

**EPCA Report No 106****Special report on pollution hot spots in NCR with request for urgent directions to improve enforcement and pollution control****October 18, 2019**

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On October 15, 2019 the Graded Response Action Plan (GRAP) came into force in Delhi-NCR. This is being monitored by the Environment Pollution (Prevention and Control) Authority (EPCA). To further enhance the impact of GRAP this year EPCA has decided to put extra focus on controlling air pollution in air pollution hotspots in the region. These hotspots have been identified by EPCA based on analysis of data from all the air quality monitoring station in the region and verified by site visits by Chairman EPCA, Shri Bhure Lal.

This report is to inform the Hon'ble Court of the situation on the ground, as found by chairman EPCA and the directions needed to ensure enforcement and action to control local sources of pollution, which are greatly adding to the challenge of toxic air in adverse weather conditions of winter.

This is important Delhi has been able to bend the pollution curve with improvement in annual air pollution load on the city from 2010 to now (Annexure 1 lists the actions taken till date). Even after these gains city still needs to reduce pollution levels by 65 per cent to meet the national air quality standard. Therefore, it becomes highly critical to act on these pollution hotspots to control local polluting sources to ensure healthier air in the region.

**2. Pollution hot spots need enforcement**

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Monitoring of air quality has identified 'pollution hot spots'. These are areas where pollution levels are higher than the city average – which itself is much higher than the acceptable standard for air quality.

**Delhi:**

1. Okhla phase 2,
2. Dwarka,
3. Ashok Vihar,
4. Bawana,
5. Narela,
6. Mundka,
7. Punjabi Bagh,

8. Wazirpur,
  9. Rohini,
  10. Vivek Vihar,
  11. Anand Vihar (including Mandoli),
  12. R K Puram,
  13. Jahangir Puri,
  14. Mayapuri
- Haryana:

1. Faridabad 1 and 2,
2. Bahadurgarh,
3. Gurgaon (including Udyog Vihar);

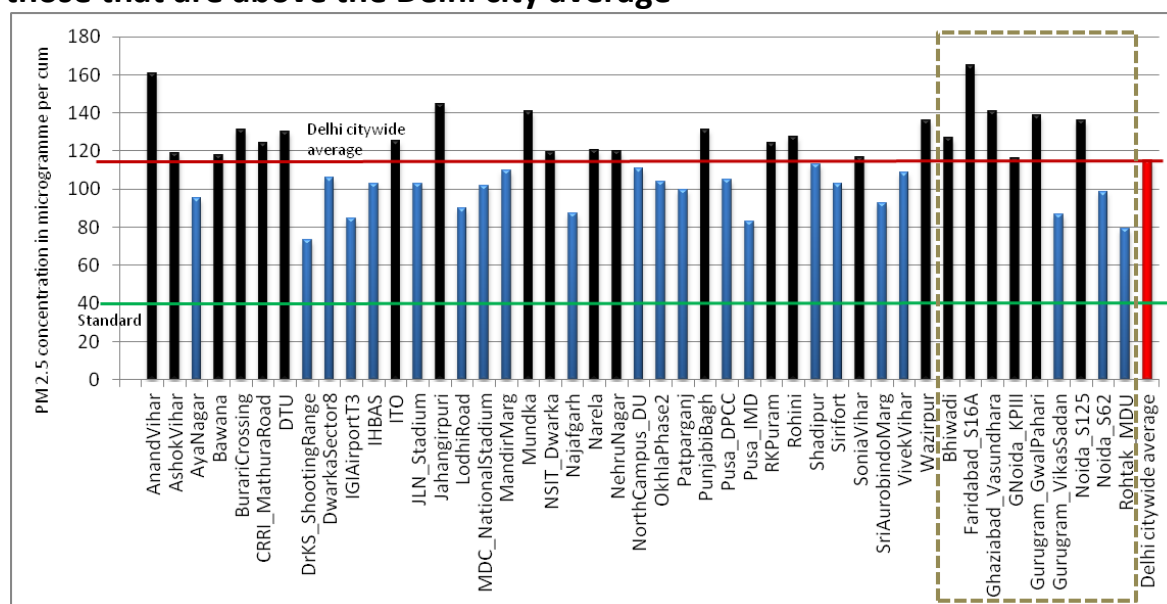
UP:

Sahibabad

Rajasthan:

Bhiwadi.

**Graph 4: PM2.5 concentration in all locations in 2018: Stations in black are those that are above the Delhi city average**



Note: All stations that have less than 60 per cent data availability are not included in the analysis

Source: CSE analysis based on real-time data from CPCB on-line portal

### 3. Directions sought from the Hon'ble Court for increased enforcement/action to control pollution in hot spots

Chairman EPCA has visited most of the sites identified as hotspot to investigate reason for high air pollution and understand nature and scale of local pollution sources (See Annexure 2 for detailed report and photographs of site visits by Chairman EPCA).

The biggest problem that has been found is the massive amounts plastic, rubber and other industrial waste which is being burnt in the open, leading to pollution. The question is what can be done to resolve this problem.

In Bawana, Mundka and Tikri, EPCA first worked with DPCC to issue necessary directions for closure, penalty so as to ensure that the industries would ensure compliance and no waste would be burnt.

But it also found that these directions were not sufficient as the problem of disposal of this waste continued. Chairman EPCA then worked to find resolution to the problem through convening meetings with the industries. It was agreed that MOUs would be signed between industries and the Delhi MSW solutions ltd so that the waste could be sent for incineration.

