

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL  
AT NEW DELHI**

ORIGINAL APPLICATION NO. 429/ 2019

**IN THE MATTER OF:**

RWA Society

Versus

.....Applicant

Govt. of NCT of Delhi.

.....Respondent

NDOH:- 27.09.2019

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Filed by

(Deepak Kumar Singh)  
Sr. Env. Engineer,  
Delhi Pollution Control Committee  
Respondents

New Delhi  
Dated : 24.09.2019

BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL

AT NEW DELHI

ORIGINAL APPLICATION NO 429 / 2019

IN THE MATTER OF:

RWA Society .....Applicant(s)

Versus

Govt. of NCT of Delhi .....Respondent(s)

**STATUS REPORT ON BEHALF OF DELHI POLLUTION CONTROL COMMITTEE WITH RESPECT TO ORDER DATED 04.07.2019.**

1. That this Hon'ble Tribunal in above referred matter vide its order dated 04.07.2019 ordered as follows :

*"Grievance in this letter, which has been treated as an application, is that there is bad odour from the STP, Kondli in Delhi as the STP is not operated as per norms. The sludge is not being cleaned which is resulting in air pollution.*

*Let the DPCC and Delhi Jal Board look in to the matter, take appropriate action in accordance with law and furnish a factual and action taken report in the matter within one month by e-mail at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in). The DPCC will be the nodal agency for compliance and coordination.*

*A copy of this order, along with complaint, be sent to the DPCC and Delhi Jal Board by e-mail for compliance.*

*List for further consideration on 27.09.2019."*

2. That it is most respectfully submitted that DPCC in another case before the Hon'ble National Green Tribunal Original Application No 882 of 2018 in the matter of Jagdish Singh Vs. Govt. of NCT of Delhi regarding release of hazardous gases from SP Kondli Plant near Mayur Vihar Phase – III, Delhi – 110096, had filed status report on 18.04.2019 and following orders were passed by the Hon'ble Tribunal on 28.05.2019 :

1. Question for consideration is the remedial action against the release of hazardous gases from the STPs near Mayur Vihar Phase – III, Delhi – 110096. Vide order dated 19.12.2018, a report was sought from Delhi Jal Board (DJB) and Delhi Pollution Control Committee (DPCC). Accordingly, report has been received vide e-mail dated 18.12.2018 acknowledging deficiencies in the operation of STPs and recommending as follows:-

- “(i) To minimize the emissions from the operational STPs. Delhi Jal Board should ensure that all the components of STPs are in operational condition so that chances of anaerobic process are minimal.
- (ii) Delhi Jal Board to take immediate necessary measures to make sludge Thickener of 45 MGD, 2 Phase – IV STP operational, provide weirs at Final Settling Tank and install flow meters at the inlet and outlet of 25 MGD, Phase – II STP, properly maintain the On Line Monitoring System (OLMS) and take rectification, measures with respect to other deficiencies mentioned in the Inspection Reports.
- (iii) Effective odour control mechanism needs to be in place especially at Kondli New STP (45 MGD) as it is quite near to residential area.
- (iv) Kondli Phase – I STP and Kondli Phase – III STP which are under rehabilitation should cater to enhanced sewage and best technologies available for sewage treatment.
- (v) Delhi Jal Board should do more plantation towards the residential areas in consultation with specialized Government Institutions like NEERI/CSIR/IIT/Delhi University/DST.”

2. Let the above recommendations be carried out by the DJB and further report furnished to the DPCC. The DPCC may take appropriate further action as may be found necessary.

3. We further direct that Central Public Health Environmental Engineering Organization (CPHEEO) of Ministry of Housing and Urban Affairs may bring out guidelines/ manual on operation and maintenance of STPs. The CPCB may bring out norms with reference to odour control and siting of STPs to avoid public nuisance. These may be brought out in three months, if not already brought out so far.

The application is disposed of.

3. That, in compliance to the said order of Hon'ble Tribunal Dated 04.07.2019, a team comprising of officials of Delhi Pollution Control Committee and Delhi Jal Board inspected the Sewage Treatment Plants at Kondli on 28.08. 2019.

4. That there are 04 STPs at Kondli namely Kondli Ph.-I (10 MGD), Kondli Ph.-II (25 MGD), Kondli Ph.-III (10 MGD), Kondli New (45 MGD). Out of 04 STPs at Kondli, 02 STPs namely Kondli Ph.-I (10 MGD) and Kondli Ph.-III (10 MGD), are non- operational as they are under rehabilitation. The STPs of Kondli New (45 MGD) and Phase II (25 MGD) are being operated by M/s Va-Tech Wabag Pvt. Ltd. and M/s Triveni-GSJ Gharpure-JV respectively.

Both the operational STPs at Kondli [25 MGD, Phase-II STP & 45 MGD, Phase-IV STP] were inspected and brief of the observations made during the inspection is given below:

**I. Brief of observations in respect of 25 MGD STP of Delhi Jal Board at Kondli, Delhi.**

- i. This STP is Phase-II STP of capacity of 25 MGD treatment. The STP was found in operational condition and different units of the STP were found in operation.
- ii. The Non-functional scraper in PST-1 as reported in earlier inspection for its non-operational has been reportedly repaired, not replaced.
- iii. No scum formation in the channel of aerators connected to the SSTs (Secondary Sedimentation Tank) were found. As informed at present the influent characteristics has been found not mixed with the nearby dairy cow dungs (Cattle Fecus).
- iv. Significant formation of MLSS in the aeration tanks were seen. The colour of the effluent in the aeration tanks was dark brown to brown. Further in Aeration tank No. 1 which is having 8 surface aerators, 2 were found non-operational due to mechanical and electrical faults.
- v. V-Notches provided with the launders were found replaced in both the SSTs.
- vi. The weirs (circular) have been found in very filthy conditions as the top of the weirs were found corroded and the effluent is overflowing at no. of locations directly to the launders through V-notches which contain floating scum.
- vii. Flow Meter at inlet has been reportedly calibrated on 18.07.2019. Copy of the certificate has been retained.

- 4
- viii. By-Pass Channel has been found closed through gates.
  - ix. 40 Nos. of Sludge Drying Beds were found for the sludge dewatering and storage before disposal through farmers and horticultural use.
  - x. In Primary Settling Tanks (PSTs) formation of sludge bulking was also seen in pockets.

## **II. Brief of observations in respect of 45 MGD STP of Delhi Jal Board at Kondli, Delhi.**

- i. STP was found in operation. During the inspection as per flow meter the influent is coming at the rate of 2.2 MGD/ hour which is excess to the designed capacity.
- ii. Leakage in the Primary Settling Tank has been arrested. No leakage was found in any of 4 Nos. of PSTs.
- iii. Aeration in the 4 No. of Aeration Tanks was going on using diffusers. In Aeration Tank No. C, the MLSS formation was low.
- iv. SST, 4No. (Secondary Sedimentation Tank) were found operational, however in SST-D Sludge Bulking was seen, indicating the treatment needs to be stabilized.
- v. PSTs near the residential facing designated by PST-C and D sludge bulking not in significant quantum was seen. Which is need to be taken care. So that the working in the PST, can be stabilized.
- vi. In the centrifuge which is situated near to the residential complexes found in operation, out of 5, 4 No. Centrifuge were in operational condition and 2 Centrifuge were working at the time of inspection. Smell from the handling of the Digested Sludge was coming out and dispersing to the surrounding.
- vii. Excess Sludge thickener and Primary Sludge thickener were also found installed near to the residential complexes, also found the main odour / smell source which were dispersed to the surroundings.
- viii. Significant Plantation has been planted in the surrounding of the boundary wall but need to be planted more.
- ix. OLMS was found operative ( BOD-20.98 mg/l, TSS 25.02 mg/l, COD 52.74 mg/l, pH- 7.41 mg/l, NH<sub>4</sub>-N-35.63 mg/l, Temp -31.1 °C).
- x. By Pass channel has been found closed through gates.
- xi. At present no Odour / Smell/ Emission control system was found installed for the effective control of the foul gases generated during the anaerobic conditions, sludges generated from Primary Excess Sludge Thickener and from centrifugal process.

