

ACTION PLAN

FOR

THE CONTROL OF AIR POLLUTION

IN

KHURJA CITY



REGIONAL OFFICE
UTTAR PRADESH POLLUTION CONTROL BOARD
F-5, JAMUNAPURAM COLONY, BULANDSHAHR

1. INTRODUCTION

Khurja is a city (and a municipal board) in the Bulandshahr district in the Indian state of Uttar Pradesh. It is situated around 85 km from Delhi. Khurja supplies a large portion of the ceramics used in the country, hence it is sometimes called The Ceramics City. The town is also famous for its special sweet, known as "khurchan". The name Khurja is derived from the Urdu word kharija meaning, cancelled or condemned, as the revenue for this town was waived because this land included many swamps and the agricultural possibilities were rare.

Khurja is now famous for its ceramics. With over 500 factories producing ceramic works, its skyline is dotted with chimneys. Khurja is located at 28.25°N 77.85°E. It has an average elevation of 197 metres (646 foot). As per provisional data of 2011 census, Khurja urban agglomeration had a population of 142,636, out of which males were 75,384 and females were 67,252. The development activities of U.P. Small Industrial Corporation Ltd. resulted in setting up of UPSIC Potteries Ltd. in 1976–77. There was a widespread complaint about the efficiency of the UPSIC Potteries Ltd., primarily because of high costs. The Government of Uttar Pradesh set up a panel in Nov.1990 to examine the working of the corporation and to consider the proposal of the passing of the commercial activities back to the Pottery Development Centre (Local Office of Directorate of Industries).

Though an industrial region, Khurja lacks the infrastructure for good industry by European standards. Since there are often power cuts lasting around eight hours, all factories and most homes have private generators. The municipality water supply is insufficient or everybody's need so many have water pumps to extract groundwater. The city is located at 28.2514° N, 77.8539° E

Air pollution has been viewed seriously by the Hon'ble Supreme Court, Hon'ble High Court & Hon'ble National Green Tribunal and issued specific directions from time to time for the improvement of the air quality of the city. Central Pollution Control Board has also issued direction under section 18 (1)(b) of the Air (Prevention & Control of Pollution) Act 1981, regarding prevention, control or abatement of Air pollution in various cities of Uttar Pradesh including Khurja.

2. ACTION TAKEN BY THE BOARD

Board has issued directions to Principal Secretary Urban Development, Principal Secretary Forests, Principal Secretary Transport, Principal Secretary Agriculture, Managing Director Central U.P. Gas Ltd., Managing Director Indraprastha Gas Ltd, and Managing Director Green Gas Ltd. under section 31 (A) of the Air (Prevention and Control of Pollution) Act, 1981 regarding prevention and control of air pollution in Khurja city on dated 05.09.2016 in compliance of directions issued by Central Pollution Control Board, Delhi under section 18(1) (b) of the Air (Prevention and Control of Pollution) Act, 1981.

Ambient Air is being monitored regularly by the Board. At source emission monitoring i.e. stack monitoring of industries is also being done regularly and action is being taken accordingly on the basis of analysis report. If any industry is found violating the standards firstly show-cause notice is issued to the industry followed by closure under Air (Prevention and Control of Pollution) Act, 1981.

3. ANNUAL AVERAGE DATA OF AMBIENT AIR QUALITY PM₁₀ (µg/m³) OF KHURJA CITY

U.P. Pollution Control Board is monitoring ambient air quality of Khurja city manually at 02 locations viz. CGCRI Campus and Ahirpara for PM₁₀, SO₂ and NO₂ parameters. Annual Average data of Ambient Air Quality particularly PM₁₀ (Particulate Matter size less than 10 microns) were observed during the year 2013-18 are as given below.

S.No.	Name of Location	Category	2013	2014	2015	2016	2017	2018
1	CGCRI Campus	Industrial	174.4	173.2	181.2	176.0	204.8	212.75
2.	Ahirpara	Residential	148.2	141.2	153.6	163.9	180.1	196.54
	STANDARD (annual average)		60 µg/m ³					

4. SOURCES OF POLLUTION IN KHURJA

The main sources of air pollution in Khurja city are Vehicular, Road dust, Construction & Demolition activities, Industries (Point source & Areas source), Garbage burning & Agriculture waste burning etc. Data obtained from Manual monitoring under National Ambient Monitoring Programme (NAMP) (2018) at Khurja showed values of NO₂ 19.80(µg/m³) and SO₂ 21.27 (µg/m³) at CGCRI Campus and ; NO₂ 18.60(µg/m³) and SO₂ 19.97 (µg/m³) at Ahirpara.