As a result of these MoUs roughly 80,000 tonnes of plastic and other waste has been sent for incineration, which would have been otherwise burnt in the open with disastrous consequences (see Annexure 3).

Similarly, 8000 tonnes of plastic and other waste has been removed from Shahdra Drain, on the intervention of Chairman EPCA (see Annexure 4).

However, this is the tip of the iceberg – across the NCR waste is piled up and then burnt. This has become a major source of pollution and urgent remedial action is needed.

**The urgent directions sought from the Hon'ble Court are as follows:**

	<b>Source of pollution</b>	<b>Way ahead</b>	<b>Directions sought from the Hon'ble Court</b>
1.	Massive quantities of plastic, industrial and other waste are found dumped in vacant areas and then burnt	Identification of dumped waste, enforcement to ensure that it is not burnt and removal for processing/incineration	May direct Delhi, Haryana, UP and Rajasthan to ensure that no waste is burnt in their regions/and that they find methods to remove the piled-up waste in hot spots and to process/incinerate it

2.	Industries emitting visible black smoke from chimney	EPCA inspection in hotspots has found many instances where there is visible black smoke from industry. There are standards for PM, NOx and Sox and industry is required to be compliant with the standard and to ensure that there is no pollution.	May direct Delhi, Haryana, Rajasthan, and UP pollution control boards to rigorously monitor the emissions, especially at night and take stringent action against any industry found non-compliant/with chimneys with visible smoke.
3.	Dust from construction sites and no proper disposal of construction and demolition waste	MoEF&CC has notified the Construction and Demolition Waste Management Rules, 2016. Detailed checklist for dust control at construction sites issued so that enforcement is improved. Pollution Control Boards have also been penalizing developers for mismanagement of dust in construction sites. However, these penalties are not leading to remedial actions – as developers continue to operate with disregard to the pollution that is being caused	May direct Delhi, Haryana, Rajasthan and UP to file status report on the penalties imposed; names of repeat offenders and if any project developers have been blacklisted or projects closed down because of non-compliance with dust management rules and guidelines.
4.	Dust from major road projects being undertaken in NCR	Road construction without dust management, covering and sprinkling of water (treated wastewater) over the site is crucial. These directions have been issued but no visible improvement is seen. The state pollution control boards are imposing	May direct Delhi, Haryana, UP and Rajasthan to file status report on the non-compliant under-construction roads



		penalties but even these are not leading to improvement	
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## Annexure 1

**Table 1: Action taken this decade (2010-2019) to combat air pollution in Delhi**

<b>Sector-wise measures implemented</b>	<b>Actions Taken</b>
<b>Industry</b>	Approved fuel list notified. In Delhi this notification bans use of all dirty fuels, including coal. In NCR states, pet coke, furnace oil is banned.
	Introduction of NOx and SOx standards in industries so that either they install pollution equipment or move to cleaner fuel like natural gas
	Expansion of piped natural gas (PNG) network to the different industrial places in Delhi—1050 has already converted to PNG and 350 are in process of the conversion. Delhi government has also incentivized move to gas in industrial areas by offering subsidy and removing tax on gas. Official data shows 95 per cent conversion of authorized industrial units.
<b>Power Plants</b>	Progressively shutting down coal power plants (total generation capacity of 1,245 MW) in the city and moving to natural gas -- Indraprastha (405MW): September 2009 -- Rajghat (135 MW): May 2015 -- Badarpur (705MW): October 2018
	Natural gas made available for Bawana power plant
<b>Vehicular emissions</b>	CNG programme for public transport - autos, taxis and buses that was started a decade ago has been further expanded to include more commercial segments.
	Bharat Stage IV emissions standards for vehicles implemented in 2010 and Bharat Stage VI fuels with 10 ppm sulphur introduced in 2018.
	10 year-old diesel vehicles and 15 year-old petrol vehicles are being phased out

	Favourable taxation for clean fuel introduced; also expansion of CNG stations from original 9 to more than 500 in Delhi and NCR
	Environment Pollution Charge on big diesel cars (more than 2,000cc) has contributed towards disincentivizing personal diesel cars. Diesel cars sales have dropped.
	Pilot on Hydrogen-CNG buses started so that this improved H-CNG could be option for older fleet of CNG vehicles
	Use of remote sensing technology for monitoring emissions from on-road vehicles has been directed
	To check pollution from in-use vehicles, strengthening and improvement in Pollution Under Control Programme (PUC) initiated across NCR. Enforcement has improved
	Installation of stage I and Stage II vapour recovery system initiated and expanded. Environmental compensation of Rs 1 crore imposed on oil companies: IOCL, HPCL and BPCL for non-compliance with directions on vapour recovery
<b>Specific action on trucks: high-polluting segment of vehicles</b>	The long-awaited bypass roads to divert commercial traffic built: Eastern Peripheral Expressway and Western Peripheral Expressway (EPE and WPE), which were ordered in 2005 have been made functional in 2018-19, which has allowed commercial and extremely polluting trucks to bypass the city
	To deter non-destined truck traffic, the country's first congestion charging introduced in 2015. Environment Compensation Charge (ECC) on each category of commercial vehicles imposed at time of entry into city
	Restriction on entry of 10-year old trucks
	Introduction of RFID at 13 entry points in Delhi for cashless ECC payment will make the congestion charge effective
<b>Public transport</b>	After stagnation and decline in bus numbers and passengers, procurement of new buses has started. Bus parking constraint is being addressed.
	NCR reciprocal agreement -- autos and buses allowed to run across borders in entire NCR draft in 2008 and effective from 2010; Time for its renewal
	The ridership in the metro has increased from 6,25,000 in 2007-08 to 25,37,175 in 2018-19. The operational route has increased from 65.1 km in 2007-08 to 228.78 km in 2017-18
	Parking policy as a demand management tool notified. Pilot schemes on parking area management plans initiated.

