

To

**The Additional PCCF (Central West Zone)
Ministry of Environment, Forest and Climate Change,
Regional Office (WCZ), Ground Floor, East Wing,
New Secretariat Building Civil Lines, Nagpur-440001**

Sub: Submission of six-monthly environmental clearance compliance report for the integrated solid waste management plan in Katihar village.

Dear Sir,

With reference to the above subject, please find here with six monthly compliance status report for the period of April 2023 to September 2023, for the integrated solid waste management plant in Village-kachahri, Post-Sendri, and Bilaspur-495009 (C.G.)

Thanking You,

Yours Sincerely,

For Delhi MSW Solutions Limited

Bhaskar Dubey

Project Head

Encl: As Above

Copy to:

1. SEIAA CHHATTISGARH, PARYAVAS BHAWAN, NORTH BLOCK, SECT-19, NAVA RAIPUR ATAL NAGAR, DIST. - RAIPUR (C.G.) 492002
2. CHHATTISGARH ENVIRONMENT CONSERVATION BOARD PARYAVAS BHAWAN, NORTH BLOCK, SECTOR -19, NAVA RAIPUR ATAL NAGAR, RAIPUR (C.G.) 492002
3. REGIONAL OFFICE CHHATTISGARH ENVIRONMENT CONSERVATION BOARD VYAPAR VIHAR NEAR PT. DINDAYAL UPADYAY GARDEN DIST: BILASPUR (C.G.)

HALF YEARLY COMPLIANCE REPORT (April to September) 2023

**DELHI MSW SOLUTIONS LIMITED
(INTEGRATED WASTE MANAGEMENT PLANT)**

Serial No.	EC COMPLIANCE POINT WISE	COMPLIANCE STATUS REPORT
1	Total land for proposed common municipal solid waste management facility shall not exceed 25 acres.	Total land proposed for common municipal solid waste management facility has not been exceeded 25 acres.
2	The common municipal solid waste management facility shall be set up as per the guidelines of the ministry of urban development, Government of India and CPCB, Delhi.	The common municipal solid waste management facility in Bilaspur has already been set up as per the guidelines of the ministry of urban development, Government of India and CPCB, Delhi. Please refer to the attached ANNEXURE –I.
3	The ‘landfill cells’ shall be developed in a phased manner to avoid water logging and misuse. The establishment of solid waste management facility shall comply the criteria laid down in Solid Waste Management Rule, 2016.	We have four landfill cells proposed for the project of the 15 years. The landfill cells have been developed in phased manner to avoid water logging and misuse. Currently cell B is in operation after successful construction and cell A is full that complies the criteria laid down in Solid Waste Management Rule, 2016. Photos of existing landfill and proposed are attached in the ANNEXURE -II.
4	Project proponent shall obtain no objection certificate from the Civil Aviation Authority/Airport Authority (as the case may be) before commencement of any activity on the site.	Project proponent has already obtained the no objection certificate from the Civil Aviation Authority/Airport Authority. The Proof of Airport NOC has been attached in the ANNEXURE -III.
5	The site for landfill, processing and disposal of solid wastes shall be incorporated in the Town Planning Department’s land-use plan.	The facility area for landfill, processing and disposal of solid wastes has already been incorporated in the Town Planning Department’s land-use plan. Details has been attached in ANNEXURE -IV.
6	A minimum 100-meter buffer zone of no development shall be maintained around solid waste processing and disposal facility.	Being Complied. We have already maintained 500-meter buffer zone of no development in our solid waste processing & disposal facility area. Details has been attached in ANNEXURE - V.
7	The biomedical wastes shall be disposed of in accordance with the Biomedical Waste Management Rules, 2016 as amended from time to time. The hazardous waste shall be managed in accordance with the Hazardous and Other Waste (Management and Tran’s boundary Movement) Rules, 2016, as amended from time to time. The E- Waste shall be managed in accordance with the E-Waste (Management) Rules, 2016 as amended from time to time.	We do not deal with any kind of bio medical and e waste. Hazardous waste like waste oil that is generated in the plant premises, reused for oiling and maintenance purposes of the machineries present in the plant. Used batteries are send to the vendor and replaced with new one.

8	Temporary storage facility for municipal solid wastes shall be established in site to accommodate the waste in case of non-operation of waste processing and during emergency or natural calamities.	Temporary storage facility for municipal solid wastes is established in site to accommodate the waste in case of non-operation of waste processing and during emergency or natural calamities up to seven days.
9	Fossil fuel such as coal, furnace oil, wood shall not be utilized / burnt in the proposed RDF plant at Kacchar for drying. Project proponent shall utilize fly ash bricks/blocks etc. in all construction activities.	Burning of any kind of waste doesn't take place in the proposed RDF plant at Kacchar for drying. Fly ash bricks / blocks are used in construction activities while required.
10	Site shall be fenced / separated by boundary wall from adjoining area and provided with proper gate to monitor incoming vehicles, to prevent entry of unauthorized persons and stray animals. Project proponent shall ensure transportation of solid wastes to the site only after completing the fencing / boundary wall along with gate and plantation.	Site is separated by boundary wall from adjoining area and proper gate is present to monitor incoming vehicle. Proper security is maintained to prevent entry of unauthorized persons and stray animals. Transportation of solid waste is only carried out inside the boundary wall along with gate and plantation. Proof of the compliance has been attached in ANNEXURE VI .
11	The approach and / internal roads shall be concreted or paved so as to avoid generation of dust particles due to vehicular movement and shall be so designed to ensure free movement of vehicles and other machinery.	The approach road and internal roads are concreted to avoid generation of dust particles caused by vehicle movement and its 5.5 meter wide to ensure free movement of vehicles and other machinery.
12	The site shall have waste inspection facility to monitor waste brought in for processing, office facility for record keeping and shelter for keeping equipment and machinery including pollution monitoring equipment. The operator of the facility shall maintain record of waste receive, processed and disposed.	Waste is sent for processing only after proper inspection. Office facility for mentioned purposes are available. We have Store room and in house laboratory for the shelter for keeping equipment and machinery including pollution monitoring equipment's respectively. Waste received, processed and disposed are recorded through online integrated centralized weighbridge software along with separate excel sheet in a particular system. Daily record keeping in logbook is also carried out on a regular basis.
13	Provisions like weigh bridge to measure quantity of waste brought at site, fire protection equipment and other facilities as may be required shall be provided.	Weighbridge to measure the weight of incoming waste, fire extinguishers, fire hydrant lines for firefighting and other facilities are provided.
14	Utilities such as drinking water and sanitary facilities (preferably washing / bathing facilities for workers) and lighting arrangements for shall be provided.	Separate sanitary facilities for washing and bathing for workers are provided. Drinking water facilities is provided by a separate tank of drinking water and lighting arrangements in and around the plant premises is maintained. Proof of the given compliance has been attached in the ANNEXURE -VII .
15	Safety provisions including health inspections of workers at landfill site shall be provided.	Provisions for all kind of safety for the workers is maintained in the premises by the safety

		officer of the site. Health inspection is being complied, and it is carried out once in a every year.
16	Provisions for parking, cleaning, washing of transport vehicles carrying solid waste shall be provided. The wastewater so generated shall be treated to meet the prescribed standards. Treated effluent shall be used for plantation within premises. Adequate facility for proper treatment of industrial (if any) and domestic effluent shall be provided to ensure the treated effluent quality within standard prescribed by Ministry of Environment. Forest and Climate Change, Government of India. Any liquid effluent what so ever generated from industrial (if any) and domestic activities shall not be discharged into the river or any surface water bodies under any circumstances, and it shall be reused wholly in the process/plantation. Project authority shall provide sewage treatment system of adequate capacity for treatment of domestic effluent generated.	Provision for parking, cleaning, and washing of transport vehicles is provided. Waste water generated is treated with the help of Multi Effective Evaporator to meet the prescribed standards and treated effluent is used for watering the plantation around the plant premises. Any liquid effluent what so ever generated from industrial (if any) and domestic activities is not discharged into the river or any surface water bodies under any circumstances, and it shall be reused wholly in the process/plantation. Details has been shown in ANNEXURE VIII
17	Waste shall be compacted in thin layers using heavy compactors to achieve high density of the waste. In heavy rainfall situation, when heavy compactors cannot be used, alternative measures shall be adopted.	Waste is compacted in thin layers using heavy compactors
18	Till the time waste processing facilities for composting or recycle are set up, the waste shall be sent to the sanitary landfill. The landfill shall be covered at the end of each working day with minimum 10 cm of soil, inert debris or construction material.	Waste was sent to the landfill at the time of setting up of the waste processing facility and landfill is regularly covered within 15c.m soil or inert.
19	Prior to the commencement of monsoon season, an intermediate cover of 40-65 cm thickness of soil shall be placed on the landfill with proper compaction and grading to prevent infiltration during monsoon. Proper drainage shall be constructed to divert run-off away from the active cell of the landfill.	Prior to the commencement of monsoon season, an intermediate cover of 60c.m cm thickness of soil on the landfill is given and also tarpaulin cover is given to prevent infiltration. Drainage is constructed to divert run-off away from the active cell of the landfill.

