

# **Action Plan for control of Air Pollution from Non-Attainment City - Patiala**

## **INTRODUCTION**

Patiala district is one of the famous princely States of erstwhile Punjab. Forming the south-eastern part of the state, it lies between 29°49' and 30°47' North latitude, 75°58' and 76°54' East longitude. It is surrounded by the districts of Fatehgarh Sahib & Roopnagar and the Union Territory of Chandigarh in the north, Sangrur district in the west, Ambala and Kurukshetra districts of neighboring State of Haryana in the east and Kaithal district of Haryana in the south. It is important city located in Malwa region of South Eastern part of Punjab. The city is well connected by roads and is located at a distance of about 75 km towards southwest from Chandigarh. It lies 25 km away from the Grand Trunk Road (i.e. National Highway No. 1) and is about 250 km from Delhi.

**District Patiala in the map of Punjab**



The Patiala district is sub-divided into 6 sub-divisions/tehsils, 3 sub-tehsils and 8 blocks as

under:

Sr. No.	Sub divisions/ Tehsils	Sub Tehsils	Blocks	No. of Villages
1	Patiala	-	Patiala, Sanaur	271
2	Rajpura	Ghanaur	Rajpura, Ghanaur	277
3	Nabha	Bhadson	Nabha	174
4	Samana	-	Samana	61
5	Patran	-	Patran	76
6	Dudhan Sadhan	-	Bhunerheri	96

Patiala town has been identified as one of the non-attainment towns/cities as the ambient quality was not conforming to the National Ambient Air Standards laid down by the MoEF vide notification dated 16.11.2009. The Deptt. Of Town & Country Planning, Punjab has prepared Master Plan for Patiala City and the different areas have been earmarked for different land uses as per prevailing situation. The urbanizable limits of Patiala City are far beyond the M.C. limits of the city and the urbanizable limits of the city have been delineated in the Master Plan. The urbanizable limits of the city is culminating in the jurisdiction of following villages located on the main roads leading to different directions.

Sr. No.	Name of the road	Name of the village upto which the urbanizable limit is culminating
1.	Sirhind Road	Village Nandpur Kesho
2.	Rajpura Road	Village Gaunspura
3.	Bhunerheri Road	Village Hiragarh
4.	Samana Road	Village Dhakarba
5.	Sangrur Road	Village Sadarpur
6.	Nabha Road	Village Dhablan
7.	Bhadson Road	Village Sidhuwal

There are no. of sensitive receptors such as habitation area, educational institutions, hospitals, religious place and wild life sanctuaries within the urbanizable limits of the city which are regulated as per Master Plan of the city. Although, there are six wild life sanctuaries, however, only one wildlife sanctuary namely Bir Moti Bagh is located within the urbanizable limits of the Master Plan.

This Sanctuary is situated at a distance of 5 Km. from Patiala on Patiala-Dakala Road and is spread over 654.00 ha of land area. Black Buck, Chital, Hog Deer, Blue Bull, Wild Boar, Jackal, Rhesus Monkey, Peafowl, Brahminy Myna, Black and Grey Partridges, Quails etc. are found here in this Sanctuary area. A Deer park is also situated in this Sanctuary area. The area was declared as wildlife sanctuary under the Preservation of Fauna of Patiala Act, 1896 vide Patiala and East Punjab State Union Government (PEPSU) notification No. F-150/50 dated 28-2-1952.

As per the guidelines, no new industrial unit shall be allowed to establish within 500 meter radius of Wildlife Sanctuary/ Zoo.

## **ENVIRONMENTAL STATUS OF PATIALA CITY**

### **Industrial Clusters in District Patiala**

There are two industrial clusters i.e. Industrial Focal Point, Patiala, which is located in the revenue estate of Vill. Alipur Arian and Industrial Estate, which is located on Sirhind Road, adjoining to District Industries Centre, Patiala, in the limits of Patiala city. Besides, there are scattered industrial air polluting units such as rice shellers, brick kilns, plastic recycling units, induction furnace, Paper mills, Milk Plants, Engineering Goods industries, Distillery etc. District Patiala has no major industrial towns. There are 182 no. of air polluting industries in the limits of the city and all these units have installed air pollution control devices to contain the concentration of Particulate Matter and other relevant pollutants in the emissions within the standards laid down by the Board. The status of pollution control of the air polluting industries located within the limits of Master Plan of Patiala is given as under:

Sr. No	Type	No. of units	APCD
1.	Pulp & Paper industries	04	04
2.	Milk Plants	02	02
3.	Distilleries	01	01
4.	Induction Furnaces	05	05
5.	Rice Shellers	94	94
6.	Brick Kilns	18	18
6.	Misc. (Food Products, Engg. Goods, Ply Board, Plastic etc.	39	39

## **Regular Monitoring**

- There are 04 no. industries which are covered under 17 categories of industries and the monitoring of these industries is being carried out on quarterly basis. Besides, in compliance to directions issued by the CPCB u/s 18(1)(b) of the Air (Prevention & Control of Pollution) Act, 1981, the distillery unit namely M/s Patiala Distillers & Bottlers has installed online continuous monitoring system for real time monitoring of concentration of SPM in the flue gas emissions. This system is connected with the server of the CPCB and PPCB for online surveillance of the concentration of Particulate Matter. In addition, the PPCB has got installed CCTV cameras in all these four industries for online surveillance of operation of the air pollution control device.

## **Other source of Air Pollution**

With the development of industries, growth of population and rise in living standards, the demand of two wheelers and four wheelers has increased manifolds. National Highway-64 passes through Patiala and very heavy traffic on this National Highway is one of the major contributors towards the ambient air quality of the city. The industries, in and around Patiala, are developing along the link roads & kacha rastas in agricultural land. Due to the movement of heavy goods vehicles like Trucks, Trolleys etc. ferrying sand/gravels from the mining site around the Patiala city, on these link / kacha roads, lot of dust/ vehicular emissions are generated which are also contributing to the ambient air quality of the town and adjoining villages. Although, the Municipal Corporation has provided metaled roads in the city but there is need to upkeep these roads by regular maintenance since, in some of the roads, potholes are existing, which are not only a source of air pollution due to movement of vehicles as the dust collected in these potholes become air borne with the movement of vehicles, but also is a source to hinder the movement of the vehicles due to which more quantity of fuel is consumed and the vehicles require regular maintenance. Although, the State Govt. has constructed southern bye pass to divert the movement of heavy vehicles coming from Tricity, which are to go towards Sangrur to reduce the impact of air pollution of these vehicles on the habitation area of Patiala city. Recently, this bye-

pass has been converted into four laning and same has already been commissioned.

### **Non-Point Sources**

Patiala is surrounded by agricultural fields and burning of rice/ wheat stubble by the farmers in the fields is also adversely affecting the ambient quality of the town. The farmers are regularly persuaded not to burn the stubble in the fields. A special vigil is being kept in the agriculture area during harvesting season for keeping a check over the burning of crop residue in the agricultural fields. The Distt. Patiala has been declared as zero crop burning district by the State Govt. in compliance to the orders passed by the Hon'ble NGT in the case of Vardhman Kaushik Vs. Union of India & Ors. and in order to eradicate the problem of indiscriminate burning of crop residue in the open fields, an action plan for this district has been prepared, which is being primarily implemented by Deptt. Of Agriculture. The role of PPCB in this action plan is only to make the general public aware regarding ill effects of burning of crop residue in the open fields. For this purpose, the Regional Office of the Board displays banners at the prominent places and also the Regional Office sends two vans before harvesting season of rabi and Kharif crops to spread the awareness amongst the farmers by distributing pamphlets and through audio system mentioning the ill effects of burning of stubble in open fields. The Deptt. Of Science, technology & Environment vide notification dated 21.10.2013 has put a complete ban on burning of crop residue in open fields. In compliance to the orders of the Hon'ble National Green Tribunal (NGT) passed on 10.12.2015, District Level Committee was constituted under the Chairmanship of Deputy Commissioner, Patiala. An SMS alert system with the help of Punjab Remote Sensing Centre, Ludhiana has been started in Distt. Patiala to identify the sites of burning of crop residue through satellite. The data bank of all the officers of District Administration, Revenue Department, Police Department, Agriculture Department and Punjab Pollution Control Board of district Patiala have been prepared indicating name of the officer, his mobile no. and e-mail address. Whenever, there is any agriculture residue burning in open fields by the farmers, Punjab Remote Sensing Centre sends SMS along with link on the mobile of the above officers. The District level committee inspects the site of burning of crop and environmental compensation is being imposed against the defaulters.