<b>Construction and Demolition waste and road dust</b>	Checklist for dust control at construction sites made so that enforcement is improved
	The Construction and Demolition Waste Management Rules, 2016 notified
	There are 60 mechanized road sweeping machines in Delhi
	Environmental compensation of Rs 1 crore has been imposed on Municipal bodies (New Delhi, South, East, North and Cantonment Board) over open dumping/ burning of garbage and C&D waste vide directions dated January 16, 2019 under section 31 A of the Air (Prevention and Control of Pollution) Act, 1981
	City has expanded recycling capacity of its C&D waste recycling plant at Burari from 500 MTD to 2,000 MTD. Two new plants are added to combined capacity of 650 MTD.
<b>Waste burning</b>	Solid Waste Management Rules and Regulations 2016 notified
	Delhi byelaws amended based on these rules and notified in January 2017
	The city has over 2,300 waste dumps —neighbourhood structures to collect and store waste. Over 80 per cent of the waste is processed through incineration.
	Recently, Delhi fought a bitter battle to stop large-scale burning of plastics in Mundka area of Delhi that caused enormous poisonous gases.
	12 wards from different MCDs in Delhi have been selected as model wards for waste segregation and management. 6,000 roadside twin bins procured.
<b>Monitoring and Graded Response Action Plan (GRAP)</b>	Air quality monitoring stations expanded to 38 in Delhi and over 50 in NCR
	Early Warning System for Delhi launched in October, 2018
	Graded Response Action Plan targeting key sources of pollution has been implemented during the winters of 2017-18 and 2018-19: These short-term measures during smog episodes include shutting down power plant, industrial units, ban on construction, ban on brick kilns, action on waste burning and construction, mechanised cleaning of road dust, etc. This also includes limited application of odd and even scheme.

## **Reports of Hot Spot site visit by Dr. Bhure Lal,** **Chairman, EPCA**

<b>Date of visit</b>	<b>Sr.No.</b>	<b>Site Visited</b>
05/10/19	1	New Friends Colony - Jhilmil industrial area
	2	Saboli & Mandoli village - Mandoli industrial area
	3	Bhopura border
	4	Sabji mandi, Sahibabad
	5	Hindon vihar, Ghaziabad
	6	Shaidabad industrial area:
06/10/19	1	Urban Extension Road 2 (UR 2)
	2	Narela Industrial area
	3	Panipat industrial area
12/10/19	1	Meerut Industrial Area
13/10/19	1	Mundka, Tikri
	2	Bahadurgarh
19/10/19	1	Bhiwadi

## October 5, 2019

Prior to the meeting at Ghaziabad District Magistrate's office, a site visit was conducted by the Chairman, EPCA. The findings of the site visit are summarized below.

### 1. NEW FRIENDS COLONY - JHILMIL INDUSTRIAL AREA

The industrial area is spread approximately over 89 acres (1.5 km x 0.2 km). It is a regularized industrial colony in the city. Over 1,000 orange category industries including Wire, Plastic, LED, manufacturing, rubber, chemical, handling, packaging industries (cement/gypsum packing), and metal welding/cutting/polishing units are located in this area. At least 3,000 small Lorries and truck ply in this region according to the public in the area.

#### Observations

1. Plastic and other industrial waste were found dumped under metro bridges and set to fire. More material was found stacked for further blazing
2. Industries are vertically placed up to three floors with hanging wires. This is Unsafe environment with potential of fire breaks. Safety is compromised. It is to be noted that in July this year 5 people were dead when a rubber factory in the area broke into fire at the top floor.
3. Strong odor of unauthorized fuel use could be sensed on inspection.
4. The industries were much closed door; no information on the source material handled/waste generation was available unlike in usual industrial areas/colonies.

### 2. SABOLI & MANDOLI VILLAGE - MANDOLI INDUSTRIAL AREA

The industrial area is spread approximately over 62 acres (0.5 km x 0.5 km). It is a regularized industrial colony in the north eastern part of the city. According to the people in the area, roughly 2000 industries operate in the area. Metal/Scrap metal processing/casting industries - copper, aluminum, iron, brass, zinc are prominent in the area. Furnaces are common. Use of unauthorized dirty fuel - tyre oil, furnace oil and diesel in their furnaces is a menace. Few days before the visit of the Chairman, EPCA, 18 industries who were found using dirty fuel was sealed. A team comprising of the Delhi Pollution Control Committee (DPCC), police and civil administration visited on surprise inspection and sealed the industries. It is to be noted that earlier in 2016 also 146 highly polluting industries in the area was shut.

### **Observations**

1. The air foul smelled. Particulate flouting and deposition on skin was felt.
2. Most industries in the area mention they have shifted to use of natural gas. Several oil tankers were kept outside on the ground.
3. Use of coal – an unauthorized fuel supply in the city premises was observed.
4. Building material suppliers were found storing material for sale in open without any sheet cover.
5. Waste dumps were found in the area which could be set on fire.

### **3. BHOPURA BORDER**

Loni-Bhopura border was found dotted with numerous waste dumps which could be set to fire this winter. Rubber, plastic, waste materials were found stocked on the plots. Numerous complaints have emerged from this area that there has been instances of electric wires, battery, and other scrap material set being fired to extract metals which reach the scrap markets.

