model Town
2. Bus Stand
3. G T Road – Sanjay Chowk
4. G T Road – BBMB
5. Industrial Area – Sector 29 – Part 2

3.1.2 PRESENT LEVELS OF POLLUTANTS IN AIR (ROUTINE PARAMETERS, SPECIAL PARAMETERS AND AIR TOXIC RELEVANT TO THE AREA IN THREE CATEGORIES – KNOWN CARCINOGENS, PROBABLE CARCINOGENS AND OTHER TOXIC)

AMBIENT AIR QUALITY AND NOISE MONITORING

The Continuous Ambient Air Quality Monitoring Station has been installed by Haryana State Pollution Control Board at Regional Office, Panipat to check the quality of Ambient Air. The station has been installed at Sector-18, HSVP, Panipat. Parameters PM10, PM2.5, NO, NO2, Nox, Sox, SO2, Benzene, VOC, Ozone along with other parameters such as Solar Radiation, Relative Humidity, Temperature, Rain Fall, Wind Direction, Wind Speed. The values of above said parameter can be seen at any time to check the ambient quality of the air.

3.1.3 PREDOMINANT SOURCES CONTRIBUTING TO VARIOUS POLLUTANTS

1. Industrial Stack Emissions
2. Industrial Process Emissions
3. Automobile Exhaust
4. Bad Road Conditions
5. Railway Goods Yard

3.2 SOURCE OF AIR POLLUTION VIZ INDUSTRIAL, DOMESTIC (COAL & BIOMASS BURNING), NATURAL AND TRANSPORT & HEAVY EARTH MOVERS

INDUSTRIAL EMISSIONS

The industries located within municipal limits and in its surrounding areas,

as mentioned above and other small spinning & finishing mills contribute to air pollution. Textile units using mainly wood and cow dung cakes, coal, rice husk as fuel. The polluting industrial units are being monitored and appropriate action is taken against violators under the law.

AIR POLLUTION CONTROL

Each unit located in Municipal Area have installed the Air Pollution Control Devices (APCD) wherever required and so far 356 units located in and around Panipat have installed the APCD, closure action has been taken against the defaulting units which were not complying in this regard.

Industries

Total Industries Covered under Air Act, 1981	417
Units required APCD	251
Units installed APCD	251
Units not required APCD	166

Brick Kilns

Total Brick Kilns Covered under Air Act, 1981	89
Units required APCD	89
Units installed APCD and converted into zig-zag technology	89

Apart from the above mentioned textile units, there are more than 150 spinning and finishing units which are although not having the water polluting process but contributes air emissions in the form of fiber dust from spinning mills and boiler emissions from the finishing mills along with the air emissions and noise emission from DG sets installed by such type of units.

3.3 AIR POLLUTING INDUSTRIES IN THE AREA / CLUSTER

Large and Medium Units	73
Small Scale Units	431
Total operating units	504

17 Category Units	07
Grossly Polluting Units	09

3.4 IMPACT OF ACTIVITIES OF NEARBY AREA ON THE CEPI AREA

Industrial process emissions and stack emissions are treated to some extent but automobile exhaust and air pollution due to bad road conditions are not containable. The effects and impact is moderate in the neighborhood of the CEPI Area. However, vehicle parking has been established under the elevated bridge of Panipat due to which congestion on the road has been reduced and thereby helpful in maintain ambient air quality condition. Also, battery operated vehicle are plying on the road in order to reduce the use of diesel operated vehicle. One CNG station has also been started in District Panipat.

3.5 QUANTIFICATION OF THE AIR POLLUTION LOAD AND RELATIVE CONTRIBUTION BY DIFFERENT SOURCES

The estimated amount of Air Pollution in the Study Area is 7500 Kg/ Day in terms of Particulate Matter.

3.6 ACTION PLAN FOR COMPLIANCE AND CONTROL OF POLLUTION

3.6.1 EXISTING INFRASTRUCTURE FACILITIES – AMBIENT AIR QUALITY MONITORING NETWORK

The Continuous Ambient Air Quality Monitoring Station has been installed by Haryana State Pollution Control Board at Regional Office, Panipat to check the quality of Ambient Air. The station has been installed at Sector-18, HSVP, Panipat. Parameters PM10, PM2.5, NO, NO2, Nox, Sox, SO2, Benzene, VOC, Ozone along with other parameters such as Solar Radiation, Relative Humidity, Temperature, Rain Fall, Wind Direction, Wind Speed. The values of above said parameter can be seen at any time to check the ambient quality of the air. Besides this 01 No. AAQ stations has been provided by IOCL, Panipat at Police Line Panipat. Also there is a requirement of more CAAQM station at the critical location mentioned at 3.1.1.

