DRAFT ACTION PLAN FOR SEVERELY POLLUTED AREA IN NASHIK JURISDICTION.

Submitted by

Sub – Regional Office, Maharashtra Pollution Control Board, Nashik.

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BACKGROUND:

Nasik city now-a- days has become a center of attraction because of its beautiful surroundings and cool climate. Nashik is a multifaceted city with Mythological, Historical, Religious, Cultural and Industrial importance. As regards to industry it is part of golden triangle of industrial Maharashtra. Because of the above factors, the city of Nashik is expanding in terms of industrialization, Urbanization and also in terms of population. Nashik has become a million plus city in the year 2001 and has grown up from a population 21,940 in the year 1901 to 10, 77, 236 in 2001. And a presently as per census report of 2011 the population is 16, 00,000. This population growth has directly indirectly affected the environmental quality of the city.

CPCB has carried out survey of prominent industrial clusters located in the state for assessment of their CEPI and as per the report, Chandrapur is on the top in the Maharashtra and indentified as Critically Polluted Area with reference to one or more environmental component. Out of total 88 industrial areas selected all over the country for the study, Nashik falls at No. 45 with CEPI index as 69.25 and identified as severely polluted area.

Nasik City area covers two industrial clusters namely; MIDC Satpur & MIDC Ambad and about 3500 industries including SSI, MSI, and LSI are in operation. All this industries are basically Engineering industries and No chemical industries are in existence. Even, industries under 17 Category of polluted industry is not in existence. The air quality of Nashik City is well within the prescribed limits and water for drinking purpose for city area is directly supplied from Gangapur Dam which is situated at upstream of the city area. Hence there is no any contamination of the water. Also more than 50% of the area is under green belt and all the agricultural fields are all around the city area. Inspite of the above situation, in CPCB report, CEPI index is shown as 69.25.

NASHIK:

Nashik, also known as the city of Grapes. Nashik is situated in the northwestern part of Maharashtra state. The city of Nashik is a major Hindu pilgrimage centre with rich culture & tradition. It is situated on the banks of Sacred Godavari River at an altitude of 565 m above the sea level. There are many beautiful Ghats situated on the banks of Godavari River. The major part of the town lies on the right (south) bank of the river, while Panchvati, a quarter of the left bank has several temples.

The holy and picturesque city of Nashik becomes very crowded during the festival season. Nashik tourism also highlights its bustling on the river banks, the ringing temples bells and sadhus mediating.

Two interpretations are available on the origin the name "Nashik", the first related with town situated on nine peaks (Navshikhar) and second relate to the incident in Ramayana where at this place Lakshmana is said to have cut off the nose (Nashik) of Shurpanakha, as sister of Lankadhipati Ravana.

It is the place of rich heritage and culture and now developed into a metropolis with a population of approximately 16 Lakhs. The banks or the Ghats of the River Godavari are considered to be sacred people take holy dip in the "kundas" (ponds) constructed on the river banks. Godavari River is "Dakhsin Vahini", Ramkund is unique place of religious importance at all times, specially in the Kumbhmela.

HISTORY:

Nashik was the capital of powerful Satvahana (also spelt as Satvahans) dynasty. It was an important trading part to the west. The city of Nashik was called as "Gulshanabad" during the Mughal period. Later it was again given its old name when Peshwas took over in 1751, but they lost Nashik to the British in 1818.

In the year 1864, Nashik Municipality was formed and in 1869, it was made a full-fledged district with its present 13 "Talukas" (regions). Nashik also played a major role in the freedom struggle of India. The non-cooperation movements started by Mahatma Gandhi were a rage here. The temple entry movement to finish untouchability started by Dr. Ambedkar and the mass movement was also organized in the Nashik in the year 1932.

Nashik at Glance:

Latitude	19 ⁰ -33' and 20 ⁰ -53' North				
Longitude	73 ⁰ -16' and 75 ⁰ -6' East				
Area	29.135 Sq.Km				
	(Second largest in Maharashtra after Mumbai)				
Rivers	Godavari, Kashyapi, Darna, Nasardi				
	(Nanadini)				
Population	16,00,000 (As per 2011 census data)				
Length of Roads	1000 Km				
National Highway passing	Mumbai-Agra National Highway No.3 (1000				
through the City	Km) Nashik Pune National Highway No. 50				
	(210 Km)				
Industrial Estate	Name Area Units				
	Satpur 635 Hect. 700				
	Ambad 515 Hect. 600				
Radio Station	All India Radio, FM Service, 100 MHz,				
	radiomirchi 98.2 fm				
Television	Doordarshan Low power Transmitter				
	(Mumbai/Delhi relay: Range 20 KM);				
	Satellite and cable TV				

GEOGRAPHICAL DATA:

The city has become the centre of attraction because of its beautiful surroundings and cool and pleasant climate. Includes the Western Ghats area.

