

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL,  
PRINCIPAL BENCH, NEW DELHI**

**MA No. 118/2023**

**in**

Original Application No. 132/2023

**In the matter of:**

Gaurav Bansal

...Applicant

Versus

Govt. of NCT of Delhi.

...Respondents

**INDEX**

S. No.	Contents	Page No.
1	Status report on behalf of Delhi Pollution Control Committee (DPCC) in terms the order dated 14.02.2024	1-2
2	<b><u>Annexure-1 (Colly)</u></b> Copy of the analysis report dated 09.4.2024.	3-4
3.	<b><u>Annexure-2</u></b> Copy of the letter dated 15.01.2024 by DPCC issued to Sr. Divisional Mechanical Engineer, Northern Railway	5
4.	<b><u>Annexure-3</u></b> Copy of the reply dated 04.7.2024 submitted by the Northern Railway.	6-11

Filed by:

New Delhi:

Dated: 19<sup>th</sup>.07.2024

  
Delhi Pollution Control Committee

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL,  
PRINCIPAL BENCH, NEW DELHI**

MA No. 118/2023

in

Original Application No. 132/2023

**In the matter of:**

Sh. Gaurav Bansal

...Applicant

Versus

Govt. of NCT of Delhi.

...Respondents

**STATUS REPORT ON BEHALF OF DELHI POLLUTION  
CONTROL COMMITTEE WITH RESPECT TO THE ORDER  
DATED 13.02.2024.**

IT IS MOST RESPECTFULLY SHOWETH:

1. That this Hon'ble Tribunal taken up the present matter on 24.04.2023 on the basis of public complaint filed by Mr. Gaurav Bansal. In the complaint, complainant mentioned that Electric Locomotive Shed in Tughlakabad pumps out untreated engine oil into the drain.
2. That, in compliance with the order dated 24.04.2023, DPCC has filed its report on 29.01.2024, which is available on the records of this Hon'ble Tribunal.
3. That, this Hon'ble Tribunal has considered the report on 14.02.2024 and pleased to direct DPCC to take the water sample of the concerned municipal drain from the point after the location of the Locomotive shed and submit the analysis report.
4. That, in compliance with the order dated 14.02.2024, DPCC has taken the sample on 28.03.2024 from following locations: -

*Bansal*

- a) Tughlakabad Drain U/s (before meeting ETP Outlet of Diesel Locomotive Shed).
- b) Tughlakabad Drain D/s (after meeting ETP Outlet of Diesel Locomotive Shed).
- c) ETP (Outlet of Diesel Locomotive Shed).

Samples were tested in DPCC laboratory and it was observed that except BOD all other parameters were within the prescribed standards. Copy of the analysis report is annexed herewith as ANNEXURE- 1(Colly).

5. That prime facie, the Possible reason for BOD exceeding the prescribed limit is mixing of sewage with the drain water without any treatment, there is no sewerage in the area and the entire sewage (domestic effluent) from the shed area is being discharged into the drain directly.
6. That, DPCC has recommended Diesel loco shed to install STP(Sewage Treatment Plant) for treating the entire sewage generated from the facility before discharging it into drain vide letter dated 15.01.2024 to Sr. Divisional Mechanical Engineer, Northern Railway. Copy of the letter dated 15.01.2024 is annexed herewith as ANNEXURE- 2. An email was also sent seeking ATR/action plan on 10 June 2024.
7. That, the issue was reviewed with the officials of Tuglakabad Loco Shed through VC on 07 July 2024 and the Northern Railway has submitted its reply through email, which is enclosed as ANNEXURE- 3.
8. In view of the above, the present status report may kindly be taken on record.

