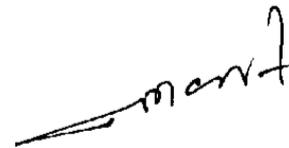


f) NHAI constructed and maintained by PWD- at Andheria Mod to Ayanagar at Mehrauli Gurugram Road.

3. The Hon'ble Tribunal constituted a committee with CPCB, CGWB, DPCC and applicant (joined later).
4. However the Committee conducted the inspection without taking the Applicant. This committee has taken samples from the RWH constructed by the NDMC, Ambedkar Hospital. And these members were not having information on how to collect samples from the recharge pit and Recharge borewell. And thus did not collect the sample.
5. Thereafter the committee involved the Applicant on 11.07.2019, 19.07.19 and 22.07.2019 and collected samples from the rest of the departments.
6. That the DPCC sent the samples and sent to lab and found waste water and sewage water and grease oil in the collected samples. The lab report is annexed as **ANNEXURE A1 (page no._____)**
7. That on the basis of the lab report the Committee has directed the storm water drain should not be connected with the RWHS and the existing connection should be closed. And in future RWHS should not be connected with the RWHS. The committee has imposed penalty of RS 50 lakh each on DDA and NHAI and PWD. The report of committee is **Annexure A2 (page no._____)**
8. The Hon'ble Tribunal has accepted the report and passed the directions that such system with connection with storm water drain should be closed. The order of the Hon'ble Tribunal is **Annexure A3 (pages no. _____)**

9. As per the APPLICANT there has not been compliance of the directions of the Hon'ble Tribunal. The same RWHS which were directed to be closed are still functioning and further the direction that new system should not be connected with Storm water drains is also not being followed. And the departments are still polluting the ground water in the same manner.

Dated



Applicant

Mahesh Chandra Saxena
S/o Late Sh. Ram Bihari Lal Saxena
R/o A-388, Chhatarpur Enclave, Phase-I
Chhatarpur, New Delhi-74
Mob. 9540844936
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Brief of inspections and water sampling of RWHSs carried out by the team constituted in Hon'ble NGT case OA No. 526/2019

S. No.	Date of Inspections	RWHSs Owning Agency and Officer Present	Brief Of Locations of RWHSs	Main Observations	Sampling locations	Test Results	Remarks
1	01.07.2019	DJB Sh. Vijendra Kumamr (JE)	DJB (Water Emergency) Office	Pit: 3m×3m×2.5m. Borewell: 6 inch in diameter & 25m depth. Catchment: Roof top 1500sqm+ spilled water during filling of tankers. Grease Trap and Sedimentation Tank are required before RWHSs. Replacement of Filter Media is required.	Water samples were taken from the RWH pit (Sample A) and DJB water tanker (Sample B).	Sample A PH -8.1 TSS - 156 BOD -14 COD - 52 OIL & GREASE- 4.4 TDS - 123 Sample B PH -8.0 TSS - 4 BOD -ND COD - ND OIL & GREASE- ND TDS - 95	The result of analysis report reveals that Sample 'A' is contaminated.
2	01.07.2019	DJB Sh. B.C Patel (EE) Sh. Naresh Kardam (ZE)	DJB (Office of Executive Eng. South IV, Near Lal Chowk Okhla Phase-2	Pit: 4m×3m×2.5m. Borewell: 6 inch in diameter & 25m depth. Catchment: Roof top 500sqm+ spilled water during filling of tankers. Grease Trap and Sedimentation Tank are required before RWHSs. Replacement of Filter Media is required.	Water samples were taken from the RWH pit (Sample A) and nearby DDA borewell (close to 200m) having 500ft depth (Sample B).	Sample A PH -7.9 TSS - 46 BOD -4 COD - 16 OIL & GREASE- 1.4 TDS - 238 Sample B PH -7.7 TSS - 2 BOD -ND COD - ND OIL & GREASE- ND TDS - 265	The result of analysis report reveals that Sample 'A' is contaminated.
3	01.07.2019	NDMC Sh. Manjeet (AE)	Between 11 Murthi Statue and Talkatora Stadium (Mother Teresa Crescent Road). 1. Near Tree No. 486 2. Near Tree No. 506 3. Near Tree No. 545	1. Pit of 6m×1.50m×1.40m with Borewell of 300mm in diameter & 42m in depth. 2. Pit of 4m×2m×2m with Borewell of 300mm in diameter & 39m in depth. 3. Pit of 4m×2.25m×1.40m with Borewell of 300mm in diameter & 36m in depth. They were properly maintained and a sedimentation tank has been provided before RWHSs.	No sample taken.	No sample taken.	