Copy of the Inspection Reports in respect of 25 MGD STP and 45 MGD STP of Delhi Jal Board at Kondli, Delhi are annexed as **Annexure – I** and **Annexure – II** respectively.

5. That a letter was sent by DPCC to Delhi Jal Board on 07.08.2019 seeking information about the measures / Action taken by Delhi Jal Board w.r.t. aforementioned orders of Hon'ble Tribunal dated 28.05.2019 regarding recommendations mentioned in the said order.

Copy of the letter sent by DPCC to Delhi Jal Board on 07.08.2019 is annexed as **Annexure- III.**

6. Delhi Jal Board vide letter dated 12.09.2019 has informed regarding Action taken by DJB on the recommendations vide order of Hon'ble National Green Tribunal dated 28.05.2019 and copy of the letter of DJB dated 12.09.2019 is annexed as **Annexure-IV.**

Action taken by Delhi Jal Board on the recommendations vide order of Hon'ble National Green Tribunal dated 28.05.2019 (as mentioned in the letter of DJB dated 12.09.2019) is given in following Table:

S. No.	Recommendations / Directions of Hon'ble NGT	Action taken by DJB
1.	To minimize the emissions from the operational STPs. Delhi Jal Board should ensure that all the components of STPs are in operational condition so that chances of anaerobic process are minimal.	All the components of STPs (25 MGD STP & 45 MGD STP) are operational. Status report of 25 MGD STP & 45 MGD are attached as Annexure-A & B of the letter dated 12.09.2019 of DJB.
2.	Delhi Jal Board to take immediate necessary measures to make sludge Thickener of 45 MGD, 2 Phase – IV STP operational, provide weirs at Final Settling Tank and install flow meters at the inlet and outlet of 25 MGD, Phase – II STP, properly maintain the On Line Monitoring System (OLMS) and take rectification, measures with respect to other deficiencies mentioned in the Inspection Reports.	<b>45 MGD STP-</b> <ul style="list-style-type: none"> <li>• There are 02 (1 working + 1 standby) primary sludge thickeners. Both are operational.</li> <li>• There are 02 (1 working + 1 standby) sludge thickeners out of which 01 is operational and the standby is under maintenance.</li> </ul> <b>25 MGD-</b> <ul style="list-style-type: none"> <li>• Weirs at Final Settling Tanks have been replaced.</li> <li>• Flow meter at inlet is installed and is functional.</li> <li>• Flow meter at outlet has been stolen and the same is under procurement</li> </ul>

		<ul style="list-style-type: none"> <li>• and shall be installed within a period of two months.</li> <li>• OLMS is functional for all parameters except flow meter readings as mentioned above.</li> </ul>
3.	<p>Effective odour control mechanism needs to be in place especially at Kondli New STP (45 MGD) as it is quite near to residential area.</p>	<p>Work Order for the engagement of the consultant has been awarded on 31.08.2019 who will submit DPR including tender documents within a period of two months. After seeking board's approval, Work Order is likely to be awarded by the end of January, 2020.</p>
4.	<p>Kondli Phase – I STP and Kondli Phase – III STP which are under rehabilitation should cater to enhanced sewage and best technologies available for sewage treatment.</p>	<p>The Work Order dated 26.07.2018 for rehabilitation and up-gradation of Kondli Phase-I [ 45.5 MLD (10 MGD)], Phase-II [113.7 MLD (25 MGD)] &amp; Phase-III [45.5 MLD (10 MGD)] Waste Water Treatment Plant (WWTP) with effluent standards of BOD- 10 mg/l, TSS-10 mg/l or better under YAP- III Package- K3 has been placed on M/s Triveni Engineering &amp; Industries Ltd.- GSJ Envo Ltd- M/s Gharpure Engineering &amp; Constructions Pvt. Ltd. (JV) and the work is under progress.</p>
5.	<p>Delhi Jal Board should do more plantation towards the residential areas in consultation with specialized Government Institutions like NEERI/CSIR/IIT / Delhi University/DST.</p>	<p>Total 3308 no. of plants (tree/shrubs) were already in existence at this STP up to the year 2017.  An addition of approximately 200 nos. trees/shrubs has been made in the year 2018. Further approximately 50 nos. of trees/shrubs have been planted this year i.e. 2019 in association with the RWAs in the vicinity to minimize odor.  As per direction of Hon'ble NGT horticulture department has been requested to do more plantations with the consultation of specialized Govt. institutions like NEERI/ CSIR/ IIT/ Delhi University/ DST. A meeting has been held on dated 03.09.2019 with Dy. Director (Horticulture) along with O&amp;M Contractor for more plantations with the suggested kind of trees in phased manner before close of the monsoon season,</p>

7. That, there are no specific standards for air emissions generated from Sewage Treatment Plants in India. However in Sewage Treatment Plants, the gases likely to be generated are Hydrogen Sulphide (H<sub>2</sub>S), Methane (CH<sub>4</sub>) and Ammonia (NH<sub>3</sub>). That Ambient Air Monitoring for 24 hours was carried out by Shriram Institute for Industrial Research (SIIR), Delhi, at 3 locations in Kondli STPs on 13<sup>th</sup>- 14<sup>th</sup> April, 2019 for Ammonia (NH<sub>3</sub>), Hydrogen Sulphide (H<sub>2</sub>S) and Methane (CH<sub>4</sub>) and report was submitted alongwith the Status Report filed by DPCC to the Hon'ble Tribunal on 18.04.2019. Monitoring Results shows that Ammonia (NH<sub>3</sub>) is within the prescribed National Ambient Air Quality Standards.

There are no prescribed National Ambient Air Quality Standards in respect of Hydrogen Sulphide (H<sub>2</sub>S) and Methane (CH<sub>4</sub>).

8. 25 MGD STP at Kondli [Phase-II] is having valid Consent to Operate under the Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981, with validity up to 13.08.2022.

45 MGD STP at Kondli [Phase-IV] was having Consent to Operate under the Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981, with validity up to 08.05.2019 however is yet to apply for renewal of Consent to Operate under the said Acts.

9. That as per the Analysis Reports of DPCC Water Laboratory for the samples collected at the outlet on 14.08.2019 from the 25 MGD STP (Phase-II) [TSS – 22 mg/l and BOD 18 mg/l ] and 45 MGD STP (Phase-IV) [TSS – 20 mg/l and BOD 16 mg/l ] of Delhi Jal Board at Kondli, both the STPs are not meeting the prescribed standards of 10 mg/l in respect of Total Suspended Solids (TSS) and BOD.