3.6.2 POLLUTION CONTROL MEASURES INSTALLED BY THE INDIVIDUAL SOURCES OF POLLUTION

Use of pet coke has been completely banned in compliance of Hon'ble Supreme Court Order. PNG pipelines are being laid by the concerned agencies to switch over to natural fuel. 20 No. of units have been converted their fuel to PNG. The other detail has already been given at 3.2.

3.6.3 TECHNOLOGICAL INTERVENTION

3.6.3.1 INVENTORISATION OF PROMINENT INDUSTRIES WITH TECHNOLOGICAL GAPS

17 category units has converted their APCD from wet scrubber and cyclone to electrostatic precipitators. Besides this efforts are being made to sensitize the industrial units to convert to PNG.

STATUS OF APCM OF MAJOR INDUSTRIAL UNITS LOCATED WITHIN MUNICIPAL LIMIT OF PANIPAT

PANIPAT CO-OPERATIVE SUGAR MILLS LTD

The Sugar Mill has two stacks on four boilers of Capacity 15 MT/hour – 3 Nos. and 25 MT/hour – 1 No. and the emission levels are complying the standards. The wet scrubbers installed for control of air emissions are performing well.

NATIONAL FERTILIZERS LIMITED

NFL, Panipat has installed APCDs and comply the standards for emission. The unit also has captive power plant installed with ESPs as APCM and achieving the norms. The unit is in the process of implementation of Ammonia feed stock revamping by changing over of the feed stock and fuel from fuel Oil to natural gas. At present 9.654 MKCal energy per tone of Urea is consumed and it shall be reduced to 7.614 MKCal / MT leading to 1/3 reduction in coal and steam consumption by implementation of this project which is targeted to complete upto March, 2013. Therefore the Board anticipates that the emission of green house gases from NFL, Panipat will be reduced considerably on the completion of the proposed project.



ESPs INSTALLED IN NATIONAL FERTILIZERS LIMITED, PANIPAT

STATUS OF APCM OF MAJOR INDUSTRIAL UNITS LOCATED OUTSIDE MUNICIPAL LIMIT OF PANIPAT

INDIAN OIL PANIPAT REFINERY

IOCL, Panipat Refinery operates Captive Power Plant of 225 MW capacity for meeting steam and power requirement and Six Sulphur Recovery Units (SRU) with total Sulphur recovery capacity of 1130 Tonnes per day (2X115 TPD, 4X225 TPD). There are 48 stacks equipped with Air Pollution Control Measure (APCM) and are integrated to OCEMS server for real time monitoring of stack emission parameters. Re-liquefied Natural Gas (RLNG), Refinery Fuel gas (<150 mg/Nm³) and low sulfur (<0.5wt. %) liquid fuel is used for power/steam generation and process heat requirement.

Panipat Naphtha Cracker Complex operates Captive Power Plant of 238 MW capacity for meeting steam and power requirement. All 17 stacks of the complex are

equipped with Air Pollution Control Measure (APCM) and are integrated to OCEMS server for real time monitoring of stack emission parameters. Mainly Re-liquefied Natural Gas (RLNG) is used for power/steam generation and process heat requirement.

Both the units are meeting the air emissions standards as prescribed by MoEFCC, CPCB and HSPCB.

PANIPAT THERMAL POWER STATION

There were eight units at PTPS but after phasing out of Unit-1 to 5, now PTPS has been left with maximum generation capacity of 710 MW electricity only as under.

Sr No	Unit	Capacity (MW)	Coal Consumption (M Ton/Hr) on full load	Plant Load Factor for 2020-21(%)
1	6	210	120	2.82
2	7	250	150	28.29
3	8	250	150	24.98

As it can be seen from the above table, the PLF of the units at PTPS had remained quite low during 2020-21 as such consumption of coal on actual basis is quite less. LDO is used only for start up of the unit. The unit has two stacks installed with three ESPs. AAQ and SPM level of two stacks is within the prescribed norms and the installed ESP are working satisfactorily on all the stacks.