  
Dr BMS Reddy  
Sr. Env. Engineer

New Delhi:  
Dated 19<sup>th</sup>.07.2024

Annexure-1 (Colly)



Result No- DPCC/W/D(Misc)/2024/11/ 737

Dated: 09/04/24

ANALYSIS REPORT

Date of Sampling: - 28.03.2024

S. No.	Sampling Location	pH	TSS (mg/l)	COD (mg/l)	BOD (mg/l)	O&G (mg/l)
	Standards	5.5- 9.0	100	250	30	-
1.	Tughlakabad Drain U/s (before meeting ETP Outlet of Diesel Locomative Shed)	7.6	70	232	80	17.2
2.	Tughlakabad Drain D/s (after meeting ETP Outlet of Diesel Locomative Shed)	7.7	66	120	60	12.4
3.	ETP (Outlet of Diesel Locomative Shed)	7.5	26	148	40	4.4

I/C Water Laboratory

**Dr. Nandita Moitra**  
 Scientist 'D'



Result No- DPCC/W/D(Misc)/2024/12/ 738

Dated: 9/4/2024

ANALYSIS REPORT

Name of Location : 2.5 MLD STP for Drain at Lado Sarai at S. No. 12  
 Date of Sampling : 28.03.2024

Parameters analyzed and results:

S. No.	Parameters	STP		Prescribed Standard
		Inlet	Outlet	
1	pH	7.2	7.9	5.5-9.0
2	Total Suspended Solids (TSS)	156	26	10.0
3	Bio-Chemical Oxygen Demand (BOD)[3 days at 27°C]	120	60	10.0
4	COD	292	172	50.0
5	Oil and Grease	19.6	5.6	10.0
6	Ammonical Nitrogen	20.6	0.8	5.0
7	Dissolved Phosphate	12.3	0.3	2.0

I/C Water Laboratory  
**Dr. Nandita Moitra**  
 Scientist 'D'

Annexure-2

By Speed Post

	<p><b>DELHI POLLUTION CONTROL COMMITTEE</b>  <b>GOVERNMENT OF NCT OF DELHI</b>  <b>1<sup>st</sup> and 2<sup>nd</sup> FLOOR, VIKAS BHAWAN – II, CIVIL LINES, DELHI-110054.</b>  visit us at : <a href="http://dpcc.delhigovt.nic.in">http://dpcc.delhigovt.nic.in</a></p>	
---	--	---

F.No. DPCC/CMC-II/NGT/OA No. 132/2023/8724

Dated: 15-01-24

To,

The Senior Divisional Mechanical Engineer,  
Northern Railway,  
Diesel Loco Shed, Tugalkabad,  
New Delhi – 110044.

Subject : Compliance of Hon'ble NGT in M.A No.118/2023 in O.A No.132/2023 "Gaurav Bansal Vs. GNCTD" dated 04.12.2023, in M.A. No. 118/2023 ( O.A. No. 132/2023) – reg.

Sir,

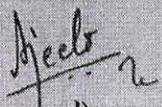
This has reference to the order passed by Hon'ble NGT in M.A No.118/2023 in O.A No.132/2023 "Gaurav Bansal Vs. GNCTD" dated 04.12.2023, in M.A. No. 118/2023 ( O.A. No. 132/2023) in the matter of Gaurav Bansal Vs. GNCTD. In compliance of the orders of Hon'ble NGT, an inspection of the Diesel Locomotive shed was conducted by DPCC officials on 18.12.2023(**Inspection report is attached**) and in view of observation of inspecting team, I am directed to inform you that the diesel locomotive shed needs to modify its ETP(Effluent Treatment Plant) for proper treatment of the waste water. Followings are the recommendations that need to be implemented for removing the deficiencies observed in ETP:-

1. In oil skimmer tank, flow of effluent needs to be from below the top layer so that no disturbance happens to top oil layer collected.
2. Technology of Ozone mixing tank in the ETP treatment process, needs to be reviewed.
3. The operation of aeration tank needs to be overhauled and managed properly as there was no MLSS in the tank during inspection.
4. The facility also needs to install STP(Sewage Treatment Plant) for treating the entire sewage generated from the facility before discharging it into the drain.

It is, therefore, requested to take further necessary action on the above and provide action taken report to enable this office to apprise the same before the Hon'ble NGT.