LOCATION:

Nashik, a major industrial town situated at Latitude 19^0 -33' and 20^0 -53' North and Longitude 73^0 -16' and 75^0 -6' East in a Northern Maharashtra is located at 565 meters above the mean sea level ay a distance of 180 Km from Mumbai (BomaY0 210 Kms from Pune, 165 Kms from Ahmednagar and 180 Kms from Aurangabad.

GEOLOGY:

The great trap region of the Deccan covers the while district it is an entirely volcanic formation. The volcanic portion consists of compact, stratified basalts and an earthy trap.

SOIL:

Nashik city falls in the Nashik District. The great trap region of the Deccan covers the whole district. The volcanic portion consists of compact, stratified basalts and an earthy trap. The basalts are the most conspicuous geological feature.

As regards the soil, the valleys are filled with disintegrated basalt of various shades from gray to black, washed down by rain. It is of argillacecres nature. The black soil contains high alumina and carbonates of calcium and magnesium with variable amounts of potash, low nitrogen and phosphorous. The red soil is less common.

It is very fertile the growth of cereals and pulses but not for large trees.

CLIMATE:

Nashik has a pleasant climate, warm in summer as slightly humid during the rainy season. Igatpuri, Surgana, and Peth Talukas in western part of the district receive more rainfall. The rainfall decreases as we move towards the east. Winter is severe in the eastern part of the district. Igatpuri, Saptashrungi and Trimbakeshwar are cool even during summer. The climate of the district is characterized by dryness except in the southwest monsoon season. Here, cold season starts from Dec. to Feb. followed by hot season from March to May and the southwest monsoon season from June to Sept. followed by the post – monsoon season.

RAINFALL:

The rainfall in the Nashik district is under the influence of southwest monsoon. There is uneven distribution of rainfall. On the one hand, the extreme west of the district receives maximum rainfall of 1202.3 mm, while on the other hand it dwindles down in the Central & eastern Sectors of the District.

The average rainfall in the district is 1034.5mm July being the rainiest month. During May and post monsoon months of October and November, some rainfall mainly in the form of Thunder shower occurs. The variations in the rainfall from year to year ion the district is not very large.

TEMPERATURE:

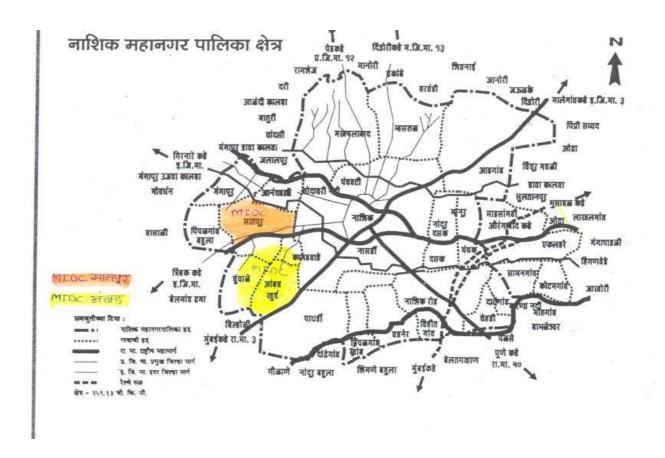
The hottest month in the Nashik is during May having a mean daily maximum temperature of 38^{0} C. The heat is intense in the height o summer and on the some days the maximum temperatures may go above 42^{0} C. The coldest month being Dec with mean daily minimum temperature of 14^{0} C. The lowest minimum temperature at Nashik was recorded as 2^{0} C

HUMIDITY:

Usually air is very humid during the monsoon season. In the pre monsoon season, cold and summer weather is dry. The summer season is the driest of the year. Percentage of humidity rise from April to August (90% to 93%). But decreases further from Sep. to Dec (80% to 82%). During January to March humidity is lower (65% to 50%).

WIND:

Winds are generally light to moderate with some strengthening in wind force during the later part of the summer season and in the southwest monsoon season. Wind speed varies from 2.7 km/hr. throughout the year. The predominant wind direction is North West.