PANIPAT THERMAL POWER STATION]

2. AUTOMOBILE EXHAUST

Panipat being located on G T Road, one among the busiest highways of the nation and possessing industrial and trade importance, automobile exhaust contribute significantly to Air Pollution. Inadequate local transport means, absence peripheral by-pass roads, encroachment of roads and lanes, inadequate traffic management, etc aggravate the contribution level of automobile exhaust to Air Pollution. The fuel used in most of the vehicles is either diesel or petrol. One CNG Station has been installed in Panipat. The detail and approximate quantity of vehicles registered with the Registration Authorities and vehicles passing through Panipat are

Number of vehicles passing Panipat Town daily through NH-I	44000
Number of vehicles entering daily into Panipat except through NH-I	11500
Number of light vehicles registered	250000
Number of Commercial vehicles registered	12000
Number of Commercial vehicles older than 15 years	1200
Number of other vehicles older than 15 years	300



TRAFFIC CONGESTION UNDER PANIPAT FLYOVER ON G T ROAD

Earlier, Heavy flow of Commercial Vehicles from Rohtak Road and other entry roads enter into Panipat City even though their destination is not Panipat which results in heavy traffic congestion and creates lot of air and noise pollution in the city. The project for providing bypass to connect NH 71 - A from Village Dahar to G.T. Road at Village Sewah has been completed and due to which the undue vehicle is now not passing through the Panipat City. Vehicle parking has been established under the elevated bridge of Panipat due to which congestion on the road has been reduced and thereby helpful in maintain ambient air quality condition. Also, battery operated vehicle are plying on the road in order to reduce the use of diesel operated vehicle. One CNG station has also been started in District Panipat.

3. RAILWAY GOODS HANDLING

Panipat has Railway Goods Handling Yard at the Centre of the City. Goods such as cement, clinker for cement industry, etc are handled at large volumes. This contributes to considerable amount of Air Pollution in the area.

4. BURNING OF WHEAT STUBBLE/PADDY STRAW IN OPEN FIELDS

Wheat stubble as well as paddy straw which is left over during the harvesting

season of wheat and paddy is burnt in some areas by the farmers which causes the air pollution in the area. To curb the burning of wheat stubble/paddy straw in open fields, the Board has launched the awareness campaign for the farmers on this issue and has organized the awareness programmes at each block level in association with the Agriculture Department and District Administration. Besides this challan of 173 farmers have been made by this office during the period 2017-19 in association with Agriculture Department and District Administration and amount of Rs.4,50,000/- has been collected from the violators. Prosecution action against 04 No. of farmers has also been initiated and complaint has been filed in Special Environment Court, Kurukshetra.

3.6.3.1 IDENTIFICATION OF LOW COST AND ADVANCED CLEANER TECHNOLOGY FOR AIR POLLUTION CONTROL

1. Conversion of furnaces / boilers wherever solid fuel is in use into Fluidized Bed Type.
2. Use of lime bed in furnaces wherever feasible.
3. Conversion to PNG.
4. Restriction on diesel operated auto-rickshaw and battery operated auto-rickshaw shall be encourage.

3.6.3.2 INTRODUCTION AND SWITCH OVER TO CLEANER FUEL

Use of pet coke has been completely banned in compliance of Hon'ble Supreme Court Order. PNG pipelines are being laid by the concerned agencies to switch over to natural fuel. 20 No. of units have been converted their fuel to PNG.

3.6.4 NEED OF INFRASTRUCTURE RENOVATION

3.6.4.1 DEVELOPMENT OF ROADS

The following roads are needed to be renovated / repaired

1. Gohana Road
2. Sanoli Road
3. Barsat Road
4. Jattal Road
5. Babail Road
6. Internal Roads of Industrial Areas

3.6.5 IMPACT OF CEPI SCORE AFTER INSTALLATION / COMMISSIONING OF FULL FLEDGED AIR POLLUTION CONTROL SYSTEMS

The impact of CEPI Score after implementation of Action Plan points shall be notable and anticipated within safe limits.