Copy of Analysis Reports of DPCC Water Laboratory for the samples collected from the 25 MGD STP (Phase-II) and 45 MGD STP (Phase-IV) of Delhi Jal Board at Kondli, Delhi on 14.08.2019 are collectively annexed as **Annexure- V.**

10. That in view of the above DPCC has issued following Directions u/s 33 (A) of Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981 to the Member Drainage of Delhi Jal Board (the Addressee as mentioned in the Directions) on 24.09.2019 :

1. That You (the Addressee) shall take immediate necessary action for rectification of the deficiencies observed during the inspections on 13.04.2019 & 28.08.2019 as mentioned above, ensure proper operation and maintenance of the STPs at Kondli

(B)

(including Regular and frequent cleaning of preliminary treatment devices such as comminutors, bar screens and grit chambers, flushing of tank walls, Removal of sludge deposits from influent and inter- process channels, Enhanced rate of withdrawal of settled solids from clarifiers) to meet the prescribed standards and comply with the directions of Hon'ble National Green Tribunal given in its order dated 28.05.2019 (in OA No 882 of 2018 in the matter of Jagdish Singh Vs. Govt. of NCT of Delhi) and submit the compliance report to DPCC within 30 days from the date of receipt of these directions.

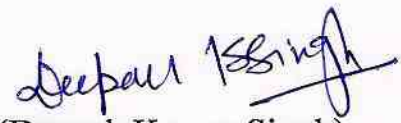
2. That You (the Addressee) shall submit Application for Renewal of Consent to Operate under the Water and Air Acts to DPCC along with required documents and requisite Consent Fee within 30 days from the date of receipt of these directions.

3. That You (the Addressee) shall provide effective odour control mechanism especially for 45 MGD STP by 31.03.2020, take measures w.r.t. other recommendations as mentioned in the order of Hon'ble Tribunal Dated 28.05.2019 and Guidelines / Norms suggested by CPCB for odour control and siting of STPs to avoid Public Nuisance submitted to Hon'ble Tribunal in the month of August, 2019 w.r.t. said order. As suggested by CPCB, Green belt of minimum 10 meter width shall be developed within and all around facility along the boundary. Vegetation, shrubs, trees and berms with high density greenery can be incorporated into green belt within facility limits to serve as visual barriers and to reduce noise levels. Compliance report w.r.t. these directions shall be submitted to DPCC by 15.04.2020.

Copy of the Directions issued to Delhi Jal Board on 24.09.2019 is annexed as

**Annexure – VI.**

That, above action taken report may please be taken on records for consideration/ further directions please.

  
(Deepak Kumar Singh)  
Sr. Env. Engineer,  
Delhi Pollution Control Committee

Delhi  
Dated : 24.09.2019

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DELHI POLLUTION CONTROL COMMITTEE  
DEPARTMENT OF ENVIRONMENT, (GOVT. OF NCT OF DELHI)  
4<sup>th</sup> & 5<sup>th</sup> FLOOR, ISBT BUILDING, KASHMERE GATE, DELHI-6

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## INSPECTION REPORT OF SEWAGE TREATMENT PLANT

1	Name & Address of the Sewage Treatment Plant	M/S DELHI JAL BOARD, Sewage Treatment Phase-II (25MGD), Kondli EE, SDW-IV, Delhi-96					
2	Date of Inspection	28.08.2019					
3	Time (Start of inspection)	3:45 PM					
4	Time (End of inspection)	6:00 PM					
5	District	EAST					
6	Capacity of STP (in MGD)	25 MGD					
7	Agency for O&M of STP	M/S Tejwani - GIST Ghar pure JV					
8	Capacity of Utilization	100% approx					
9	Power requirement of STP	2.26 MWH 226 MWH					
10	Details of Power connection	CANo. - 100009451					
11	Catchment Area	SPSI - Preet Vihar SPSI - New Kalyan Vihar - Interceptor, SPSI - Preet Vihar, Dabaiti, Kondli, Dehali, Dallupura, Kalyan puchi					
12	Date of operation of STP	Commissioned in 1998					
13	Equipment Details						
	S. No.	Equipment/Unit	Total in No.	Operational	Non-Operational	Reasons of Non-Operational	Remarks
	I	Screens	2	2	—		
	II	Grit Chamber	2	2	—		
	III	Primary Settling Tank	2	2	—		
	IV	Aeration Tank	2	2	—		
	V	Surface Aerator	16	14	02		
	VI	Secondary Sedimentation Tank	2	2	—		
	VII	No. of Sludge Pump (to aeration tank) (RAS)	04 (Pans)	4	—		
	VIII	Sludge Drying Beds	40	36 (partially filled up)	04 (Empty)		
	IX	Sludge Digester	5	0	5	5 Non-Operational	
	X	Gas Holder	2	0	2	2 Non-Operational	
14	Other Observations						
	I	Quantity of Gas Generated (m3)	NA				
	II	Quantity of Gas Flared Without any use (m3)	NA				
	III	Quantity of Gas used for Electricity Generation / Other Purpose	NA				

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\* In PSTs formation of sludge bulking was also seen in pockets.

IV	By Pass channel (Total Number with Location)	02 (Before aeration, after Grit Chamber)			
V	Fixation of flow meters	1 Flow Meter at Inlet = Outlet (OLMS)			
VI	Flow Meter reading at inlet	4080.2 m <sup>3</sup> /hour			
VII	Flow Meter reading at outlet	No Flow Meter at Outlet			
VIII	Quantity of Effluent Treated	In month of	In Year of	Total Intake/month	Unit Type
		April	2019	720.48	MGD
		May	2019	668.95	MGD
		June	2019	692.03	MGD
		July	2019	819.45	MGD
		August (till 27.08.19)	2019	749.47	MGD
IX	Total Number of Workers	28			
X	Total Number Of Staffs	32			
XI	If the plant is not in operation give reasons in detail	NA <span style="float: right;">Inform by DJB (48412KL)</span>			
XII	Area of Reutilization	DDA, Horticulture, DTC, PHD etc. (6028 KL)			
<p>Remarks - This STP is Phase-II STP of Capacity of 25 MGD treatment. The STP was found in operational condition and different units of the STP were found in operation.</p> <ul style="list-style-type: none"> <li>- The Non-functional scraper in PST-1 as reported in earlier inspection for its non-operational has been repeatedly repaired, not replaced.</li> <li>- No scum formation in the channel of aerators connected to the SSTs (Secondary Sedimentation Tank) were found. As informed at present the influent characteristic has been found not mixed with the nearby dairy cow dung (Cattle Focus).</li> <li>- Significant formation of MLSS in the aeration tanks were seen. The colour of the effluent in the aeration tanks was dark brown to brown. Further in Aeration Tank No.-1 which is having 8 surface aerators, 2 were found Non-operational due to mechanical and electrical faults.</li> <li>- The V-notches provided in with the launders were found replaced in both the SSTs.</li> <li>- The weires (Circle) have been found in very filthy conditions as the top of the weire were found corroded and the effluent is <del>not</del> overflowing at no. of locations <del>to</del> directly to the launders through V-notches which contain floating scum.</li> <li>- Flow Meter at inlet has been repeatedly calibrated on 28.07.2019. Copy of the certificate has been retained.</li> <li>- By-pass channels has been found closed through doors gates.</li> <li>- 40 Nos. of Sludge Drying Beds were found for the sludge dewatering at and storage before disposal through farmers and horticultural use.</li> </ul>					
Name & Signature of Inspecting Officials and Person contacted at site					