MIDCs in Nashik & Area Covered –

MIDC Satpur.: 636.98 haMIDC Ambad.: 519.55 ha

INDUSTRIAL NASHIK:

Nashik is the 3rd largest industrial city of Maharashtra. It is well connected to Mumbai (185 Km), Pune (215 Km), Aurangabad (185 Km), and Jalgaon (230 Km). The city has become centre of attraction because of its beautiful surrounding and cool climate. The city has more importance as it is a part of golden triangle of industrial Maharashtra. Nashik District is a major agricultural centre for grapes, Onion, flowers, sugarcane, rice and vegetables. Grapes, onion and flowers are exported from Nashik.50% of land area is under cultivation. In recent times, wine industry is emerging as a very profitable business option. Nashik is in fact, considered to be a wine capital of India with over 50 wineries is established here. Nashik contributes 35 to 40% of onion production of the state. Due to its pungency, flavor, and colour as well as longer shelf life, Nashik onion product has added advantage in the export market.

Nashik basically remained dormant till 1962 in terms of industrialization. Thereafter the things slowly and steadily started changing for Nashik to develop into an important industrial centre of country.

Nashik as a growth centre was like a boon for rapid industrialization of the region. Nashik, due to its location and climatic advantages, was soon folded with many small and large scale industries.

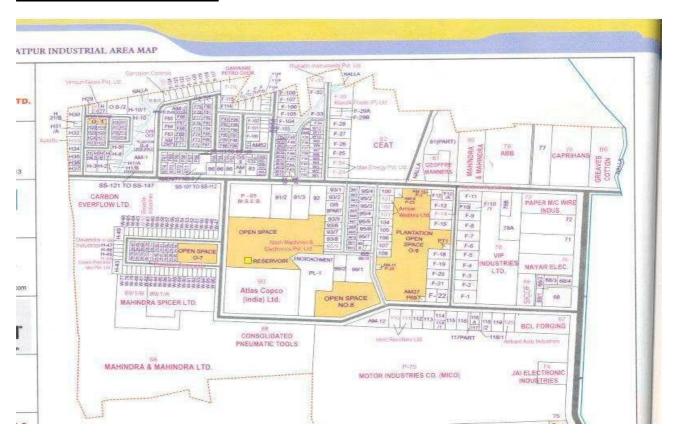
Industrial estate NICE (Nashik Industrial Co-operative estate) was formed in the co-operative sector in 1962. In the same year, Maharashtra, State Government also responded by declaring MIDC (Maharashtra Industrial Development Corporation). Industrial estate at Satpur Village 7 Km from Nashik. Hindustan Aeronautics Limited established unit for production of MIG Fighters at Ozar, a village 20 Km from Nashik. In 1967, SICOM (State Investment Corporation of Maharashtra) adapted Nashik as its growth centre. All these events brought Nashik on the industrial map of India. MICO (German International) and ABB (Swedish Multinational) established their production units. The industry that came to Nashik was mostly engineering, electrical and pharmaceutical. Crompton Greaves, MICO, VIP, CEAT, Mahindra & Mahindra etc, are other important industries. Thermal Power plant at Eklahare Village (630 MW), near nashik road, has greatly contributed to meet the power demand of the industries.

This is where the Modern Industrial Nashik was born and grew from strength to strength to become one of the most important industrial zones of the country. The real transformation of Nashik took place during the last twenty-five years. Saturation of Satpur MIDC with industries necessitated the creation of an additional industrial. This led to acquisition of 5231 hectares of land at Ambad by MIDC in 1980. Apart from Satpur, Ambad and Sinnar (Malegaon), the district has other MIDC Estates at Malegaon, Dindori, Vinchur, Peth and Surgana.

ABOUT NASHIK INDUSTRIAL AREA:

- Nashik Industrial area is basically engineering industrial zone and no chemical industries are in existence.
- There are no industries in existence in the above MIDC's under 17 categories of industry.
- In MIDC Satpur & Ambad area all LSI & MSI industries have provided full fledge Effluent treatment and APC arrangements.
- Almost all SSI units except some electroplating units are having adequate treatment facility. Now, CETP is proposed for the such units.
- Automobile Industries, foundry, engineering with surface coating activity are major industrial sectors in the area. Also some pharmaceutical formulation, plastic and rubber industries are in existence.