Brief of inspections and water sampling of RWHSs carried out by the team constituted in Hon'ble NGT case OA.No. 526/2019

S. No.	Date of Inspections	RWHSs Owning Agency and Officer Present	Brief Of Locations of RWHSs	Main Observations	Sampling locations	Test Results	Remarks
4	02.07.2019	PWD Sh. Ajay (AE)	Sarvodaya Kanya Vidyalaya, Aya Nagar	Pit: 4m×2m×3m. Borewell: 200mm in diameter & 86.85m in depth. Catchment: Roof top 2980sqm+ Surface runoff 3850sqm. A sedimentation tank has been provided before the RWHS.	No sample taken.	No sample taken.	
5	02.07.2019	DDA Sh. R. K Mehta (EE)	Sector- E, Pocket-2 Park 1. In Front of Flat No. 616, 692 and 754 2. In Front of Flat No. 197 and 497 3. Backside Open Land	1. Pit: 7m×1.7m×2.15m with two Borewells of 200 mm in diameter & 56.50m in depth. Common sedimentation tank was installed and found filled with soil & waste material and was found dry. Material settled in the pit due to which holes were found. 2. Pit: 5m×1.7m×1.60m with Borewell of 200mm in diameter with 57.50m in depth RWHSs was not maintained and found dry. 3. Pit: 3m×2.5m×2.40m with Borewell of 300mm in diameter with 113m in depth. RWHSs. was not maintained and found dry. * RWHSs are having Catchment: Rooftop 9907sqm+ Surface runoff 26093sqm each.	Water sample was taken from the borewell present in park of DDA.	PH -7.7 TSS - 4, BOD -ND COD - ND OIL & GREASE- ND TDS - 649	The result of analysis report reveals that Sample is non-contaminated.
6	02.07.2019	DDA Sh. M.R Sharma (AE)	Mega Housing behind D-6, Vasant Kunj, In front of Tower N-2.	Pit: 6m×2m×3m with two Borewells of 4 inch diameter & depth of 160m each. Catchment: Rooftop 9907sqm+ Surface runoff 26093sqm. RWHS was found Dry and Maintained.	No sample taken.	No sample taken.	

Brief of inspections and water sampling of RWHSs carried out by the team constituted in Hon'ble NGT case OA No. 526/2019

S. No.	Date of Inspections	RWHSs Owning Agency and Officer Present	Brief Of Locations of RWHSs	Main Observations	Sampling locations	Test Results	Remarks
7	02.07.2019	DDA Sh. R.K Mehta (EE)	Senior Welfare Association, B-XI, DDA Community Centre, Vasant Kunj.	Pit: 3m×2.5m×2.95m with Borewell of 300mm in diameter and 113m in depth. Catchment: Rooftop 313sqm+ Surface runoff 3825sqm. RWHS was not inspected as the slabs were jammed due to which it was hard to open them.	No sample taken.	No sample taken.	
8	04.07.2019	PWD Sh. Ajay Kumar (AE)	Baba Saheb Ambedkar Hospital, Rohini Sector-6 has 7 RWHSs at following locations: 1. Opp. Qtr No. 273 2. Near Gate No. 5 3. Near Dr. Hostel (Boys), North Side, Gate No. 3 4. B- Block, Near Gate No. 1, Rohini West Metro Station. 5. Gate No. 2 (Jail Backside). 6. Near Gate No. 1 Left Side. 7. Near STP.	Each RWHS has Pit: 8m×2m×2.1m with two Borewells of 200 mm diameter & depth of 12 m. Total Catchment Area for all RWHSs: 49300 sqm (Rooftop 39300sqm+ Surface runoff 10000sqm). RWHSs are properly maintained except RWHS mentioned at location no.6. All RWHSs are found Dry and Samples were collected from 2 locations. No Sedimentation tank has been provided before RWHSs. Ground Water Level reported approx. 8M below the Ground Level.	i. From Handpump around 10 M away from 1st RWHS- Sample A (Opp. OTR No. 273). ii. From Borewell of 60 Ft. deep, near Gate No. 3 and around 60 M away from RWHS 3- Sample B.	Sample A PH -8.0 TSS - 8 BOD -ND COD - ND OIL & GREASE- ND TDS - 328 Sample B PH -8.0 TSS - 4 BOD -ND COD - ND OIL & GREASE- ND TDS - 328	The result of analysis report reveals that both the Samples are non-contaminated.