Although no major construction activities are going on in Patiala, still the private or public sector organizations carrying out any construction activity in the city, who are being checked from time to time to ensure the compliance of Construction & Demolition Management Rules, 2016 by the local authorities, since as per the said Rules, it is the primary duty of the Local Body to ensure that the construction material and the debris generated during construction is handled in an environmentally sound manner.

There are two grain markets in Patiala city out of which one is located at Sirhind Road Patiala and other is located at Sanour Road, Patiala. It has been noticed that significant air pollution is caused due to screening of grains with mechanical screeners in these grain markets especially during the months of April/ May for Rabi crop and October/ November for Kharif crops, thereby, deteriorating the air quality of the city. The Punjab Pollution Control Board has already taken up matter with the Mandi Board to ask all the Arhitiyas to provide proper air pollution control device with their screeners, so the air pollution caused due to screening of grains may be controlled.

There are a number of Dharam Kandas (Weighing bridges) in Patiala city and most of them are located on road sides. The approach roads to these Dharam Kandas have not been stabilized and due to movements of vehicles, the dust becomes air borne which effects the air quality of the city. Therefore, the Punjab Pollution Control Board has issued notice to all the Dharam Kandas to stabilize their approach roads so that air pollution due to movement of vehicles related to Dharam Kandas can be mitigated.

### **Municipal Solid Waste**

About 260 TPD of municipal solid waste is generated from the Patiala city. The Local bodies have not made any arrangements for proper treatment & disposal of the said waste. Presently, the solid waste is dumped in an earmarked site located on Sanour Road, Patiala. Although, the Govt. has divided the entire state into eight clusters for installation of Integrated MSW Management facilities and Patiala is one of the eight clusters. The land for installation of Integrated MSW Management facility for Patiala cluster has been identified in Vill. Dudhar and the environmental Clearance under EIA notification for this project has been obtained. But, at present, the solid waste of the city is collected and dumped. Thus, this

waste at present generates gases like methane, H<sub>2</sub>S and ammonia, which is effecting the ambient air quality of the city. Although, the PPCB and Deptt. of Local Govt. have formulated Ten Point Common Action Plan as a short term measure for Management & Handling of Solid Waste, but the M.C. Patiala is not fully complying with these points. However, the corporation will be pursued to comply with all these points in true letter & spirit, so that anaerobic digestion of organic matter be ruled out, which is the source of generation of gases like methane, H<sub>2</sub>S and ammonia resulting into deterioration of ambient air quality of the city. In addition, the M.C is required to provide proper secondary collection centres so as to ensure no littering of solid waste in the vicinity of secondary collection centres, which becomes a source of nuisance in the area due to odour problem.

### Monitoring of Ambient Air Quality

In order to monitor the ambient air quality of the town, the PPCB has installed two ambient air stations at the following locations.

Sr. No.	Station Name	Zone/Area	Parameters monitored
1.	Kinos Industries, D-244, Focal Point, Patiala	Industrial	So <sub>2</sub> , Nox, SPM
2.	Fire Brigade Station, Sai Market, Patiala.	Commercial/residential mix use	So <sub>2</sub> , Nox, SPM

The monitoring stations are being operated regularly for 24 hours, twice a week i.e. 104 samples are collected in a year. The ambient air data for the period 01.04.2016-31.10.2017 alongwith monthly average are given as under:

#### Station Name: Fire Brigade Office, Patiala

Month	RSPM (PM <sub>10</sub> ) µg/m <sup>3</sup> (limits 100 µg/m <sup>3</sup> )	NO <sub>x</sub> µg/m <sup>3</sup> (limits 80 µg/m <sup>3</sup> )	SO <sub>2</sub> µg/m <sup>3</sup> (limits 80 µg/m <sup>3</sup> )
April 2016	105	13	6
May, 2016	110	12	6
June, 2016	102	13	5
July, 2016	107	14	5
August, 2016	97	12	5
September, 2016	102	12	5
October, 2016	116	12	5
November, 2016	116	13	5
December, 2016	111	12	5

January, 2017	109	11	5
February, 2017	105	11	5
March, 2017	107	11	5
April, 2017	109	11	5
May, 2017	102	11	5
June, 2017	100	10	5
July, 2017	99	10	5
August, 2017	90	10	4
September, 2017	99	12	5
October, 2017	150	15	5
<b>Annual average</b>	<b>107.15 µg/m3</b> <b>(Limits 60 µg/m3)</b>	<b>11.84 µg/m3</b> <b>(Limits 40 µg/m3)</b>	<b>5.05 µg/m3</b> <b>(Limits 50 µg/m3)</b>