Mamanta  
28/08/19  
TE, DPCC

Smilin  
28/8/19  
EE, DPCC

Miraj  
28/8/19  
T-11L

AE (EAM) DJB  
28/8/19

TE (EAM) DJB  
28/8/19

EE (SMD) DJB  
28/8/19

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**DELHI POLLUTION CONTROL COMMITTEE**  
**DEPARTMENT OF ENVIRONMENT, (GOVT. OF NCT OF DELHI)**  
 4<sup>th</sup> & 5<sup>th</sup> FLOOR, ISBT BUILDING, KASHMERE GATE, DELHI-6  
 visit us at : <http://dpec.delhigovt.nic.in>

**INSPECTION REPORT OF SEWAGE TREATMENT PLANT**

1	Name & Address of the Sewage Treatment Plant	M/S DELHI JAL BOARD 45 MGD STP, KONDLF, DELHI-96 (Phase-IV)					
2	Date of Inspection	28.08.2019					
3	Time (Start of inspection)	2:00 PM					
4	Time (End of inspection)	3:15 PM					
5	District	EAST					
6	Capacity of STP (in MGD)	45 MGD					
7	Agency for O&M of STP	VA TECH WABAG LIMITED					
8	Capacity of Utilization	45 MGD ± 5 MGD					
9	Power requirement of STP	255 MWH					
10	Details of Power connection	C.A. No. - 150489755 Sanction Load - 1860KW					
11	Catchment Area	SPS-I (Breet Vihar) SPS-II (New Kalyan Bori) - Interceptor (ISP) SPS (Jagriti Vihar Enclave, SPS (Mandla Bori) * December 2013 SPS (Dallapura)					
12	Date of operation of STP						
13	Equipment Details						
	S. No.	Equipment/Unit	Total in No.	Operational	Non-Operational	Reasons of Non-Operational	Remarks
	I	Coarse Mechanical Bar Screen	3 Nos.	3 Nos.	—		
	II	Fine Mechanical Bar Screen	3 Nos.	2 Nos.	1 Nos.		
	III	Aerated Grit Chamber	3 Nos.	2 Nos.	1 Nos.		
	IV	Aerated Grit Blowers Motor	5 Nos.	3 Nos.	2 Nos.		
	V	Primary Sedimentation Tank (PST)	4 Nos.	4 Nos.	—		
	VI	Primary Sludge Transfer Pump	4 Nos.	4 Nos.	—		2 Primary Sludge Thickners 1 is under Maintenance
	VII	Aeration Tank	4 Nos.	4 Nos.	—		
	VIII	Secondary Sedimentation Tank (SST)	4 Nos.	4 Nos.	—		
	IX	Primary Sludge Thickener	2 Nos.	01 Nos.	01 Nos.		
	X	Excess Sludge Thickener	2 Nos.	01 Nos.	01 Nos.		
14	Other Observations						
	I	Quantity of Gas Generated (m <sup>3</sup> )	7,500 m <sup>3</sup> /Day (Average)				
	II	Quantity of Gas Flared Without any use (m <sup>3</sup> )	At Present, Nil				
	III	Quantity of Gas used for Electricity Generation / Other Purpose	100%				

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- At present no odour/smell/emission control system was found installed for the effective control of the foul gases generated during the anaerobic conditions, sludges generated from Biogas Excess Sludge Thickener and from Centrifugal Process.

IV	By Pass channel (Total Number with Location)	02 Exist at Inlet (Before aeration, Before Grit Chamber)			
V	Fixation of flow meters	02 Flow Meters at Inlet and 01 at Outlet			
VI	Flow Meter reading at inlet	4,600 m <sup>3</sup> & 4336.57 m <sup>3</sup>			
VII	Flow Meter reading at outlet	70.32 m <sup>3</sup>			
VIII	Quantity of Effluent Treated	In month of	In Year of	Total Intake/month	Unit Type
		April	2019	1379	MGD
		May	2019	1513.51	MG
		June	2019	1404.67	MG
		July	2019	1470.41	MG
		August	2019	1292.46	MG
		(Till 27.08.19)			
IX	Total Number of Workers	64			
X	Total Number Of Staffs	70			
XI	If the plant is not in operation give reasons in detail	N/A			
XII	Area of Reutilization	DDA, Horticulture, MCD, DTC (48265 KL) as info by DTE			

Remarks - STP was found in operation. During the inspection as per flow meter the influent is coming at the rate of 2.2 MGD/hour which is excess to the designed capacity.

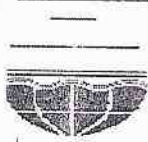
- Leakage in the Primary Settling Tank has been arrested. No leakage was found in any of 4 No. of PST.
- Aeration in the 4 No. of Aeration Tank was going on using diffusers. In Aeration Tank No. C, the MLSS formation was low.
- SST, 4 No. [Secondary Sedimentation Tank] were found operational, however in SST-D, Sludge Bulking was seen, indicating the treatment needs to be stabilized.
- PSTs Near the residential being designated by PST-C and D sludge bulking not in significant quantum was seen. Which is need to be taken care. So that the working in the PST, can be stabilized.
- In the Centrifuge which is situated nearer to the residential complexes, found in operation out of 5, 4 No. Centrifuge were in operational condition and 2 were in working condition at the time of inspection. Smell from the handling of the Digested Sludge was coming out and floating dispersing to the surrounding.
- Excess Sludge Thickener and Primary Sludge Thickener were also found installed nearer to the residential complexes, also found the main odour/smell sources which were dispersed to the surroundings.
- \* Significant plantation has been plotted in the surrounding of the boundary wall but need to be planted more.

Name & Signature of Inspecting Officials and Person contacted at site

\* OMS was found operative BOD - 20.98 mg/L, TSS - 25.02 mg/L, COD - 52.74 mg/L, PH - 7.1 mg/L, NH4-N - 35.63 mg/L, Temp - 31.1°C

By-pass channel has been found closed through gates.

Damanta 28/08/19 AE(E/M) DSB  
 TE, DPCC  
 Shrinu 28/8/19 EE, DPCC  
 28/8/19 AE(E/M)  
 28/08/19 AE(E/M)  
 28/08/19 AE(E/M)  
 28/08/19 PM.  
 28/08/19 DSB



**DELHI POLLUTION CONTROL COMMITTEE**  
**DEPARTMENT OF ENVIRONMENT, GOVT. OF NCT OF DELHI**  
**5<sup>th</sup> FLOOR, ISBT BUILDING, KASHMERE GATE, DELHI-110006**  
 visit us at : <http://dpcc.delhigovt.nic.in>

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F. No. DPCC/WMC-II/OA – 882/ Kondli STP/2019/ 2017

Dated: 07/08/19

To,

**The Member (Drainage)**

Delhi Jal Board, Varunalaya Phase -II, Jhandewalan Extn,  
 Delhi-110005

Sub: OA No. 429/2019 titled "RWA Society vs GNCTD" before Hon'ble National Green Tribunal

Sir,

With reference to aforementioned subject, Hon'ble National Green Tribunal (NGT) has treated the grievance of RWA Society of Mayur Vihar Phase-3 as an application. The complainant is aggrieved by the bad odour from STP Kondli. Earlier a similar case was filed before Hon'ble National Green Tribunal vide OA No. 882/2018 titled as Jagdish Singh Vs Govt. of NCT of Delhi.