20	<p>After completion of landfill, a final cover shall be designed to minimise infiltration and erosion. The final cover shall meet the following specifications, namely: --</p> <p>a. The final cover shall have a barrier soil layer comprising of 60 cm of clay or amended soil with permeability coefficient less than 1×10^{-7} cm/sec.</p> <p>b. On top of the barrier soil layer, there shall be a drainage layer of 15 cm.</p> <p>c. On top of the drainage layer, there shall be a vegetative layer of 45 cm to support natural plant growth and to minimise erosion.</p>	<p>After completion of landfill, a final cover has already been done to minimise infiltration for Cell -A, Cell B is in still operation phase. No operation has been started yet for Cell C & D.</p>
21	<p>The storm water drain shall be designed and constructed in such a way that the surface runoff water is diverted from the landfilling site and leachates from solid waste locations do not get mixed with the surface runoff water. Provisions for diversion of storm water discharge drains shall be made to minimise leachate generation and prevent pollution of surface water and also for avoiding flooding and creation of marshy conditions.</p>	<p>The storm water drain has already been built and configured so that surface runoff water is routed away from the landfilling site and that leachates from solid waste locations are not mixed together. Storm water discharge drains have been diverted in order to reduce leachate production, prevent surface water contamination, prevent floods, and prevent the development of marshy conditions.</p>
22	<p>Non-permeable lining system at the base and walls of waste disposal area shall be provided. For landfill receiving residues of waste processing facilities or mixed waste or waste having contamination of hazardous materials (such as aerosols, bleaches, polishes, batteries, waste oils, paint products and pesticides) shall have liner of composite barrier of 1.5 mm thick high density polyethylene (HDPE) geo-membrane or geo-synthetic liners, or equivalent, overlying 90 cm of soil (clay or amended soil) having permeability coefficient not greater than 1×10^{-7} cm/sec. The highest level of water table shall be at least two meters below the base of clay or amended soil barrier layer provided at the bottom of landfills.</p>	<p>Non-permeable HDPE lining system at the base and walls of waste disposal area has already been provided. For landfill receiving residues of waste processing facilities or mixed waste or waste having contamination of hazardous materials (such as aerosols, bleaches, polishes, batteries, waste oils, paint products and pesticides) is having liner of composite barrier of 1.5 mm thick high density polyethylene (HDPE) geo-membrane or geo-synthetic liners, or equivalent, overlying 90 cm of soil (clay or amended soil) having permeability coefficient not greater than 1×10^{-7} cm/sec. The highest level of water table is 20 meters below the base of clay or amended soil barrier layer provided at the bottom of landfills.</p>
23	<p>Provisions for management of leachates including its collection and treatment shall be made. The treated leachate shall be recycled or utilized within premises. In no case, leachate shall be released into open environment.</p>	<p>In our facility area we have separate provision for leachate treatment</p>

24	Arrangement shall be made to prevent leachate runoff from landfill area entering any drain, stream, river, lake or pond. In case of mixing of runoff water with leachate or solid waste, the entire mixed water shall be treated by the project proponent.	We have arrangements to collect leachate in a leachate collection tank with the help of grid pipes and spread in the landfill. Thus, we prevent leachate runoff from landfill area entering any drain, stream, river, lake or pond.
25	Baseline data of ground water quality in the area shall be collected and kept in record for future reference by Project proponent. The ground water quality within 50 meters of the periphery of site shall be periodically monitored covering different seasons in a year that is, summer, monsoon and post-monsoon period to ensure that the ground water is not contaminated. Ground water quality monitoring in nearby villages shall be done on regular basis.	Ground water quality monitoring and reporting is conducted by a NABL certified lab within 50 meters of the periphery of site on periodic basis covering different seasons in a year that is, summer, monsoon and post-monsoon period to ensure that the ground water is not contaminated. We collected the baseline data at the time of construction of the plant and kept in record for future reference. Details has been shown in ANNEXURE IX
26	Usage of ground water in and around the site for any purpose (including drinking and irrigation) shall be considered only after ensuring its quality.	Ground water in and around the site for any purpose (including drinking and irrigation) is used only after ensuring the quality test from N.A.B.L certified lab. Test reports are attached as supporting document. ANNEXURE X
27	Landfill gas control system including gas collection system shall be installed at landfill site to minimize odour, prevent off-site migration of gases, to protect vegetation planted on the rehabilitated landfill surface etc. For enhancing landfill gas recovery, use of geomembranes in cover systems along with gas collection wells should be considered.	We will comply after the completion of landfill.
28	The concentration of methane gas generated at landfill site shall not exceed 25 per cent of the lower explosive limit (LEL).	We have conducted air monitoring from NABL certified lab which shows that the concentration of methane gas generated at landfill site does not exceed 25 per cent of the lower explosive limit [LEL]. File of air monitoring is kept in record on periodic basis. Details has been shown in ANNEXURE XI
29	The landfill gas from the collection facility at a landfill site shall be utilized for either direct thermal applications or power generation, as per viability. Otherwise, landfill gas shall be burnt (flared) and shall not be allowed to escape directly to the atmosphere or for illegal tapping. Passive venting shall be allowed in case if its utilization or flaring is not possible.	We comply it in post closure period.
30	Ambient air quality at the landfill site and at the vicinity shall be regularly monitored. Ambient air quality shall meet the standards prescribed in this regard.	We have tested the ambient air quality at the landfill site and at the vicinity area on three points at angle 120 degree apart to the landfill and the ambient air quality meets the standards prescribed in this regard. Test

		reports are kept in record on periodic basis. Periodic monitoring report of ambient air quality monitoring has been attached in ANNEXURE XII
31	<p>A vegetative cover shall be provided over the completed site in accordance with the following specifications, namely: -</p> <ul style="list-style-type: none"> a. Locally adopted non-edible perennial plants that are resistant to drought and extreme temperatures shall be planted; b. The selection of plants should be of such variety that their roots do not penetrate more than 30 cms. This condition shall apply till the landfill is stabilized; c. Selected plants shall have ability to thrive on low-nutrient soil with minimum nutrient addition; <p>Plantation to be made in sufficient density to minimise soil erosion.</p> <ul style="list-style-type: none"> d. Plantation to be made in sufficient density to minimise soil erosion. e. Special attention shall be given for green belt development. Green belts of broad leaf native species (non-edible) shall be developed in buffer zone of minimum 22-meter-wide area all around the boundary of the site. Project proponent shall develop green belt in at-least 33% area of total project area including the green belt mentioned in the buffer zone. Dense plantation shall be completed in first year before start of any activity at site related with solid waste management; failing which, environmental clearance may be cancelled. 	Landfill is under operation stage. Will ensure post closure care after closing of landfills.
32	<p>The post-closure care of landfill site shall be conducted for at least fifteen years and long term monitoring or care plan shall consist of the following, namely :-</p> <ul style="list-style-type: none"> a) Maintaining the integrity and effectiveness of final cover, making repairs and preventing run-on and run-off from eroding or otherwise damaging the final cover b) Monitoring leachate collection system in accordance with the requirement; c) Monitoring of ground water in and around landfill; d) Maintaining and operating the landfill gas collection system to meet the standards. 	Landfill is under operation stage. Will ensure to comply this during post closure care after closing of landfills.
33	Use of closed landfill sites after fifteen years of post-closure monitoring can be considered for human settlement or otherwise only after	Landfill is under operation stage. Will ensure use of closed landfill sites after fifteen years of post-closure monitoring for human settlement

	ensuring that gaseous emission and leachate quality analysis complies with the specified standards and the soil stability is ensured.	or otherwise only after ensuring that gaseous emission and leachate quality analysis complies with the specified standards and ensuring the soil stability.
34	The incoming organic waste at site shall be stored properly prior to further processing. To the extent possible, the waste storage area should be covered. If, such storage is done in an open area, it shall be provided with impermeable base with facility for collection of leachate and surface water run-off into lined drains leading to a leachate treatment and disposal facility.	The incoming organic waste at site is stored on tipping floor properly prior for further processing.
35	Necessary precaution shall be taken to minimise nuisance of odour, flies, rodents, bird menace and fire hazard.	Daily covering with 15cm soil on landfill to prevent odors, birds etc. and fire hydrant installed. Odour control measures have been taken thrice in a week, using odour control liquid spray on the waste storage at tipping floor. For proof ANNEXURE- XIII has been attached.
36	In case of breakdown or maintenance of plant, waste intake shall be stopped and arrangements be worked out for diversion of waste to the temporary processing site or temporary landfill sites which will be again reprocessed when plant is in order.	We have sufficient machineries (Two 75 mm trammel) providing facilities of waste processing and adequate space (2200 sqm area for accommodating in coming waste of volume 5500 m ³ which implies to store in coming waste till two weeks) for storage of incoming waste at the time of breakdown and maintenance of the plant. So, we do not need to send the incoming waste to the temporary processing site or temporary landfill sites which will be again reprocessed when plant is in order.
37	Pre-process and post-process rejects shall be removed from the processing facility on regular basis and shall not be allowed to pile at the site. Recyclables shall be routed through appropriate vendors. The non-recyclable high calorific fractions to be segregated and used for RDF production. Only rejects from all processes shall be sent for sanitary landfill site(s).	Pre-process and post-process rejects are removed from the processing facility on regular basis and not allowed to pile at the site. Recyclables are routed through appropriate vendors which are authorized recyclers. The non-recyclable high calorific fractions are segregated and used for RDF production and sent to cement plants on regular basis. Only rejects from all processes are sent to sanitary landfill site(s) as inert.

