

**BEFORE THE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE, CHENNAI**

ORIGINAL APPLICATION No. 199 OF 2021 (SZ)

IN THE MATTER OF:

Sri. Shankar Narayanan Bala Krishnan
R/o.Dammaiguda, Medchal – Malkajgiri District
& others

....

Applicant(s)

Versus

State of Telangana,
rep. by its Chief Secretary,
Hyderabad & Ors.

....

Respondent(s)

**REPORT OF THE TELANGANA STATE POLLUTION CONTROL BOARD
(RESPONDENT No. 4)**

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Place: Hyderabad

Date: 26-02-2022.

Report of the Telangana State Pollution Control Board (Respondent No. 4) in Original Application No. 199 of 2021 filed by Sri. Shankar Narayana Bala Krishna & Others R/o.Dammaiguda, Keesara (M), Medchal-Malkajgiri District.

It is to submit that Sri.Shankar Narayana Bala Krishna & others have filed an Original Application before the Hon'ble NGT, Chennai regarding non-implementation of Municipal Solid Waste (Management & Handling) Rules, 2000 and the Solid Waste Management Rules, 2016 in its letter & spirit in the State of Telangana, especially in Jawahar Nagar, Hyderabad. The Board has filed report on 05.10.2021 and the same was taken on record in the hearing held on 22.11.2021, the Hon'ble NGT vide order dated 04.02.2022 has directed to file independent reports and the action taken on the basis of the observations made by the Joint Committee and also Central Pollution Control Board.

In this regard, the following is submitted: -

The Board has constituted Team on the complaints from nearby residents regarding odor nuisance during October, 2021. The team has visited the Facility and submitted the report to the Board. The report of the Team was reviewed before the Task Force Committee of the Board on 21.12.2021 and directions were issued to Facility on 27.01.2022.

The Central Pollution Control Board inspected the Jawahar Nagar dump site on 17.11.2020 with regard to the representation made by the Hon'ble MP. The CPCB filed the report before the Hon'ble NGT on 01.02.2022 duly making certain observations and recommendations to be implemented by the GHMC.

The observations / recommendations of the CPCB were communicated to Greater Hyderabad Municipal Corporation (GHMC) for Compliance.

The latest Status / Compliance on the observations / recommendations of CPCB to the GHMC are as follows:-

S.No	Observations/ Recommendations	Action Taken / Remarks
i	To initiate necessary steps for day to day collection of solid waste generated and to achieve 100% of segregation for the effective treatment &	GHMC has taken steps for collection of solid waste from all 150 wards in GHMC area on daily basis. At present GHMC has taken steps to eliminate open dumping points/ bin points so as to achieve 100% collection by improving the infrastructure. The details are as follows:

disposal.	<p>Deployment of vehicles and machinery for primary and secondary collection i.e., to transport waste from generation point to Transfer stations:</p> <ul style="list-style-type: none"> ▪ Swachh Auto Tippers – GHMC: 3150 no’s. (1350 additional no’s. are being introduced in phase wise) ▪ Private Autos: 875 no’s. ▪ Mini tippers: 376 no’s. ▪ Big tippers: 6 no’s. ▪ Tractors: 11 no’s. ▪ Refuse Compactor Vehicle: 50 no’s. ▪ Bobcats: 72 no’s. ▪ JCBs: 10 no’s. ▪ Front End Loaders: 4 no’s. <p>Deployment of vehicles and machinery for transportation of waste from Transfer stations to the Processing & Disposal Facility:</p> <ul style="list-style-type: none"> ▪ Hook Mounted Vehicles: 69 no’s. (18 additional no’s. are under procurement.) ▪ Open Tippers with tarpaulin: 140 no’s. ▪ Portable Compactors (PCs): 85 no’s. ▪ Static Compactors: 14 no’s. (20 additional no’s. are under procurement.) ▪ Static Containers: 70 no’s. (69 additional no’s. are under procurement.) <p>Deployment of manpower at ground level:</p> <ul style="list-style-type: none"> ▪ Sanitary workers - out sourcing: 18,550 no’s. ▪ Sanitary workers - permanent : 1,907 no’s. ▪ Sanitary field Assistants: 959 no’s. ▪ Transport workers: 1,291 no’s. <p>GHMC is conducting various IEC activities for segregation of waste at source or generator level as well as at transfer station level through waste collector or rag pickers to achieve 100% of waste segregation.</p>
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ii	<p>To immediately remediate & restore the Malkaram-II Cheruvu and also to explore the possibility of treating the RO reject generated by treating the leachate accumulated in the lake by MEE & ATFD in the Leachate Treatment Plant instead of putting back in the lake.</p>	<p>GHMC is operating the 2 X 2000 KLD mobile RO plants for treatment of legacy leachate at Jawaharnagar.</p> <p>In compliance with directions of the Board and CPCB, earlier system of treating the legacy leachate with RO system and pumping back of rejects was stopped and Global tenders were called for comprehensive treatment and disposal of total quantity of leachate and restoration of Malkaram Tank in order to ensure no further ground water pollution.</p> <p>The work was allotted to the Concessionaire, M/s. Ramky Infrastructure Limited, a private operator, under Design, Build, Finance, Own, Operate and Maintain basis with a cost of Rs.251.016 Crore. The Concessionaire adopted Mechanical Vapor Recompression (MVR) concept and the project construction is under process and expected to commence operation in March, 2022 and rejects/sludge obtained post treatment will be disposed through the Waste to Energy plant at Jawaharnagar along with RDF or Cement units.</p> <p>The Board issued CFE to the facility for treatment of legacy leachate.</p>
iii	<p>The leachate generated by the capped legacy waste shall be diverted to the leachate treatment plant by completing the construction of garland drains around the capped area.</p>	<p>In the scientific design of Capping at Jawaharnagar, provision was made for management of leachate & landfill gas and accordingly, network of HDPE pipes were provided during the execution of capping work which started in 2012-13. Initially, leachate was collected in Artificial ponds and subsequently connected to the 500 TPD capacity Leachate Treatment Plant constructed as part of Capping project which is in operation since June, 2021 to treat the leachate generated from the residual moisture in the capped legacy waste.</p> <p>GHMC also provided garland drains around the capped</p>

		legacy waste.
iv	The GHMC may initiate quick & suitable steps to clean the surrounding area accumulated with leachate near the Malkaram-II Cheruvu for avoiding ground water contamination.	GHMC has taken action for complete rehabilitation of artificial leachate ponds and Restoration of Malkaram Cheruvu through the comprehensive Project entrusted to the Concessionaire i.e., M/s. Ramky Infrastructure Limited with a cost of Rs.251.061 Cr and conditions were provided in the above project's agreement for stabilization of the Malkaram. The Board issued CFE to the facility for treatment of legacy leachate.
v	GHMC will ensure that the waste around 60,000 tonnes stored in the compost area will be treated within two months period so that it will not become another dumpsite.	The accumulated waste of 60,000 MT at the time of inspection was treated and disposed. Additional trommels were installed and existing old trommels were replaced in phased manner in order to stop the accumulation of waste on the Tipping floor.
vi	To effectively use the odor control system and right amount of neutralizer to eliminate the odor problem in the compost plants. The workers shall be provided with reusable respirators while in the compost plants and impart hands on training with PPEs to work in the compost plant.	GHMC has taken following measures to reduce odor. Odor mitigation is being approached in (02) ways viz., application of bio-enzyme on the incoming MSW to replace the microorganisms responsible for generation of odor causing by-products and spraying of odour masking chemicals. <u>Steps taken/ being taken:</u> <ol style="list-style-type: none"> i. Spraying of odorite solution using (03) drones at the tipping floor, RDF storage and landfill locations at frequency of (02) shifts per day @ (02) times per shift. ii. Fixed misting system of length 2400 running meters has been setup all along the periphery of the tipping floor, pre-sorting shed and compost yards for spraying odor neutralizing chemicals. iii. A Pre Engineered Building (PEB) Shed has been