Brief of Inspections and water sampling of RWHSs carried out by the team constituted in Hon'ble NGT case OA No. 526/2019

S. No.	Date of Inspections	RWHSs Owning Agency and Officer Present	Brief Of Locations of RWHSs	Main Observations	Sampling locations	Test Results	Remarks
9	11.07.2019	SDMC Sh. C.S Meena (AE) Sh. Jagdish Gahlot (JE)	MCD/JE/ Store/Chattarpur Main Road: Near Temple	Pit: 2.40m×4.20m ×1.40m with Borewell of 200 mm in diameter and 155 Fl. Total Catchment Area:250 sqm (Rooftop 150sqm+ Surface runoff 100sqm). Filter Media is to be replaced. Sedimentation tank has to be reconstructed. Integration of Rain Water Convergence Pipes to be upgraded for Rooftop only.	Recharge Borewell inside the RWH Pit.	PH -7.3 TSS - 488 BOD -55 COD - 160 OIL & GREASE- 8.8 TDS - 285	The result of analysis report reveals that Sample is contaminated.
10	19.07.2019	DDA Sh. Lokender Singh (XEN- SED)	Vasant Kunj Flats: 1. Behind D-6 along 45 M Road. 2. Near UGR, Narmada Society/ N1 Block	1.Pit: 6m×2m ×3m with Borewell of 100 mm in diameter and 34.40 m. The Storm Water Drain carrying water runoff of Road (45M) is connected to the Recharge Chamber and found Dried. Filter Media needs to be replaced. Recharge Borewell needs to be redeveloped 2.Pit: 6m×2m×3m with Borewell: 100 mm in diameter with 90 m in depth. Filter Media needs to be replaced. Recharge Borewell needs to be redeveloped. Only Roof Top Run-Off should be connected in the RWH pit. Static Ground Water Level is 80 m.	Location 1. No water in recharge well and pit. Sample could not be taken. Location 2. Sample taken from Pit (Sample A) and Borewell (Sample B) of RWHS at location 2 (Narmada Society/N 1 Block).	Sample A PH -7.9 TSS - 228 BOD -180 COD - 536 OIL & GREASE- 8.8 TDS - 127 Sample B PH -7.9 TSS - 48 BOD -34 COD - 96 OIL & GREASE- 2.8 TDS - 184	The result of analysis report reveals that both the Samples are contaminated.

Brief of Inspections and water sampling of RWHSs carried out by the team constituted in Hon'ble NGT case OA No. 526/2019

S. No.	Date of Inspections	RWHSs Owning Agency and Officer Present	Brief Of Locations of RWHSs	Main Observations	Sampling locations	Test Results	Remarks
11	19.07.2019	PWD Sh. Vikas Verma (AE) Sh. Sanjeev Rajnan (JE)	In Storm Water Drain at M.G Road (Main) 1. Near Arjan Garh Metro Station, Pillar No. 178. 2. Near Ghitorni Metro Station, Pillar No. 102.	The RWHSs are installed inside the Storm Water Drains and are located at 75 m centre to centre distance along full length of 7 Km (approx.) on both sides of Road (as per copy of RTI reply attached). Size of RWHS pit cannot be measured and each RWHS has two bores of 100 mm diameter. Silt found deposited inside Storm Water Drain at location 1. No Information, Permission, Technical Assistance, Design and Certification of work done for RWHSs obtained by the land owning agencies/stakeholder i.e, NHAI/PWD, sought from CGWB/DJB. The maintenance and upkeep of the drain lies with PWD at present. Waste Water found flowing inside Storm Water Drain at location 2. * PWD officer present during the inspection mentioned on the report that NHAI has not handed over/ informed PWD regarding RWHS installed inside the Storm Water Drains. Area DJB officers also mentioned that no sewage water of village Ghitorni is being left in PWD Drain.	No sample taken from Location 1. Samples were taken from Borewell at Location 2.	PH - 7.7 TSS - 428 BOD - 170 COD - 524 OIL & GREASE - 10.4 TDS - 619 Total Coliform MPN/100ml - 35 x 10 ⁶ . Fecal Coliform MPN/100ml - 35 x 10 ⁶ .	The result of analysis report reveals that Sample is contaminated and water quality shows it is sewage.