As directed by Hon'ble NGT, status report was filed by Delhi Pollution Control Committee before Hon'ble NGT in this matter after inspection of Sewage Treatment Plants at Kondli. After taking cognizance of the report, Hon'ble NGT Vide order dated 28.05.2019 directed Delhi Jal Board (DJB) to implement the following recommendations:

1. To minimize the emissions from the operational STP's. DJB should ensure that all the components of STPs are in operational condition so that chances of anaerobic process are minimal.
2. DJB to take immediate necessary measures to make sludge Thickener of 45 MGD, phase-IV STP operational, provide weirs at Final settling tank and install flow meters at the inlet and outlet of 25 MGD, phase-II STP, properly maintain the OLMS and take rectification, measures with respect to other deficiencies mentioned in the Inspection Reports.
3. Effective odour control mechanism needs to be in place especially at Kondli New STP (45MGD) as it is quite near to residential area.
4. Kondli Phase-I STP and Kondli phase III STP which are under rehabilitation should cater to enhanced sewage and best technologies available for sewage treatment.
5. DJB should do more plantation towards the residential areas in consultation with specialized Government Institutions like NEERI/CSIR/IIT/Delhi University/DST.

DJB was also directed to implement these directions and furnish report on these recommendations to DPCC but no report has been filed by you till date. By way of this letter you are hereby requested to inform DPCC about the measures/Action taken by DJB on the aforesaid recommendations.

This issue with the approval of Competent Authority.

Yours Sincerely

(D.K.Singhi)  
 SEE(WMC-II)



**DELHI JAL BOARD : GOVERNMENT OF N.C.T. OF DELHI  
OFFICE OF THE SUPERINTENDING ENGINEER (SDW)-I  
KONDLI S.T.P. DELHI - 110096**

**PH. No. : 011-22611333, Email : se.sdw1@gmail.com**



No.: F- 139/DJB/SE(SDW)-I/2019/927

Date : 12.09.2019

To

The SEE(WMC-II)  
DPCC  
5<sup>th</sup> Floor ISBT Building,  
Kashmiri Gate, Delhi-110006

Delhi Pollution Control Committee
Dairy No. <u>56463</u>
<b>13 SEP 2019</b>
<u>WMC-2</u>
Sign. of Receiving Officer

**Sub. : OA No. 429/2019 titled "RIVA Society V/s GNCTD" before Hon'ble National Green Tribunal.**

Reference to your letter No. F.No. DPCC/WMC-II/OA-882/Kondli STP/2019/2047 dated 07.08.2019 addressed to Member(Dr.) DJB on the above said subject. A report/action taken by DJB on the recommendations vide Hon'ble NGT order dated 28.05.2019 is given below:-

S.No.	Direction of Hon'ble NGT	Action taken by DJB
1	To minimize the emission from the operational STP's. DJB should ensure that all the components of STPs are in operational so that chances of anaerobic process are minimal. DJB to take immediate necessary measures to make sludge thickener of 45 MGD, Phase-IV STP operational, provide weirs at Final Settling Tank and install Flow Meters at inlet and outlet of 25 MGD, Phase-II STP, properly maintain the OLMS and take rectification measures with respect to other deficiencies mentioned in the Inspection Report.	All the components of STPs (25MGD STP & 45MGD STP) are operational. Status report of 25 MGD STP & 45 MGD are attached as Annexure-A & B for kind perusal.  <b>45 MGD STP-</b> <ul style="list-style-type: none"> <li>• There are 02 (1 working + 1 standby) primary sludge thickeners. Both are operational.</li> <li>• There are 02 (1 working + 1 standby) sludge thickeners out of which 01 is operational and the standby is under maintenance.</li> </ul> <b>25 MGD STP-</b> <ul style="list-style-type: none"> <li>• Weirs at Final Settling Tanks have been replaced.</li> <li>• Flow meter at inlet is installed and is functional.</li> <li>• Flow meter at outlet has been stolen and the same is under procurement and shall be installed within a period of two months.</li> <li>• OLMS is functional for all parameters except flow meter readings as mentioned above.</li> </ul>

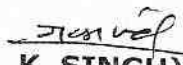
*p/4 ante  
DWB  
13/09/2019*

*EE (SS)  
Sm/s  
16/9/19  
Sh. Abish (Training)*

*984/2019-II  
16/9/19*

3	Effective odor control mechanism needs to be in place especially at Kondli New STP (45 MGD) as it is quite near to residential area.	Work Order for the engagement of the consultant has been awarded on 31-08-2019 who will submit DPR including tender documents within a period of two months. After seeking board's approval, Work Order is likely to be awarded by the end of January 2020.
4	Kondli Phase-I STP and Kondli Phase-III STP are under rehabilitation should cater to enhanced sewage and best technologies available for sewage treatment.	The Work Order dated 26-07-2018 for rehabilitation and up-gradation of Kondli Phase-I (45.5 MLD), Phase-II (113.7 MLD) & Phase- III (45.5 MLD) Waste Water Treatment Plant (WWTP) with effluent standards of BOD- 10 mg/l, TSS- 10 mg/l or better under YAP- III Package- K3 has been placed on M/s Triveni Engineering & Industries Ltd.- GSJ Envo Ltd- M/s Gharpure Engineering & Constructions Pvt. Ltd. (JV) and the work is under progress.
5	DJB should do more plantations towards the residential areas in consultation with specialized Government institutes like NEERI/CSIR/IIT/Delhi University/DST	<p>Total 3308 no. of plants (trees/shrubs) were already in existence at this STP up to the year 2017.</p> <p>An addition of approximately 200 nos. trees/shrubs has been made in the year 2018.</p> <p>Further approximately 50 nos. of trees/shrubs have been planted this year i.e. 2019 in association with the RWAs in the vicinity to minimize odor.</p> <p>As per direction of Hon'ble NGT, horticulture department has been requested to do more plantations with the consultation of specialized Govt. institutions like NEERI/ CSIR/ IIT/ Delhi University/DST. A meeting has been held on dated 03.09.2019 with Dy. Director (Horticulture) along with O&amp;M Contractor for more plantations with the suggested kind of trees in phased manner before close of the monsoon season.</p>

This is issued with the approval of Competent Authority

  
**(J. K. SINGH)**  
**SE (SDW)-I**

Subject:- Status report of electro mechanical equipment of 25 MGD Phase -II STP Kondli under EE (SDW)-IV Division  
as on 02.09.2019.