38	The windrow area for composting shall be provided with impermeable base. Such a base shall be made of concrete or compacted clay of 50 cm thick having permeability coefficient less than 10–7 cm/sec. The base shall be provided with 1 to 2 per cent slope and circled by lined drains for collection of leachate or surface run-off.	The windrow area for composting is provided with impermeable base. Such a base is made of concrete and the base is provided with 1 to 2 per cent slope and circled by lined drains for collection of leachate or surface run-off.
39	Leachate shall be re-circulated in compost plant for moisture maintenance	Leachate is re-circulated in compost plant for moisture maintenance.
40	The end product compost shall meet the standards prescribed under FCO notified from time to time.	We test our compost as per F.C.O standards that so that compost quality meets the specifications prescribed in Solid Waste Management Rules, 2016 notified vide so 1357 (E) Dated 08/04/2016. Both Internal and external report has been mentioned in the ANNEXURE- XIV
41	Project proponent shall ensure that in order to ensure safe application of compost, compost quality shall be met the specifications prescribed in Solid Waste Management Rules, 2016 notified vide so 1357 (E) Dated 08/04/2016. Compost quality exceeding the above-mentioned standards shall not be used for food crops. However, it may be utilized for purposes other than growing food crops	We test our compost as per F.C.O standards that so that compost quality meets the specifications prescribed in Solid Waste Management Rules, 2016 notified vide so 1357 (E) Dated 08/04/2016.
42	Ambient air quality monitoring shall be regularly carried out. Odour nuisance at down-wind direction on the boundary of processing plant / landfill side shall also be checked regularly.	Ambient air quality monitoring is regularly carried out and that odour nuisance at down-wind direction on the boundary of processing plant /landfill side is also checked regularly. Test reports are kept in record on periodic basis.
43	Project proponent shall provide 'adequate measuring arrangements for the measurement of water utilize in different categories and effluent generated. Good housekeeping practices shall be adopted	Being complied. For the measurement of water utilization separate flow meter has already been installed with bore well. Monthly, hourly monitoring data is recorded properly to prevent over consumption of limit mentioned in the ground water NOC. Good housekeeping practices are also being mentioned. Please refer to the ANNEXURE - XV

44	Provision shall be made for the housing of construction labour with all necessary infrastructure and facilities such as fuel for cooking (with proper safety arrangement), mobile toilets, mobile STP, safe drinking water, medical health care, crutch etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	Complied during the time of plant construction. All the temporary structures removed after the full establishment of the project. No further construction has been taken place after the date mentioned in the CFE letter. During each landfill construction labours appointed for the same are provided the existing toilets, safe drinking water, medical health care facilities and all other necessary facilities as other employees present in the plant.
45	Project proponent shall take proper action to control the noise pollution. Project proponent shall install appropriate noise barriers /control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation to control the noise. Earplugs/ear muffs etc. shall be provided to the employee working in the high noise areas (if any). Leq of /noise levels emanating from machines shall be limited to 75 dBA. The noise level shall not exceed the limits 75 dB (A) during the daytime and 70 dB (A) during the night time within the premises. Project proponent shall take adequate measures for control of noise level below 85 dB (A) in the work environment.	Noise level within plant premises is within range as per the standard by CPCB. ANNEXURE - XVI attached.
46	A separate environment management cell with full fledged laboratory facilities to carry out various management and monitoring functions shall be set up under the control of a Senior Executive.	Complied
47	Project proponent shall ensure compliance of all provisions of Solid Waste Management Rules. 2016 notified vide so 1357 (E) Dated 08/04/2016.	Complied
48	Transportation of waste by covered vehicles only shall be ensured. Provision for monitoring of vehicles by installation of close circuit cameras at suitable locations i.e. entry gate, weigh bridge etc. shall also be made	Transportation of waste is carried out by hydraulic compactors which are covered vehicle. Monitoring of vehicles by installation of close circuit cameras at suitable locations i.e., entry gate, weigh bridge etc. is in place.

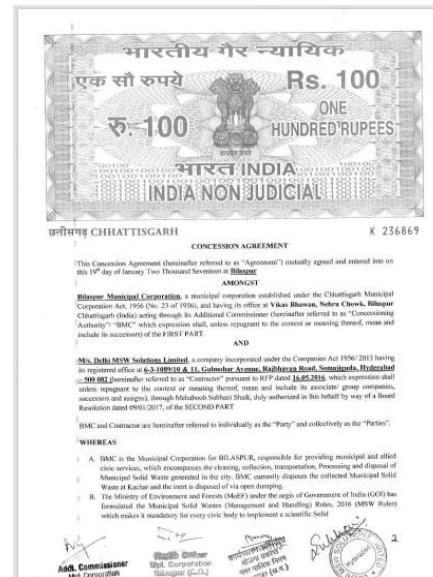
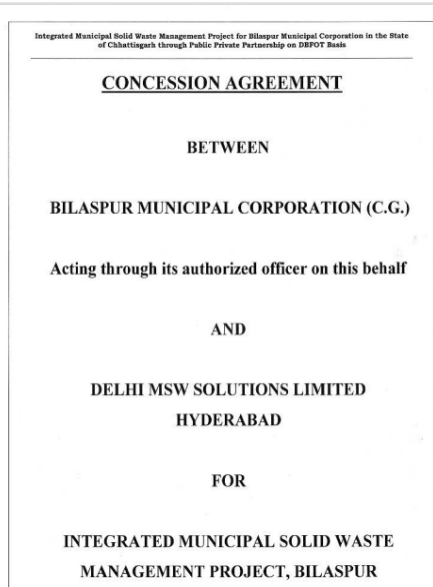
49	<p>Project proponent shall constitute a monitoring committee comprising of representatives of all stake holders i.e., Gram Panchayat. Villagers, workers, transporters and management etc. This committee shall monitor the environmental protection measures adopted, transportation of solid wastes. Complaints (if any) etc. The committee shall monitor the above matters at-least once in a two month: during which, factual situation regarding above matters will be discussed. Project proponent shall ensure meeting of this committee at regular interval. The proceedings of the committee shall be recorded in writing along with suggestions (if any). Project management shall take immediate action on the basis of observations / suggestions of the committee. A copy of the proceedings of the committee shall be submitted to Regional Officer, Chhattisgarh Environment Conservation Board, and Bilaspur for information.</p>	<p>Noted, we will comply before the submission of the next half yearly report for the tenure Oct- 23- Mar- 24.</p>
50	<p>Health camp shall be organised in Kachhar and nearby villages in every six months for health check-up of village people. Health check-up of workers shall be done every month regularly</p>	<p>Health Camp has already been Organised by DMSWSL on 5.09.23. Please refer to the ANNEXURE – XVII.</p>
51	<p>Project proponent shall ensure continuous operation of processing plant to prevent birds / fly / mosquito etc. nuisance. Preventive measure shall be ensured within and nearby areas of processing / landfill site for prevention and control of birds/ fly / mosquito etc. nuisance. Project proponent shall not mix and / or dispose anima' carcass, bio-medical wastes etc. in the processing / landfill site.</p>	<p>Continuous operation of processing plant is carried out to prevent birds / fly / mosquito etc. nuisance. Shed for the processing area and covering of landfill with 15cm soil on it is given as a preventive measure to control birds/flies/mosquitos etc. nuisance. We do not mix and / or dispose anima' carcass, bio-medical wastes etc. in the processing / landfill site.</p>

52	SEIAA. Chhattisgarh reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction. SEIAA. Chhattisgarh reserves the right to amend / cancel any of the conditions and add new conditions and make further stringent the emission / effluent limit as and when deemed necessary in the interest of environmental protection, change in the project profile or non-satisfactory implementation of the stipulated conditions etc.	Agreed
53	Project proponent shall advertise it at least two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned within seven days from the website of SEIAA, Chhattisgarh at www.seiaac.org .	Complied
54	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad / Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions / representations, if any. Received while processing the proposal. The clearance letter shall also be put on the website of the project proponent.	Complied
55	Half yearly report on the status of implementation of the stipulated conditions and environment safeguards shall be submitted to the Chhattisgarh Environment Conservation Board Raipur, Regional Office, Chhattisgarh Environment Conservation Board, Bilaspur, SEIAA, Chhattisgarh and Regional Office, Ministry of Environment, Forest and Climate Change. Government of India. Nagpur	Submitted previously and will be submitted in future also.

