

ACTION PLAN

FOR

THE CONTROL OF AIR POLLUTION

IN

GAJRAULA CITY



REGIONAL OFFICE
UTTAR PRADESH POLLUTION CONTROL BOARD
108/11, AVAS VIKAS COLONY,
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1. INTRODUCTION

Gajraula Town is situated on NH-24, between Delhi and Moradabad city. Gajraula is a main Industrial town of District – Amroha (J.P. Nagar). Gajraula is a Small city/ Town but known as a Developed Town due to its, Location, Rail and Road connectivity and Industrial activity. Most of The Nearby area is well developed forming area and dairy Milk producing area as well as good forming of sugarcane also. Local drain/River Bagad is the main Rainy drain which carry the storm water and industrial treated waste water and ultimately meet to River Ganga. Gajraula has a humid subtropical climate with cool, dry winter form mid November to February and dry hot summer from late March to June. Due to local sugar crop growing and Ganga River bed December January is mostly full of Fog weather. Gajraula Town is under limit of Nagar Palika Parishad Gajraula. It is an important industrial area of Uttar Pradesh.

Ambient air quality monitoring in Gajraula Town is carried out by UPPCB on out sourcing basis at two location (i) Raunak Automotive Ltd, U.P.S.I.D.C. industrial area and (ii) Indira Chowk, Gajraula. Ambient air quality monitoring is carried out at above two main location of this town. The ambient air quality (PM₁₀) is increasing periodically due to development of industrial, commercial and residential activities in this area. Besides this NHAI work for 06 lining of NH-24 is also in progress and dust emission is prominent due to this activity.

The Ambient Air Quality trends are show that SPM levels are exceeding the national standard. Due to that CPCB has declared this city as non attainment city in U.P. The average concentration of particulate matter in ambient air of urban area mainly contributed by vehicular emission, industrial emission, process emission, fuel quality used in this area, M.S.W. Management, road construction activities. Industries located around this city are also main source of particulate matter emission. The details of industries situated in Gajraula Town and nearby area are as under.

S.No.	Name of Industry	Product Cap.	Fuel used	Air, Pollution, control status
1	Jubilant Agri and Consumer Products Limited (Fertilizer Unit) Bhartiagram, Gajraula, Amroha.	H ₂ SO ₄ Acid 7500 Ton/Month, SSP-15000 MT/Month & GSP-15000 MT/Month	Coal-31 MTD & Rice Husk-27 MTD	Dust collector, Wet Scrubber Installed

2	Jubilant Agri and Consumer Products Limited (Polymer Unit) Bhartiagram, Gajraula, Amroha.	Soild PVA and Derivatives-2458 MT/Month, Polyurethane Devivatives – 500 MT/Month & Wood finished 450 MT/Month	HSD- 1200 ltr/day	30 mtr. stack.
3	Jubilant Life Sciences Limited (Chemical Unit I) Bhartiagram, Gajraula, Amroha.	Acetic Acid, Ethyl acetate , Acetaldehyde, Acetic Anhydride	Common Steam Header provider by thermal Plant	Scrubber and Absorption tower Installed.
4	Jubilant Life Sciences Limited (Chemical Unit II) Bhartiagram, Gajraula, Amroha.	Pyridine , Picoline, Chino peridene, Lutidine & Derivatives	Common Steam Header provider by thermal Plant	Thermo Oxidizer, Scrubber and Absorption tower Installed.
5	Jubilant Life Sciences Limited (Distillery Unit) Bhartiagram, Gajraula Amroha.	Rectified Sprit 183 KLD	Common Steam Header provider by thermal Plant	Bag filter and 50 mtr. stack installed.
6	Jubilant Life Sciences Limited (Power Plant) Bhartiagram, Gajraula Amroha.	Power Generation 48 M.W.	Coal-32400 MT/M, Bio Gas-4659120 nm ³ /M, R.F.O-300 MT/M, L.D.-330 MT/M,	ESP, Dust collector Mist Eliminator, and 55 mtr. stack installed.
7	Coral News Prints Ltd. Gajraula, Amroha.	Craft Paper 20 Ton/day	Wood/Rice Husk 10 ton/day	Dust collector & 30 mtr. stack installed.
8	Kamakshi Papers Pvt. Ltd., Gajraula, District Amroha	News print Paper 60 Ton/day	Wood/Rice Husk 30 ton/day	Dust collector & 30 mtr. stack installed.
9	Teva API India Ltd, A- 2/1, A-2/2, UPSIDC Industrial Area, Bijnor Road, Gajraula, Amroha.	Bulk durks Intermediate I & II,- 620 MT/Years	LDO-09 KLD, HSD-3800 KLD	Dust collector, Wet Scrubber, Spray Dryer & 30, 45 mtr. stack installed.
10	Insilco Ltd, A-5 UPSIDC ind area Gajraula, Amroha.	Precipitated silica-21000 Ton/Year	Bio Bricate-15 Ton/day & HSD for DG Set.	Dust collector & 30 mtr. stack installed.
11	Umang Dairies Ltd. 3 Km. Hasanpur road Gajraula, Amroha	Pasteurized Milk, Butter Ghee, Dahi By	Rice Husk/Agro waste 72 MT/day	Dust collector, Bag Filter & 40 mtr. stack