5. Short term & Long term Action Plan

(A) Vehicle emission control

(a) Long Term Action Plan: Reduce congestion

Sl. No	Action Points	Timeframe for implementation	Action Required to be Taken by Responsible Departments
i	Plying of electric buses for public transport including establishment of sufficient charging stations.	360 days	Transport Department
ii	Prepare plan for construction of expressways/bypasses to avoid congestion due to non-destined vehicles.	360 days	N.H.A.I. /PWD
iii	Construction of peripheral road around the city to avoid congestion.	360 days	N.H.A.I./PWD
iv	rangement of Multilevel Parking Facilities	360 days	Nagar Nigam/Development Authorities

vi	Development/Strengthening of Bike zone/Cycle zone at metro/railways/bus stations from where travelers hire bi-cycle to reach the destination.	360 days	Nagar Nigam/Development Authorities
vii	Initiate steps for retrofitting of particulate filters in diesel vehicles, when BS-VI fuels are available	360 days	Vehicle Manufacturing Companies/Ministry of Road Transport & Highways (MoRTH)
viii	Use of Bio-Ethanol in the city/urban transport system/waste to energy.	360 days	Transport Department

(b) Short Term Action Plan

Sl. No	Action Points	Timeframe for implementation	Action Required to be Taken by Responsible Departments
i	Launch extensive drive against polluting vehicles for ensuring strict compliance	As regular activity	R.T.O/Traffic Police
ii	Launch public awareness campaign for air pollution control, vehicle maintenance, minimizing use of personal vehicles, lane discipline, etc.	As regular activity	R.T.O/ Traffic Police
iii	Prevent parking of vehicles in the non-designated areas	As regular activity	Traffic Police/ Nagar Nigam
iv	Prepare & implement action plan to check fuel adulteration and random monitoring of fuel quality data	30 days	District Supply Officer/Oil companies
v	Prepare & implement plan for widening of roads and improvement of infrastructure for decongestion of road	90 days	Nagar Nigam
vi	Steps for promoting battery operated vehicles including establishment of charging stations.	120 days	Transport Department/Nagar Nigam & Development Authorities
vii	Install weigh in motion bridges at the borders of cities/towns and States to prevent overloading of vehicles	180 days	Transport Department
viii	Synchronize traffic movements/Introduce intelligent traffic systems for lane-driving	180 days	Traffic Police
ix	Installation of remote sensor based PUC system	180 days	Traffic Police

(B) Suspension of road dust and other fugitive emissions control

(a) Long Term Action Plan

Sl. No.	Action Points	Timeframe for implementation	Action Required to be Taken by Responsible Departments
i)	Implementation of maintaining at least 33% forest cover area in the city in master plan.	360 days	Nagar Palika Parishad, Khurja /Development Authority/Forest Department
ii)	All the canals/nullah's side roads should be brick lined. Proper plantation also carried out.	360 days	Irrigation Department/ Forest department

(b) Short Term Action Plan

Sl. No.	Action Points	Timeframe for implementation	Action Required to be Taken by Responsible Departments
i)	Prepare plan for creation of green buffers along the traffic corridors. Plantation of specific types of species of plants which are helpful in pollution control.	90 days	Forest Department/ Nagar Palika Parishad, Khurja & Development Authorities
ii)	Maintain potholes free roads for free-flow of traffic	90 days & as regular activity afterwards.	Nagar Palika Parishad, Khurja / Development Authorities
iii)	Introduce water fountains at major traffic intersection, wherever feasible	90 days	Nagar Palika Parishad, Khurja
iv)	Greening of open areas, gardens, community places, schools and housing societies	90 days	Forest Department
v)	Blacktopping of metalled road including pavement of road shoulders	180 days	Nagar Palika Parishad, Khurja
vi)	Use of treated effluent of STPs in Pollution Control Measure such as watering of Plants, sprinkling for dust suppression purposes.	90 days	Nagar Palika Parishad

vii)	Wall to Wall pavement for control of dust from road. Design the footpath pavement/tiles having capacity to grow grass in between.	180 days	Nagar Palika Parishad
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(C)Control of emissions from biomass/crop residue/garbage/municipal solid waste burning

Sl. No.	Action Points	Timeframe for implementation	Action Required to be Taken by Responsible Departments
i)	Launch extensive drive against open burning of bio-mass, crop residue, garbage, leaves, etc.	90 days	Nagar Palika Parishad
ii)	Regular check and control of burning of municipal solid wastes and use of fire extinguisher for control of fire in municipal solid waste and bio mass.		Nagar Palika Parishad
iii)	Proper collection of horticulture waste (bio-mass) and its disposal following composting-cum-gardening approach		Nagar Palika Parishad
iv)	Ensure ban on burning of agriculture waste and crop residues and its implementation	180 days	Agriculture Department & U.P. Pollution Control Board
v)	Door to Door collection of segregated waste by agency and then its disposal directly in plant without dumping it on land.	90 days	Nagar Palika Parishad, Khurja
vi)	Establishment of composting pits in Parks/ residential societies etc for management of biodegradable waste.	90 days	Nagar Palika Parishad, Khurja / Development Authority
vii)	No plot should be left open more than 02 years and planting of trees must be mandatory on vacant plots.	90 days	Nagar Palika Parishad, Khurja / Development Authority

