LIFE
Legal Initiative for Forest and Environment

NCAP SERIES

REVIEW OF
ACTION PLAN FOR THE CONTROL OF AIR POLLUTION
GHAZIABAD & NOIDA

Author: Kankana Das

Editing & Design: Aakriti Shrivastava & Ankit Kumar

N-71, LGF, Greater Kailash 1
New Delhi, 110048
Phone: +91-11-49537774, 41025852
E-mail: Info@lifeindia.net.in
Website: www.thelifeindia.org.in

Summary:

Cities with poor air quality across India that do not match the National Ambient Air Quality Standards of 2009, have been termed as non-attainment cities and ordered to form "city action plans". These plans lay out the roadmap and specific tasks to be performed to reduce air pollution in the city.

This report is a review of such plans prepared for neighbouring cities of Ghaziabad and Noida. The action plans are intended to control vehicular emissions, suspension of road dust, and other fugitive emissions from biomass/crop residue, garbage/municipal solid waste burning, and construction and demolition. The action plans for both cities are identical in terms of actions proposed and their timelines, which led to a joint review report. This analysis finds that the same action plan for two cities with different industrial profile and pollution sources is unreasonable. Overall, these plans merely reiterate existing regulations instead of data-backed ideas or targets. To see any improvement in the air qualities of Ghaziabad and Noida, new plans need to be formulated as the current ones are highly ineffective.

Key Findings:

- Action plans for both cities do not report the status of Air Quality Management Committees. Forming these committees is mandatory for non-attainment cities following an order by the National Green Tribunal.

- The plans lack quantifiable targets. They list addition of electric buses as one action, but there is no information about the number of vehicles or charging stations that will be added. Same is the case with the listed actions of adding water fountains and distributing masks.

- Construction and demolition (C&D) waste processing facility is mandatory in cities managing such waste. However, none of the two action plans have proposed a C&D waste facility or specified if such facilities are in place.

Background

Noida is one of the ten most polluted cities of the world, as per the 2019 World Air Quality Report by IQAir. This is not unexpected, given that it adjoins other cities that are also on the dirty list: Ghaziabad, Delhi, Faridabad and Gurgaon. Together, they comprise one of the most polluted regions in the world, where more people are exposed to such highly polluted air than any other part of the world. Noida is an acronym of New Okhla Industrial Development Area and was set up in 1976 to encourage export-oriented industries. Over the last two decades, it has become a mix of industrial, residential and office complexes. Noida has been included in the list of 102 "non-attainment cities" by the Central Pollution Control Board (CPCB). This means that its air quality does not comply with the National Ambient Air Quality Standards 2009. Noida has prepared an action plan pursuant to the 2018 direction of the National Green Tribunal (NGT)[1].

The Ghaziabad district, adjoining Noida, also has large number of industries. In the early 1970s, many steel-manufacturing units came up in the city making it Ghaziabad's primary sector. Electronics industry also emerged in this period, with the setting up of Bharat Electronics Limited and Central Electronics Limited. Over the years, planned industrial development saw participation from major industrial houses of the country including Mohans (Mohan Nagar Industrial Estate, 1949), Tatas (Tata Oil Mills), Modis (Modinagar, 1933; International Tobacco Co. 1967), Shri Rams (Shri Ram Pistons, 1964), Jaipurias, etc,. and also significant participation through foreign capital such as Danfoss India Ltd. (estd. 1968), Indo-Bulgar Food Ltd. and International Tobacco Company (estd. 1967).[2]

Image 1: A smog gun in Greater Noida.

Credit: Vikrant Tongad

1 In matter of News Item Published in "The Times of India" authored by Shri Vishwa Mohan Titled "NCAP with Multiple Timelines to Clear Air in 102 Cities to be released around August 15" (OA 681 of 2018)

2. https://cpcb.nic.in/Actionplan/Ghaziabad.pdf

Objective

The present paper aims to review the action plans prepared for Noida and Ghaziabad cities. The objective is to critically evaluate effectiveness of the plans in reducing pollution levels to meet the NAAQS 2009.
It is important to highlight here that the action plan for Ghaziabad and action plan for Noida are identical in actions proposed and timelines, therefore a combined review has been prepared with city-specific examples.

Salient Features of Action Plan

The proposed action plans are intended to control vehicular emissions, suspension of road dust, and other fugitive emissions from sources such as biomass/crop residue, garbage/municipal solid waste burning[3], industrial emissions[4] and air pollution from construction and demolition activities[5]. The proposed action plans are a combination of long-term and short-term actions.

Various actions suggested for vehicular emission control[6] include introduction of electric buses for public transport, construction of bypasses/expressways and peripheral road to reduce traffic congestion, cycle and bike zone strengthening at metro depot, retrofitting particulate filter in diesel vehicles in synchronous with BS VI fuel, promoting battery-operated vehicles, widening of roads, extensive drive against polluting vehicles for ensuring strict compliance, arrangement of multi-level parking and prevention of parking at non-designated areas. The plan proposes[7] maintenance of 33% forest cover in the master plan of the city, creation of green buffer by planting species that are good at pollution control, water fountains at important traffic junctions, blacktopping of metal roads, maintenance of pothole-free roads etc., as measures to reduce fugitive dust emissions.