This issues with the approval of the Competent Authority, DPCC.

Yours sincerely,

  
(Ajeeta D. Agrawal)  
Sr. Env. Engineer (DPCC)

Annexure-3



**Northern Railway - Diesel Locomotive Shed**  
**Tughlakabad, New Delhi - 110044,**  
**E-mail- [srdmetkd@gmail.com](mailto:srdmetkd@gmail.com), Fax- 011-26360671**  
**(Upgraded IMS Certified)**



No- TKD/ACMT/2024/misc/1

03.07.2024

Senior Environment Engineer  
 Delhi Pollution Control Committee, Govt. of NCT of Delhi  
 1<sup>st</sup> and 2<sup>nd</sup> Floor, Vikash Bhawan-II, Civil Lines  
 Delhi-110054

**Sub:- Status update on DPCC recommendations.**

Ref:- i) F.No. DPCC/CMC-II/NGT/OA No. 132/2023/8724 dated:-15/01/24.

ii) Video conference by DPCC with Railway officials as on 02/07/2024.

Dear Sir/Ma'am,

Updated status on actions to be taken against recommendations of DPCC vide Ref(i) is as follows:

Recommendations	Status of Implementation of recommendations
<p>a) Modification of ETP on following accounts.</p> <ul style="list-style-type: none"> <li>• In oil skimmer tank, flow of effluent needs to be from below the top layer so that no disturbance happens to top oil layer collected.</li> <li>• Technology of Ozone mixing tank in the ETP treatment process needs to be reviewed.</li> <li>• The operation of aeration tank needs to be overhauled and managed properly as there was no MLSS in the tank during inspection.</li> </ul>	<p>a) To meet the recommendations, specifications to upgrade ETP finalized and are attached as Annexure-I. Formal approval for the tender is at final stage and is expected to be opened by 30.07.24.</p>

3

NRM

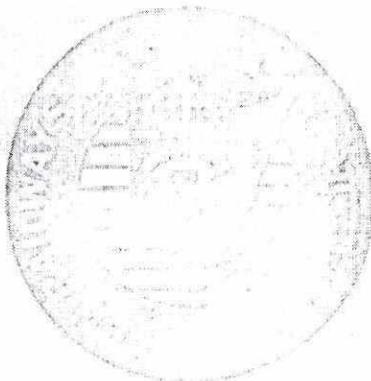
b) The facility also needs to install STP(Sewage Treatment Plant) for treating the entire sewage generated from the facility before discharging it into the drain.	b) The tender for installation and commissioning of STP will be opened on 09.07.24. Installation and commissioning of STP are expected to be completed within given the time limit.
--	---

Every effort to implement all four recommendations of DPCC within the time limits submitted to Hon'ble NGT.

Your Sincerely

  
07-07-24  
(B.P. Singh)

ACMT/DSL Loco Shed TKD  
(for Sr. DME/ DSL Loco Shed TKD)



Annexure - 1  
(4 pages)

**Subject-** Specification for modification required in existing Effluent Treatment Plant (ETP, capacity 60 KLD) in DSL Shed TKD as per DPCC letter no- F.No. DPCC/CMC-II/NGT/OA No. 132/2023/8724 Dated- 15-01-2024 and joint inspection report of officials of DPCC and DSL Shed TKD on date 18-12-2023 & 20-12-2023.

**Background:**

DPCC Authority visited the Effluent Treatment Plant at DSL Shed TKD and recommended that, the Diesel Locomotive Shed, TKD needs to modify its ETP for proper treatment of waste water. The recommended deficiencies to remove from ETP are as follows.

1. In oil skimmer tank flow of effluent needs to be from below the top layer so that no disturbance happens to the top oil layer collected.
2. Technology of ozone mixing tank in the ETP treatment process needs to be reviewed.
3. The operation of aeration tank needs to be revamping due to non function during inspection.
4. Biological treatment process needs to be developed as there is only Physiochemical treatment going on in plant.
5. After modification of plant the characteristics of outlet treated effluent should be as per DPCC prescribed limits mentioned below.