3.6.6 MANAGERIAL AND FINANCIAL ASPECTS

3.6.6.1 COST AND TIME ESTIMATES

All concerned departments and agencies shall be asked to give cost and time estimates.

3.6.6.2 IDENTIFIED PRIVATE/PUBLIC SECTOR POTENTIAL INVESTORS AND THEIR CONTRIBUTION/ OBLIGATION

Yet to be identified

3.6.6.3 GOVERNMENT BUDGETARY SUPPORT REQUIREMENT

To be obtained from the Finance Department

3.6.6.4 HIERARCHICAL AND STRUCTURED MANAGERIAL SYSTEM FOR EFFICIENT IMPLEMENTATION

Hierarchical and Structured Managerial System for Efficient Implementation is yet to be devised & decision to be taken by the Govt. of Haryana.

3.6.7 SELF MONITORING SYSTEM IN INDUSTRIES (Stacks, APCDs, ETC)

115 No. of units have been directed to install online emission monitoring system on their stacks.

3.6.8 DATA LINKAGE TO SPCB/CPCB (OF MONITORING DEVICES)

113 No. of units have been connected to the SPCB/CPCB server and rest 02 No. of units are under process of connectivity to SPCB/CPCB Server.

V. PROPOSED ACTION POINTS

Agenda Item No.6- Municipal Corporation, Panipat (MCP):

2.	Short Term Action Points with regard to Air environment.	Latest status report
(a)	The MCP will prepare the parking policy in their jurisdiction:	Municipal Corporation is under process of converting the Waste site into Green Parks.
4.	Long Term Action Points with regard to Air environment.	Latest status report
(a)	MCP will synchronize traffic signals on the roads in their jurisdiction to de-congest the traffic flow:	The work is under process.
(b)	MCP has to submit the annual estimate for road repairs within their jurisdiction:	The work is under process.

Agenda Item No.7- Public Work Department (Building & Road):

1.	Long Term Action Points with regard to Air environment.	Latest status report
(a)	PWD (B&R) Department will synchronize traffic signals on the roads in their jurisdiction to de-congest the traffic flow:	Synchronization of traffic signal has been made by the Department.
(b)	PWD (B&R) Deptt. Panipat has to submit proposal for constructing the by-pass roads for Panipat town:	This Bye-pass has been completed and opens for traffic.
(c)	PWD B & R has to submit the annual estimate for road repairs with in their area within MC limit:	The riding surface of all the PWD B&R road within Municipal Corporation limit are in good condition. However, the potholes/patchwork if developed will be attended immediately.

Agenda Item No.8- Regional Transport Authority (RTA):

1.	Short Term Action Points with regard to Air environment.	Latest status report
(a)	The Secretary, RTA, Panipat will submit detail of CNG stations shall be provided for control of vehicular pollution.	One CNG station is working in Panipat Distt.
(b)	The Secretary RTA will submit detail of audit carried out of all vehicular emission checking facilities existing in Panipat town in the year 2013-14, 2014-15, 2015-16, 2016-17 & 2017-18.	A team has been constituted for inspection the pollution centres under the chairmanship of Motor Vehicle Inspector 2013-14 -31 2014-15 -01 2015-16 -02 2016-17 -05 2017-18 -03 2018-19 -04 2019-20 -03 Total =49
2.	Long Term Action Points with regard to Air environment.	Latest status report
(a)	The Secretary, RTA, Panipat will submit detail of banned commercial vehicles, which are more than 15 years old in the year 2013-14, 2014-15, 2015-16,2016-17 & 2017-18.	No vehicle is plying in District Panipat after the age of 15 years

Agenda Item No.9- National Highway Authority of India (NHAI):

1.	Long Term Action Points with regard to Air environment.	Latest status report
(a)	NHAI Department will synchronize traffic signals on the roads in their jurisdiction to de-congest the traffic flow.	Efforts are being made to synchronize the traffic signals.
(b)	NHAI Deptt. Panipat has to submit proposal for constructing the by-pass roads for Panipat town	Bye-pass has been completed and opens for traffic. Work is under process for construction of road from Sonapat to Panipat.

Agenda Item No.10- Railway Department.