56	Regional Office of the Ministry of Environment. Forest and Climate Change at Nagpur will monitor the implementation of the stipulated conditions. A complete set of documents including Environment Impact Assessment Report and Environment Management Plan along with the additional information submitted from time to time shall be forwarded to the Regional Office for their use during monitoring. Project proponent will upload the compliance status in their website and up-date the same from time to time at least six-monthly basis.	Complied and half yearly compliance report uploading process is under progress.
57	Full cooperation shall be extended to the Scientists / Officers from the SEIAA, Chhattisgarh, Ministry of Environment, Forest and Climate Change, Government of India /Regional Office, Ministry of Environment, Forest and Climate Change, Government of India. Nagpur I CPCB I Chhattisgarh Environment Conservation Board, who would be monitoring the compliance of environment status.	Complied
58	In case of any deviation or alteration in the proposed project from those submitted to this SEIAA, Chhattisgarh for clearance, a fresh reference should be made to the SEIAA, Chhattisgarh to assess the adequacy of the condition(s) imposed and to add additional environment protection measures required, if any. No further addition, expansion or modifications in the site / plant should be carried out without prior approval of the Ministry of Environment, Forest and Climate Change, Government of India / SEIAA, Chhattisgarh.	No deviation or alteration in the proposed project from those submitted has been taken place before receiving and till date from the receiving of EC. We are being complied all the conditions mentioned in the EC. No further addition, expansion or modifications in the site / plant has been executed.
59	Concealing factual data or submission of false / fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.	Complied

60	The project authorities must strictly adhere to the stipulations made by the Chhattisgarh Environment Conservation Board (CECB) and the State Government.	Complied
61	The above stipulations would be enforced among others under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981. The Environment (Protection) Act, 1986 and rules made there under.	The above stipulations has been already enforced among others under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981. The Environment (Protection) Act, 1986 and rules made there under.
62	The issuance of this environmental clearance does not convey any property rights in either real or personal property, or any exclusive privileges. Nor does not authorize any injury to private property or any invasion of personal rights, nor any infringement of Central, State or Local laws or regulations.	Complied
63	Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under section 16 of the National Green Tribunal Act, 2010.	Complied

ANNEXURE -II



Agreement for 15 years with BMC (Bilaspur Municipal Corporation)



Landfill Cell B in Operation



Landfill Cell A completed.

ANNEXURE -III



भारतीय विमानपत्तन प्राधिकरण
AIRPORTS AUTHORITY OF INDIA

BILASPUR MUNICIPAL CORPORATION, EXECUTIVE ENGINEER, MR. ANUPAM TIWARI Date: 24-03-2022

VIKAS BHAWAN , NEHRU
CHOWK, BILASPUR,
CHHATTISGARH, 495001

System Generated Auto Assessment for Height Clearance

1. Airports Authority of India (AAI) in pursuance of responsibility conferred by and as per the provisions of Govt. of India (Ministry of Civil Aviation) order GSR 751 (E) dated 30th Sep. 2015 for Safe and Regular Aircraft Operations has assessed the site data filled by the applicant.

2. Assessment details for Height Clearance:

NOC ID :	BILA/EAST/B/030622/658950
Applicant Name*	Anupam Tiwari
Site Address*	DELHI MSW SOLUTIONS LIMITED (MUNICIPAL SOLID WASTE MANAGEMENT PROJECT) LOCATED AT KACHHAR, 495009 SURVEY NOS – 1359, 1052/1 SENDRI KACHHAR VILLAGE BILASPUR TALUK BILASPUR DISTRICT CHHATTISGARH STATE
Site Coordinates*	22 10 45.50N 82 06 43.68E, 22 10 53.63N 82 06 50.58E, 22 10 41.14N 82 06 50.68E, 22 10 37.41N 82 06 55.18E, 22 10 43.98N 82 06 55.98E, 22 10 40.50N 82 06 57.41E, 22 10 40.12N 82 06 58.05E, 22 10 48.36N 82 06 58.59E, 22 10 42.12N 82 06 59.84E
Site Elevation in mtrs AMSL as submitted by Applicant*	284.98 M
Type Of Structure*	Waste Management Facility

*As provided by applicant

Your site is located at a distance 20438 mts from ARP and lies in the grid A12 of the published CCZM of Bilaspur airport. The Permitted top elevation for this grid is 416 mts.

Since the requested top elevation 309.98 mts in AMSL is below CCZM permitted top elevation, the NOC for height clearance is not required from Airports Authority of India.

3. This assessment is subject to the terms and conditions as given below:

a. The site-elevation and site coordinates provided by the applicant are taken for calculation of the permissible top elevation for the proposed structure. If however, at any stage it is established that the actual data is different from the one provided by the applicant, this assessment will become invalid.

b. The Site coordinates as provided by the applicant in the NOC application has been plotted on the street view map and satellite map as shown in ANNEXURE. Applicant/Owner to ensure that the plotted coordinates corresponds to his/her site. In case of any discrepancy, this assessment shall be treated as null and void

c. Airport operator or his designated representative may visit the site (with prior coordination with applicant or owner) to ensure that assessment terms & conditions are complied with.

d. The assessment is further subject to the provisions of Section 9-A of the Indian Aircraft Act, 1934 and any notifications issued there under from time to time including the Aircraft (Demolition of Obstruction caused by Buildings and Trees etc.) Rules, 1994.

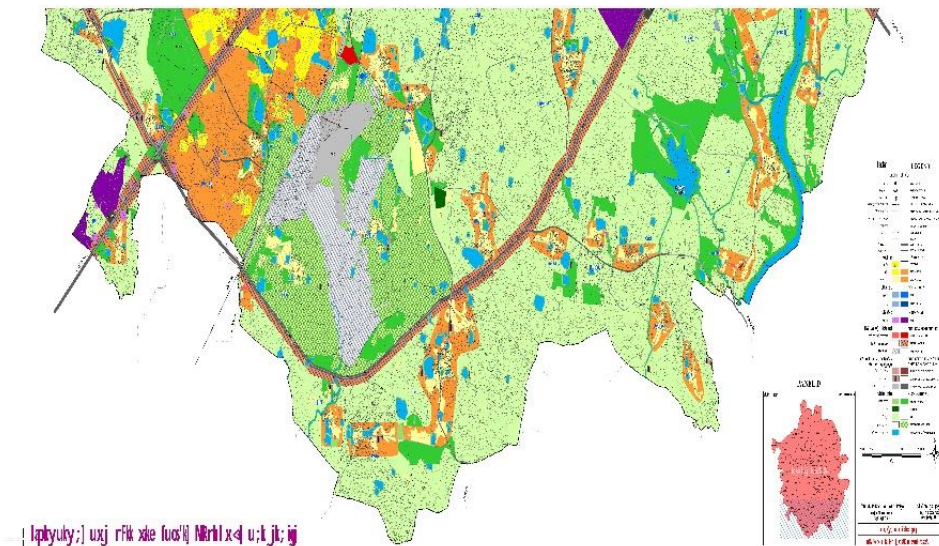
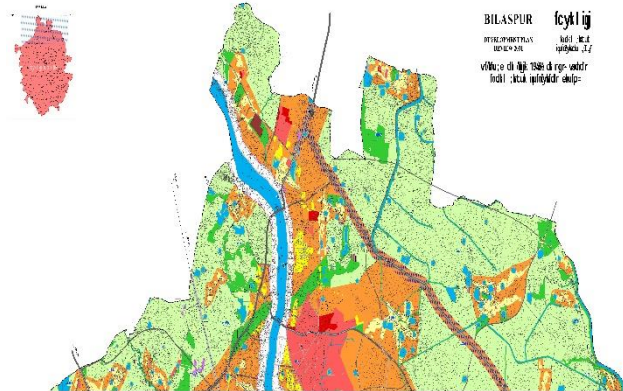
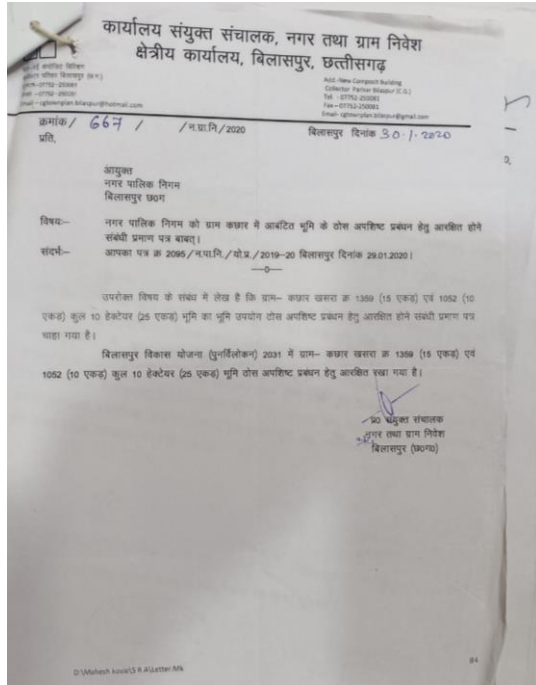
राजीव गांधी भवन
Rajiv Gandhi Bhawan

