

EXECUTIVE SUMMARY

1. Introduction

Management of pollution and Bio-Medical Waste generated from the hospitals is always been a challenging task faced by the country. M/s.**Medicare Environmental Private Limited (MEPL)**, has the credit and distinction of having established the first ever bio-medical waste management and hazardous waste management facilities operating on a common platform in India, providing dimension to various other similar projects in the country.

As per EIA Notification S.O.No 1533 dated 14th Sep 2006 the proposed project is falling under 7 (da) as “Bio-Medical Waste Treatment Facility” , Category “B” as per S.O.1142 (E) Notification dated 17th April 2015 issued by MoEF&CC and published in Gazette of India on 30th April 2015 and requires environmental clearance from SEAC Chhattisgarh. The proposal was considered by EAC meeting held during 17th November 2015 for determination of the Terms of Reference (TOR) for undertaking detailed EIA Study. The SEAC has given TOR vide its letter No. 4556/SEACCG/ToR/BIO.MED/JAJ-CHAMPA/116, Raipur, dated 14th January, 2016.

CSIDC (Chhattisgarh State Industrial Development Corporation) has given letter regarding acquiring of land in Kapan industrial State for CBWTF Letter no. CSIDC/B/BA/2015/5498 dated on 01st September 2015

2. Project Capacity Details

The project is aimed to cater the needs of the Bio Medical waste generation units in the nearby Health Care Units of Janjgir-Champa & nearby districts, with an approximation of 25,000 beds @ 0.160 kg/day/bed equals to 5 tons per day.

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|--------------------------------|---|---------------------------|
| I. Capacity of the Incinerator | - | 250 kg/hr |
| II. Capacity of Autoclave | - | 2.0 tons/day (430 liters) |
| III. Capacity of shredder | - | 1 ton/day |

3. Land Details

The project is being proposed in Kapan Industrial Area as Common Biomedical Waste Management facility and all other auxiliary units associated in 1.23 acres.

4. Water Requirement

The total water requirement for the proposed facility is 20 KLD and this Water requirement for the project will be met through bore wells the boundary premises and wastewater generation would be around 15 KLD, the wastewater generated will be treated in ETP.

Medicare intent to have Air pollution control devices (APCD) in order to meet stringent standards of Bio-medical Waste Management Rules, 2016 i.e to reduce temperature of flue gas from incinerator, to reduce Dioxin and furan due to rapid quenching, etc. In addition to the above 32KLD of water is necessary for APCD operations which will be recirculate in the system.

5. Power Requirement

The power required for the facility is 0.075 MW will be fetched from Chhattisgarh Electricity Regulatory Commission. For emergency backup DG set is maintained with optimal usage by using a High Speed Diesel with a capacity of 100 KVA.

6. Required Manpower

On contract basis the labors and workers will be hired from nearby villages in construction phase and 35 persons are proposed to hire including skilled and unskilled for the proposed project during operational phase.

7. Baseline Environmental Status

The baseline data generation has been carried out in the winter season Dec-2015- Feb-2016. The predominant wind direction during study period was N to S. The ambient air quality was monitored at 10 locations and the results obtained and found that all sampling locations recorded values within the applicable limits of residential and rural area limits for all locations in study area.

Water samples in the study area were collected from ten ground water sources and five samples of surface water are analyzed for physical and chemical characteristics. Overall all the ground water samples collected from the study area were found to be fit for human consumption as per IS 10500 drinking water standards, except one sample rest all were falling in desirable limits, whereas one sample was falling permissible limits. The surface water samples were falling in category A as per IS 2296 surface water standards.

Baseline noise levels have been monitored at 10 locations within the study zone, using a spot noise measurement device. The day equivalents during the study period are ranging between 51.4 to 59.4 dB (A). Whereas the night equivalents were in the range of 41.5 to 44.5 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 and commercial area standards except one location due to commercial activities.

To determine the impact on agricultural productivity of soil due to the proposed activity soil samples were collected at 10 locations.

8. Anticipated Impacts

Construction phase works include site clearance, site formation, building works, infrastructure provision and any other infrastructure activities. The impacts due to construction activities are short term and are limited to the construction phase. The impacts will be mainly on air quality, water quality, soil quality and socio-economics, necessary control measures will be taken to minimize the impacts.

During the operation phase of the proposed project there would be impacts on the air environment, water environment, Land environment and socio-economic aspects. The main sources of air pollution are as follows.

1. Area source emissions from vehicular Transport operations
2. Point source emissions from Incinerator and DG set.

The area source emissions and line source emissions will be within the plant premises, whereas point source emissions expected the proposed project.

9. Environmental Monitoring Program

The main spirit of environmental monitoring program is aimed such that there is not much of time lag between commencement of damage to environment mitigation measures to various environmental parameters that are being affected. Environmental monitoring program has been prepared for assessing the efficiency of implementation of Environment Management Plan.

10. Risk Analysis

The principal objective of the risk assessment study is to identify and quantify the major hazards and the risk associated with various operations of the proposed project, which may lead to emergency consequences (disasters) affecting the public safety and health.

All necessary measures to minimize the risk due to the proposed project will be taken during design stage and also during operation period viz, Fire & safety control measures, Emergency preparedness plan, Disaster Management plan, etc.

11. Project Benefits

From the proposed project the major benefits, include improving the degraded environment by establishing a Common Bio-Medical Waste Management Facilities. It will be the showcase for other states for management of Bio-Medical waste with additional benefit of green and clean

Environment. It reduces the number of hazardous Bio-Medical waste dump sites in the area and also eliminates the pollution potential. The management of wastes is relatively easier & economically viable at common facility. Prevention of natural resource contamination thereby improving overall environmental status of the region.

12. Environmental Management Plan

The Environmental Management Plan (EMP) is required to ensure sustainable development in the area of the proposed project site. Hence, it needs proper Environmental Management Plan (EMP) to meet this objective. The purpose of the Environmental Management Plan is to minimize the potential environmental impacts from the project and to mitigate the adverse impacts.

13. Project Cost.

Capital Cost estimates of the project is about 10 cr.

14. Budgetary Provision for EMP

Cost towards EMP/ environmental mitigation measures for environmental protection and safety measures is proposed 1.60 cr. with a recurring cost of 16 lakhs per annum.

15. Socio-Economic Development Activities (CSR)

The company shall earmarks funds of 4.0 Lakhs for social development and welfare measures in the surrounding villages like education, health facility, infrastructure facilities, etc, this fund

shall be utilized over a period of 3 years. After this company shall a lot 2% of the PAT towards the same.

16. Conclusion

Company has committed to implement all the pollution control measures to protect the surrounding environment. The project can definitely improve the regional, state and national environment and reduce health hazards. Projects like this will certainly improve the living standard of local people. The implementation of this project will definitely improve the physical and social infrastructure of the surrounding area.