Observation

1. Status of Air Quality Management Committee

The NGT in an October 2018 order, directed state governments to constitute Air Quality Monitoring Committee (AQMC) to prepare air quality action plans for "non-attainment cities" in the state.

However, the action plans for both Noida and Ghaziabad lack information on the status of their AQMC. Unlike other city action plans, the Noida and Ghaziabad plans make no reference to the constitution of AQMCs.

3. 5.C of Noida and Ghaziabad Action Plan: (i - vii)
4. 5.D of Noida and Ghaziabad Action Plan – Actions for control of industrial emission (a) (i-iii) long term action plan and (b) (i-v) short term action plan
5. 5.E of Noida and Ghaziabad Action Plan (i - vi)
6. 5.A of Noida and Ghaziabad Action Plan: Vehicle Emission Control – (a) (i -viii) Long term action plan, (b) (i- ix) Short term action plan
7. 5.B of Noida and Ghaziabad Action Plan: Suspension of Road Dust and Other Fugitive Emission Control – (a) (i -ii) Long term action plan, (b) (i- vii) Short term action plan

2. Quantifiable targets missing

The action plans for both Noida and Ghaziabad lack quantifiable targets.

- The action plans talk about plying of electric buses for public transport including establishment of sufficient charging stations[8], steps for promoting battery-operated vehicles[9] , installation of remote sensor-based PUC system[10] etc. However, the plans do not provide any information on the number of such e-vehicles, charging stations etc.

- The plans also mention installing water fountains at major traffic intersections[11] or water sprinkling for dust suppression[12] , but they do not specify the number of sprinklers or fountains that will be put up. One objective is to ensure availability of masks to public[13] at the time of severe or above AQI[14]. This seems impractical from an enforcement point of view, given the size of population that needs to be covered. Therefore, phase-wise and time-bound quantifiable targets must be in place for execution of such tasks.

The action plans lack baseline data on polluting vehicles presently plying on the road. There is also no information on major traffic junctions where water fountains or green buffer will be put up. Without baseline figures, any numbers of electric vehicles, water sprinkler or water fountains cannot meet the objective.

3. City Action Plans lack regional approach

Although there are no separate source apportionment studies for Noida and Ghaziabad, such a study of Delhi (ARAI et al, 2018) has recognized that not all of Delhi's air pollution originates there. Pollution from neighbouring states also affects the air quality in the city. The city action plans of Noida and Ghaziabad have however not considered any initiative to restrict and control dispersion of pollutants towards Delhi.

4. Similar timeline for different cities

Having the same timeline for one action in different cities may compromise both the scale of action as well as the quality of work. For example, the requirement of parking facilities in Noida and Ghaziabad will vary depending on the vehicle composition, population density and other factors that have not been taken into account.

Also, the industrial profiles of Ghaziabad[15] and Noida[16] are different, as reflected by their respective district Micro, Small and Medium Enterprises (MSME) profiles and also the comprehensive action plans for critically polluted industrial clusters of Noida[17] and Ghaziabad[18]. For example, Ghaziabad had 1,383 registered units till 2011[19] whereas Noida had 1,196 registered units till 2011[20]. Among these, Noida had 10 highly polluting industries and 164 red category industries[21]. Ghaziabad had 67 large and medium category industries and 313 Small Scale Industries (SSI)[22].

8. Action Point No. 5.A (a) (i) of Noida and Ghaziabad Action Plan
9. Action Point No. 5.A (b) (vi) of Noida and Ghaziabad Action Plan
10. Action Point No. 5.A (b)(ix) of Noida and Ghaziabad Action Plan
11. Action Point No. 5.B (b) (iii) of Noida Action Plan and Action Point No. 5.B (b) (iv) of Ghaziabad Action Plan
12. Action Point No. 5.B (b) (vi) of Noida Action Plan and Action Point No. 5.B (b) (vii) of Ghaziabad Action Plan
13. Action Point No. 5.F (b) (viii) of Noida and Ghaziabad Action Plan
14. Air Quality Index
15. District MSME profile of Ghaziabad - http://dcmsme.gov.in/dips/final%20Report%20Ghaziabad.pdf
16. District MSME profile of Gautam Budh Nagar-http://dcmsme.gov.in/dips/DIP%20Report%20Gautam%20Budh%20Nagar.pdf
17. https://cpcb.nic.in/displaypdf.php?id=Tm9pZGEucGRm
18. https://cpcb.nic.in/displaypdf.php?id=R2hhemlhYmFkLnBkZg==
19. http://dcmsme.gov.in/dips/final%20Report%20Ghaziabad.pdf
20. http://dcmsme.gov.in/dips/DIP%20Report%20Gautam%20Budh%20Nagar.pdf
21. Comprehensive Action Plan of Noida CPA, 2010, accessed from https://cpcb.nic.in/displaypdf.php?id=Tm9pZGEucGRm
22. Comprehensive Action Plan of Ghaziabad CPA, 2010, accessed from https://cpcb.nic.in/displaypdf.php?id=R2hhemlhYmFkLnBkZg==

Industrial profiles of the two cities differ in type, characteristics and number of units. In such a scenario, formulating similar actions with similar timelines cannot be useful in reducing industrial pollution and the plans are bound to fail.