		<p>constructed over the new compost yard.</p> <p>iv. Fog cannon is also being used to spray odor masking agents around the plant and tractor mounted misting system is being used to spray at operational areas to reduce odor.</p>
vii	<p>To effectively trap the gases produced from the sanitary landfill either to flare or explore possible technology to utilize the collected gases.</p> <p>To also operate the sanitary landfill according to the CPCB guidelines.</p>	<p>To collect the gases from the capped area, gas vents are provided in the capped area connected with HDPE pipelines which are further connected to collection tanks. The landfill gas so collected is further purified at the Compressed Bio Gas (CBG) plant of 750 Cum per hour capacity to bring to the standards of Compressed Natural Gas (CNG). The purified gas is stored in a gas balloon and later is bottled with the help of high pressure booster pump and then is supplied to fuel stations to use as CNG in vehicles.</p> <p>All sanitary Landfill at Jawaharnagar site are constructed and operated as per the CPCB guidelines with</p> <p>i) Base Lining System:</p> <ul style="list-style-type: none"> • MSW • 285 gsm Geo-Textile • 300 mm thick drainage layer • 160 OD HDPE feeder • 285 gsm Geo-textile • 1.5mm thick HDPE liner • 900 mm thick clay <p>ii) Final Cover:</p> <ul style="list-style-type: none"> • 450 mm thick vegetative soil layer • 1.5mm thick HDPE liner • 600 mm thick clay barrier layer • 450 mm thick gas venting layer of granular material • MSW

viii	To immediately explore possible ways to clear the RDF stored in 54.7 acres of land either by sending to cement industries or utilizing in the Waste to Energy.	<p>In order to dispose and utilize the RDF from site, 19.80 MW Waste to Energy (WtE) Plant was constructed within the project site at Jawaharnagar and is being operated by consuming about 1200-1300 TPD of RDF.</p> <p>To dispose the accumulated RDF and future requirement, GHMC is planning more WtE plants. Existing 19.80 MW plant is going to be augmented into 48 MW capacity within Jawaharnagar site itself for which MoEF&CC GoI has granted Environmental Clearance on 23.12.2021. Further, Consent for Establishment was issued on 19.01.2022.</p> <p>Another 14.50 MW capacity WtE project is under construction at Dundigal and is expected to commission by end of 2022, after which about 1200 TPD of additional RDF will be disposed.</p>
ix	The sludge generated from the leachate treatment plant shall be utilized in waste to energy plant or send to cement industries for co-processing instead of landfill, so as to avoid the unnecessary load.	The Board issued CFE to the facility with a condition to utilise the sludge generated leachate treatment plant in the Waste to Energy plant along with RDF or send to cement plants for co-processing. The facility informed that they are conducting experiments on the same. Preliminary results are encouraging to proceed with same and will be implemented.
x	To obtain the consent to operate under Water & Air Act & authorization under Solid waste Management Rules, 2016 for the plastic waste recycling plant.	The facility is having Consent to operate and authorization for the recycling facility viz., No. TSPCB/128/CFO/RO-RR-II/HO/2018-3299, dated: 19.02.2019 valid up to 31.07.2023.
xi	To ensure that the three alternative sites identified for the	GHMC has identified following three Alternate Sites for Setting up Treatment and Disposal Facilities at Pyaranagar (V) Gummadidala (M), Sangareddy Dist.,