1.	Long Term Action Points with regard to Air environment.	Latest status report
(a)	Loading/ unloading of clinkers/ cement material at railway yards, causes dust emissions in the area:	Station Superintendent informed that loading/ unloading of clinkers/ cement material at railway yards stopped since last 05 years & cement is transported by road.

Agenda Item No.12- Panipat Thermal Power Plants, Panipat (PTPS):

3.	Short Term Action Points with regard to Air environment.	Latest status report
(a)	Unit will submit the latest status of installation of Dust suppression system in coal handling section.	It is informed that Unit#1 to 5 of PTPS, Panipat has been phased out. The Coal Handling Plant of Unit#1 To 4 i.e. CHP-I has been dismantled completely & the Coal Handling Plant of Unit#5 i.e. CHP-II is being used for Unit#6 rarely as running of Unit#6 is very less. However the dust suppression system at wagon tipplers, conveyors belts etc. installed in the existing Coal Handling Plants of PTPS, Panipat are in working condition.
(b)	Water Sprinkling System has been provided only in Coal Handling Unit No. 3 and PTPS will also provide the same in the Coal Handling Units No. 1 and 2 also.	It is informed that Unit#1 to 5 of PTPS, Panipat has been phased out. The Coal Handling Plant of Unit#1 To 4 i.e. CHP-I has been dismantled completely & the Coal Handling Plant of Unit#5 i.e. CHP-II is being used for Unit#6 rarely as running of Unit#6 is very less. The water sprinkling system including pre wetting of existing Coal Handling Plants are working satisfactorily. The water sprinkling on the coal stock is also been carried out on regular basis.
4.	Long Term Action Points with regard to Air environment.	Latest status report
(a)	All the new boiler/ thermic fluid heater/	LDO is being used.

	furnaces installed should use cleaner fuel viz. CNG/ LNG/ LPG/ HSD.	
(b)	The unit has to submit the latest status for up-gradation of ESPs and for control of air emissions for unit No. 5, 6, 7 & 8.	Installed ESP in Unit#7&8 is working satisfactorily and complying with SPM norms. Further ammonia flue gas conditioning system has also been installed for further improvement
(c)	Disposal of Fly Ash collected in the ash ponds will be disposed off by PTPS as per schedule & provisions given in the fly ash notification.	<p>As per the General Statutory Rules Notification GSR 285 (E) dated 22.04.2021 circulated by MoEF, wherein it is proposed to lift the complete legacy ash in the next 10 years from the date of notification in addition to 100% Ash Utilization norm. As per the notification, the utilization of legacy ash should be completed fully within 10 years from the date of publication of the Notification. This would be over and above the utilization targets prescribed for ash generation through current operations of that particular year. MoEF has proposed huge penalty @ Rs. 1000/- MT for the shortfall in the set targets.</p> <p>Adequate steps have been taken to maximize the ash utilization and hence minimizing the penalty. The pond ash lifting in the year 2020-21 was 30.15 Lakh MT as compared to 8.18 Lakh MT in the year 2019-20, which is mainly because of lifting of pond ash by NHAH for their various ongoing projects in the vicinity of PTPS. PTPS is bearing the cost of transportation for these NHAH projects as per the MoEF notification. Further, efforts are being made for utilization of ash by NHAH for other projects; complete evacuation of Ashdyke-B by M/s. Shree Cement along with its forestation; signing of long term agreement with M/s. Ambuja Cement Limited for lifting of 5 Lakh MT pond ash on annual basis. In addition, various local lifters are also lifting the pond ash for localfilling purpose from time to time as per the demand.</p>
(d)	PTPS will install the water sprinklers for dust suppression on Ash Dykes.	Water tankers keep on sprinkling the water all around the ashdyke area. Majority of the Ashdyke is already covered with vegetation, which prevents flying of pond ash during windy seasons. Two no. borewells are already operational and more sprinklers are being installed. There is some delay in commissioning of the borewells due to non-availability of necessary spares due to ongoing pandemic. However, these will be commissioned soon. In addition, the trucks

		are fully covered with tarpaulin before moving out of the ashdyke. The lifting of Pond ash is restricted during day time in case of heavy winds.
(e)	Installations of online continuous stack monitoring by 17 category (L&M) polluting units and networking the same with State and National Database.	CEMS is installed and real time parameters are networked with national as well as state database.