सफरजंग हवाई अड्डा नई दिल्ली-110003
Safdarjung Airport, New Delhi-110003

दूरभाष : 24832950
Phone: 24832950

NOC from AAI (Airport authority of India)

ANNEXURE –IV



The facility area for landfill, processing and disposal of solid wastes has already been incorporated in the Town Planning Department's land-use

ANNEXURE -V



Figure 4.7: Features around 500 m from the project site

500 m Buffer around the project site is maintained

ANNEXURE -VI




Main gate & Boundary Wall

ANNEXURE -VII



Separate sanitary facilities for washing and bathing for workers are provided. Drinking water facilities is provided by a separate tank of drinking water

ANNEXURE –VIII

S. No.	Time (Hrs)	Total Feed in Feed to MEE (MT/hr)		Steam Pressure to Evaporator (kg/cm ²)	SS-I		SS-II		MEE		MEE Condensate Characteristics		ATD		CYCLONE SEPARATOR		
		Feed to MEE (MT/hr)	Feed to MEE (MT/hr)		Vacuum (mmHg)	Temp ^o	Vacuum (mmHg)	Temp ^o	Conc. in Specific Gravity	Conc. in Flow (% H ₂ O)	TDS	PH	Feed to ATD (kg/hr)	Feed to ATD PH	Steam Pressure to ATD (kg/cm ²)	Solid Output (kg/hr)	Temp ^o
1	8:00	0.750	0.750	3.8	440	73	540	63		0.55	690	8.3					
2	9:00	0.760	1.51	3.6	465	72	565	62		0.56	660	8.2					
3	10:00	0.720	2.23	3.5	475	71	575	61		0.52	600	9.0					
4	11:00	0.710	2.94	3.4	485	72	585	62		0.51	580	7.9					
5	12:00	0.690	3.63	3.3	495	72	595	62		0.49	520	7.7					
6	13:00	0.730	4.36	3.2	515	73	615	63		0.53	490	7.6					
7	14:00	0.740	5.10	3.1	520	72	620	62		0.54	440	7.4					
8	15:00	0.680	5.78	3.3	505	74	605	64		0.48	390	7.3					
9	16:00	0.750	6.53	3.4	495	76	595	66		0.55	360	7.0					
10	17:00	0.760	7.27	3.5	490	78	590	68		0.54	280	7.1					
11	18:00	0.760	8.03	3.3	525	79	625	69		0.56	240	6.8					
Total Feed in whole Operation (liters)																	8030 LTR.
																	Client Shift Incharge

MEE LOG SHEET

Date

Date


16.05.23

S. No.	Time (Hrs)	Total Feed in		Steam Pressure to Evaporator (kg/cm ²)	SS-I		SS-II		MEE		MEE Condensate Characteristics		ATD		CYCLONE SEPARATOR		
		Feed to MEE (MT/hr)	Feed to MEE (MT/hr)		Vacuum (mmHg)	Temp ^o	Vacuum (mmHg)	Temp ^o	Conc. in Specific Gravity	Conc. in Flow (% H ₂ O)	TDS	PH	Feed to ATD (kg/hr)	Feed to ATD PH	Steam Pressure to ATD (kg/cm ²)	Solid Output (kg/hr)	Temp ^o
1	9:20	0.760	0.760	3.6	420	78	520	63		0.56	690	8.9					
2	10:20	0.740	1.50	3.5	440	74	540	64		0.54	630	8.6					
3	11:20	0.750	2.25	3.6	430	76	530	66		0.55	600	8.5					
4	12:20	0.720	2.97	3.2	415	75	515	68		0.52	580	8.2					
5	13:20	0.730	3.70	3.2	420	76	520	66		0.53	520	8.0					
6	14:20	0.740	4.44	3.1	425	74	525	64		0.54	500	7.8					
7	15:20	0.710	5.15	3.0	435	75	535	65		0.51	480	7.7					
8	16:20	0.750	5.90	3.3	410	76	510	66		0.55	455	7.6					
9	17:20	0.700	6.60	3.4	405	78	505	68		0.50	430	7.5					
10	18:20	0.690	7.29	3.5	400	81	500	71		0.49	415	7.2					
11	19:20	0.710	8.00	3.6	405	82	505	72		0.51	395	7.1					

Total Feed in whole Operation (liters)

8000 LTR

Running Hour — 10



Client Shift Incharge

Multi Effective Evaporator to meet the prescribed standards and treated effluent is used for watering the plantation around the plant premises. We follow ZLD in our plant premises

ANNEXURE –IX

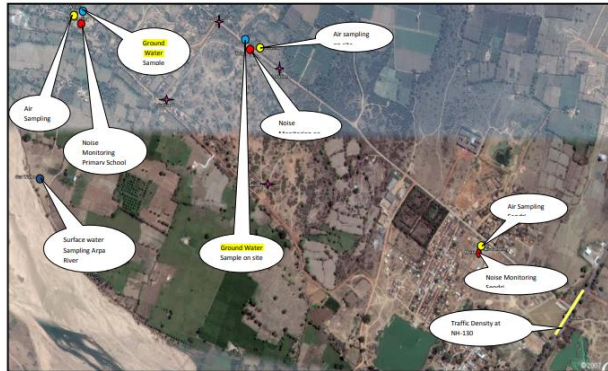


Figure: 4.11: Sampling locations marked on Google earth

TEST REPORT	
Name & Address Of the Customer :	ULR No. : TC627123000000617F
M/s. Delhi MSW Solutions Limited	Report No. : QLS/P-51/23-24/C/07
VILLAGE: SENDRI, MAHAMAYA VIHAR,	Date : 09.05.2023
RATANPUR ROAD, BILASPUR (CG)	Sample No. : QLS/P-51/23-24/07
	Sample Description : Drinking Water
	Sample Mark/ Location : Monitoring Borewell -1
	Date of Performance(s) : Near Landfill Cell A
	Sample Drawn On : 29.04.2023-08.05.2023
	Sample Method : 28.04.2023
	Ref No. Date : IS 3025(Part 1): 1987 (RA 2019)
	Mail Confirmation Dated 28.04.2023

Analysis Result			
Chemical Analysis			
Sl. No.	Test Parameter	Test Method	Result
1.	pH Value at 25°C	IS 3025 (Part 11): 1984 (RA 2019)	7.56
2.	Total Dissolved Solids (as TDS) in mg/l	IS 3025 (Part 16): 1984 (RA 2019)	462
3.	Electrical Conductance (µS/cm) at 25°C	APHA 24 th Edition-2023, 2510B	825
4.	Total Hardness (as CaCO ₃) in mg/l	IS 3025 (Part 21): 2019	329.6
5.	Turbidity in NTU	IS 3025 (Part 10): 1984 (RA 2019)	<1.0
6.	Chemical Oxygen Demand (as COD) mg/l	APHA 24 th Edition-2023, 5120B	<4
7.	Biochemical Oxygen Demand (as BOD) mg/l	IS 3025 (Part 44): 1993, RA-2019	<2
8.	Total Suspended Solid in mg/l	APHA 24 th Edition-2017, 2540D	<2.5
9.	Sodium (As Na) in mg/l	APHA 24 th Edition-2023, 3500Na-B	33.7
10.	Potassium (As K) in mg/l	APHA 24 th Edition-2023, 3500 K-B	13.4
11.	Oil & Grease in mg/l	APHA 24 th Edition-2023, 5510A	<1.4
12.	Ammonical nitrogen (as N) in mg/l	APHA 24 th Edition-2023, 4500NH ₃ -d	<0.1
13.	Nitrogen, Organic in mg/l	APHA 24 th Edition-2023, 4500 N _{org}	<0.1
14.	Phenolic Compounds(as CatOH) in mg/l	IS 3025 (Part 43): Sec 1(RA 2022)	<0.001

Ground water quality monitoring and reporting is conducted by a NABL certified lab within 50 meter of the periphery of site on periodic basis covering different seasons in a year that is, summer, monsoon and post-monsoon period to ensure that the ground water is not contaminated.