<p>treatment & disposal of solid waste shall be operated immediately so that the load on the Jawahar nagar facility can be reduced.</p>	<p>Khanapur (V), Talakondapally (M) Sy.No.256/2, Rangareddy Dist and Lakdaram(v) Patancheruvu(M) Sy.No. 747 (150 acres), Sangareddy Dist. Status of the (03) Alternate Sites are as below:</p> <p>i. Pyaranagar(v) Gummadidala (M):</p> <p>a) The Revenue Department has identified 152 acres of suitable land and GHMC has taken advance possession of the entire land.</p> <p>b) A request letter was addressed to the Principal Chief Conservator of Forest (PCCF), Govt. of Telangana on 13.09.2019 for diversion of forest land to the extent of 0.6228 ha of Nallavelly Reserve Forest adjacent to the above said site for formation of approach road to the site.</p> <p>c) After conducting Grama Sabhas, RoFR Certificate by the District Collector, Sangareddy, the PCCF on 31.12.2021 has addressed a letter to the Special Chief Secretary to Govt., Forest Dept. GoTS for according approval for the project. The details are also forwarded to the regional office of MoEFCC, Chennai for technical Evaluation and approval.</p> <p>ii. Khanapur (V), Talakondapally (M) Sy.No.256/2 :</p> <p>a) The Collector, Rangareddy District, vide a letter dated 12.12.2019 accorded permission to Tahsildar, Talakondapally Mandal for handing over the Government land to an extent of Ac. 42- 22 Gts.</p> <p>b) GHMC has submitted to the Government (on 08.05.2020) justifying the reasons for the requirement of the site.</p> <p>c) Govt. vide Memo no.10226/Assn.II(2)/2020-1 dt:30.06.2020 has directed the District</p>
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		<p>Collector, Ranga Reddy, to resolve the dispute and hand over advance possession of the land.</p> <p>d) Land is yet to be handed over to GHMC.</p> <p>iii. Lakdaram(v) Patancheruvu(M) Sy.no. 747 (150 acres):</p> <p>a) Alienation proposal was submitted to the Dist. Collector of Sangareddy Dist. on 22.06.2018. The Collector, Sangareddy submitted the proposal to the Chief Commissioner of Land Administration for alienation.</p> <p>b) Land is yet to be handed over to GHMC.</p>
xii	To immediately take necessary steps for remediation and restoration of the ground water quality in and around the facility & capped site.	GHMC has taken action for complete rehabilitation of artificial leachate ponds and Restoration of Malkaram Cheruvu through the comprehensive Project entrusted to the Concessionaire i.e., M/s. Ramky Infrastructure Limited with a cost of Rs.251.061 Cr and conditions were provided in the above project's agreement for stabilization of the Malkaram Chervu and restoration in the area.

The GHMC has taken action by providing fixed misting system around the tipping floor, shed with misting system, new processing plant provided with covered shed for composting, fog cans spraying the odour control bio-enzyme on the waste, storm water drain around the compost plant etc. The photographs are enclosed as **Annexure-I**.

The Board will review the compliance of the recommendations / directions regularly and initiate action from time to time.

Date: 26-02-2022.

Place: Hyderabad.

Sd/-

MEMBER SECRETARY

//T.C.F.B.//

K. Reddy

JOINT CHIEF ENVIRONMENTAL ENGINEER

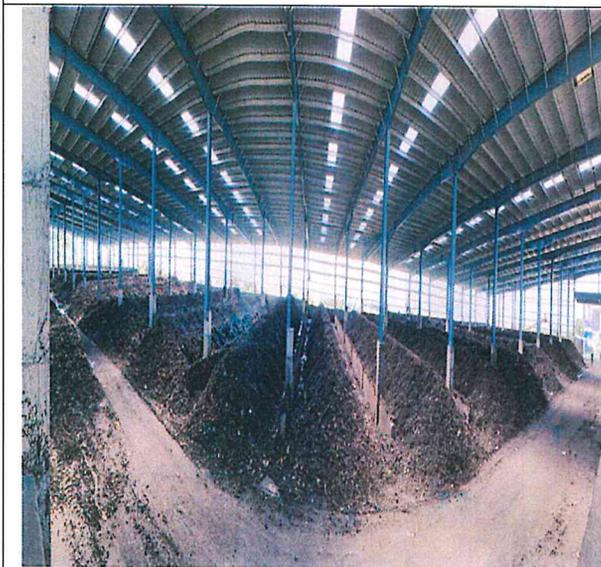
ANNEXURE – I



Fog canon spraying the odour control bio-enzyme on waste



Fixed Misting system around the Tipping floor



New Processing Plant at PS3 provided with covered Shed for composting and Misting System