Sl.	Parameters	Unit	Raw Effluent	Treated Water
1	PH	-	6.0 - 10.0	6.5 - 8.5
2	Total Suspended Solids (TSS)	mg/L	400 - 500	<50
3	BOD	mg/L	400 - 500	<30
4	COD	mg/L	1000 - 1200	<150
5	Oil & Grease (After O/G trap)	mg/L	15 - 20	< 10

**Specifications:**

For removing deficiencies following works in details with justification are tabulated-

Works	Justification
<b>Activity number 1</b> To remove deficiencies in oil skimmer portion following developments are required.	
1. An oil and grease tank of size 1000mmx3000mmx1500mm (Height) with 03 compartments needs to be installed.	To transfer effluent in oil skimmer with low disturbance and for

Produce

		better oil separation.
	2. 02 nos. belt type oil skimmer of 4 inch belt size with 0.5 HP motor/01 no. belt type oil skimmer of 8 inch belt size with 1.0 HP motor (motor make Kirloskar or CRI or equivalent) fitted with gear should be installed.	For faster oil separation at peak time. Presently only one belt of 2.5 inch is in service which may not handle the peak time.
	3. An extra submersible pump of non-clog type with capacity of 2-3 m <sup>3</sup> /hour needs to be installed. Which can handle solid up to 28mm. Pump should be capable of generating head of 20m. The motor of pump needs to be of 2hp power with 2880 rpm. The make of motor may be of Kirloskar or CRI or equivalent.	The extra pump required for fast processing as well as backup in case of failure of any pump.
	4. 01 no. Of SS bar screen, Size 600 x 600 needs to install at inlet point.	Raw effluent will pass through a SS screen Jug for removal of floating objects so that no disturbance occur in oil skimmer while separating oil from effluent.
<p><b>Activity number 2</b> Because of biological treatment process, ozone mixing tank is not required in the existing plant so this tank needs to be utilised in biological treatment process if possible or wherever it can be used in the modification process, so regarding ozone tank following development is required.</p>		
	<ol style="list-style-type: none"> <li>1. Need to install a coagulation + flocculation tank with proper dosing system in MSFRP thickness 5+2 mm</li> <li>2. 03 nos. Chemical dosing pumps (poly dosing and coagulant dosing) PP, Diaphragm pump, 0-10-100 LPH and 03 nos. HDPE Chemical tank need to install for proper dosing of chemicals in to the coagulation + flocculation tank.</li> </ol>	Ozone tank is not required in biological treatment process and before biological treatment it requires physiochemical process.
<p><b>Activity number 3</b> Operation of aeration tank needs to be changed. In this regard the present chemical treatment process is not up to the mark as no MLSS was found in the tank during inspection so there is need to develop this tank for the same, following things need to be carried out:-</p>		
	1. Primary tube settler tank of capacity 2.5 m <sup>3</sup> /hr(thickness 5+ 2 mm) with tube media quantity of 1.5 m <sup>3</sup> and tube length of 0.75 m of PVC with screw pump 01 no., also filter press 14x14x10 plates material required at an installation angle of 60°. It is also to be noted that present aeration tank at ETP can be used as oil storage tank and need to develop for the same.	The aeration tank is RCC underground tank at present which need to replace by a hopper type tank of MS so that proper dosing of chemical take place and sludge can be coagulated and separated, though there is a hopper type DAF tank

