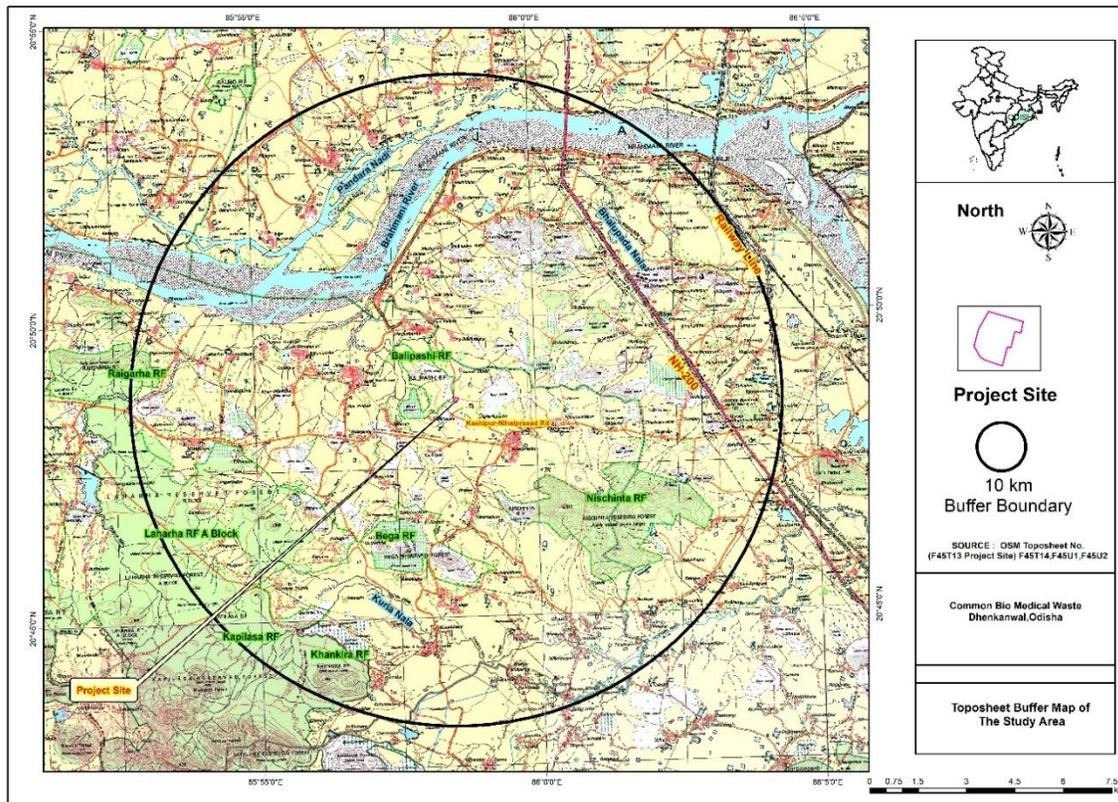


SUMMARY OF ENVIRONMENTAL IMPACT ASSESSMENT
REPORT FOR PUBLIC HEARING
COMMON BIO-MEDICAL WASTE TREATMENT FACILITY
PROJECT

At

**Plot no. 553/1081, 555, 556, 557, 559, 560, 561, 562, 563, 565,
566, 567, Tehsil/Thana-Gondia, District - Dhenkanal, Odisha**



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1.0 PROJECT DESCRIPTION

M/s MKD Eco Clean Private Limited has proposed Greenfield project for Common Bio-Medical Waste Treatment Facility (CBWTF) at Plot No.553/1081, 555,556, 557, 559, 560, 561, 562, 563, ,655, 566, 567 khata no. 123/124, Mauja- Asanbahali Tehsil/Thana Gondia, District: Dhenkanal, Odisha.

Application was submitted for obtaining Terms of References (TOR) for conducting the EIA studies. Accordingly, the project proponents have submitted prescribed application along with Pre-Feasibility Report vide proposal No:- SIA/OR/INFRA2/498744/2024 for seeking terms of references for conducting the EIA Study. SEIAA, Odisha granted TOR for the project on 24.03.2025 vide File No: 498744/54-INFRA2/10-2024. The State Expert Appraisal Committee, Odisha shall appraise the project.

“The project falls under Category ‘B’ of Schedule 7 (da), as per the EIA Notification, 2006 & its amendment till date and will be appraised by SEAC, Odisha”

Total land required for the project is 2.65 acre. Out of which 0.87 acre land will be reserved for development of green belt and plant will be planted 2500 trees/ha as per the MoEFC&CC requirement.

Environment monitoring was done during post-monsoon season during 01st October 2024 to 31st December 2024.

Project Promoters:

M/s MKD Eco Clean Private Limited will be managed by Mr. Lipshit Dash. He is experienced and knowledgeable employees for the respective areas of operation.