MIDC SATPUR AREA



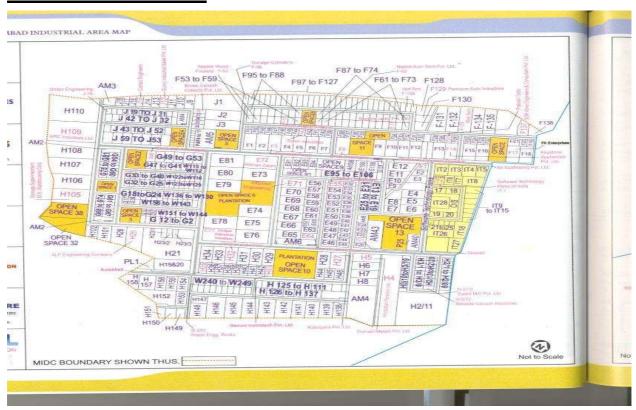
SATPUR MIDC – THE VIEW

Sr. no	. A] Plots Nos & Area	Quantum
1	Total Nos. of plots	1053 Nos.
2	Area of plots	477.72 ha
3	Total Nos. of plots allotted	1014 Nos.
4	Area of plot allotted	475.31 ha

BREAK UP OF PLOTS ALLOTTED IN SATPUR MIDC AREA:

Sr. no.	Plots	Quantum
1	Industrial	704 Nos
2	Commercial	36 Nos
3	Textile dying or water Intensive	1 Nos
4	Pharmaceutical	6 Nos
5	Service Industries	48 Nos
6	Miscellaneous	197 Nos
7	Electronics	22 Nos

MIDC AMBAD MAP



AMBAD MIDC -- THE VIEW

Sr. no	o.A] Plots Nos & Area	Quantum
1	Total Nos. of plots	1231 Nos.
2	Area of plots	365.61 ha
3	Total Nos. of plots allotted	1170 Nos.
4	Area of plot allotted	345.61 ha

BREAK UP OF PLOTS ALLOTTED IN MIDC AMBAD AREA:

Sr. no.	Plots	Quantum
1	Industrial	969 Nos
2	Commercial	25 Nos
3	Textile dying or water Intensive	3 Nos
4	Pharmaceutical	2 Nos
5	Service Industries	28 Nos
6	Miscellaneous	89 Nos
7	Electronics	24 Nos

NASHIK DISTRICT INDUSTRIAL STATISTICS:

Scale / Category	Red	Orange	Green	Total
LSI	133	37	09	179
MSI	150	65	18	233
SSI	1113	781	5414	7308
Total	1385	883	5441	7720

CEPI INDEX

Preamble

To arrive at a rational number to characterize the environmental quality at a given location a comprehensive Environmental Pollution Index (CEPI) has been developed by the Central Pollution Control Board (CPCB), New Delhi. The index captures the various health dimensions of environment including air, water and land and intended to act as an early warning tool, which is handy to use. The CEPI was applied to 88 selected industrial clusters/areas across the country, Nashik is one of them. CEPI scores for these areas have been given in Table 8 of the report entitled "Comprehensive Environmental Assessment of Industrial Clusters". Scores of Nashik along with industrial clusters having highest and lowest CEPI are given hereunder:

*The CEPI scores for industrial areas/ clusters

Rank	Industrial	Air (A)	Water(W)	Land	CEPI	Status
	Cluster/Area			(L)		
1	Ankleshwar	72.00	72.75	75.75	88.50	Ac_Wc_Lc
	(Gujarat)					
45	Nashik	55.00	57.50	50.25	69.25	As_Ws_Ls
	(Maharashtra)					
88	Digboi (Assam)	32.00	32.75	38.00	44.55	An_Wn_Ln

	A1	A2	A	B1	B2	В3	В	C1	C2	C3	С	D	Total
Water	5.5	5	27.5	8	0.0	3.0	11.0	3.0	3.0	0.0	9.0	10.0	57.5
	A 1	A2	Α	B1	B2	В3	В	C1	C2	C3	C	D	Total
Air	6.0	5.0	30.0	6.0	0.0	0.0	6.0	3.0	3.0	0.0	9.0	10.0	55.0
	A1	A2	A	B1	B2	В3	В	C1	C2	C3	С	D	Total
Land	3.0	5.0	15.0	7.75	0.0	0.0	7.75	5.0	3.5	0.0	17.5	10.0	50.25

Source: Extract of the Table 8 of the report entitled "Comprehensive Environmental Assessment of Industrial Clusters" published by CPCB, New Delhi, The score along with the status of Air, Water and Land environment in terms of subscript as critical (c)/ severe (s)/ normal (n). A sub-index score of more than 60 shows a critical level of pollution in the respective environmental component, whereas a score between 50–60 shows a severe level of pollution with reference to the respective environmental component.