### **Observations**

1. Koyal Enclave has new real-estate apartments. Opposite of new apartment Ozy homes Pvt. Ltd. thyrofoam and other plastic waste heaps was found dumped (about 10 acres land). These mostly are the covers of pillow, beds, air conditioning units's packaging material, sofa and other cover materials used to prevent the equipments from shocks and scratches during transport.
2. Panchsheel enclave area is inhabited by Kabadis who deal with plastic, rubber, and foam waste along a 1-2 km road. In vacant plots (each of size 3-7 acres) mountains of waste has been accommodated. They can be set to fire at nights. Highly polluting carcinogenic pollutants will emanate from the fumes endangering life. Night patrolling has been ordered to ensure no firing of garbage. Contacts has to be established with the industries and it be emphasized to them not to set this garbage into fire. It was communicated in the meeting that negotiations are underway to use them in waste to energy plant. The discussion and activities be expedited. In the meantime this waste must not be set to fire and inventory of such waste be maintained.
3. Construction material (about 20-30 truck load material) was found lying uncovered in Panchsheel enclave area along the road. Their handling can prod dust floating in the ambient air. Appropriate control measures should be taken to minimize dust emissions.

#### **4. SABJI MANDI, SAHIBABAD**

Sabji Mandi in Ghaziabad had around 2400 sq.ft dumped with rich organic waste which was left fermenting and fouling creating nuisance to the public. The segregators and waste management systems were defunct. None of the tandal spaces were found utilized, encroachment of paths, congestion, and heavy particulate dust was observed. Following which the below instructions were advised,

1. Garbage removal from Sabji Mandi Sahibabad and proper utilisation of the waste was to be done by October 15, 2019.
2. Right of way (ROW) in Sabji Mandi to be established.
3. Transactions should be done from the Tadals only.
4. No encroachments on the road in the mandi, clean and clear ROW are ensured in Sabji mandi.
5. Regular water sprinkling should also be ensured in Sabji Mandi area to control dust.

#### **5. HINDON VIHAR, GHAZIABAD**

Hindon Vihar was a kabadi dominated area. The area is located in the north-east and is a non regularized colony on the banks of the lean River Hindon.

##### **Observation**

1. Waste burning is a major issue similar to Goyal enclave. The dumps were on lands owned by individuals with fences. However setting plastic and other waste to fire are common according to the people around the area. The administration was advised to ensure 1. Night patrolling, 2. Vigil monitoring and 3. Action on default.

#### **6. SHAIDABAD INDUSTRIAL AREA:**

Sahidabad industrial areas houses steel, pipe, motor winding companies. Two read mix concrete plants are also in the area – Tata and ACC. Dust due to material handling and road damage was common. Based on the site visit, the below instructions were advised to control dust emission in the area,

1. Dust control measures should be taken by all the industries handling material and waste.
2. Central Works Department should take up plantation along the road way. Proper soil without mix of cement and other dirt should be ensured for the same. Right type of plants should be planted like Peepal, Pelican, and Neem. In the vacant area between two trees grass should be planted.

3. The area must be free from plastic. Respective officers should be posted to ensure the same.
4. Factories can be involved in the maintenance of the area by allotting certain patches. They can be advised to utilize their Corporate Social Responsibility (CSR) funds to maintain the same.
5. It should be ensured that authorized fuel is only used by industries in this area. Use of unauthorized fuel like rubber oil, Chappals, etc. be banned. Defaulters should be proceeded against under the provisions of law. Periodic visit be carried by senior official to ensure appropriate fuel use.

#### Construction activities management:

1. Culvert and Brij Vihar Nallah should be constructed in time bound manner. All floating material and sediment be removed within three months.
2. Pakka road to be constructed in front of Ready-mix concrete (RMC) plant and all corrective measures be taken to catch dust. Dust catching technology and measures must be installed.

#### MOBILITY CONGESTIONS

1. Unauthorized bus stop was observed at Mohan Nagar which is holding the traffic in the area. SSP was advised to visit the site and make arrangements for the bus stop ensuring no encroachments of the ROW.
2. Illegal parking near Khaushambi bus stop was observed and authorities were advised to clear the same.
3. Similarly authorities were asked to ensure service roads are not used for 3 wheeler parking or any other mode of transport parking.
4. Parking arrangements were advised to be made for Dabur, Tata Steel, and Fair Dealz Maruti service centre.



Photographs of site visits of October 05, 2019

**Jhilmil Industrial Area**



Waste burning



Waste dumping

**MANDOLI INDUSTRIAL AREA**



Construction and Demolition Waste dumping



Coal supply in Delhi



waste dumping



Building material supply without tarpaulin cover



## BHOPURA

Opp. Koyal Enclave



Plastic waste dumping

Panchsheel Enclave,  
Bhopura

Plastic waste dumping

Panchsheel Enclave,  
Bhopura

Construction material stored in open

Panchsheel Enclave,  
Bhopura

Construction material stored in open

Sahibabad Sabzi Mandi



Sahibabad Subji Mandi – Waste Dumping

HINDON VIHAR,  
GHAZIABAD

Waste dumping Hindon Vihar



## **Site Visit October 6, 2019**

Prior to his meeting at Deputy Commissioner's office Panipat, Chairman EPCA visited the below sites to ensure pollution reduction in the city. The site visit observations, advice given to officials have been summarized below.

### **1. Urban Extension Road 2 (UR 2)**

Garbage dump and setting them to fire was a menace in the area. Piles of garbage were found lying along the road and opposite to the industrial area. Though the performance of the industries was satisfactory, threat of industry equivalent pollutant release exists on firing the piled up garbage in the area.