S. No.	Name of equipment	Details of equipment	Qty.	Present status	
				Functional	Non functional
(i)	(ii)	(iii)	(iv)	(v)	(vi)
1	Coarse Mechanical Bar Screen	Make:- Dorr-Oliver Type:- old conventional Bar spacing :-20mm	2 Nos.	2No.	---
2	Grit Chamber	Make:- Dorr-Oliver	2 Nos.	2 No.	---
3	Rake Classifier	Make:- Dorr-Oliver	2 Nos.	2 No.	---
4	PST	Make:- Dorr-Oliver	2 Nos.	2 Nos.	---
5	Raw Sludge Pumps	Pump:- Kirloskar, Head:-17.5m, Discharge:-52.61 L/s Motor:- C.G, Rating:-25 HP, RPM:-1450	4 Nos.	4Nos.	---
6	Surface Aerators	Motor :- C.G, Rating:-50HP, RPM:-1470	16 Nos.	14 Nos.	2 Nos. (Standby)
7	FST	Make:- Dorr-Oliver	2 Nos.	2 Nos.	---

S. No.	Name of equipment	Details of equipment	Qty.	Present status	
				Functional	Non functional
(i)	(ii)	(iii)	(iv)	(v)	(vi)
8	Return Sludge Pumps	Pump:- Kirloskar, Head:- 8m, Discharge:- 184 L/s Motor:- C.G, Rating:- 30 HP, RPM:- 710	4 Nos.	4 Nos.	---
9	Transformers	Make:- The Thana Electric Supply Co. Ltd., Rating:- 1500 KVA, Tank capacity:- 840 ltr.	2 Nos.	2 Nos.	---
10	Panel H.T. 11.00KV Switch Board	Make:- C.G, VCB:- 630 amp	1 No.	1 No.	---
11	Panel L.T. Switch Board	Make:- C&S, ACB:- 3200 amp	4 Nos.	4 Nos.	---
12	APFC Panel	Make:- Javic	1 No.	1 No.	---
13	Sludge Drying Beds	-----	40 Nos.	40 Nos.	---

*Y. N. Singh*  
EE(SDW)-IV

*[Signature]*  
AE(E&M)-I

*[Signature]*

JE(E&M)

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Subject: - Status report of electro mechanical equipment at 45MGD STP under EE (SDW)-IV Division as on 03.09.2019.  
45 MGD Phase-IV STP Kondli.

S. No.	Name of equipment	Details of equipment	Qty.	Present Status	
				Functional	Non functional
(i)					
1.	Coarse Mechanical Bar Screen (ii)	Make:- Jash conventional Bar spacing:-20 mm	(iv) 3 Nos.	(v) 03 Nos.	(vi) ---
2.	Fine Mechanical Bar Screen	Make:- Jash conventional Bar spacing:-6 mm	3 Nos.	02 Nos.	01 No. (Standby)
3.	Aerated Grit Chamber	MAKE: AWT	3 Nos.	01 Nos.	02 Nos.
4.	Primary Sedimentation Tank	MAKE:- EIMCO KCP	4 Nos.	4 Nos.	(1 Standby + 1 Working under maintenance)
5.	Primary Sludge Transfer Pump:-	Make: - M&P Model:- SK 65/32	4 Nos.	4 Nos.	
6.	Aeration Tank	Capacity: - 33.5 m <sup>3</sup> /h			
	Aeration Blowers	Membrane MAKE :- FDT Make: - USHA	4 Nos.	4 Nos.	
7.		Model:- VRI300H Capacity:- 3050 m <sup>3</sup> /h	16 Nos.	12 Nos.	04 Nos. (Standby)
8.	Return Activated Sludge Pumps (RAS)	Make: - ABS Model:-VUP501 TYPE:-Axial Flow	4 Nos.	2 Nos.	2 No. (Standby)

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9.	Excess Sludge Pump	Make:- Kishor Model:- KDSM164c 20 MS Type :- Submersible Capacity:- 170 m3/h (MAKE:-EIMCO KCP	2 Nos.	2 Nos.	
10.	Final Settling Tank (FST)		4 Nos.		
11.	Primary Sludge Thickener	MAKE:- EIMCO KCP	2 Nos.	1 No.	1 No. Standby
12.	Excess Sludge Thickener	MAKE:- KROFTA	2 Nos.	1 No.	1 No. (Standby)
13.	Excess sludge thickener pump				
14.	Sludge Digester	Size:- 26m Dia X 9.3m SWD Type:- Fixed Roof Dome	4 Nos.	4 Nos.	
15.	Digester Recirculation Pump		4 Nos.	4 Nos.	
16.	Digester Gas Compressor		8 Nos.	6 nos.	2 Nos. (Standby)
17.	Digester Feed Pump		8 Nos.	8 Nos.	
18.	Centrifuge	Make:- HUMBOLDT Capacity:- 20.75 to 30 m3/h	6 Nos.	6 Nos.	
19.	Centrifuge Feed Pump		5 Nos.	02 No.	3 Nos. (2 Standby + 1 Working under Maintenance)
20.	Sludge Balancing Tank Mixture		5 Nos.	05 Nos.	
			3 Nos.	3 Nos.	

21.	Gas Holder	Capacity: 3150 m3	2 Nos.	2 Nos.	
22.	Gas Flare Stack	Capacity: - 10.10 m3/hr	2 Nos.	2 Nos.	
23.	H2S Scrubber	Capacity: 1100 m3/hr	1 No.	1 No.	
24.	Bio- Gas Engine	Make:- GE Jenbacher Model-JGS 320GS BL Capacity:- 1063 KWel Speed:1500 rpm Type: -Horizontal Centrifugal	3 Nos.	1 No.	2 Nos.
25.	HI Panel (11 KV)	Make:- Siemens India Ltd.	5 Panel Board	5 Nos.	
26.	Transformers	Make:- VOLTAMP Capacity: 2500 KVA	2 Nos.	2 Nos.	
27.	LT Panels	MAKE:- Mohini Electrical Ltd.			
28.	APFC Panels (MKS Technology )	MAKE:- MEHER (L&T)	1 No.	1 No.	
		Capacity:- 800 KVAR(each)	2 Nos.	2 Nos.	
29.	SCADA	MAKE:- Siemens	1 No.	1 No	

*Handwritten signature*

EE (SDW)-IV

*Handwritten signature*  
AE (E&M)-I

*Handwritten signature*

JE (E&M)

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**DELHI POLLUTION CONTROL COMMITTEE**  
 (Government of N.C.T. of Delhi)  
 4th Floor, I.S.B.T. Building, Keshmere Gate, Delhi - 110006  
 Website : <http://www.dpcc.delhigovt.nic.in>

Report Number : DPCC/W/STP/19-20/118 / 786

Dated 09/09/2019

ANALYSIS REPORT OF STP FOR THE MONTH OF AUGUST- 2019

1. Name & Address of Ind./Unit **Kondli STP**
2. Sampling location **Inlet and Outlet of STP**
3. Date of Inspection **14.08.19**
4. Samples collected by **DPCC Lab**
5. Parameters analyzed and results

Sr. No.	Installed Capacity (MGD)	STP Standard	PH 5.5-9.0	Parameters					Remarks	
				TSS (mg/l)	BOD (mg/l)	COD (mg/l)	Oil & Grease (mg/l)	Ammonical Nitrogen (mg/l)		Dissolved Phosphate as P (mg/l)
1	25	Inlet	7.8	280	210	620	29.6	32.8	8.0	Not meeting the Standards w.r.t TSS and BOD.
		Outlet	8.0	22	18	52	2.4	4.3	1.5	
		OLMS*	-	-	-	-	-	-	-	
	Total 25									

I/C LABORATORY

*Nandita*

SR. SCIENTIFIC ASSISTANT

Dr. NANDITA MOITRA  
 Scientist I/c



**DELHI POLLUTION CONTROL COMMITTEE**  
 (Government of N.C.T. of Delhi)  
 4th Floor, I.S.B.T. Building, Kashmere Gate, Delhi - 110006  
 Website : <http://www.dpcc.delhigovt.nic.in>