Pradub

10/11/17

		at present but it has very low capacity and not adequate for a 60KLD plant.
	2. One sludge transfer pump of CI Body, Non Clog pump, 2m <sup>3</sup> /Hr @ 10mtr, 1HP, AC 440V, make kirloskar or equivalent need to install.	Needed for the transfer of sludge.
	3. TWO MSFRP aeration tank need to install before secondary settling tank with MBBR and diffuser.	Needed for developing biological treatment process.
<b>ACTIVITY number 4:-</b> Biological treatment process needs to be develop in the existing plant as there is only chemical treatment going on in plant for the same following things to be carried out:		
	1. A secondary tube settler of capacity 2.5 m <sup>3</sup> /hr (thickness 4.0 & 5.0 mm) with tube media quantity of 1.5 m <sup>3</sup> and tube length of 0.75 m of PVC material with screw pump 1 nos. also filter press 14x14x10 plates material required at an installation angle of 60°. Note:- Total size of Aeration tank 1 and 2 ,tube settler tank 1 & 2 with bio pack media 4M <sup>3</sup> , CCT and coagulation & flocculation tank should be L-7M, w-1.5 M, Height 3M for up gradation in ETP of 60 KLD.	Needed in new biological treatment process.
	2. One sludge transfer pump of CI Body, Non Clog pump, 2m <sup>3</sup> /Hr @ 10mtr, 1HP, AC 440V, make kirloskar or equivalent need to install.	Needed for the transfer of sludge.
	3. It also required one more twin lobe roots blower of 85 m <sup>3</sup> /hour capacity of make Akash, Rootech, Everest or equivalent with 3 HP, 440v motor (motor make Kirloskar or equivalent).	Biological treatment process needs more air for bio-degradation.
	4. A set of Grade Sand Filter MSEP Vessel, 600mm DIAx1600mm(height), Multiport valve, Frontal piping UPVC40mm required with vessel thickness 4.0 mm and dish thickness 6.0 mm.	Needed in biological treatment process.
	5. Also a set of activated carbon filter MSEP Vessel, 600mm DIAx1600mm(height) , Multiport valve, PVC frontal piping 40mm, Multiport valve, Carbon 900IDV required, with vessel thickness 4.0 mm and dish thickness 6.0 mm with filter feed pump 2 nos. Kirloskar	Needed in biological treatment process.
	6. A dosing tank of 100 Ltr. capacity for chlorination required (make Sheetal or equivalent) as well a dosing pump of metering type of 0-10 LPH capacity required (make e-dose or MCS or equivalent ).	Needed in biological treatment process for dosing Chlorine 1 set.
<b>ACTIVITY number 5: Additional requirements.</b>		
	1. Needs to install a digital magnetic flow meter and an inline ph meter for real time ph value at outlet.	Because at present flow meter is of mechanical type and there is no

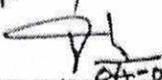
*Pradeep*

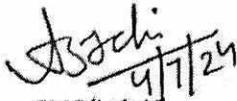
N.R.V.

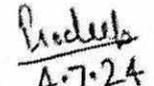
		inline ph meter.
--	--	------------------

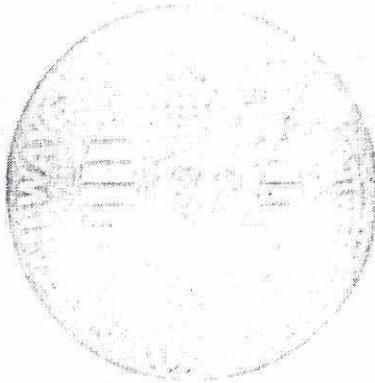
NOTE:-

1. An adequacy report regarding the quality of treated effluent needs to be submitted by the firm done by DPCC itself/DPCC certified lab after completion of modification work of ETP.
2. Characteristic of outlet effluent should be as per DPCC prescribed limits for achieving this if any other modification required in plant firms are allowed to do the same.
3. After completion of modification work plant will be operate under trail for 60 days. So that all DPCC norms to be ensured.
4. Temporary arrangement for treatment of effluent during modification work of the plant will be done so that during modification daily effluent reaching at ETP Plant can be treated.

Approved  
  
 ACMT/DSL/TKD  
 27-07-24

  
 4/7/24  
 CMS/Lab IC

  
 4.7.24  
 CMS/ETP



N.R.V.