#### **Observations**

1. Small-scale textile waste, packaging and plastic waste, rubber waste from non – regularized industries, gudowns, were found dumped along the road starting Alipur till Narela Industrial estate. The waste has also been set to fire; burnt char was found atleast in 3-4 spots along the road. Piles were built up particularly on Borghar road at Dalhousie point.
2. Also huge garbage dump was observed outside right opposite to the Narela Industrial Area. The industrialists were instructed to clear the dump else it appeared it had been prepared to be set on fire soon. The land belonged to Public Works Department (PWD).
3. The UR2 road is maintained by the Delhi Development Authority (DDA). The authorities were advised to register the Raddiwalas' in the areas and ensure appropriate fencing of the land to prevent further dumping.

### **2. Narela Industrial area**

Nearly all the units have shifted to use of natural gas. The factories are tracking the waste generation and transport to the third-party for treatment. They complained sale of liquor in plastic bags addicting the workers and generating waste, and water scarcity in the area.

### **3. Panipat industrial area**

Cluster of textile industries were found operating in the area. Predominantly they use oil and coal as fuel for steam generation. Effluent treatment systems are defunct. Short stacks and heavy pollution was prevalent.

#### **Observations:**

1. **Plastic and other waste burning in the industrial area:** Plastic, rubber and other industrial waste were burning on the roadside within the industrial area. Fire brigade was called to extinguish this fire after instructions by the Chairman EPCA to Regional Officer (RO), Panipat.
2. **Uncontrolled emissions at the Stack:** Black smoke was observed from many of the running units. Only four units in the area are using natural gas fuel. Emissions as high as 1000 mg/N.cu.m with black carbon and soot particles are visible.
3. **No fugitive emission control measures** were seen at one of the **Ready-mix concrete (RMC) plant** in the industrial area. Regional officer Panipat, HPCB has been instructed to ensure compliance at the facilities.
4. **Sludge deposition:** Dumping of industrial waste on the road sides, empty plots, and accumulation of untreated industrial effluent on land was seen.
5. **Defunct CETP:** Working and performance of the CETP installed in the industrial area is questionable and needs to be checked by the RO Panipat.
6. **Construction material storage improper:** No sprinkling system for construction material stored in the open.

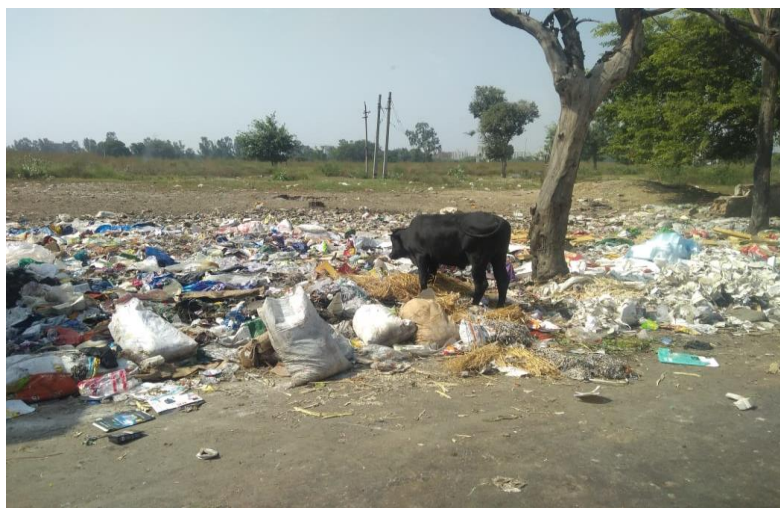
#### 4. Deputy Commissioner Presentation

Ms. Sumedha Kataria (Dy. Commissioner) briefed that the administration is working towards proper corrective actions:

1. Out of the 37 units inspected by them 17 units were found non-complying. Show cause notice has been issued to 17 no. of units and closure notice is issued to 9 no. of units.
2. Dust control measures have been taken to contain air pollution in NCR districts. They have employed about 800 employees and 7 machines to sweep the road and maintain 60 km road in the district.
3. Proper solid waste management along with prevention of bio mass burning has been ensured by collecting garbage door to door.
4. Out of total 103 brick kilns, 86 no. of units have switched to zig-zag technology. The remaining 17 units are permanently closed.
5. Administration is ensuring uninterrupted power supply in Panipat district to discourage the use of DG sets.
6. Steps were taken to control vehicular pollution. DC also provided the list of the units found running without CTE/CTO from the board, non-complying units for the latest one week before the meeting (between 1<sup>st</sup> October, 2019 till 5<sup>th</sup> October, 2019

