

Action Plan

For

**The Control of Air Pollution
in
Raebareli City**



**REGIONAL OFFICE
U.P POLLUTION CONTROL BOARD
C-BLOCK, AVAS VIKAS COLONY, INDIRA NAGAR,
RAEBARELI**

1. INTRODUCTION

The district of Raebareli, which was created by the British in 1858, is named after its headquarters town. Tradition has it that the town was founded by the *Bharsand* was known as *Bharauli* or *Barauli* which in course of time got corrupted into Bareli. The prefix, Rae, is said to be a corruption of Rahi, a village 5km. west of the town. It is also said that the prefix, Rae, represents Rae, the common title of the Kayasths who were masters of the town for a considerable period of time. Since about the beginning of the media level period of Indian history the region in the south of which the area covered by the district of Raebareli lies has been known as Avadh or Subah of Avadh. In the north it stretched as far as the foothills of the Himalayas and in the south as far as the Ganga beyond which lay the Vatsa country. There is no doubt that the district has been civilised and settled life since very early times. The Quit India movement was inaugurated on August 8, 1942 and the district did not lag behind any others. Again there was mass arrests, imposition of collective fines, lathi charges and police firing. At Sareni the police opened fire at an agitated crowd, killing and maiming many. The people of this district enthusiastically respond to the call of individual Satyagraha and large numbers courted arrest. At last, on August 15, 1947, the country shook off the foreign yoke and achieved its long-awaited independence. Raebareli celebrated the event with benefiting glee and rejoicing in every home along with the rest of the country.

Raebareli district is a district of Uttar Pradesh state in northern India. The town of Raebareli is the district headquarters. Many freedom fighters who fought against the British hail from Raebareli. According to the 2011 census Raebareli district has a population of 3,404,004, roughly equal to the nation of Panama or the US state of Connecticut. This gives it a ranking of 97th in India (out of a total of 640). The district has a population density of 739 inhabitants per square kilometre (1,910/sq mi). Its population growth rate over the decade 2001-2011 was 18.51%.

The district had an area of 4,609 km². The principal rivers of the district are the Ganges and the Sai. The population of Raebareli (Nagar Palika Parishad) as per 2011 census is 1,91,056 out of which male and female are 99,844 and 91,212 respectively. Considering the population statistics from the last century, the city faced a decrease in population in the decade 1911-1921 and thereafter the decadal population increased successively.

Raebareli situated in the central part of Uttar Pradesh state is well connected to the other parts of state and country both by road and railways. As Raebareli is surrounded by the five districts of Lucknow, Unnao, Allahabad, Pratapgarh and Sultanpur the city is well connected to all of them. On road Raebareli is situated 77 kms south to Lucknow, 134 kms east of Unnao, 127 kms east west to Allahabad, 98 kms north west to Pratapgarh, 90 kms west to Sultanpur and at a distance of 111 kms to Kanpur. Four National Highways pass through the city, the National Highway (NH) 24B linking Lucknow to Allahabad, NH 231, NH 232 and NH 330A connecting different regions of the state are passing through the city. The Raebareli Railway station situated on the Lucknow - Howrah railway line is a major junction of Northern railways. The station is well connected by rail to major cities of Uttar Pradesh like Lucknow, Varanasi, Allahabad and Kanpur and to the major cities of India like Delhi, Kolkata, Amritsar, Dehradun etc.

Famous for its rich inheritance, architectural brilliance, and historical importance of being a part of Indian Freedom Movement and for its industrial base with famous companies like Indian Telephone Industries, Rail Coach factory, Birla Cement Factory and NTPC Ltd the district

is a popular destination for tourist visit throughout the year. Apart from this the district is also well populated which needs better service in all factors.

2. ACTION TAKEN BY THE STATE 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 Raebareili 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 RAEBARELI CITY (YEAR 2013-2018)

U.P. Pollution Control Board is monitoring ambient air quality of Raebareli city manually at 03 locations viz. Town Hall Colony, Gulab Road ,Ahmad Nagar ,Khoya Mandi Tiraha, and Amawan Road, Industrial Area 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 previous years are as given below.

S.No.	Name of Location	Category	2013	2014	2015	2016	2017	2018
1	Town Hall Colony, Gulab Road ,Ahmad Nagar	Residential	163.5	148.8	144.5	129.3	128.8	132.48
2	Khoya Mandi Tiraha, Lucknow,Road	Commercial	179.8	164.7	163.8	145.6	146.9	115.38
3	Amawan Road, Industrial Area	Industrial	185..0	164.5	163.2	146.3	147.1	148.55
	STANDARD (annual average)		60 µg/m ³					

4. SOURCES OF POLLUTION IN RAEBARELI

The main sources of air pollution in Raebareli 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 Raebareli showed values of NO₂ 14.96(µg/m³) and SO₂ 8.64(µg/m³) at Town Hall Colony, Gulab Road ,Ahmad Nagar; NO₂ 19.91(µg/m³) and SO₂ 14.49(µg/m³) at Khoya Mandi Tiraha, Lucknow,Road and ; NO₂ 17.22(µg/m³) and SO₂ 10.76 (µg/m³) at Amawan Road, Industrial Area.

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	Arrangement 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
ii)	Implementation of maintaining at least 33% forest cover area in the city in master plan.	180 days	Nagar Palika Parishad, Raibareli /Development Authority/Forest Department
ii)	All the canals/nullah's side roads should be brick lined. Proper plantation also carried	360 days	Irrigation Department/ Forest department

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(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 Plaika Parishad, Raibareli & Development Authorities
ii)	Maintain potholes free roads for free-flow of traffic	90 days & as regular activity afterwards.	Nagar Palika Parishad, Raibareli / Development Authorities
iii)	Introduce water fountains at major traffic intersection, wherever feasible	90 days	Nagar Palika Parishad, Raibareli
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, Raibareli
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, Raibareli
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, Raibareli

(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, Raibareli

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, Raibareli
iii)	Proper collection of horticulture waste (bio-mass) and its disposal following composting-cum-gardening approach		Nagar Palika Parishad, Raibareli
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, Raibareli
vi)	Establishment of composting pits in Parks/ residential societies etc for management of biodegradable waste.	90 days	Nagar Palika Parishad, Raibareli
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, Raibareli

(D)Control of industrial emissions
(a) Long Term Action Plan

Sl. No.	Action Points	Timeframe for implementation	Action Required to be Taken by 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

(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.	Proposed Master Plan for Raebareli City 2021	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 16.02.2018 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, Raibareli
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	15days, and thereafter, continue as regular activity	U.P. Pollution Control Board

	basis for manually operated monitoring stations and real time basis for continuous monitoring stations		
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, Raibareli
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 Nigam