As evidenced from the scores in the above table, all the environmental subsystems including air, water, and land in Nashik are severely polluted. However, the report does not specify the exact cause of deterioration of environmental subsystems within the jurisdiction of the Nashik Municipal Corporation. Therefore, a detailed study is warranted to assess the causes, effects along with gravity of pollution in Nashik city so that a meaningful plan of action can be formulated to avoid further deterioration of environmental subsystems.

PROBLEMS IN NASHIK INDUSTRIAL AREA:

- Disposal of industrial waste water on Open Land Requirement of Underground Drainage System.
- Electroplating Industry Partial Treatment
- Sewage effluent in minute quantity disposal into Nalla, Which Ultimately meets Godavari River.
- Nashik Thermal Power Station and stone crushing units are located in close vicinity of the city.(i.e. at Vilholi & Sarul Area)
- Due to ethical importance of the city, fast infrastructure development in the city area.
- Increase in vehicle population at faster rate.
- Burning of solid waste/Garbage at various locations in the Nashik corporation jurisdiction.

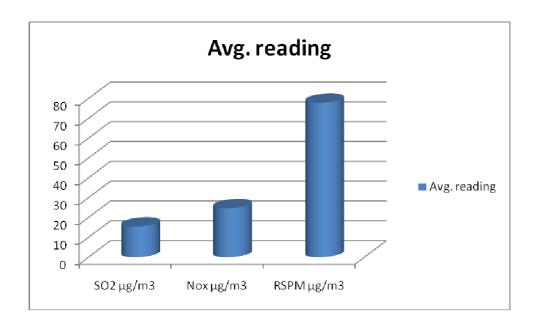
> AMBIENT AIR MONITORING DATA:

Ambient Air Quality Monitored at SRO Office Nashik

Location :Udyog Bhavan Type :Industrial Program Name :SAMP Status:In operation

Frequency:Six days in a week

Year- April-2015	SO2	NOx	RSPM
to March -2016	μg/m³	μg/m ³	$\mu g/m^3$
Standards	80.00	80.00	100.00
Avg. reading	15.48	24.73	77.86



Ambient Air Quality Monitored at MIDC Satpur

Location :VIP industries ltd ,MIDC

satpur, Nashik

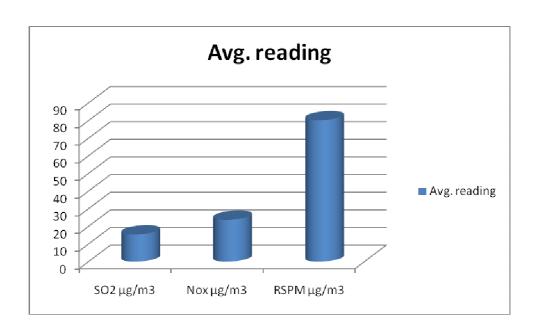
Type :Industrial

Program Name: NAMP

Status:In Operation

Frequency:Two days in a week

Year- April-2015	S02	NOx	RSPM
to March -2016	μg/m³	μg/m ³	μg/m ³
Standards	80.00	80.00	100.00
Avg. reading	15.41	23.72	80.18



Ambient Air Quality Monitored at RTO Colony

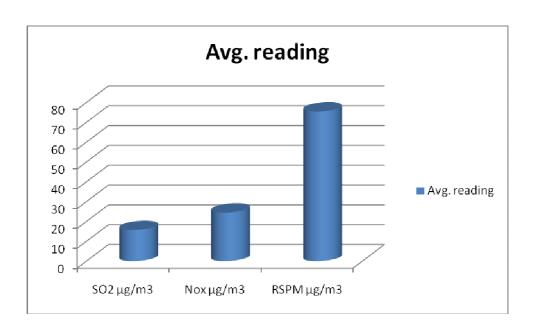
Location :RTO Colony Water Tank Type :Residential

near Golf Club Nashik

Program Name :NAMP Status:In operation

Frequency:Two days in a week

Year- April-2015	SO2	NOx	RSPM
to March -2016	μg/m³	μ g/m ³	μg/m ³
Standards	80.00	80.00	100.00
Avg. reading	15.65	24.48	75.42