Agenda Item No.13- National Fertilizers Limited (NFL)

3.	Long Term Action Points with regard to Air environment.	Latest status report
(a)	All the new boiler/ thermic fluid heater/ furnaces installed by the NFL should use cleaner fuel viz. CNG/ LNG/ LPG/ HSD.	Implemented GTG-Cum-HRSG modernization Scheme at Panipat, consisting of 1 No. Gas Turbo Generator (GTG) 20 MW, along with dedicated Heat Recovery Steam Generator (HRSG) Boiler using cleaner fuel Natural Gas. Expenditure of Rs.18918.91 lakh for above scheme.
(b)	NFL has not submitted any proposal regarding installation of sprinkler for dust suppression of Fly Ash.	NFL Panipat is having 4 ash ponds. A dense thick green belt has been developed in the area. These trees act as natural pollution inhibitor and helps in maintaining the ecological balance. Out of 4 ponds, two ponds are active and taken in line, for ash slurry disposal, alternately. Due to alternate use, these ponds remain wet. Moreover, water is being sprayed on fly ash from time to time. Plantation in house also being done for maintaining dense greenery surrounding the Ash Ponds.
(c)	Installations of online continuous stack monitoring by 17 category (L&M) polluting units and networking the same with State and National Database.	NFL has installed On Line Continuous Monitoring System for stack emission in the year 2015 as per guidelines received from CPCB and the data is being communicated to CPCB Server & HSPCB server through clouding.
(d)	The project is under implementation which will result reduction of Coal Consumption to less than 1200 MT / day i.e. 33% by implementation of Ammonia Revamp Project. This will help to reduce Air, Water and Land Pollution considerably.	Ammonia Feed Stock Change over Revamp Project (AFCP) has been completed successfully in 2013 by which steam generation requirement has reduced significantly and also Natural Gas is used as supporting fuel in Coal fired boiler. As a result, coal consumption in Panipat unit has reduced to less than 1000/MT.

Agenda Item No.14- Indian Oil Corporation Limited (IOCL)

3.	Long Term Action Points with regard to Air environment.	Latest status report
(a)	All the new boiler/ thermic fluid heater/ furnaces installed by the NFL should use cleaner fuel viz. CNG/ LNG/ LPG/ HSD.	Noted & will be Complied. However, both RLNG & Low Sulfur Liquid Fuel provision shall be kept to meet any emergency situation such as non-availability of RLNG.

(b)	Installation of online continuous stack monitoring to be installed by IOCL and networking the same with State and National Database.	Complied
(c)	Panipat Oil Refinery (IOCL) to submit the plan for installation of flare gas recovery system from flare towers.	Complied

Agenda Item No.15- Panipat Naphtha Cracker Project, Panipat

3.	Long Term Action Points with regard to Air environment.	Latest status report
(a)	All the new boiler/ thermic fluid heater/ furnaces installed by the Panipat Naphtha Cracker Project should use cleaner fuel viz. CNG/ LNG/ LPG/ HSD.	Noted and Will be Complied.
(b)	Installation of online continuous stack monitoring to be installed by Panipat Naphtha Cracker Project and networking the same with State and National Database.	Complied.
(c)	Panipat Naphtha Cracker to submit the plan for installation of flare gas recovery system from flare towers.	Not applicable.

Agenda Item No.16- Shree Cement Ltd. (Jay Pee Cement Grinding Unit)

3.	Long Term Action Points with regard to Air environment.	Latest status report
(a)	All the new boiler/ thermic fluid heater/ furnaces installed by the Shree Cement should use cleaner fuel viz. CNG/ LNG/ LPG/ HSD.	There is no requirement of thermic fluid heaters, boilers. We have DG sets in which only 1250 kva in operational, where HSD is used to run the generator in case of Emergency power failure.
(b)	Installation of online continuous stack monitoring to be installed by Shree Cement and networking the same with State and National Database.	Online continuous stack monitoring system installed and data transferred to HSPCB and CPCB.
(c)	Control of visible fugitive emission from loading yard and truck parking areas	APCM operating effectively and stack monitoring result is well within limit. Entire truck parking and loading area are concreted. Vacuum sweeping machines deployed for maintaining good housekeeping.