Brief of Inspections and water sampling of RWHSs carried out by the team constituted in Hon'ble NGT case OA No. 526/2019

S. No.	Date of Inspections	RWHSs Owning Agency and Officer Present	Brief Of Locations of RWHSs	Main Observations	Sampling locations	Test Results	Remarks
12	22.07.2019	DDA Sh.Shailendra Kumar (EE)	UER-II Dwarka 60 m Link Road (Samllha-Dwarka Road) 1. Near Golden Green in Storm Water Drain. 2. Near Tivoli Pushpanjali Farm in Storm Water Drain. 3. Opp. Bijawasan Gate, adjoining to Airport Boundary.		1. Sample from Drain has been taken as the bore was found choked at location 1 Sample A,B 2. Samples taken from bore at 14 m depth and from Drain at location 2 Sample C, D. 3. Samples taken from bore at 20 m depth and from RWH pit at location 3. Sample E,F.	Sample A PH -7.3 TSS - 538 BOD -210 COD - 660 OIL & GREASE- 6.8 TDS - 194 Sample B PH -7.6 TSS - 434 BOD -210 COD - 668 OIL & GREASE- 12.4 TDS - 186 Sample C PH -7.8 TSS - 172 BOD -120 COD - 340 OIL & GREASE- 4.4 TDS - 532 Sample D PH -7.6 TSS - 652 BOD -260 COD - 772 OIL & GREASE- 7.6 TDS - 193 Sample E PH -7.8 TSS - 241 BOD -190 COD - 544 OIL & GREASE- 8.4 TDS - 171 Sample F PH -7.8 TSS - 405 BOD -170 COD - 516 OIL & GREASE- 9.2 TDS - 116	The result of analysis report reveals that all six Samples are contaminated.

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL

PRINCIPAL BENCH, NEW DELHI

Original Application No. 526/2019

In the matter of:

Mahesh Chandra Saxena

.....Applicant

Vs

Central Pollution Control Board & Anr

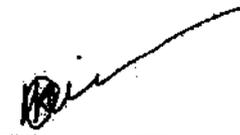
.....Respondent(s)

Additional

ACTION TAKEN REPORT ON BEHALF OF DELHI POLLUTION
CONTROL COMMITTEE

1. That this Hon'ble Tribunal vide its order dated 31.05.2019 was pleased to pass the following directions:

"A joint Committee of the Central Pollution Control Board (CPCB), the Delhi Pollution Control Committee (DPCC) and the Central Ground Water Board (CGWB) take samples of groundwater and study the methodology of groundwater recharge undertaken by Respondent."
3. That in pursuance and compliance of the aforementioned order passed by this Hon'ble Tribunal dated 31.05.2019, a Committee has been constituted vide order dated 22.06.2019.
4. That interim reports have been filed before Hon'ble Tribunal on 08.07.2019 and 29.07.2019 via email for kind consideration.
5. That the Report of the Committee is enclosed herewith as Annexure-A for the perusal and kind consideration of this Hon'ble Tribunal.


V.K Jain, AEE

DPCC

**REPORT OF THE COMMITTEE
CONSTITUTED IN PURSUANCE AND
COMPLIANCE OF THE ORDER PASSED BY
HON'BLE NATIONAL GREEN TRIBUNAL
DATED 31.05.2019
IN O. A. NO. 526/2019
MAHESH CHANDRA SAXENA
VERSUS
CENTRAL POLLUTION CONTROL BOARD &
ANR.**

Report of The Committee Constituted in Pursuance and Compliance of the Order Passed by Hon'ble National Green Tribunal Dated 31.05.2019 in O A No. 526/2019 titled as, "Mahesh Chandra Saxena Versus Central Pollution Control Board & Anr."