ANNEXURE –X

TEST REPORT

Name & Address Of the Customer :	ULR No. : TC62712300000617F
	Report No. : QLS/P-51/23-24/C/07
	Date : 09.05.2023
M/s. Delhi MSW Solutions Limited	Sample No. : QLS/P-51/23-24/07
VILLAGE: SENDRI, MAHAMAYA VIHAR,	Sample Description : Drinking Water
RATANPUR ROAD, BILASPUR (CG)	Sample Mark/ Location : Monitoring Borewell -1
	Near Landfill Sell A
	Date of Performance(s) : 29.04.2023-08.05.2023
	Sample Drawn On : 28.04.2023
	Sampling Method : IS 3025(Part 1): 1987 (RA 2019)
	Ref No. Date : Mail Confirmation Dated 28.04.2023

Analysis Result

Chemical Analysis

Sl. No.	Test Parameter	Test Method	Result
1.	pH Value at 25°C	IS 3025 (Part 11): 1984 (RA 2019)	7.56
2.	Total Dissolved Solids (as TDS) in mg/l	IS 3025 (Part 16): 1984 (RA 2017)	462
3.	Electrical Conductance (µS/cm) at 25° C	APHA 24 th Edition-2023, 25108	825
4.	Total Hardness (as CaCO ₃) in mg/l	IS 3025 (Part 21): 2019	319.6
5.	Turbidity in NTU	IS 3025 (Part 10): 1984 (RA 2017)	<1.0
6.	Chemical Oxygen Demand (as COD) mg/l	APHA 24 th Edition-2023, 52208	<4
7.	Biochemical Oxygen Demand (as BOD) mg/l	IS 3025 (Part 44)-1993, RA-2019	<2
8.	Total Suspended Solid in mg/l	APHA 24 th Edition-2017, 25400	<2.5
9.	Sodium (As Na) in mg/l	APHA 24 th Edition-2023, 3500Na – B	33.7
10.	Potassium (as K) in mg/l	APHA 24 th Edition-2023, 3500 K B	13.4
11.	Oil & Grease in mg/l	APHA 24 th Edition-2023, 5520A	<1.4
12.	Ammonical nitrogen (as N) in mg/l	APHA 24 th Edition-2023, 4500NH3-F	<0.1
13.	Nitrogen, Organic in mg/l	APHA 24 th Edition-2023, 4500 N _{ORG}	<0.1
14.	Phenolic Compounds(as CaH ₂ OH) in mg/l	IS 3025 (Part 43): Sec 1(RA 2022)	<0.001

Report No.	: QLS/P-51/23-24/C/07
Date	: 09.05.2023

Sl. No.	Test Parameter	Test Method	Result
15.	Boron(as B) in mg/l	IS 13428-2005(Annex L); RA-2018	<0.5
16.	Calcium(as Ca) in mg/l	IS 3025 (Part 40): 1991(RA 2019)	73.7
17.	Chloride(as Cl) in mg/l	IS 3025 (Part 32): 1988 (RA 2019)	97.3
18.	Copper(as Cu) in mg/l	IS 3025 (Part 42): 1992(RA 2019)	<0.02
19.	Fluoride(as F) in mg/l	APHA 24 th Ed., 4500 F D : 2023	<0.1
20.	Free Residual Chlorine in mg/l	IS 3025 (Part 26): 1986(RA 2021)	<0.1
21.	Iron (as Fe) in mg/l	IS 3025 (Part 53): 1988(RA 2019)	0.45
22.	Manganese (as Mn) in mg/l	IS 3025 (Part 59): 2006 (RA 2019)	<0.02
23.	Nitrate (as NO ₃) in mg/l	IS 3025 (Part 34): 1988(RA 2019)	<0.5
24.	Sulphate (as SO ₄) in mg/l	IS 3025 (Part 24): 1986 (RA 2022)	36.8
25.	Sulphide (as H ₂ S) in mg/l	IS 3025 (Part 29): 1991 (RA 2019)	<0.05
26.	Silica as SiO ₂ in mg/L	APHA 24 th Edition-2023, 4500 SiO ₂	<0.1
27.	Alkalinity(as CaCO ₃)in mg/l	IS 3025 (Part 23): 1986(RA 2019)	343.2
28.	Cadmium(as Cd) in mg/l	IS 3025 (Part 41): 1992(RA 2019)	<0.002
29.	Cyanide(as CN) in mg/l	IS 3025 (Part 27): 1986(RA 2019)	<0.02
30.	Lead(as Pb) in mg/l	IS 3025 (Part 47): 1994 (RA 2019)	<0.01
31.	Mercury(as Hg) in mg/l	IS 3025 (Part 48): 1994(RA 2019)	<0.001
32.	Arsenic(as As) in mg/l	IS 3025 (Part 37): 1988 (RA 2019)	<0.01
33.	Zinc(as Zn) in mg/l	IS 3025 (Part 49): 1994 (RA 2019)	<0.02
34.	Total Chromium (as Cr) in mg/l	IS 3025 (Part 52): 2014(RA 2019)	<0.05
35.	Chromium (as Cr ⁶⁺) in mg/l	APHA 24 th Edition-2023, 3500Cr	<0.05
36.	Phosphorus (as P) in mg/l	APHA 24 th Edition-2023, 4500P-D	<0.05
37.	Nitrite (as NO ₂) in mg/l	APHA 24 th Edition-2023, 4500 NO ₂ -B	<0.5
38.	Nickel (as Ni) in mg/l	APHA 24 th Edition-2023, 3111 B	<0.02

Report Prepared By:

for Qualissure Laboratory Services

Reviewed & Authorized By:

Ground water assessment report from NABL certified LAB to ensure the quality of the water.

ANNEXURE –XI



Qualissure Laboratory Services

361, Prantick Pally,
45/361, Bose Pukur Road,
Kolkata - 700107
Email : qualissure@gmail.com
Mob. No. : 9831287086
9830093976


DOC NO : QLS/SAMP/08-A/00

TEST REPORT

Name & Address Of the Customer :	Report No. : QLS/P-51/23-24/C/14
M/s. Delhi MSW Solution Limited	Date : 09.05.2023
Village – Sendri. Mahamaya Vihar,	Sample No. : QLS/P-51/23-24/14(A-C)
Ware House Road,	Date of Performance(s) : 29.04.2023-08.05.2023
Bilaspur (CG).	Sample Description : Ambient Air
	Ref No. Date : Mail Confirmation Dated 28.04.2023

Analysis Result

Date of sampling : 26-27.04.2023			
Sampling Done by: Akhilesh Mathankar			
Environmental Condition : Clear & Sunny			
Sampling done as per : CPCB Guidelines (Volume-1)			
Sample No.	Location	Methane(as CH ₄) in ppm	METHOD OF TEST REFERENCE
12A	Near Main Gate	<0.5	IS: 5182 (Part- 17)-1979
12B	Near TLP Plant	<0.5	
12C	Near 75 MM Trommel	<0.5	
Remarks : Nil			

Report Prepared By: 

for Qualissure Laboratory Services
Reviewed & Authorized By

Benimadhab Gorai, Chemist
(Authorized Signatory)

-----End of Report-----

air monitoring from NABL certified lab which shows that the concentration of methane gas generated at landfill site does not exceed 25 per cent of the lower explosive limit [LEL].

ANNEXURE –XII



TEST REPORT

Name & Address Of the Customer :	Report No. : QLS/P-51/23-24/C/01
M/s. Delhi MSW Solution Limited	Date : 09.05.2023
Village – Sendri, Mahamaya Vihar,	Sample No. : QLS/P-51/23-24/01
Ware House Road,	Date of Performance(s) : 29.04.2023-08.05.2023
Bilaspur (CG).	Sample Description : Ambient Air
	Ref No. Date : Mail Confirmation Dated 28.04.2023

Analysis Result

Location : Near Main Gate		Date of sampling : 26-27.04.2023		
Sampling Done by: Akhlesh Mathankar		Sampling done as per : CPCB Guidelines (Volume-1)		
Environmental Condition : Clear & Sunny				
Sl. No.	POLLUTANT	RESULT	LIMIT	METHOD OF TEST REFERENCE
1	Particulate matter (<10µm) in µg/m ³	85	100	IS: 5182 (Part-23)- (RA-2017)
2	Particulate matter (<2.5µm) in µg/m ³	45	60	USEPA CFR-40,Part-50, Appendix-L
3	Sulphur dioxide (SO ₂) in µg/m ³	9.2	80	IS: 5182 (Part-2)-2001, (RA-2017)
4	Nitrogen dioxide (NO ₂) in µg/m ³	36.2	80	IS: 5182 (Part- 6)- (RA-2017)
5	Carbon Monoxide (CO) in mg/m ³	0.984	2	IS: 5182 (Part- 10)-2014
6	Carbon dioxide (CO ₂) in %	<0.2	---	ORSAT
7	Ammonia (NH ₃) in µg/m ³	58.1	400	Air Sampling, 3 rd Edn -Method-401
8	Ozone (O ₃) in µg/m ³	32.0	180	Air Sampling, 3 rd Edn -Method-411
9	Lead (Pb) in µg/m ³	0.03	1	EPA IO-3.2 & 5.0
10	Nickel (Ni) in ng/m ³	6.8	20	EPA IO-3.2
11	Arsenic (As) in ng/m ³	<1.0	6	Air Sampling, 3 rd Edn Method 402 and APHA 22 nd Edition Part 31148
12	Benzene (C ₆ H ₆) in µg/m ³	<2.08	5	IS: 5182 (Part- 11)
13	Benzo (a) pyrene in ng/m ³	<0.4	1	IS: 5182 (Part- 12)-(RA-2009)
14	Hydrogen Sulphide (H ₂ S) in µg/m ³	<6.0	---	IS: 5182 (Part-7)

NOTE: Limit as per CPCB notification, New Delhi, 18th November 2009, for Ambient air quality.