## Photographs of site visit October 6, 2019

## UER Road



Garbage Dumping



Garbage Dumping

## Panipat Industrial Area



Waste burning



Stack emissions



Pollution from RMC plant



CETP sludge dumping in open

**October 12, 2019**

**Meerut Visit**

1. On NH-9 after UP Gate up-to Dasna interchange road is under construction. On NH-9 dust is dominating in entire area, water is not sprinkled and everywhere dust is blowing in air causing heavy air pollution in Violation of environment act liable to be punished. RO Ghaziabad informed that a penalty of Rs.90.23Lakh has been imposed on NHA. NHA is directed to ensure regular and sufficient sprinkling of water. What is the completion date of this Project and is the project running late of as per the schedule? Chairman NHA should nominate Nodal Officer to proper monitoring of entire stretch and for NH9/DME & NH-235 (Meerut Hapur Road).
2. Ved Cellulose Ltd (Paper Mill) on 16 milestone NH-9 is causing huge air pollution by way of visible dense black smoke coming out from its chimney. Ved Cellulose Ltd is also dumping all its boiler's waste ash on the vacant land and on road side near its factory. RO, Pollution Ghaziabad informed that a penalty of Rs.26.25 Lakh has been imposed on Ved Cellulose Ltd. Company owner, who was present in meeting was directed to ensure no repetition of this serious offence in future, otherwise strict action will be taken against him.
3. On 14-15KM milestone at RMC and Hot Mix Plant high level of dust was visible in the air because of uncovered building material. These people should be given a strict warning.
4. Near GS Medical College and Hospital huge patch of land was found dumped with municipal solid waste. There was huge fire in municipal waste was also seen. Authorities are directed to properly stack this municipal waste and daily municipal waste, which is coming to this site must be segregated, processed and stored.
5. Several factories in Dheer Khera Industrial Area (on Hapur-Meerut Road) were found emitting dense black smoke. A strong action should be taken against these polluters to stop this violation of environment act and after 3-4 days surprise visit and checking should be conducted in these factories and if anyone found involved in violation of act, he should be fined heavily.
6. a) On NH-235 Meerut-Hapur road, dumping ground of Meerut nagar nigam just after Meerut City is most mismanaged and is in very bad condition. City Commissioner, MNN is directed to ensure scientific management of this dumping ground along with keeping minimum area for dumping and covering most of area with soil to ensure neat and clean environment around this site.

- b) All the municipal and plastic waste lying road side, water bodies and vacant land must be removed by respective nagar nigams of Meerut, Hapur, Modi Nagar and Pilkhuwa
7. In Partapur bypass industrial area and phase-1 industrial area Meerut huge amount of smoke was seen coming from several factories. Pollution Department is directed to give very strict notices to these factories and after 2-3 days a surprise checking should be done and anyone found violating the environment act should be punished heavily. In all the Industrial Areas and Industrial Clusters strict monitoring must be done including Night Patrolling.
  8. Modi Sugar Mill and Other Sugar Mills must be given strict warning to run their boiler with water scrubber and bag filters and those found violating must be punished very heavily. Zero Tolerance must be observed in case of Sugar and Paper Mills.
  9. It is directed that Nagar Nigam Meerut and Meerut Development Authority must explore to setup a C&D (Construction and Demolition) Waste processing plant to consume huge amount of C&D Waste that is being generated in Meerut City. This will bring down huge burden of disposal of C&D waste.
  10. Regarding non availability of PNG to Entrepreneurs, GAIL/IGL is directed to ensure earliest supply of PNG to entrepreneurs of Meerut and Hapur so that they can convert to clean fuel at the earliest.
  11. Proposal for waste to energy plant for Hapur and Meerut Nagar Nigam must be explored on top priority.



Photographs of site visit to Meerut on October 12, 2019

On Main NH-9  
Behind HP Petrol Pump  
19KM Mile Stone before  
Hapur



Industrial Stack emissions

Partapur bypass road  
NH34, Near SBI, Meerut



Industrial Stack emissions

Phase I, Industrial Area,  
Mohkam Pur, Meerut



Waste burning in Industrial area

Near G S Medical College & Hospital, NH 24, Pilkhuwa,  
Uttar Pradesh 245304



Waste burning

On NH34, Aminagar,  
Meerut,



Waste dumping

Dumping Yard on  
NH-235, Meerut-Hapur  
Road



Dumping yard in Meerut



**October 13, 2019**

## **1. Mundka, Tikri**

EPCA Chairman visited Mundka, Tikri nearby area and Bahadurgarh of Haryana.

Member Secretary DPCC, DC (MCD) of the area, officers from the PWD, Police and Revenue.

1. It is observed that on NH 11 from Pirhagarhi crossing to Tikri border is very dusty, dugged up and construction material and plastic is lying at different places. It seems the mechanical sweepers/manual sweeping is not undertaken since long. This condition is contributing significantly in concentration of road re-suspension dust.
2. The road UER2 towards Mundka Industrial area is highly dusty and plastic/rubber waste is lying all over. The action on road dust is required to initiate at the earliest.
3. The agricultural land near Mundka Village is turning into commercial area as big go-downs are coming up everywhere. It is also observed the plastic waste is burnt here. The visiting team reached at one of the go-downs and douse the fire with the help of local police.
4. The roads of the Mundka village are full of plastic waste.
5. To RMC plants found operational in LokNayakPuram, Bakarwala without adequate dust control measures. DPCC officials were directed to check the violations and initiate action and put a deterrent fine on them.
6. EPCA Chairman convened a meeting of local residents of the area near pillar 479 Rajdhani Park Metro Station. EPCA Chairman stressed upon to take all the precautions to stop garbage burning and dust suppression so in this winter the conditions will not move to Severe or Severe +. It is further directed officers of the PWD to take all the preventive measures to stop road re-suspension dust on NH-11 and for removal of construction and demolition waste. DC (MCD) also directed to take all the measures to stop garbage dumping and keep the night visit to stop any type of burning.
7. On the complaint that at Tikri Border a stretch of almost 1 Km of the road is water logged. Chairman directed MCD and PWD to initiate action immediately to solve the problem.