1. The Hon'ble National Green Tribunal in its order dated 31.05.2019 in the above mentioned matter observed as:

"Grievance in this application is that groundwater recharge by Delhi Jal Board (DJB) and Delhi Development Authority (DDA), Public Works Department (PWD) Delhi, New Delhi Municipal Council (NDMC), South Delhi Municipal Corporation (SDMC) through rain water harvesting structures is not scientific and is resulting in contamination of groundwater."

Further, in the order this Hon'ble Tribunal was pleased to pass the following directions:

"A joint Committee of the Central Pollution Control Board (CPCB), the Delhi Pollution Control Committee (DPCC) and the Central Ground Water Board (CGWB) take samples of groundwater and study the methodology of groundwater recharge undertaken by Respondent."

2. In pursuance and compliance of the aforementioned order passed by this Hon'ble Tribunal dated 31.05.2019, a Committee of the following members has been constituted to take samples of Ground Water and study the methodology of groundwater recharge:

- (i). Member Secretary, DPCC
- (ii). Representative from Central Pollution Control Board (CPCB)
- (iii). Representative from Central Ground Water Board (CGWB)
- (iv). Dr. M.P. George, Sr. Scientist, DPCC
- (v). Sh. V.K Jain, AEE, DPCC

(vi). A Representative from Delhi Jal Board, to assist the committee for Sampling of Ground Water

Copy of the Office Order dated 22.06.2019 is annexed herewith as Annexure 1.

3. Vide office order dated 17.07.2019 Dr. Nandita Moitra Sr. Scientist (Water Lab), DPCC is nominated as member of the Committee in place of Dr. M.P. George, Sr. Scientist, DPCC. Copy of the Office Order dated 17.07.2019 is annexed herewith as Annexure 2.
4. The Committee members met on 26.06.2019 and 27.06.2019 to decide the program and methodology for inspection/sampling of Rain Water Harvesting Structures (RWHSs) mentioned in the petition. During the meetings, Representatives/Nodal Officers of the agencies which installed RWHSs mentioned in the petition were also consulted.
5. The Committee members carried out inspections on 01.07.2019, 02.07.2019, 04.07.2019, 11.07.2019, 19.07.2019, 22.07.2019, in the areas mentioned in the petitions and collected representative water samples from RWHSs and from nearby ground water sources wherever available:
 - i. DJB Water filling Station at Okhala and GK-1.
 - ii. DDA Flats Vasant Kunj, New Delhi.
 - iii. New Delhi Municipal Council Area from 11 Murthi Statue to Talkatora Stadium (Mother Teresa Crescent Road).
 - iv. Baba Saheb Ambedkar Hospital at Sector-6, Rohini.
 - v. MCD/JE (SDMC) / Store/ Chattarpur Main Road, Near Temple.
 - vi. Mehrauli Gurgaon Road from Andheri Mor to Aaya Nagar and
 - vii. Samalkha - Dwarka Road.
6. On 11.07.2019, 19.07.2019, 22.07.2019 the applicant Sh. Mahesh Chandra Saxena was also associated with the inspecting team.

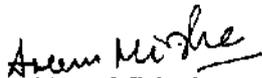
7. The Committee members prepared a summary/brief of the inspections and water sampling and the same is enclosed herewith as Annexure 3.
8. A meeting of the Committee was held for examination of methodology of Ground Water Recharge Mechanism. Following are the main observations of the Committee in view of the findings of the inspections and water sample analysis reports:
 - a. In two areas Mehrauli - Gurgaon Road and Samalkha - Dwarka Road, RWHSs were found installed within the Storm Water Drains on sides of the road. The present RWHSs operating agencies i.e. PWD and DDA were not able to take proper measures to prevent pollutants reaching in these Storm Water Drains. The contaminated water was flowing in these drains.
 - b. In the area Mehrauli - Gurgaon Road, the sewage was found flowing in the storm water drains and thus, sewage is being recharged into ground water through the RWHSs installed in the Storm Water Drain by NHAI and presently maintained by PWD.
 - c. The RWHSs were found dry at the locations namely 'New Delhi Municipal Council Area from 11 Murthi Statue to Talkatora Stadium (Mother Teresa Crescent Road)', 'Sarvodya Kanya Vidhyalay Aaya Nagar', 'Mega Housing behind D-6, Vasant Kunj, in front of Tower N-2' and 'Baba Saheb Ambedkar Hospital'.
 - d. During the inspections, it was observed that most of the RWHSs operating agencies are not doing periodical maintenance of the RWHSs. Thus, the goals of installation of RWHSs are not being fulfilled.
 - e. The water analysis reports of the samples taken from RWHSs and from nearby ground water sources, wherever available, reveals that in most of the places polluted water is being recharged into ground water through RWHSs. However, the