Report Number : DPCC/W/STP/19-20/129 / 777

Date: 05/09/2019

ANALYSIS REPORT OF STP FOR THE MONTH OF AUGUST- 2019

1. Name & Address of Ind./Unit **Kondli STP New**
2. Sampling location **Inlet and Outlet of STP**
3. Date of Inspection **14.08.19**
4. Samples collected by **DPCC Lab**
5. Parameters analyzed and results

Sr. No.	Installed Capacity (MGD)	STP Standard	pH 5.5-9.0	TSS (mg/l)	BOD (mg/l)	COD (mg/l)	Oil & Grease (mg/l)	Ammonical Nitrogen (mg/l)	Dissolved Phosphate as P (mg/l)	Remarks
1	45	Inlet	7.8	280	210	620	29.6	32.8	8.0	Not meeting the Standards w.r.t TSS and BOD.
		Outlet	7.9	20	16	44	2.0	2.9	1.6	
		OLMS*	-	-	-	-	-	-	-	
Total		45								


Remarks: OLMS was found locked

I/C LABORATORY *N. Moitra*

Dr. NANDITA MOITRA  
 Scientist 'C'

SR. SCIENTIFIC ASSISTANT

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**DELHI POLLUTION CONTROL COMMITTEE**  
**DEPARTMENT OF ENVIRONMENT, GOVT. OF NCT OF DELHI**  
**5 TH FLOOR, ISBT BUILDING, KASHMERE GATE, DELHI-110006**  
 visit us at : <http://dpcc.delhigovt.nic.in>

F. No. DPCC/WMC -II / OA 882/ Kondli STP / 2019/ 2340

Dated: 24/09/19

**Subject: Directions u/s 33 (A) of the Water (Prevention and Control of Pollution) Act, 1974 and u/s 31(A) of the Air (Prevention and Control of Pollution) Act, 1981, as amended to Date.**

Whereas, Central Pollution Control Board is the State Board for all the Union Territories to exercise powers and perform functions under the Water (Prevention & Control of Pollution) Act, 1974 and Air (Prevention & Control of Pollution) Act, 1981

And whereas, Central Pollution Control Board has delegated all its powers and functions under the Water (Prevention & Control of Pollution) Act, 1974 and the Air (Prevention & Control of Pollution) Act, 1981 in respect of Union Territory of Delhi to Delhi Pollution Control Committee (DPCC) vide Notification No. S.O.198 (E) dated 15.03.1991.

And whereas, it is a mandatory provision under u/s 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 that no person without the previous consent of the DPCC shall Establish or take any steps to establish any industry, operation or process or any treatment and disposal system an extension or addition thereto, which is likely to discharge sewage or trade effluent into a stream or well or sewer or on land.

And whereas, the whole Union Territory of Delhi has been declared as an Air Pollution Control area, under sub section (I) of section 19 of the Air (Prevention & Control of Pollution) Act, 1981 vide notification no. GSR 106 (E) dated 20.02.1987.

And whereas, it is mandatory provisions under u/s 21 of the Air (Prevention & Control of Pollution) Act, 1981 that no person without the previous consent of the Delhi Pollution Control Committee i.e. State Board in case of Delhi, shall Establish or operate any industrial plant in air pollution control area.

And whereas, you, **the Member Drainage, Delhi Jal Board, Varunalaya Phase-II, Jhandewalan, Karol Bagh, Delhi-110005** (herein after referred as "Addressee") are responsible for the Operation and Maintenance of the Sewage Treatment Plants (STPs) of Delhi Jal Board in Delhi including the **25 MGD STP (Phase-II) and 45 MGD STP (Phase-IV) at Kondli, Delhi -110096**.

And whereas, 25 MGD STP at Kondli [Phase-II] is having valid Consent to Operate under the Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981, with validity up to 13.08.2022.

And whereas, 45 MGD STP at Kondli [Phase-IV] was having Consent to Operate under the Water (Prevention and Control of Pollution) Act, 1974 and Air (Prevention and Control of Pollution) Act, 1981, with validity up to 08.05.2019 however is yet to apply for renewal of Consent to Operate under the said Acts.

And whereas, in compliance to the orders of Hon'ble National Green Tribunal dated 19.12.2018 in OA No. 882 of 2018 in the matter of Jagdish Singh versus Govt. of NCT of Delhi a team comprising of officials of DPCC and Delhi Jal Board inspected the STPs at Kondli on 13.04.2019 and Ambient Air Monitoring for 24 hours was carried out by Shriram Institute for Industrial Research (SIIR), Delhi at 3 locations at Kondli STPs on 13<sup>th</sup> - 14<sup>th</sup> April, 2019 for Ammonia (NH3), Hydrogen Sulphide (H2S) and Methane (CH4) and copy of the report of the

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team along with Monitoring Results of SIIR were submitted to the Hon'ble National Green Tribunal vide status report filed on 18.04.2019.

And whereas, vide letter dated 18.04.2019, DPCC had sent copy of the Ambient Air Monitoring Report and Inspection Report dated 13.04.2019 to Delhi Jal Board to take immediate necessary action and send the compliance report to DPCC within 30 days.

And whereas, Hon'ble National Green Tribunal in the abovementioned case ( OA No 882 of 2018 in the matter of Jagdish Singh Vs. Govt. of NCT of Delhi) has passed order on 28.05.2019 and given directions including following directions :

1. Question for consideration is the remedial action against the release of hazardous gases from the STPs near Mayur Vihar Phase – III, Delhi – 110096. Vide order dated 19.12.2018, a report was sought from Delhi Jal Board (DJB) and Delhi Pollution Control Committee (DPCC). Accordingly, report has been received vide e-mail dated 18.12.2018 acknowledging deficiencies in the operation of STPs and recommending as follows:-

- “(i) To minimize the emissions from the operational STPs. Delhi Jal Board should ensure that all the components of STPs are in operational condition so that chances of anaerobic process are minimal.
- (ii) Delhi Jal Board to take immediate necessary measures to make sludge Thickener of 45 MGD, 2 Phase – IV STP operational, provide weirs at Final Settling Tank and install flow meters at the inlet and outlet of 25 MGD, Phase – II STP, properly maintain the On Line Monitoring System (OLMS) and take rectification, measures with respect to other deficiencies mentioned in the Inspection Reports.
- (iii) Effective odour control mechanism needs to be in place especially at Kondli New STP (45 MGD) as it is quite near to residential area.
- (iv) Kondli Phase – I STP and Kondli Phase – III STP which are under rehabilitation should cater to enhanced sewage and best technologies available for sewage treatment.
- (v) Delhi Jal Board should do more plantation towards the residential areas in consultation with specialized Government Institutions like NEERI/CSIR/IIT/ Delhi University/DST.”

2. Let the above recommendations be carried out by the DJB and further report furnished to the DPCC. The DPCC may take appropriate further action as may be found necessary.

And whereas, Hon'ble National Green Tribunal in another case Original Application No. 429/2019 in the matter of RWA Society Vs Govt. of NCT of Delhi has passed following order on 04.07.2019:

“Grievance in this letter, which has been treated as an application, is that there is bad odour from the STP, Kondli in Delhi as the STP is not operated as per norms. The sludge is not being cleaned which is resulting in air pollution.

Let the DPCC and Delhi Jal Board look in to the matter, take appropriate action in accordance with law and furnish a factual and action taken report in the matter within one month by e-mail at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in). The DPCC will be the nodal agency for compliance and coordination.”