Ambient Air Quality Monitored at NMC Nashik

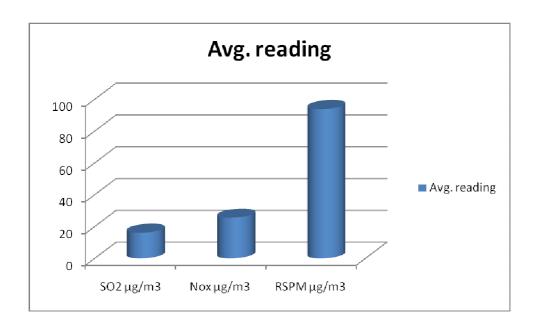
Location :Nashik Municipal Council Type :Rural & other

Building ,Nashik Areas

Program Name :NAMP Status:In operation

Frequency: Two days in a week

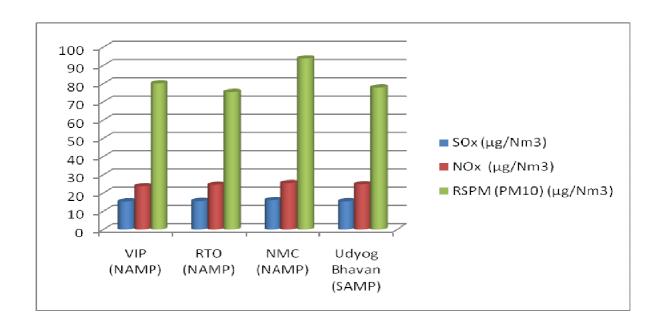
Year- April-2015	SO2	NOx	RSPM
to March -2016	μg/m³	μ g/m ³	$\mu g/m^3$
Standards	80.00	80.00	100.00
Avg. reading	16.09	25.48	93.82



AMBIENT AIR MONITORING DATA:

Annual Average of AAQM for the Year 2015 - 2016

Location	Category	SOx (μg/Nm3)	NOx (μg/Nm3)	RSPM (PM ₁₀) (µg/Nm3)
	Standard	50	40	60
VIP (NAMP)	Industrial	15.41	23.72	80.18
RTO (NAMP)	Residential	15.65	24.48	75.42
NMC (NAMP)	Commercial	16.09	25.48	93.82
Udyog Bhavan (SAMP)	Industrial	15.48	24.73	77.86



ACTION PLAN FOR REDUCTION OF CEPI INDEX:

SHORT TERM MEASURES: (One Year)

- Regular Vigilances and timely actions.
- Up gradation in existing ETPs
- DPR of CETP sent to Govt. for approval.
- To Promote Multi fuel Boilers –(Use of white coal / Bio fuels etc.)
- Giving direction to the industries for improvement in O & M of the existing arrangements.
- Constitution of Regional Pollution Prevention Committee (RPPC) with representation from NMC, MIDC, Industrial Association, GTZ, MPCB, and IIT Bombay.
- Comprehensive study of environmental quality of Nashik to assess causes and effects of pollution on different environmental sub-systems:
- o Quality of Surface & Groundwater,
- o Ambient Air Quality Modeling of the City,
- o Quality of Soils and Sediments in Nashik Region,
- o Traffic Impact Study (TIS) to device an appropriate city mobility plan (CMP)

 This exercise should be undertaken under close co-ordination with the aforementioned RPPC.
- To combat pollution due to poor sanitation, NMC has already started working towards preparing city sanitation plan in line with National Urban Sanitation Policy (NUSP) in technical coordination of GTZ-ASEM, New Delhi.

LONG TERM MEASURES: (> one year)

- To Promote use of Cleaner Technology
- Speed up the installation and commissioning of CETP for Small Scale Industries (Electroplating & others)
- MIDC-Underground Drainage System for Industrial Area.
- Use of solar street lights in Industrial area.
- Continuous Ambient Air Quality Monitoring Station for both Industrial Zones
- Rain water harvesting in Industrial areas.
- Development of Green Belt on existing open reserved plots in industrial Area and along with the road sides in MIDC area.

The outcome of the aforesaid study will essentially determine the future course of action. However, in general, the NMC has envisaged protecting and improving quality of various subsystems of city ecosystem by upgrading various environment management infrastructures in city.