## **2. Bahadurgarh**

1. Chairman EPCA visited Bahadurgarh area Chairman Haryana State Pollution Control Board, RO, City Magistrate Bahadurgarh and other officers accompanied.
2. It is observed big storage of the construction material and RMC are operational without any dust suppression facilities. EPCA Chairman showed his displeasure and requested Chairman HSPCB to initiate the action immediately.
3. The plastic scrap market on the Haryana-Delhi border visited and it is observed that it is growing on a very fast rate. The officer of the revenue department Haryana clarified that it's an illegal development and the land use is agriculture still. Chairman HSPCB informed that they will study the case and submit the status.
4. It is also observed that a big landfill site is developed near educational institute though boundary wall is under construction but the sighting of the landfill site is wrong as it is very close to major road. Corrective steps are required.
5. A meeting of industrialists and officers was convened at DC Jhajjar Office. Chairperson HSPCB is also present. Chairman EPCA enquired about the plastic and rubber residual waste, their collection and disposal system. No satisfactory answer given by the officers or by industrialists. It is directed that Chairman HSPCB will discuss this matter with their officers and submit a report to EPCA. DC Jhajjar is also requested to look into the matter of plastic market and identify the plot where the market can be developed.
6. It is also discussed no reverse borings was observed in the area though it happened in the past.

## Photographs of site visit October 13, 2019

## Mundka Area



Roadside waste dumping



Roadside waste dumping

### **Field Visit to Bhiwadi Region on October 19, 2019**

A visit was made to Bhiwadi region, Rajasthan to review the implementation of measures listed under Graded Response Action Plan and following observations were made:

1. Massive fire was observed on the RIICO industrial area's allotted waste dump yard. The fire was so massive. Local residents complained that on a daily basis the garbage dump is set to fire endangering the villages and industries on the side lines more than 4 years now. One person was dead and 4 children in the area were reported to be affected by cancer according to the residents. The total area of the dump yard was 24-28 acres. 220 kV power distribution pole was on the waste yard and electricity lines were passing over the waste dump area which was set to fire. There is a potential risk of explosion at the site. A firefighting squad was called on my insistence to quench the burning. EPCA was informed that this land has been already allotted for development of dump site but no development initiated by RIICO yet.
2. Similarly behind RP Industries (Mundane Meo), RIICO, about 5 acres of land was dug 10 m deep and was found filled with plastic – hard and single use, thermoform, and other waste estimated to be around 10000 tonnes. Although the waste stored was not set to fire but smouldering was observed on the site and that the waste burning appears as a regular practice on this site.
3. Incidence of open burning of industrial waste outside M/s Megha Inc., G-1-687-A, RIICO Industrial Area was noted and this is commonly seen at also other locations in the industrial area.
4. Rag pickers were found carrying out segregation of huge volume of plastic waste at various locations but the state government representatives were unaware about the land use of these areas (commercial/ forest/ agriculture land) and further there is no solution identified by the state for treatment of non-recyclable plastic which is expected to be set to fire by the rag pickers.

Based on the field visit, EPCA made the following recommendations for consideration:

1. State govt. to prepare area development plan for Bhiwadi development clearly earmarking commercial/ forest/agriculture land and permitting the prescribed commercial activities only in the commercial area. No commercial activity to be allowed on agriculture/ forest land.
2. Plan should be prepared within 01 month for development of landfill site at Rampur-Mundana. Boundary wall of sufficient height to be provided all around the site. Area should be kept under strict vigil to prevent any chance of burning.
3. Plastic waste dumped at RIICO industrial area plot shall be got cleared within 15 days and this waste be stored for further processing.
4. Rag pickers should be shifted to a designated area for carrying out activities of segregation of waste. State shall explore alternatives for management of non-recyclable plastic and submit report.

Photographs of site visit October 19, 2019



Waste dump burning on RIICO Industrial waste yard



Fire Extinguisher being called



Fire extinguished on waste dump burning yard



Waste dumping near RP industries



Megha Inc. Plot No.:  
G1-687A, RIICO Ind.  
Area, Khushkhera,  
Rajasthan



**DELHI MSW SOLUTIONS LTD.**

(A Ramky Group Venture)

MCD Workshop, Near Metro Station,  
Model Town, Phase-1, Delhi-110009

Phone : 011-27450824

Towards sustainable growth

Our Ref:- DMSWSL/North DMC/632/2019

Date:- 16<sup>th</sup> October 2019

To

**Sh. Bhure Lal**

Chairman - EPCA

India Habitat Center

Lodi Road

New Delhi

Sub:- Regarding collection , transportation, processing and disposal of Plastic and Other  
Inflammable waste

Respected Sir,

In line with the direction received from your good self, we have entered into separate agreements from various PVC market associations operating in Tikeri , Mundka, Piragadhi and Alipur area including but not limited to Delhi Development Authority for Mangolpuri Industrial area and an tripartite agreement with DSIDC for Narela Bawana industrial area.

Under the various agreements till now we have received a total of 79827.10 MT of Plastic and Rubber waste at our Waste to Energy Plant at Narela Bawana. The said quantity also includes the quantity delivered by North DMC through their own departmental vehicles. Detailed statement of the same for the period October 2018 to 15<sup>th</sup> October 2019 is attached herewith this letter for your ready reference and perusal.

Pl do let us know incase if any further information is required.

Thanking you in anticipation.