NOTE: Limit as per CPCB notification, New Delhi, 18th November 2009, for Ambient air quality.

Report Prepared By: [Signature]

for Qualissure Laboratory Services
Reviewed & Authorized By
[Signature]
Srinivasbab Goral, Chemist
(Authorized Signatory)

—End of Report—



TEST REPORT

Name & Address Of the Customer :	Report No. : QLS/P-51/23-24/C/02
M/s. Delhi MSW Solution Limited	Date : 09.05.2023
Village – Sendri, Mahamaya Vihar,	Sample No. : QLS/P-51/23-24/02
Ware House Road,	Date of Performance(s) : 29.04.2023-08.05.2023
Bilaspur (CG).	Sample Description : Ambient Air
	Ref No. Date : Mail Confirmation Dated 28.04.2023

Analysis Result

Location : Near TLP Plant		Date of sampling : 26-27.04.2023		
Sampling Done by: Akhlesh Mathankar		Sampling done as per : CPCB Guidelines (Volume-1)		
Environmental Condition : Clear & Sunny				
Sl. No.	POLLUTANT	RESULT	LIMIT	METHOD OF TEST REFERENCE
1	Particulate matter (<10µm) in µg/m ³	76	100	IS: 5182 (Part-23)- (RA-2017)
2	Particulate matter (<2.5µm) in µg/m ³	67	60	USEPA CFR-40,Part-50, Appendix-L
3	Sulphur dioxide (SO ₂) in µg/m ³	8.4	80	IS: 5182 (Part-2)-2001, (RA-2017)
4	Nitrogen dioxide (NO ₂) in µg/m ³	29.2	80	IS: 5182 (Part-6)- (RA-2017)
5	Carbon Monoxide (CO) in mg/m ³	0.858	2	IS: 5182 (Part- 10)-2014
6	Carbon dioxide (CO ₂) in %	<0.2	---	ORSAT
7	Ammonia (NH ₃) in µg/m ³	88.0	400	Air Sampling, 3 rd Edn -Method-401
8	Ozone (O ₃) in µg/m ³	42.1	180	Air Sampling, 3 rd Edn -Method-411
9	Lead (Pb) in µg/m ³	0.04	1	EPA IO-3.2 & 5.0
10	Nickel (Ni) in ng/m ³	7.0	20	EPA IO-3.2
11	Arsenic (As) in ng/m ³	<1.0	6	Air Sampling, 3 rd Edn Method 402 and APHA 22 nd Edition Part 31148
12	Benzene (C ₆ H ₆) in µg/m ³	<2.08	5	IS: 5182 (Part- 11)
13	Benzo (a) pyrene in ng/m ³	<0.4	1	IS: 5182 (Part- 12)-(RA-2009)
14	Hydrogen Sulphide (H ₂ S) in µg/m ³	<6.0	---	IS: 5182 (Part-7)

NOTE: Limit as per CPCB notification, New Delhi, 18th November 2009, for Ambient air quality.

NOTE: Limit as per CPCB notification, New Delhi, 18th November 2009, for Ambient air quality.

Report Prepared By: [Signature]

for Qualissure Laboratory Services
Reviewed & Authorized By
[Signature]
Srinivasbab Goral, Chemist
(Authorized Signatory)

—End of Report—

Test reports are kept in record on periodic basis.
Periodic monitoring report of ambient air quality
monitoring

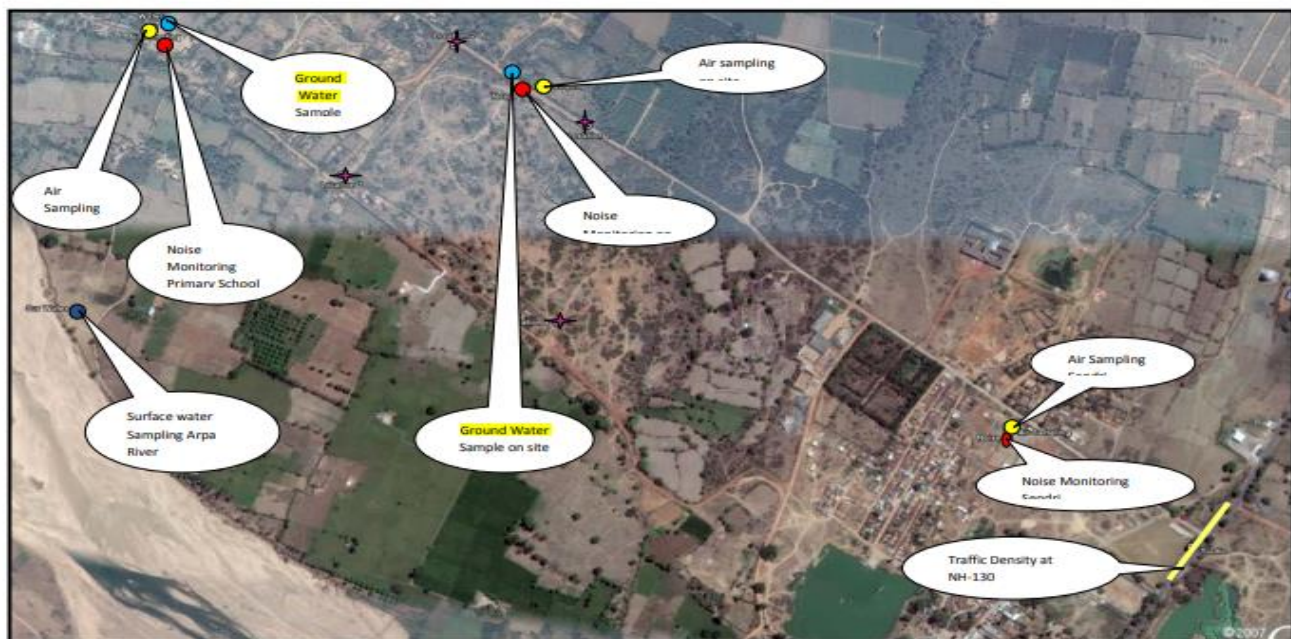


Figure: 4.11: Sampling locations marked on Google earth

ANNEXURE -XIII



Odour control measures have been taken thrice in a week, using odour control liquid spray.



Covering with 15cm soil on landfill to prevent odors, birds etc.

ANNEXURE –XIV



DELHI MSW SOLUTIONS LIMITED
INTEGRATED SOLID WASTE MANAGEMENT PLANT
Village-Kachhar, Post-Saudi, Bilaspur-495009 (C.G.)