		handling of 11.5 lac liter milk.		installed.
12	Dairy India Pvt Ltd. Gajraula, Amroha.	Pasteurized Milk, Butter Ghee, Dahi By handling of 70000 liter milk.	Rice Husk/Agro waste 30 MT/day & Diesel oil for DG Set.	Dust collector & 30 mtr. stack installed.
13	Best Crop Science LLP (Old Name Chemtura Chemicals India Pvt. Ltd.), C-2, Industrial Area Gajraula, Amroha.	Formulation of Pesticides, Insecticides & Herbicides	HSD for DG Set.	Bag Filter
14	Best Agro Chem. Pvt. Ltd., Gajraula, Amroha.	Formulation of Pesticides, Insecticides & Herbicides	Bio Bricate-01 Ton/day & HSD for DG Set.	Dust collector & 30 mtr. stack installed.
15	Raunak Automotive Ltd, Gajraula, Amroha.	Automotive Gear & shaft 30 MT/day	LPG 1800 Kg/day & Diesel oil 400 Ltr/day for DG set.	10 mtr. stack installed.
16	Irachem Pvt. Ltd, Gajraula, Amroha.	Formulation of Pesticides, Insecticides & Herbicides	HSD for DG Set.	Bag Filter
17	Madhur Ceramic Pvt. Ltd, A-8, UPSIDC, Gajraula, Amroha.	Fine bone China ware (Crockery) 05 MT/day	Diesel Oil 2000 Lit/day	10 mtr. stack installed.
18	Kaushambi Paper Mill Pvt. Ltd., Khasra No-138, Village Naipura Khadar, Dhanaura, Gajraula, Amroha	Craft Paer 35 Ton/day	Wood/Rice Husk 09 ton/day	Dust collector, Wet Scrubber & 30 mtr. stack installed.
19	A.S.P Sealing Products Ltd. Gajraula, Amroha	EPDM , Rubber Industrial Profile & Industrial Housing	Diesel oil 1000 Ltr/day	Dust collector, Bag filter & 10 mtr. stack installed.
20	Nirmal Fiber Pvt. Ltd., Gajraula, Amroha	Polyester Staple Fiber 900 Ton/Month & Rexene / Coated fabrics 03 lac mtr. /month.	Coal/wood -2500 kg/day & Diesel oil for DG set.	Dust collector & 15 mtr. stack installed.

2. ACTION TAKEN BY THE BOARD

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. SOURCE OF AIR POLLUTION

The source of air pollution in Gajraula are Industrial Air emission, Road dust, Vehicular emission, domestic fuel burning, open waste burning, construction activities, M.S.W. garbage dumping, Bio-mass and garbage burning, crop residue burning etc. Major contribution of air pollution load in town is due to Jubilant organadies Group of Industries because it is the major fuel (like coal, Diesel/furnace oil) consumer in the town. Notices has been issued to submit their action plan for improvement and effective control of Air pollution. Data obtained from Manual monitoring under National Ambient Monitoring Programme (NAMP) (2018) at Gajraula showed values of NO₂ 29.33($\mu\text{g}/\text{m}^3$) and SO₂ 17.75($\mu\text{g}/\text{m}^3$) at Raunaq Auto and ; NO₂ 36.08($\mu\text{g}/\text{m}^3$) and SO₂ 22.08 ($\mu\text{g}/\text{m}^3$) at Indira Chowk.

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 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. 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.

4. ANNUAL AVERAGE DATA OF AMBIENT AIR QUALITY PM₁₀ ($\mu\text{g}/\text{m}^3$) OF GAJRAULA CITY (YEAR 2013-2018)

U.P. Pollution Control Board is monitoring ambient air quality of Gajraula city manually at 02 locations viz. Raunaq Auto and Indira Chowk 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	Raunaq Auto	Industrial	131.3	173.9	167.0	183.0	194.3	205.58
2	Indira Chowk	Commercial	141.4	190.9	180.8	198.9	216.5	245.75
	STANDARD (annual average)		60 $\mu\text{g}/\text{m}^3$					

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 Palika Parishad Gajraula
v	Prepare & implement action plan to check fuel adulteration and random monitoring of fuel quality data	30 days	District Supply Officer/Oil companies
vi	Prepare & implement plan for widening of roads and improvement of infrastructure for decongestion of road	90 days	Nagar Palika Parishad Gajraula
ix	Steps for promoting battery operated vehicles including establishment of charging stations.	120 days	Transport Department/ Nagar Palika Parishad Gajraula & Development Authorities
x	Install weigh in motion bridges at the borders of cities/towns and States to prevent overloading of vehicles	180 days	Transport Department
xi	Synchronize traffic movements/Introduce intelligent traffic systems for lane-driving	180 days	Traffic Police
xii	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 Gajraula /Forest Department
ii)	All the canals/nullah's side roads should be	360 days	Irrigation Department/

	brick lined. Proper plantation also carried out.		Forest Department/NMCG
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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/Horticulture/ Nagar Palika Parishad Gajraula & Development Authorities
ii)	Maintain potholes free roads for free-flow of traffic	90 days & as regular activity afterwards.	Nagar Palika Parishad Gajraula
iii)	Introduce water fountains at major traffic intersection, wherever feasible	90 days	Nagar Palika Parishad Gajraula
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 Gajraula
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 Gajraula
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 Gajraula

(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 Gajraula

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

(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
v)	Installation of web cams and OCEMS in Grossly Polluting Industries.	60 days	U.P. Pollution Control Board

(E) 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		Urban Development/Development Authorities

	through water sprinkling, curtains, barriers and dust suppression units;		
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 16.02.2018 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

(F) 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 Gajraula
ii)	Installation of CAAQMS by polluting units/institutions etc. under "Polluters Pay Principles".	360 days	U.P. Pollution Control Board
iii)	Source Apportionment, Emission Inventory & Carrying Capacity Assessment	4 years	U.P. Pollution Control Board
iv)	Tree Plantation for mitigation of air pollution based open location of pollution sources and Windrose data	360 days	Forest department/Development Authority/IMD/Regional Office & UPPCB

(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 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 Gajraula
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