1.1 Salient Features of the Project

Location	Plot No.553/1081, 555,556, 557, 559, 560, 561, 562, 563, ,655, 566, 567, khata no. 123/124, Mauja- Asanbahali Tehsil/Thana Gondia, District: Dhenkanal, Odisha
Acquired Area	2.65 Acre (1.0725 ha)
Category of Project	7 (da) Bio-Medical Waste Treatment Facilities
Coverage area of waste collection	within radius of 75 km

Project site Toposheet No.	F45T13
Co-ordinates	Latitude: 20°48'38.37"N Longitude: 85°58'32.25"E
Nearest Habitation	Asand Bahali : 0.9 km towards NNE
Nearest city	Cuttak City : 40.0 km towards SSW
Nearest Highway	o NH 53: 6.5 km towards ENE o Kashipur-Nihalprasad Road: 1.3 km towards S
Nearest Railway Station	Jenapur Railway Station: 10.30 km towards ENE
Nearest airport	Biju Patnaik International Airport: 64.0 km towards SSW
Seismic Zone	III
Facility	<ul style="list-style-type: none"> • Proposed capacity of the plant 7250 kg/day. • Autoclave – 0.50 m3 • Shredder – 400 Kg /hr • Incineration (Rotary Kiln)– 400 kg/hr • Incineration – 500 Kg/hr • ETP – 10 KLD
Water requirement and source	The total water requirement for the project is 12 KLD and will be sourced from Ground water.
Total Power load and source	40 KW to be procured from Tata Power Central Odisha Distribution Limited (TPCODL).
Manpower requirement	30 no.
Estimated project cost	INR 1.80 Crores
Issue of ToR	SEIAA, Odisha File no. 498744/54-INFRA2/10-2024 dtd. 24.03.2025

1.2 LOCATION OF THE PROJECT

The Project is proposed to be located at Plot No.553/1081, 555,556, 557, 559, 560, 561, 562, 563, ,655, 566, 567 khata no. 123/124, Mauja- Asanbahali Tehsil/Thana Gondia, District: Dhenkanal, Odisha.

NH-53 which is at 6.5 km in ENE and Kashipur-Nihalprasad Road is at 1.3 km in South direction from the project site. The nearest railway station is Jenapur Railway Station at 10.3 km towards ENE from the project site. Nearest airport to the project site is Biju Patnaik International Airport at a distance of 64.0 km towards SSW from the project site.

2.0 DESCRIPTION OF BASELINE ENVIRONMENT

The baseline study was conducted during 1st October 2024 to 31st December, 2024 during post-monsoon season.

Summary of Ambient Air Quality

- During the study PM₁₀ was observed in the range of 52.9 to 76.3 µg/m³.
- PM_{2.5} was observed in the range of 24.2 to 40.1 µg/m³
- SO₂ concentration was observed in the range of 4.0 to 8.6 µg/m³, which is well within the standard limit.
- NO_x concentration in was observed in the range of 8.3 to 18.3 µg/m³, which is well within the standard limit.

Ground Water was analysed at 8 locations and surface water was analysed at 2 locations within study area

Summary of Ground Water Quality

- pH was observed in the range of 6.97 to 7.89 which meets with desirable norms.
- Total dissolved solid were recorded in the range of 157 mg/l to 445 mg/L site.
- Total hardness was in the range of 97 mg/l to 248 mg/L.
- Total Alkalinity was found in the range of 74 to 203 mg/L

Summary of Surface Water Quality

The following description is based on the analysis of the samples:

- During the analysis pH of the samples was found in the range of 7.57 to 7.63.
- TDS analysis was also carried out for surface water sample and it was found in the range of 200 mg/l to 210 mg/L.
- DO measured during analysis was found in the range of 6.3 to 6.5 mg/L.
- COD measured during analysis was found in the range of 10 to 12 mg/L.
- BOD measured during analysis was found in the range of 2.4 to 2.8 mg/L.

Soil samples were collected from 08 sampling locations. The analysis results show that soil is alkaline in nature as pH value ranges from 6.78 to 7.49, Iron ranges from 6.3 to 11.2 mg/kg, Bulk Density is 1.36 to 1.45 gm/cc, Water Holding Capacity is 25.9 to 33.8%, Total

Nitrogen (as N) is 38 to 45 mg/kg and Total Phosphorus (as P₂O₅) is 5.3 to 7.9 mg/kg. Soil texture is sandy clay loam at project site.

Assessment of day noise levels around the study area are ranging between 40.3 to 52.7 dB (A) during study period. Whereas the night equivalents were in the range of 36.5 to 43.6 dB (A). From the results it can be seen that the Day equivalents and the Night equivalents were within the Ambient Noise standards of residential areas standards.