(C) Control of industrial emissions

(a) Long Term Action Plan

Sl.	Action Points	Timeframe for	Action Required to be Taken by
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No.		implementation	Responsible Departments
i)	Conversion of natural draft brick kilns to induced draft using zigzag technique in a phased manner.	360 days	U.P. Pollution Control Board
ii)	Installation of Electrostatic precipitators and appropriate air pollution control devices in factory units/industries.	180 days	U.P. Pollution Control Board
iii)	Development of mobile facility/van for continuous ambient air quality monitoring for different localities.	360 days	Nagar Nigam

(b) Short Term Action Plan

Sl. No.	Action Points	Timeframe for implementation	Action Required to be Taken by Responsible Departments
i)	Identification of brick kilns and their regular monitoring including use of designated fuel, and closure of unauthorized units	60 days	U.P. Pollution Control Board
ii)	Conversion of natural draft brick kilns to induced draft	120 days	U.P. Pollution Control Board
iii)	Monitoring of industrial emission including real time online monitoring through OCEMS (Online Continuous Emission Monitoring System) and live camera feed and to take action against non-complying industrial units.	60 days, and thereafter, regular activity	U.P. Pollution Control Board
iv)	Bank guarantee should be taken for the compliance of conditions imposed in CTO/CTE for control of Environmental Pollution from industries. The bank guarantee shall be forfeited in case of any violation. Verification of these conditions to be carried out by UPPCB/selected Third Party Institutions/Quality control agencies etc.	60 days, and thereafter, regular activity	U.P. Pollution Control Board
v)	Installation of web cams and OCEMS in Grossly Polluting Industries.	60 days	U.P. Pollution Control Board

(D) Control of air pollution from constructions and demolition activities

Sl. No.	Action Points	Timeframe for implementation	Action Required to be Taken by Responsible Departments
i)	Enforcement of Construction & Demolition Rules 2016. Fine should be imposed on defaulting units.	15 days , and thereafter, continue as regular activity	Urban Development/Development Authorities
ii)	Control measures for fugitive emissions from material handling, conveying and screening operations through water sprinkling, curtains, barriers and dust suppression units;		Urban Development/Development Authorities
iii)	Ensure carriage of construction material in closed/covered vessels		Development authorities/ Regional Transport Department
iv)	Environmental aspects should be included during preparation of master plan for development of city.	Within a reasonable timeframe	Urban Development/Development Authorities
v)	Builders should leave 33% area for green belt in residential colonies. Plantation should be done as per Office order No.H16405/220/2018/02 dated 16.02.201 available on website of the Board .i.e.,www.uppcb.com.	Within a reasonable timeframe	Urban Development/Development Authorities/ housing companies
vi)	All construction areas must be covered to avoid dispersion of particulate matter	30 days	Nagar Nigam /Development Authorities

(E) Other Steps to control Air Pollution

(a) Long Term Action Plan

Sl. No.	Action Points	Timeframe for implementation	Action Required to be Taken by Responsible Departments
i)	Dead Bodies of Animals should be disposed through proper treatment facility like rendering plant etc	360 days	Nagar Palika Parishad, Khurja
ii)	Installation of CAAQMS by polluting units/institutions etc. under "Polluters Pay Principles".	360 days	U.P. Pollution Control Board

(b) Short Term Action Plan

Sl. No.	Action Points	Timeframe for implementation	Action Required to be Taken by Responsible Departments
i)	Air Quality Index to be calculated and disseminated to the people through website and other media (on maximum fortnightly basis for manually operated monitoring stations and real time basis for continuous monitoring stations)	15days, and thereafter, continue as regular activity	U.P. Pollution Control Board
ii)	Establish an Air Quality Management Division at SPCB/PCC Head Quarters to oversee air quality management activities in the State and interact with CPCB	30 days	U.P. Pollution Control Board
iii)	Set-up and publicize helpline in the city/town as well as SPCB/PCC HQ for complaints against reported non-compliance	30 days	U.P. Pollution Control Board
iv)	Engage with concerned authorities on continual basis for maximizing coverage of LPG/PNG for domestic and commercial cooking with target of 100% coverage	30 days	District Supply Officer
v)	Monitoring of DG sets and action against violations Fine should be imposed on defaulters.	30 days	U.P. Pollution Control Board/Nagar Palika Parishad, Khurja
vi)	Street vendors are to be controlled strictly in respect of removing their wastes and debris before leaving the site of operation	30 days	Nagar Nigam /Development Authorities
vii)	Complete ban on littering of streets with municipal solid wastes (MSW). Segregation & source collection at source of MSW to be implemented.	30 days	Nagar Nigam /Development Authorities
viii)	If Air Quality Index found severe or above grade, ensure availability of masks to public for protection.	90 days	Nagar Palika Parishad, Khurja