And whereas, in compliance to the said order of Hon'ble Tribunal Dated 04.07.2019, a team comprising of officials of DPCC and Delhi Jal Board inspected the Sewage Treatment Plants at Kondli on 28.08. 2019. The STPs of Kondli New (45 MGD) and Phase II (25 MGD) are being operated by M/s Va-Tech Wabag Pvt. Ltd. and M/s Triveni-GSJ Gharpure-JV respectively. Both the operational STPs at Kondli [25 MGD, Phase-II STP & 45 MGD, Phase-IV STP] were inspected and brief of the observations made during the inspection is given below:

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**I. Brief of observations in respect of 25 MGD STP of Delhi Jal Board at Kondli, Delhi.**

- i. This STP is Phase-II STP of capacity of 25 MGD treatment. The STP was found in operational condition and different units of the STP were found in operation.
- ii. The Non-functional scraper in PST-1 as reported in earlier inspection for its non-operational has been reportedly repaired, not replaced.
- iii. No scum formation in the channel of aerators connected to the SSTs (Secondary Sedimentation Tank) were found. As informed at present the influent characteristics has been found not mixed with the nearby dairy cow dungs (Cattle Fecus).
- iv. Significant formation of MLSS in the aeration tanks were seen. The colour of the effluent in the aeration tanks was dark brown to brown. Further in Aeration tank No. 1 which is having 8 surface aerators, 2 were found non-operational due to mechanical and electrical faults.
- v. V-Notches provided with the launders were found replaced in both the SSTs.
- vi. The weirs (circular) have been found in very filthy conditions as the top of the weirs were found corroded and the effluent is overflowing at no. of locations directly to the launders through V-notches which contain floating scum.
- vii. Flow Meter at inlet has been reportedly calibrated on 18.07.2019. Copy of the certificate has been retained.
- viii. By-Pass Channel has been found closed through gates.
- ix. 40 Nos. of Sludge Drying Beds were found for the sludge dewatering and storage before disposal through farmers and horticultural use.
- x. In Primary Settling Tanks (PSTs) formation of sludge bulking was also seen in pockets.

**II. Brief of observations in respect of 45 MGD STP of Delhi Jal Board at Kondli, Delhi.**

- i. STP was found in operation. During the inspection as per flow meter the influent is coming at the rate of 2.2 MGD/hour which is excess to the designed capacity.
- ii. Leakage in the Primary Settling Tank has been arrested. No leakage was found in any of 4 Nos. of PSTs.
- iii. Aeration in the 4 No. of Aeration Tanks was going on using diffusers. In Aeration Tank No. C, the MLSS formation was low.
- iv. SST, 4No. (Secondary Sedimentation Tank) were found operational, however in SST-D Sludge Bulking was seen, indicating the treatment needs to be stabilized.
- v. PSTs near the residential facing designated by PST-C and D sludge bulking not in significant quantum was seen. Which is need to be taken care. So that the working in the PST, can be stabilized.
- vi. In the centrifuge which is situated near to the residential complexes found in operation, out of 5, 4 No. Centrifuge were in operational condition and 2 Centrifuge were working at the time of inspection. Smell from the handling of the Digested Sludge was coming out and dispersing to the surrounding.
- vii. Excess Sludge thickener and Primary Sludge thickener were also found installed near to the residential complexes, also found the main odour / smell source which were dispersed to the surroundings.
- viii. Significant Plantation has been planted in the surrounding of the boundary wall but need to be planted more.
- ix. OLMS was found operative ( BOD-20.98 mg/l, TSS 25.02 mg/l, COD 52.74 mg/l, pH- 7.41 mg/l, NH<sub>4</sub>-N-35.63 mg/l, Temp -31.1 OC).
- x. By Pass channel has been found closed through gates.
- xi. At present no Odour / Smell/ Emission control system was found installed for the effective control of the foul gases generated during the anaerobic conditions, sludges generated from Primary Excess Sludge Thickener and from centrifugal process.

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And whereas, as per the Analysis Reports of DPCC Water Laboratory for the samples collected at the outlet on 14.08.2019 from the 25 MGD STP (Phase-II) [TSS – 22 mg/l and BOD 18 mg/l ] and 45 MGD STP (Phase-IV) [TSS – 20 mg/l and BOD 16 mg/l ] of Delhi Jal Board at Kondli, both the STPs are not meeting the prescribed standards of 10 mg/l in respect of Total Suspended Solids (TSS) and BOD.

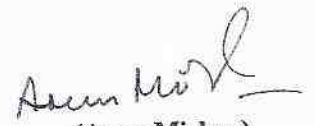
And whereas, a letter was sent by DPCC to Delhi Jal Board on 07.08.2019 seeking information about the measures / Action taken by Delhi Jal Board w.r.t. aforementioned orders of Hon'ble Tribunal dated 28.05.2019 regarding recommendations mentioned in the said order.

And whereas, Delhi Jal Board vide letter dated 12.09.2019 has informed regarding Action taken by Delhi Jal Board on the recommendations vide order of Hon'ble National Green Tribunal dated 28.05.2019 and the same has been considered by DPCC.

Now therefore, in view of the above and as decided , following Directions u/s 33(A) of Water (Prevention and Control of Pollution) Act, 1974 and u/s 31 (A) of the Air (Prevention and Control of Pollution) Act, 1981, as amended to date, are hereby issued:

1. That You (the Addressee) shall take immediate necessary action for rectification of the deficiencies observed during the inspections on 13.04.2019 & 28.08.2019 as mentioned above, ensure proper operation and maintenance of the STPs at Kondli (including Regular and frequent cleaning of preliminary treatment devices such as comminutors, bar screens and grit chambers, flushing of tank walls, Removal of sludge deposits from influent and inter- process channels, Enhanced rate of withdrawal of settled solids from clarifiers) to meet the prescribed standards and comply with the directions of Hon'ble National Green Tribunal given in its order dated 28.05.2019 (in OA No 882 of 2018 in the matter of Jagdish Singh Vs. Govt. of NCT of Delhi) and submit the compliance report to DPCC within 30 days from the date of receipt of these directions.
2. That You (the Addressee) shall submit Application for Renewal of Consent to Operate under the Water and Air Acts to DPCC along with required documents and requisite Consent Fee within 30 days from the date of receipt of these directions.
3. That You (the Addressee) shall provide effective odour control mechanism especially for 45 MGD STP by 31.03.2020, take measures w.r.t. other recommendations as mentioned in the order of Hon'ble Tribunal Dated 28.05.2019 and Guidelines / Norms suggested by CPCB for odour control and siting of STPs to avoid Public Nuisance submitted to Hon'ble Tribunal in the month of August, 2019 w.r.t. said order. As suggested by CPCB, Green belt of minimum 10 meter width shall be developed within and all around facility along the boundary. Vegetation, shrubs, trees and berms with high density greenery can be incorporated into green belt within facility limits to serve as visual barriers and to reduce noise levels. Compliance report w.r.t. these directions shall be submitted to DPCC by 15.04.2020.

Non compliance with the aforementioned directions attracts penal action u/s 41 of the Water (Prevention and Control of Pollution) Act, 1974 and u/s 37 of the Air (Prevention and Control of Pollution) Act, 1981, as amended to date.

  
(Arun Mishra)  
Member Secretary

To,  
The Member Drainage,  
Delhi Jal Board, Varunalaya Phase-II,  
Jhandewalan, Karol Bagh, Delhi-110005