Shed boundary with Misting System



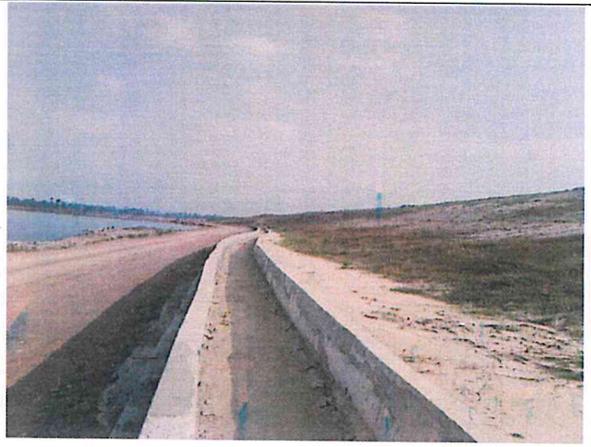
Masking agents spraying in facility



Operation area with misting system



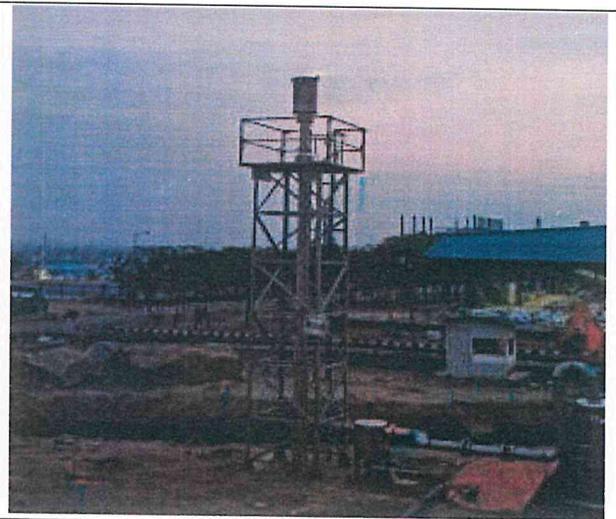
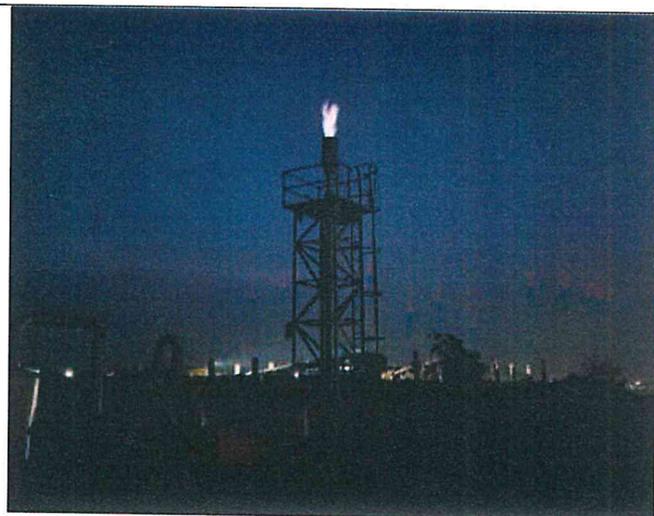
Storm water drain around the Compost Plant



Finished Rectangular drain around the Dump



RDF Covered with tarpaulin and spraying with Drones in the active area



Gas Flaring System