Similarly, in case of decongestion of roads, an arbitrary timeline of 90 days has been given for planning and implementing the action in both Noida and Ghaziabad. The timeline has not even factored in the total number of road stretches that need to be decongested.

5. Actions to reduce vehicular emission

Plying of electric buses

One of the actions proposed to reduce vehicular emission is plying of electric buses for public transport, including establishment of sufficient charging stations.[23] Interestingly, this action is aimed at reducing traffic congestion. That is not possible because electric vehicles reduce tail pipe emission and have no effect on traffic congestion. Further, electric vehicles alone cannot reduce vehicular emission unless existing old and polluting buses are replaced with electric ones. The action plans for both the cities do not have any measure for phasing out old and polluting vehicles.

Parking of vehicles in non-designated area

As part of vehicular pollution control measures, the action plans propose that vehicles should not be parked in non-designated areas.[24] However, there are no details about the steps/measures to be taken to prevent unauthorised parking. This is not enough for cities with ever-increasing traffic. A Supreme Court order in the matter of M.C. Mehta Vs Union of India & Ors[25] on Delhi's parking issues is of relevance here. The Court has directed a set of actions for resolving the parking problem in Delhi[26]. This includes immediate notification of the draft Delhi Maintenance and Management of Parking Places Rules 2019; viability and effectiveness of introducing RFID[27] tags; parking guidance and information systems; and last mile connectivity from parking spaces to commercial areas, institutions etc. The Government of Delhi has been directed to ensure proper assessment of parking needs for the next 25 years while granting permission to build any structures. Noida and Ghaziabad must also come up with a detailed and comprehensive parking policy in line with their requirements.

6. Enforcement of Construction and Demolition Waste Rules 2016

The action plans for Ghaziabad and Noida have merely stated "enforcement of Construction and Demolition Rules 2016", adding that fines should be imposed on defaulting units[28]. However, details of the rules have not been made clear. Implementation of the Construction and Demolition Waste Management Rules 2016 is mandatory under the Environment (Protection) Act, 1986. A city-specific facility is required for processing construction and demolition waste, mandated as per the Rules. According to the Schedule III (to be read with Rule 13) of the Construction and Demolition Waste Management Rules 2016, cities with population of one million and above had to commission and make the facility operational within 18 months, i.e. by September 2017. Cities with population of 0.5 - 1 million had to do the same within 24 months, i.e. by April 2018. Noida, with a population of 0.6 million as per Census 2011, should have commissioned the facility by April 2018 while Ghaziabad (4.6 million population as per Census 2011) should have commissioned it by September 2017.

Neither of the city action plans have proposed a construction and demolition waste processing facility, nor have they made clear if the cities have such facilities in place.

23. Action Point No. 5.A (a) (i) of Noida and Ghaziabad Action Plan
24. Action Point No. 5.A (b)(iii) of Noida and Ghaziabad Action Plan
25. Writ Petition (Civil) No. 13029 of 1985
26. Supreme Court Order dated 2nd September 2019
27. RFID - Radio Frequency Identification
28. Action Point No 5. E (i) of Noida and Ghaziabad Action Plan

Conclusion

The analysis shows that action plans for both Noida and Ghaziabad cannot lead to any improvement in air quality even if fully implemented.

It can be safely concluded that despite being among the most polluted cities in the world, both Noida and Ghaziabad do not have any comprehensive plan to clean up the city. Mere cosmetic beautification of the city by painting walls with murals and greening with ornamental plants will not make the cities clean. In the absence of any plan to clean up the city, both Noida and Ghaziabad will continue to figure, for many years to come, in the list of most polluted cities of the world. For the people living in the cities, it is dangerous existence.

References

ARAI, et al (2018): The Automotive Research Association of India (ARAI) and The Energy and Resources Institute (TERI); Source Apportionment of $PM_{2.5}$ and PM_{10} of Delhi NCR for Identification of Major Sources; accessed from https://www.teriin.org/sites/default/files/2018-08/Report_SA_AQM-Delhi-NCR_0.pdf

CPCB (2010): Air quality monitoring, emission inventory and source apportionment study for Indian cities by Central Pollution Control Board; Chapter 1, accessed from https://cpcb.nic.in/displaypdf.php?id=RmluYWxOYX-Rpb25hbFN1bW1hcnkucGRm

LIFE
Legal Initiative for Forest and Environment

PRINCIPAL OFFICE
N-71, LGF, Greater Kailash 1
New Delhi – 110048
Phone: +91-11-49537774, 41025852
E-mail: Info@lifeindia.net.in
Website: www.thelifeindia.org.in

REGIONAL OFFICE
AC-160, Sector-1, Salt Lake,
Kolkata - 700064
Phone: 033-40607481