**Station Name: Kinos Industries, D-244, Focal Point, Patiala**

<b>Month</b>	<b>RSPM (PM<sub>10</sub>) µg/m3 (limits 100 µg/m3)</b>	<b>NO<sub>x</sub> µg/m3 (limits 80 µg/m3)</b>	<b>SO<sub>2</sub> µg/m3 (limits 80 µg/m3)</b>
April 2016	108	12	5
May, 2016	110	14	5
June, 2016	97	14	5
July, 2016	105	13	5
August, 2016	102	12	5
September, 2016	102	12	5
October, 2016	112	13	5
November, 2016	117	13	5
December, 2016	108	12	5
January, 2017	104	11	5
February, 2017	101	11	5
March, 2017	109	11	5
April, 2017	118	11	6
May, 2017	101	10	5
June, 2017	99	11	5
July, 2017	84	10	5
August, 2017	95	10	5
September, 2017	91	11	5
October, 2017	127	13	5
<b>Annual average</b>	<b>104.73 µg/m3</b> <b>(Limits 60 µg/m3)</b>	<b>11.78 µg/m3</b> <b>(Limits 40 µg/m3)</b>	<b>5.05 µg/m3</b> <b>(Limits 50 µg/m3)</b>

As per National Air Quality Index (AQI), the AQI for the month of August, 2016, June, 2017 to September, 2017 falls in satisfactory category, but for the rest of the months (April, 2016 to July 2016, Sept., 2016 to May, 2017 & Oct., 2017), the AQI falls in moderately polluted category for the ambient air quality monitoring station located at Fire Brigade Office, Patiala. Similarly, the AQI for the month of June, 2016 & June, 2017 to September, 2017 in satisfactory category but for the rest of the months (April, 2016, May, 2016 and July 2016 to May, 2017 & Oct., 2017), falls in moderately polluted category, for the ambient air



quality monitoring station located at Kinos Industries, D-244, Focal Point, Patiala. However, at both above mentioned ambient air quality monitoring stations the AQI falls in good category for NO<sub>x</sub> and SO<sub>2</sub> parameters. Thus, there is a need to tackle the point & non-point sources which are contributing to PM<sub>10</sub>.

### AQI BASED ACTION PLAN

The ambient air quality data for the last one & half year shows that the AQI for SO<sub>2</sub> & NO<sub>x</sub> parameter falls in good category, as such no action is required as far as improvement ambient air quality with respect of both these parameter is concerned. However, the annual average value of PM<sub>10</sub> in the ambient air quality of Patiala city falls in the range of 84 -118 µg/m<sup>3</sup> for most of the months, as such, the graded response action plan to eradicate the problem is given as under: -

Source group**	Action	Implementation period (short/ mid/ long-term)	Time target for implementation *	Responsible agency(ies)	Any other information
Vehicles	1. Launch extensive drive against polluting vehicles for ensuring strict compliance.	Short Term	Continuous & Regular Activity	State Transport Authority(STA)	Pollution Check Centers are being inspected from time to time by the Punjab Pollution Control Board and action is being recommended to State Transport Authority, if any pollution check center is found not proper conducting emission sampling of vehicles.
	2. Launch Public awareness campaign for air pollution control, vehicle maintenance, minimizing use of personal vehicle, lane discipline, etc.	Short Term	Continuous & Regular Activity	STA & Traffic Police	
	3. Re-designing of traffic	Long term	365 days and regular activity	PWD (B&R) and M.C.	A study has been

	congestion points			Patiala.	conducted by IIT Delhi and Thapar University, Patiala to re-design the traffic congestion points such as fountain chowk and entire mall road.
	4. Initiate steps for retrofitting of particulate filters in diesel vehicles, when BS-V fuels are available.	Long Term	---	STA	Policy Matter
	5. Prepare action plan to check fuel adulteration and random monitoring of fuel quality data.	Short Term	Continuous & Regular Activity	Deptt. of Food & Civil Supplies.	
	6. Prepare plan for widening of road and improvement of Infrastructure for decongestion of road.	Long Term	180 days and Regular Activity	Public works Dept.,(PWD, & Municipal Corporation	Widening of Bye-Pass road connecting Patiala-Sirhind Road to Patiala-Rajpura Road. Also widening of Sirhind-Patiala Road.
	7. Install weigh in motion bridges at the borders of cities/towns and states to prevent overloading of vehicles.	Long Term	30 days and Continuous & Regular Activity	National Highway Authority of India & Public Works Department (B & R)	Policy Matter
	8. Synchronize traffic movements /introduce intelligent traffic systems for lane-driving.	Short Term	Continuous & Regular Activity	Traffic Police	
	9. Steps for promoting battery operated vehicles.	Long Term	Continuous & Regular Activity	State Transport Authority (STA)	Policy Matter