Prevention and Control of Air Pollution:

- NMC has satisfactory road infrastructure, however, to execute ongoing projects like lying of sewerage and storm water drainage, some of the roads has been excavated and undergoing repair. All efforts will be made by the NMC to prevent dust pollution in the vicinity of those roads. Besides, NMC, as per its routine, constructs new pakka road and maintains the existing pakka road to prevent dust pollution likely to arise from such roads in windy weather.
- PUC check-up in NMC area to made mandatory in coordination with Regional Transport Officer (RTO).
- Comprehensive Air Quality Monitoring of Nashik Region in coordination with MPCB,

Prevention and Control of Soil Pollution:

- NMC has adequate infrastructure to process municipal solid waste generated
 in its jurisdiction but improvement needs to be done towards operation.
 Besides, it has acquired adequate land to deal with future requirements. NMC
 produces compost through its compost processing plant which enhances the
 essential nutrient content in soil.
- Awareness program shall be launched in relatively comprehensive way for the community to practice segregation at source so as to minimize quantity of waste likely to consume the place in the sanitary landfill.

FOR CONTROL OF NOISE (GENERAL PUBLIC):

- Avoiding or minimizing usage of loudspeakers during festival and wedding celebration.
- Restriction on burning of crackers i.e. implementing certain rule like adopting specific period for burning, prohibition on loud sounding crackers like hydrogen bomb.
- Declaring more silence zone.
- Banning usage of horns at traffic junctions.
- Educating people with respect to noise pollution and its effect on health.
- Installation of noise dosimeters at main areas of the city in order to make the public aware.
- Plantation of tall, dense trees along the sides of roads to reduce the impact of noise.
- Installing the Continuous Ambient Noise monitoring stations in city & industrial area in collaboration with CPCB.

MSW MANAGEMENT:

- Segregation of solid wastes into biodegradable and non-biodegradable components in order to undertake composting efficiently.
- Creating more awareness in public for minimizing wastes, non-usage of polythene bags, plastic bags.
- Prohibition on throwing wastes on roadside or in public places.
- Increase in number of mobile garbage collection vehicles, normally cundas places.
- Modernizing method of trash collection.
- Increasing the awareness programme in local people for effective segregation at the source.
- Upgrading the existing MSW Treatment Facilities and Enhance the proposed site for MSW Treatment Technically.

Water & Waste Water Management:

- Encouraging use of waste water obtained from domestic activities i.e. sullage is treated & recycle for toilet flushing & gardening, reducing fresh water requirement by 60%.
- Encouraging rain water collection & using same for non consumptive purpose.
- Mandating both Rain water harvesting & Sullage Recycle for new large complexes.
- Plantation of trees on hilly slopes on a warfutting.
- Educating Industries about water conservation by conducting water audits & Implementing the recycle & Reuse method of water.
- Optimize use of water through recycling.
- Avoiding the discharge of untreated effluents entering the surface water bodies.
- Modifying sewage treatment plants.
- Discouraging mass bathing in the holy river in order to reduce pollution.

- Prohibition of immersing chemicals painted idols in water bodies.
- The eco-friendly and economical red bed system for treatment and recycle of industrial effluent, sewage sullage also provides a solution to increasing problems of pollution & water scarcity.
- NMC has envisaged and is in process to collect and treat more than 95% of total sewage generated in city within next 2 years. Currently, NMC collects and treat 126 MLD of sewage collected through its existing sewerage system. Treatment capacity is likely to be increased in very near future to cater almost 100% sewage generated in the city. Lying of storm water drainage is also underway. Besides, the city sanitation plan being developed by the NMC will positively affect the NMC's vision of keeping the city green and clean.
- Awareness program shall be continued for the community residing alongside the River Godavari to prevent & protect the river pollution.

Green Belt Development:

- Conservation of green belts.
- Improvements of Footpaths.
- Developments of Tree plantation on the road side in order to increase beauty.
- Periodic manicure of tree planted on roads.
- Prohibition of Spiting, peeing & throwing waste on the roads.
- Improvement of Traffic island & junctions.
- Awareness to citizens to keep city clean through slogans, messages, media etc.
- Maintenance of public utility buildings and Monuments.
- Increase in number of parks & play grounds for public use.
- Total use of open land for green belt development,
- Arranging the seminar/awareness programme at school & collage levels.