water quality of the samples taken from nearby ground water sources, wherever available, were not found contaminated.

- f. The operating agencies of RWHSs, which were inspected, didn't approach DJB for technical assistance regarding design of RWHSs installed.
9. Based on the observations during inspections and water analysis reports, the Committee reached to the following conclusions/suggestions:
- a. Water analysis reports reflect that the samples taken from Rain Water Harvesting Structures (RWHSs) were found contaminated. However, samples taken from nearby ground water sources, wherever available, were found non-contaminated. Therefore, the Committee came to a conclusion that at present there is no evidence of ground water contamination, because of faulty RWHSs.
 - b. The installation of RWHSs within Storm Water Drains having Contaminants should not be allowed.
 - c. Rain Water Harvesting by pollutants/contaminated water must be stopped and the owners/owning agencies of RWHSs should properly maintain their RWHSs to prevent recharging by contaminated water.
 - d. The Committee also suggested that piezometer should be installed near the RWHSs for monitoring of Ground Water Level and Water Quality of recharging water. It was also suggested that proper separators should be installed to separate the pollutants before recharging the RWHSs by polluted water such as surface run-off.
 - e. Depth of recharge bore well should be at least 5m above the Static Water Table of the area. However, it should not be made compulsory considering the geological aspects and static ground water level of the area.

- f. The guidelines regarding installation of RWHSs are available at DJB website and these guidelines are required to be strictly followed by the agencies/persons installing/ installed RWHSs in Delhi.

The Committee recommends that directions under section 5 of Environmental (Protection) Act, 1986 may be issued to close deficient RWHSs installed in storm water drains immediately and to levy Environmental Damage Compensation wherever applicable.

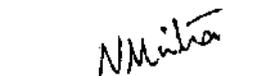

(Arun Mishra)

Member Secretary, DPCC


(N Jyoti Kumar)
Scientist 'D', CGWB

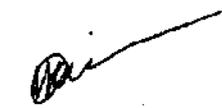

(Harish Chander)

Ex. Engineer, DJB


(Dr. Nandita Moitra)
Sr. Scientist, DPCC


(Danish Meena)

Scientist 'B', CPCB


(V.K Jain)
AEE, DPCC

Annexure A-3

Item No. 10

Court No. 1

**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI**

Original Application No. 526/2019

Mahesh Chandra Saxena

Applicant(s)

Versus

Central Pollution Control Board & Anr.

Respondent(s)

Date of hearing: 27.08.2019

Date of uploading of order: 11.09.2019

CORAM: **HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON**
HON'BLE MR. JUSTICE S.P. WANGDI, JUDICIAL MEMBER
HON'BLE MR. JUSTICE K. RAMAKRISHNAN, JUDICIAL MEMBER
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER

For Applicant(s): Mr. Rahul Khurana, Advocate

For Respondent(s): Mr. Narender Pal Singh, Advocate for DPCC and
Mr. Dinesh Jindal, L.O. for DPCC**ORDER**

1. The question for consideration is whether groundwater recharge by Delhi Jal Board (DJB) and Delhi Development Authority (DDA), Public Works Department (PWD) Delhi, New Delhi Municipal Council (NDMC), South Delhi Municipal Corporation (SDMC) through rain water harvesting structures is not scientific and is resulting in contamination of groundwater.
2. Vide order dated 31.05.2019, this Tribunal constituted a joint Committee of the Central Pollution Control Board (CPCB), the Delhi Pollution Control Committee (DPCC) and the Central Ground Water

Board (CGWB) to take samples of groundwater and study the methodology of groundwater recharge undertaken.