	10. Installation of remote sensor based PUC system	Long Term	Continuous & Regular Activity	State Transport Authority (STA)	Policy Matter
Road Dust	1. Mechanical Sweeping of city roads to remove accumulated dust.	Long Term	180 days and Continuous Activity	Municipal corporation	Process initiated for road sweeping project by M.C.
	2. Preparation plan for green buffers along the traffic corridors and Greening of open areas, gardens, community places, schools & housing societies.	Mid Term	180 days and Continuous Activity	NHAI, PWD (B & R) & Municipal Corporation	The M.C. Patiala has identified the stretches, where the green belt can be provided. The entire work of providing city parks and green belts will be done as per the policy issued by the State Govt. vide notification dated 11.05.2017 for maintenance of parks and recreational facilities.
	3. Maintain potholes free roads for free flow of traffic	Mid Term	90 Days and Continuous Activity	NHAI, PWD (B & R), & Municipal Corporation	
	4. Blacktopping metaled roads including pavement of road shoulders.	Mid Term	180 days and Continuous Activity	NHAI, PWD (B & R), & Municipal Corporation	
	5. Wall to wall paving	Mid term	180 days and Continuous Activity	Municipal Corporation	Wall to wall paving will only be provided, where there is no scope of providing green belt.
	6. Introduce water fountain at major traffic	Mid Term	180 days	Municipal Corporation	The municipal corporation is in the process

	intersection wherever feasible				of upgrading the fountains installed at Fountain Chowk and also in the process of providing fountains at Children Memorial Chowk, which are the major traffic intersection of the city.
	7. Stabilization of approach road to Dharam Kandas (Weighing bridges)	Mid Term	180 days	PPCB & Department Weight and Measurement	The Punjab Pollution Control Board has issued notice to all the Dharam Kandas to stabilize their approach roads so that air pollution due to movement of vehicles related to Dharam Kandas can be mitigated
Biomass and garbage burning	1. Launch extensive drive against open burning of bio-mass/ crop residue.	Short Term	Continuous & Regular Activity	Distt. Administration, Department of Agriculture, Department of Co-operative Societies and PPCB	Before harvesting of Rabi and Kharif crops, the Deptt. of Agriculture and PPCB hold awareness camps and spread the awareness amongst the farmers through print media also to make the general public aware regarding the ill effects of burning of crop residue indiscriminately.
	2. Regular check and	Mid Term	180 days & Continuous	Punjab Pollution	Regular inspections are

	control of burning of municipal solid waste.		Activity	Control Board & Municipal Corporation	being carried out by the PPCB from time to time to check & control of open burning of municipal solid waste in different areas of the city. In the past where the MSW was found under fire, fine has been imposed on the M.C. in light of NGT order dated 10.12.2015.
	3. Proper collection of horticulture waste (bio-mass) and its disposal following composting-cum-gardening.	Long term	180 days & Continuous activity	Municipal Corporation	Pilot project of on-site composting of green waste has already been conducted in Yadwindra Enclave and the same has been replicated in six parks and five colleges of the city. The corporation is replicating the same in the remaining areas, where the same is required.
	4. Door to door collection of MSW and providing proper secondary collection points	Mid Tern	180 days & continuous activity	Municipal Corporation	The Municipal Corporation has recently started converting open secondary collection points into underground storage bins and static compactor system. Further, request for proposal (RFP) is being

					finalized for 100% door to door collection of MSW from each household.
	5.Construction of advanced waste management Site.	Long Term	---	Municipal Corporation	Integrated MSW Management facilities for Patiala city is to be installed in the revenue estate of Vill. Dudhar, Tehsil & Distt. Patiala and the environmental Clearance under EIA notification for this project has been obtained from MoEF. Further course of action is being taken at the Govt. level, being policy matter.
Industries	1.Identification of brick kilns and their regular monitoring including use of designated fuel and closure of unauthorized units.	Short Term	Regular & Continuous Activity	Punjab Pollution Control Board	All the Brick Kilns have already been identified and their regular monitoring is being carried out to check the compliance of code of practice, emission standards by way of conducting emission sampling and to ensure that no illegal fuel is used for burning purpose. The Brick Kiln are also advised to adopt best firing practices for complete combustion of fuel.