Other Action Plan in Co-ordination with RTO & NMC

- Banning outdated vehicles of age more than 15 years.
 Power to fix the age of any model is conferred on Central Govt. vide Section
 of the Motor Vehicle Act, 1988. Till date no such notification has been issued. Central Govt. may be requested to consider this issue for consideration.
- 2) As per the provisions of 73 (3), Central Govt. can restrict and limit number of contract carriers in the cities / towns were heavy population is not less than 5 lakhs. Accordingly, Maharashtra Govt. has issued notification restricting number of contract carriers in the city of Mumbai, Thane, Pune, Nagpur, Solapur, Nashik, Aurangabad etc., the provision of Act & Rules need to be reviewed and amended suitably in the light of increasing population & urbanization of these cities.

- 3) MSRTC may be directed at Govt. level to provide proper, efficient & sufficient city buses in Nashik, various alternatives suggested in the plans by this office may be implemented.
- 4) Working of NMRDA will be helpful to reduce the problem of pollution in Nashik city.
- 5) Proper routing of the vehicles to avoid congestion. Powers of this function are vested with Traffic Policy only. This subject may be diverted to them.
- 6) Traffic of heavy goods vehicles may be routed outside city area by creating by-passes & ring roads before entry and exit of the city.
- 7) Local development authority may develop Truck terminals, bus terminals at various entry points.
- 8) This matter will be discussed with NMC, MIDC, and Hotel & Tourist Association.
- 9) We have already taken more than 68 awareness programmes in which 27,000 persons were trained.

CEPI after Action Plan -

	A1	A2	A	B1	B2	В3	В	C1	C2	C3	C	D	Total
Water	3.0	5.0	15.0	3.0	0.0	0.0	3.0	5.0	1.5	0.0	7.5	15.0	40.5
(Present)													
After ST	4.0	5.0	20.0	3.0	0.0	3.0	6.0	3.0	2.0	0.0	6.0	5.0	37.0
After LT	3.0	5.0	15.0	2.0	0.0	3.0	5.0	3.0	1.5	1.0	4.5	5.0	25.0

	A1	A2	A	B1	B2	В3	В	C1	C2	C3	С	D	Total
Air	2.0	5.0	10.0	2.0	0.0	0.0	2.0	5.0	1.5	0.0	7.5	10.0	29.5
(Present)													
After ST	2.0	5.0	10.0	2.0	0.0	0.0	2.0	3.0	1.0	0.0	3.0	5.0	20.0
After LT	2.0	5.0	10.0	2.0	0.0	0.0	2.0	3.0	1.0	0.0	3.0	5.0	20.0

	A1	A2	A	B1	B2	В3	В	C1	C2	C3	С	D	Total
Land	3.0	5.0	15.0	6.0	0.0	0.0	6.0	5.0	3.0	0.0	15.0	10.0	46.0
(Present)													
After ST	3.0	5.0	15.0	3.0	0.0	0.0	3.0	3.0	2.0	0.0	6.0	5.0	29.0
After LT	3.0	5.0	15.0	2.0	0.0	0.0	2.0	3.0	1.5	0.0	4.5	5.0	26.5

- A=A1 X A2, A1: Presence of Toxin, A2: Scale of industrial activities
- B=B1+B2+B3 B1: Pollution concentration, B2: Impact in people, B3: Impact on Eco-geological Features.
- C=C1 X C2+C3, Where C1= Potential Affected Population, C2 = Level of Exposure, C3= Risk to Sensitive Receptor
- D= Additional High risk Element.
- Land CEPI will be reduced from 29.0 to 26.5 after long term action plan

CEPI INDEX AFTER IMPLENETATION OF ACTION PLAN

Parameter	CPCB CEPI	Present	After Short Term Action Plan (1 year)	Long Term Action Plan After (1 Year)
Water	57.5	40.5	37.0	25.0
Air	55.0	29.5	20.0	20.0
Land	50.25	46.0	29.0	26.5

Conclusion:

The Nashik city is having about 50 to 55% of the area is under green belt & agriculture fields. The population of the Nasik city is about 16 lacs. & as per the air quality monitoring reports air quality seems to be well within the prescribed limits except RSPM exceeding the prescribed limits sometimes due to vehicular, construction activity etc.

In the Nasik Municipal Corporation area, 7 STPs are installed & operated. The total sewage generation is around 280 MLD & about 270.5 MLD sewage is being treated. Also, New 02 nos. of STP having capacity 50 MLD are proposed. This has resulted in to improving the water quality of the Godavari River.

Nashik industrial area is basically industrial engineering zone. In the nashik city no any chemical industries and industries covered under 17 category of polluting industries. After implementation of the measures planned for control of pollution the pollution load will be reduced.

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