Agenda Item No.17- Ultra Tech Cement Limited

3.	Long Term Action Points with regard to Air environment.	Latest status report
(a)	All the new boiler/ thermic fluid heater/ furnaces installed by the Ultra Tech	NA, As DG set is used during power failure for

	Cement should use cleaner fuel viz. CNG/ LNG/ LPG/ HSD.	emergency
(b)	Installation of online continuous stack monitoring to be installed by Ultra Tech Cement and networking the same with State and National Database.	Complied.
(c)	Control of visible fugitive emission from loading yard and truck parking areas	Complied

Agenda Item No.18- Haryana Organics, Samalkha

3.	Long Term Action Points with regard to Air environment.	Latest status report
(a)	All the new boiler/ thermic fluid heater/ furnaces installed by the Haryana Organics should use cleaner fuel viz. CNG/ LNG/ LPG/ HSD.	Unit has already installed ESP as APCM and parameters are within limit.
(b)	Installation of online continuous stack monitoring to be installed by Haryana Organics and networking the same with State and National Database.	Unit has already installed husk feed Boiler with cogeneration 3 MW Turbine. In the path of flue gases WPH, APH & most modern latest technology ESP (Electrostatic Precipitator) with three fields and now added 4 th field to maintain emission of flue gasses from RCC Stack height as per HSPCB norms. We have also installed online continuous stack monitoring devices and connected to CPCB & HSPCB.

Agenda Item No.19- Panipat Co-operative Sugar Mill, Panipat

3.	Long Term Action Points with regard to Air environment.	Latest status report
(a)	All the new boiler/ thermic fluid heater/ furnaces installed by the Panipat Co-operative Sugar Mills should use cleaner fuel viz. CNG/ LNG/ LPG/ HSD.	Bagasse is generated after extraction of juice from sugarcane which is widely used all over the world as boiler fuel in sugar industry. Bagasse is renewal energy source and also eco friendly after burning of bagasse 12-14% Co ₂ is generated and the same amount of Co ₂ is observed by the cane during growing Phase and after installation of ESP. We easily that the desired parameter of the flue gas as per norms of CPCB.
(b)	Installation of online continuous stack monitoring to be installed by Panipat Co-operative Sugar Mills and networking the same with State and National Database.	On stack wet scrubber with latest venture system is working satisfactory.

Agenda Item No.21- Industries/HSPCB

2.	Short Term Action Points with regard to Air environment.	Latest status report
(a)	Compliance of Air Emission Norms	As per the directions of Hon'ble Supreme Court Petcoke fired industries has started using coal as a fuel. Total 675 No. of units (Industries+BKO) are covered under Air Act, 1981. APCM installed= 462 Nos. (Industries+BKO) Unit.
(b)	Performance monitoring of APCDs of major polluting industry.	Total 9 No. of units are operating in District Panipat covered under 17 Category. All 17 Category units have provided online monitoring system. Details of which are continuously transferred to the server of CPCB and HSPCB.
(c)	Awareness campaign to curb burning of wheat stubble/ paddy straw in open fields and for other Environmental issues and involvement of NGOs. Industrial Association and Student community.	Awareness Programmers are conducted before harvesting season of Wheat/Paddy to stop burning of wheat stubble/paddy straw in open fields. Total Environment compensation collected for Wheat Stubble and Paddy Straw burning is Rs.1,80,000/- Paddy Straw cases=70
(d)	Installation of New Air Monitoring stations in Panipat	IOCL has provided Continuous Online Monitoring Station for Ambient Air Quality at Police Line, Panipat. Demarcation of new Ambient Air Quality Monitoring Station is under consideration.
4.	Long Term Action Points with regard to Air environment.	Latest status report
(a)	Adoption of Clean Technologies, including use of low sulphur fuel and clean fuel by the industry.	M/s NFL has starting using natural gas as fuel and has adopted cleaner technology. Direction has been issued u/s 18 (1)(b) by CPCB for adoption of cleaner technology by the industry.
(b)	Installation of online continuous stacks monitoring by Highly Polluting (L&M) air polluting units and networking of the same with State and National Database.	All the L&M Category units have been issued direction to install online continuous stack monitoring system. Besides this 09 No. of highly polluting units have installed online monitoring system and is transferring data to HSPCB & CPCB server.

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