For Delhi MSW Solutions Ltd

Authorized Signatory

Plastic and Rubber Waste Collected/Transported / Received at Narela Bawana Waste to Energy Plant for the Period of October-18 to 15th Oct -2019

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Total
	TEKRI/ Narela	NDMC DPT	SDMC DPT	ALIPUR	MUNDKA/ MSW	PVC M / Tekri	BIDPL	PNCIDIPL	IWS/MUN DKA	PPWT	DRPL	DDA	PVC/TK/SPT	Balbir Plastic Waste Traders (BPWT)	Nish Earth Movers (NEM)	
MONTHS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	TONS	
Oct-18	0	0	0	0	0	0	3487.645	2444.67	0	0	0	0	0	0	0	0
Nov-18	1274.64	0	0	0	0	0	8498.69	10698.55	0	0	0	0	0	0	0	0
Dec-18	6273.725	2358.005	140.31	41.895	237.315	271.28	4829.86	1743.595	0	0	0	0	0	0	0	0
Jan-19	2042.685	7487.96	0	59.86	111	261.27	2006.845	859.835	270.01	0	0	0	0	0	0	0
Feb-19	0	0	0	42.94	0	0	42.94	782.4	0	45.29	0	0	0	0	0	0
Mar-19	0	0	0	51.925	0	177.355	1721.22	644.24	0	20.93	270.325	0	0	0	0	0
Apr-19	0	0	0	57.68	0	111.64	1665.92	745.43	0	0	6.11	0	0	0	0	0
May-19	0	0	0	45.87	35.395	0	1562.16	682.13	7.075	0	26.94	0	0	0	0	0
June-19	0	0	0	54.335	0	0	1656.03	771.93	0	1.205	1.205	45.1	0	0	0	0
July 2019	0	0	0	68.22	0	18.55	1824.35	996.77	0	0	0	461.61	109.795	0	0	0
Aug 19	9.045	267.34	0	88.15	0	2.54	2237.96	1051.395	0	0	0	204.905	0	0	0	0
Sept-19	0	0	0	126.23	124.89	0	2544.01	1111.575	0	0	0	0	39.46	5.65	166.65	0
Upto 15th Oct 2019	0	0	0	68.88	0	0	1023.525	591.825	0	0	0	0	0	8.405	166.65	0
TOTAL TONS	9600.095	10113.305	140.31	705.985	508.6	842.635	33101.16	23124.35	277.085	67.425	304.58	711.615	149.255	14.055	166.65	79827.10





OFFICE OF THE SUPERINTENDING ENGINEER, FLOOD CIRCLE-I:  
GOVT. OF N C T OF DELHI:  
IRRIGATION & FLOOD CONTROL DEPARTMENT:  
L.M. BUND OFFICE COMPLEX, SHASTRI NAGAR, DELHI-110031:  
PHONE NO. 21210870:

F.No. SEFC-I/DB/CD-III/MISC./2018-19/ 1935-37

Dated: 26/2/19

REPORT

To,

The Chairman, EPCA,  
Core-6A, 3<sup>rd</sup> Floor, India Habitat Centre,  
New Delhi-110003.

Sub: Inspection of Shadhara Drain.

Ref:UD letter No. PS/Pr. Secy./UD/2019/308 dated 07/02/2019.

I am directed to refer to your observations made during your visit to Shadhara Drain on dated 07/02/2019, that the Shadhara drain is in filthy condition due to accumulation of a huge quantity of floating material/MSW near Patparganj Industrial Area and to inform you that a total quantity of 8139MT from the above point has been removed and disposed off at SLF site of EDMC at Shinghola khampur Tikari during period 17/01/2019 to 14/02/2019. (Photographs enclosed)

It is further to inform you that the stacked material could not be removed from the above site due to closure of SLF site by EDMC for a period of more than 02 months i.e. 12/10/2018 to 27/12/2018.

A copy of each of EDMC letter certifying the above position is also enclosed herewith for your kind perusal.

Further an undertaking/certificate, as a testimony of the facts of the removal of above stated floating material/MSW and its disposal at SLF site of EDMC, by the EE, CD-III is also enclosed herewith.

Yours faithfully

Encl: As above

(Y.K. SHARMA)

SUPERINTENDING ENGINEER (FC-I)

F.No. SEFC-I/DB/CD-III/MISC./2018-19/ 1935-37

Dated: 26/2/19

Copy forwarded for information:-

1. P.S. to Secretary (I&FC) Deptt., Varunalaya, DJB (H.Q), Karol Bagh, Delhi.
2. Chief Engineer (Zone-I), I&FC Deptt., Govt. of NCT of Delhi, Delhi-110031.

(Y.K. SHARMA)

SUPERINTENDING ENGINEER (FC-I)

27/2/2019



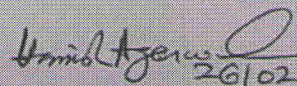
OFFICE OF THE EXECUTIVE ENGINEER, CD-III:  
GOVT. OF N C T OF DELHI:  
IRRIGATION & FLOOD CONTROL DEPARTMENT:  
L.M. BUND OFFICE COMPLEX, SHASTRI NAGAR, DELHI-110031:

EE/CD-III/T-27/DB/2018-19/

Dated:

CERTIFICATE

It is certified that the floating material/MSW, quantity 8139MT has been lifted from Shadhara drain (Trunk Drain No. 1) from the point at RD 260m near Patparganj Industrial Area during the period 17/01/2019 to 14/02/2019 and disposed off at SLF site of EDMC, at Shinghola Khampur, Tikari.

  
26/02/2019  
EXECUTIVE ENGINEER  
CIVIL DIVISION-III



**Before****Date: 25.11.2018****After****Date: 13.02.2019**

**Comparison Photograph of Shahdra Drain near Road No.:57  
Opposite Patparganj Industrial Area. Situation Before and  
After intervention of Dr. Bhure Lal (Chairman, EPCA)**