	2. Conversion of natural draft brick kilns to induced draft.	Long Term	By 31.03.2019	Punjab Pollution Control Board	There are 18 brick kilns, which are located within a radius of 10 km from the boundaries of the Patiala city. These brick kilns may have effect on the ambient air quality of the city. Out of these brick kilns, 5 brick kilns have been converted from BTK to High draught technology with zig zag brick stacking.
	3. Action against non-complying industrial units	Short Term	Within one month and continuous activity	Punjab Pollution Control Board	The air polluting industries are being visited from time to time as per the frequency fixed by the PPCB to check the compliance of various pollution control laws. In case, any unit is found in violation of provisions of any Act/ Rule; then action under the relevant Act/ Rule is initiated against such unit.
	4. Promoting cleaner production in industries.	Mid Term	180 Days and regular activity	Punjab Pollution Control Board	
	5. Fugitive emission control	Mid Term	Within six months and continue as regular activity	Punjab Pollution Control Board	

	6. Installation/upgradation of air pollution control system	Mid Term	180 days and continuous activity	Punjab Pollution Control Board	All the air polluting units have installed air pollution control devices. However, if any unit is found not meeting with the emission standards, the same is being pursued to upgrade the APCD or to switch over cleaner technology. All the plastic granules manufacturing units from waste Plastic will be asked to upgrade their existing APCDs.
	7. Use of alternate fuel	Mid Term	180 days and continuous activity	Punjab Pollution Control Board	M/s Federal Mogul Goetze Pvt. Ltd. has switched over to cleaner fuel by using CNG instead of LDO in the melting furnaces. The other major industries will also be pursued to use cleaner fuel.
Construction and Demolition activities	1. Enforcement of Construction and Demolition Waste Rules	Long Term	360 days	Punjab Pollution Control Board and Municipal Corporation	Identification of site for dumping of construction & Demolition waste is under process. The Corporation is also planning to install construction & demolition waste facility.



	1. Control measures for fugitive emissions from material handling-conveying and screening operations through water sprinkling, curtains, barriers and dust suppression units.	Short Term	Within one month and continuous activity	Punjab Pollution Control Board and Municipal Corporation	The corporation has planned to impose a condition for control of fugitive emissions to be generated during handling of constructional material in the construction projects, while sanctioning layout plans.
	2. Ensure Carriage of construction material in closed / covered vessels.	Short Term	Within one month and continuous activity	RTA	
Other Steps	1. Air Quality Index to be calculated and disseminated to the people through website and other media.	Mid Term	Within one month and continuous activity	Punjab Pollution Control Board	As per air quality being monitored by the PPCB at two stations, the air quality index either remains satisfactory or moderate in most of the times every year. Now, the PPCB has started continuous ambient air monitoring station in the premises of PPCB office at Nabha Road, Patiala for real time monitoring of ambient air quality.
	2. Engage with concerned authorities on continual basis for maximizing coverage of	Long Term	Continuous Activity	State Govt.	Policy Matter

	LPG /PNG for domestic and commercial cooking with target of 100% coverage.				
	3. Monitoring of DG sets and action against violations.	Short Term	Within one month and continuous activity	Punjab Pollution Control Board & Municipal Corporation	-
	4. Installation of Air Pollution Control Devices on the mechanical screeners installed in Grain markets by Arhitiyas (Commission Agents)	Long Term	365 days	Mandi Board	The Punjab Pollution Control Board has already taken up matter with the Mandi Board to ask all the Arhitiyas to provide proper air pollution control device with their screeners, so the air pollution caused due to screening of grains may be controlled.

### Monitoring mechanism for implementation

Action plan will be implemented by the committee comprising of following officers:

- DC Patiala – Chairman
- Commissioner Municipal Corporation, Patiala – Member
- Punjab Pollution Control Board – Member Convener
- Department of PWD and B & R – Member
- Department of Mandi Board – Member
- Department of Legal Metrology - Member
- Department of Food & Civil Supplies and Consumer Affairs – Member
- National Highway Authority of India – Member
- Department of Agriculture – Member
- Co-operative Societies - Member
- Department of Transport – Member
- Traffic Police- Member

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