Laboratory Test Report

Sample Reg. No. : DMSWSL/2023/Batch 35
Date of Report : 08-08-2023
Date of Sampling : 08-08-2023
Sampling Collected by : DMSWSL LABORATORY
Date of analysis start : 05-08-2023
Date of analysis end : 08-08-2023

S.No	Parameter	UNIT	Range	Method	Result
1	pH	---	6.0-8.0	As per FCO 1985(july2021)	7.37
2	Conductivity	ds/m ⁻¹	6 not more than	-do-	4.83
3	Color	---	Dark brown to black	-do-	Dark Brown
4	Odor	---	Absence of foul odor	-do-	Absence of foul odor
5	Particle size (on Dry Basis)	%	Minimum 90% material transfer from 15 4mm sieve	-do-	96.8
6	Bulk density	g/cm ³	<1.20	-do-	0.89
7	C:N ratio	---	20.0 maximum	-do-	10.50
8	Moisture	---	25.0 maximum	-do-	20.356
9	Total organic carbon	---	12.0 minimum	-do-	18.28
10	Total nitrogen as N	---	---	-do-	1.95
11	Total Phosphates as P ₂ O ₅	Percentage by weight	---	-do-	0.56
12	Total potash as K ₂ O	---	---	-do-	0.39
13	NPK nutrients –Total of N, P ₂ O ₅ and K ₂ O	---	Not less than 1.2	-do-	2.5

Internal test report of city compost as per the FCO guideline



Qualissure Laboratory Services

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Email : qualissure@gmail.com
Mob. No. : 9831287086
9830093976

DOC NO : QLS/SAMP/08-E/00

TEST REPORT

Name & Address Of the Customer :	Report No. : QLS/P-51/23-24/C/11
	Date : 11.05.2023
M/s. Delhi MSW Solutions Limited	Sample No. : QLS/P-51/23-24/11
VILLAGE: SENDRI, MAHAMAYA VIHAR,	Sample Description : Organic Fertilizer
RATANPUR ROAD, BILASPUR (CG)	Sample Mark : City Compost
	Sample Submitted On : 28.04.2023
	Ref No. Date : Verbal Confirmation

Analysis Result

Sl. No.	Test Parameter	Test Method	Specification of City Compost as per FCO	Result
1.	pH at 25°C	As Per FCO norms (1985)	6.5-7.5	7.27
2.	Electrical Conductivity at 25°C in ds/m ⁻¹	As Per FCO norms (1985)	4.0(Max)	2.31
3.	Bulk density in g/cm ³	As Per FCO norms (1985)	<1	0.89
4.	Moisture	As Per FCO norms (1985)	15-25	18.3
5.	Total N (as N), Total P (as P ₂ O ₅) & Total K (as K ₂ O)(% by weight)	As Per FCO norms (1985)	1.2(Min)	2.09
6.	TOC (% by weight)	As Per FCO norms (1985)	12.0(Min)	15.4
7.	C:N Ratio	As Per FCO norms (1985)	<20.0	12.7
8.	Copper (as Cu), mg/kg	As Per FCO norms (1985)	300.0(Max)	34.8
9.	Zinc (as Zn), mg/kg	As Per FCO norms (1985)	1000.0(Max)	310.4
10.	Mercury (as Hg), mg/kg	As Per FCO norms (1985)	0.15(Max)	<0.01
11.	Cadmium (as Cd), mg/kg	As Per FCO norms (1985)	5.0(Max)	0.84
12.	Nickel (as Ni), mg/kg	As Per FCO norms (1985)	50.0(Max)	4.33
13.	Chromium (as Cr), mg/kg	As Per FCO norms (1985)	50.0(Max)	19.7
14.	Lead (as Pb), mg/kg	As Per FCO norms (1985)	100.0(Max)	2.41
15.	Arsenic (as As ₂ O ₃), mg/kg	As Per FCO norms (1985)	10.0(Max)	<0.25

for Qualissure Laboratory Services

External test report of city compost as per the FCO guideline

ANNEXURE -XV

	A	B	C	D	E
1	Date	Totalizer(m ³)			
2	01-07-2023				
3	02/07/2023	1.65			
4	03/07/2023	3.54			
5	04/07/2023	4.29			
6	05/07/2023	3.2			
7	06/07/2023	1.9			
8	07/07/2023	1.91			
9	08/07/2023	3.28			
10	09/07/2023	2.6			
11	10/07/2023	2.66			
12	11/07/2023	1.12			
13	12/07/2023	2.27			
14	13/07/2023	2.53			
15	14/07/2023	2.33			
16	15/07/2023	2.56			
17	16/07/2023	6.54			
18	17/07/2023	1.83			
19	18/07/2023	3.87			
20	19/07/2023	N/A			
21	20/07/2023	3.01			
22	21/07/2023	0.81			



भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन, नदी विकास
और गंगा संरक्षण विभाग
केन्द्रीय भूमि जल प्राधिकरण
Government of India
Ministry of Jal Shakti
Department of Water Resources,
River Development & Ganga Rejuvenation
Central Ground Water Authority

(भूजल निकासी हेतु अनापत्ति प्रमाण पत्र)

NO OBJECTION CERTIFICATE (NOC) FOR GROUND WATER ABSTRACTION

Project Name:	Establishment For Storage Transport Separation Treatment And Disposal Arrangement Of Common Msw		
Project Address:	Kachhar Village, Sendri, Bilaspur		
Village:	Kachhar	Block:	Belha
District:	Bilaspur	State:	Chhattisgarh
Pin Code:			
Communication Address:	Municipal Corporation Bilaspur, Vikash Bhawan, Nehru Chowk, Bilaspur, Belha, Bilaspur, Chhattisgarh - 495001		
Address of CGWB Regional Office :	Central Ground Water Board North Central Chhattisgarh, 2nd Floor, Lk Corporate And Logistic Park, Dhamtari Road, Nh-30, Dumartarai, Raipur, Chhattisgarh - 492015		

1. NOC No.:	CGWA/NOC/IND/ORIG/2020/8758										
2. Application No.:	21-4/3843/CT/IND/2020		3. Category: (GWRE 2017)	Semi Critical							
4. Project Status:	New Project		5. NOC Type:	New							
6. Valid from:	30/10/2020		7. Valid up to:	29/10/2023							
8. Ground Water Abstraction Permitted:											
Fresh Water		Saline Water		Dewatering	Total						
m ³ /day	m ³ /year	m ³ /day	m ³ /year	m ³ /day	m ³ /year						
10.00	3650.00										
9. Details of ground water abstraction /Dewatering structures											
Total Existing No.:1						Total Proposed No.:0					
	DW	DCB	BW	TW	MP	DW	DCB	BW	TW	MP	
Abstraction Structure*	0	0	1	0	0	0	0	0	0	0	
*DW- Dug Well; DCB-Dug-cum-Bore Well; BW-Bore Well; TW-Tube Well; MP-Mine Pit											
10. Ground Water Abstraction/Restoration Charges paid (Rs.):						21900.00					

Monthly monitoring data is recorded properly to prevent over consumption of limit mentioned in the ground water NOC.

ANNEXURE –XVI



Qualissure Laboratory Services

361, Prantik Pally, 45/361, Bose Pukur Road, Kolkata -700107
Email : qualissure@gmail.com; info@qualissure.com ; Mob.No. 98312 87086 ; 9830093976




DOC NO : QLS/SAMP/08-A/00

TEST REPORT

Name & Address Of the Customer :	Report No. : QLS/P-51/23-24/C/13
M/s. Delhi MSW Solution Limited	Date : 09.05.2023
Village – Sendri. Mahamaya Vihar,	Sample No. : QLS/P-51/23-24/13(A-B)
Ware House Road,	Date of Performance(s) : 29.04.2023-08.05.2023
Bilaspur (CG).	Sample Description : Ambient Noise
	Ref No. Date : Mail Confirmation Dated 28.04.2023

Monitoring Result Noise

Sampling Done By: Akhilesh Mathankar						
Sampling Guideline : As per IS: 9876: 1981 (RA-2001)						
Sample. No.	Location	Date of Monitoring	Leq dB (A) Day Time	Limit in Leq dB(A) Day time	Leq dB (A) Night Time	Limit in Leq dB(A) Night Time
13 A	Near Main Gate	26-27.04.2023	55.2	75	46.1	70
13 B	Near 4 mm Trommel		63.6		60.4	

Report Prepared By: 



for Qualissure Laboratory Services
Reviewed & Authorized By



Benimadhab Gorai, Chemist
(Authorized Signatory)

-----End of Report-----

Noise level within plant premises is within range as per the standard by CPCB.

ANNEXURE –XVII



DELHI MSW SOLUTIONS LTD.
(A Re Sustainability Ltd. Venture)
CIN: U90001TG2009PLC063708
H. No : 259/1/ Lane No. R-04,
Mahamaya Vihar, Ware House Road,
Bilaspur, Chattisgarh - 495001
www.delhimswsolutions.com

Towards sustainable growth

Venue:

Date: 05/09/2023

Survey no.-1359, Village-Kachhar Sendri
Bilaspur - 495009, Chhattisgarh

HEALTH CHECKUP CAMP ORGANIZED BY DMSWSL

We are DMSWSL hereby notifying that health checkup camp has been organized on 05/09/2023, for the nearby villagers of the venue mention above.

Health checkup camp has been started at 9:00 A.M. sharp at the venue in presence of respected Doctor's team:

Doctor- Mohit Maurya, Nurse- Sujata Dubey, Lab. Technician- Gulshan Jaiswal, Pharmacist- Nilesh Somkar, Driver- Rakesh Suryavanshi.

All of your coordination and participation is highly appreciated.

List of the villagers taken part in the health checkup are attached here with.

Authorized Sign.



Bhaskar Dubey

Sign.



Dr. Mohit Maurya

Regd. Office : Level 11, Aurobindo Galaxy, Hyderabad Knowledge City, Hitech City Road, Hyderabad-500081

Some glimpse of Health Camp which has been organised by DMSWSL on 5.09.23.