3. Accordingly, report dated 08.07.2019 and additional action taken report dated 13.08.2019 have been filed by the DPCC. The Committee conducted inspections on 01.07.2019, 02.07.2019, 04.07.2019, 11.07.2019, 19.07.2019 and 22.07.2019 in the concerned areas and collected water samples from the Rain Water Harvesting Systems (RWHS) and nearby ground water sources.

4. The observations of the Committee after considering the reports of the samples are:

- a. *In two areas Mehrauli - Gurgaon Road and Samalkha - Dwarka Road, RWHSs were found installed within the Storm Water Drains on sides of the road. The present RWHSs operating agencies i.e. PWD and DDA were not able to take proper measures to prevent pollutants reaching in these Storm Water Drains. The contaminated water was flowing in these drains.*
- b. *In the area Mehrauli - Gurgaon Road, the sewage was found flowing in the storm water drains and thus, sewage is being recharged into ground water through the RWHSs installed in the Storm Water Drain by NHAI and presently maintained by PWD.*
- c. *The RWHSs were found dry at the locations namely 'New Delhi Municipal Council Area from 11 Murthi Statue to Talkatora Stadium (Mother Teresa Crescent Road)', 'Sarvodya Kanya Vidhyalay Aaya Nagar', 'Mega Housing behind D-6, Vasant Kunj, in front of Tower N-2' and 'Baba Saheb Ambedkar Hospital'.*
- d. *During the inspections, it was observed that most of the RWHSs operating agencies are not doing periodical maintenance of the RWHSs. Thus, the goals of installation of RWHSs are not being fulfilled.*
- e. *The water analysis reports of the samples taken from RWHSs and from nearby ground water sources, wherever available, reveals that in most of the places polluted water is being recharged into ground water through RWHSs. However, the water quality of the samples taken from*

nearby ground water sources, wherever available, were not found contaminated.

- f. The operating agencies of RWHSs, which were inspected, didn't approach DJB for technical assistance regarding design of RWHSs installed.”*

5. In the light of above, the Committee has suggested as follows:

- “a. Water analysis reports reflect that the samples taken from Rain Water Harvesting Structures (RWHSs) were found contaminated. However, samples taken from nearby ground water sources, wherever available, were found non-contaminated. Therefore, the Committee came to a conclusion that at present there is no evidence of ground water contamination, because of faulty RWHSs.*
- b. The installation of RWHSs within Storm Water Drains having Contaminants should not be allowed.*
- c. Rain Water Harvesting by pollutants/contaminated water must be stopped and the owners/owning agencies of RWHSs should properly maintain their RWHSs to prevent recharging by contaminated water.*
- d. The Committee also suggested that piezometer should be installed near the RWHSs for monitoring of Ground Water Level and Water Quality of recharging water. It was also suggested that proper separators should be installed to separate the pollutants before recharging the RWHSs by polluted water such as surface run-off.*
- e. Depth of recharge bore well should be at least 5m above the Static Water Table of the area. However, it should not be made compulsory considering the geological aspects and static ground water level of the area.*
- f. The guidelines regarding installation of RWHSs are available at DJB website and these guidelines are required to be strictly followed by the agencies/persons installing/ installed RWHSs in Delhi.”*

6. We are satisfied that the suggestions of the Committee need to be accepted for protection of the environment.

7. Accordingly, we direct that the suggestions of the Committee be acted upon. RWHS may not be installed close to storm water drains to

avoid contamination of ground water in the process of recharging the ground water from the RWHS. Piezometers be installed near the RWHS for monitoring of ground water level and water quality of recharged water. Separators be installed to separate pollutants before recharging. Depth of the borewells should be at least 5m above the Static Water Table. Deficient RWHS be closed.

8. In light of observations of the Committee, the Delhi Jal Board (DJB), Delhi Development Authority (DDA), Public Works Department (PWD), Delhi; New Delhi Municipal Corporation (NDMC) and South Delhi Municipal Corporation (SDMC) are directed to take appropriate remedial measures for mitigation.

The application is accordingly disposed of.

Adarsh Kumar Goel, CP

S.P. Wangdi, JM

K. Ramakrishnan, JM

Dr. Nagin Nanda, EM

September 11, 2019
Original Application No. 526/2019
DV