According to 2011 Population Census the study area has a total population of 1,44,224. Of this 51.1 percent are male and the remaining 48.9 percent are female.

3.0 ANTICIPATED ENVIRONMENTAL IMPACT & MITIGATION MEASURES

- The flue gas resulting from the combustion process is raised to a temperature to 800°C ± 50 °C for at least 2 seconds in the incinerator
- The incinerator will be equipped with air pollution control system i.e, quencher, ventury scrubber followed by ID fan with 30 m stack.
- The main wastewater generation sources in the proposed project are water of quencher, cleaning of the floors and pavements of the facility and vehicles, vehicle wash area, etc. will be treated in ETP.
- The domestic waste water will be disposed in septic tank followed by soak pit.
- Zero effluent discharge will be practiced.
- High noise generating equipment's like pumps, motors, etc. should be on anti-vibration pads, closed rooms and regular maintenance as suggested by the manufacturer.
- Providing suitable enclosures (adequate insulation) to minimize the impact of high noise generating sources.
- Ash and ETP sludge generated during the operation phase would be sent to the Hazardous waste secure landfill site at TSDF.
- 100% of waste water will be recycled and Zero discharge condition will be maintained.
- Low noise emitting plant and machinery will be selected. 33% land area will be developed as greenbelt. The noise level at plant boundary will be maintained below 70 dBA.

- Appropriate traffic management plan will be implemented.

4.0 ENVIRONMENTAL MONITORING PROGRAM

An environmental management cell will be formed headed by CBWTF head to undertake routine environmental monitoring. Monitoring will be done to ensure compliance with the prescribed laws and standards. The environmental cell will provide necessary services and co-ordinate on environmental issues of the project. This environmental group will be responsible for implementation of environmental management plan, interaction with the environmental regulatory agencies, reviewing draft policy and planning. This department will interact with State Pollution Control Board (SPCB), other environment regulatory agencies and all member. The department will also interact with local people to understand their problems and to formulate appropriate community development plans.

EMC will be responsible for the following functions:-

Regular monitoring of:-

- Pollution Monitoring Facilities
- Reporting Schedules of the Monitoring Data
- Measuring the ambient air quality at upwind and downwind direction of crusher, at plant boundary.
- Checking the wastewater quality (inlet and outlet).
- Checking the ground water quality near the project area, and surrounding villages.
- Noise monitoring at plant boundary, nearest habitation, near highway, and working area.
- Development and maintenance of greenbelt and greenery within the plant boundary.

5.0 ADDITIONAL STUDIES

Adequate fire mitigation measures will be ensured for handling fire in project area in case of emergency. Disaster Management Plan has been prepared to take care of public health and safety during any accident.

CER will be done as per CER norms. Generally, the CER amount use to spent for making classrooms in local schools, providing teaching aids, making community centres, develop

drinking water facility in nearby villages, making rainwater harvesting structures like anicuts and check dams in the area, developing infrastructure facilities and equipment in primary health centres.

As per MoEF&CC Office Memorandum vide F.No.22-65/2017-IA.III dated. 30th September 2020, following is budgetary allocation (Rs. 10 Lakh) for commitment made by Project Proponent to address the activities for CER.

6.0 PROJECT BENEFITS

The proposed project is expected to yield a positive impact on the socio-economic environment within the study area. It helps to sustain the development of this area including further development of physical infrastructural facilities.

About 11 people will get employment during the construction stage. Approx. 30 persons are expected to be employed during operational phase, for the skilled, semi-skilled and unskilled category. The preference will be given to local population for employment in the semi-skilled and unskilled category; this will increase the employment opportunity in the surrounding area. More revenue will be generated by the way of GST to the State & Central exchequers.

7.0 ENVIRONMENTAL MANAGEMENT PLAN

Environmental Management Plan for effective management of environmental impacts and ensuring overall protection of the environment through appropriate management procedures has been developed. In order to implement the recommended mitigation measures and institutionalize the EMP, budgetary provision of Rs. 100 Lakh (excluding CER) capital expenditure has been made and Recurring annual expenditure will be Rs 25 Lakh.

Environment Management Cell (EMC) will ensure that all air pollution control device, effluent treatment plants and water re-circulating systems function effectively. EMC will also supervise disposal of solid hazardous waste to the TSDF Site. Plantation will be started during the construction phase by following the guidelines issued by the Central Pollution Control Board. Schemes for resource conservation (raw materials, water, etc.), rainwater harvesting and social forestry development will be taken up by EMC. Regular environmental awareness programs for the employees will be conducted.

Workers will be periodically subjected to health check-up. EMC will ensure cleanliness and industrial hygiene in the plant. The review will ensure enforcement of the proposed safeguards for pollution abatement, resource conservation, accident prevention and waste minimization. The implementation of EMP would ensure that all elements of project comply with relevant environmental legislation throughout its life cycle.

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