Case No. - 5007/2016 The Project Manager, M/s Sagar MSW Solutions Private Limited, 6-3-1089/G/10&11, Gulmohar Avenue, Rajbhavan Road, Somajiguda, Hyderabad-500082 Prior Environment Clearance for development of an Integrated Municipal Solid Waste Processing & Disposal Facility (350 TPD) at Khasra No.-166, Village-Hafsili, Tehsil-Sagar, District-Sagar (M.P.)FoR- ToR.

The project is a construction CMSWMF falls under Category 7(i) of Common Municipal Solid Waste Management Facility (CMSWMF) (As per EIA notification dated 14th September 2006 and amended to the date) and involves environmental clearance. Application was forwarded by SEIAA to SEAC for appraisal and necessary recommendations.

The current Municipal Solid Waste (MSW) management system in Sagar town and ten (10) other surrounding Urban Local Bodies, ULBs (Makronia, Banda, Khurai, Rehli, Grahakota, Bina, Deori, Rahatgarh, Shahgarh and Shahpur) currently do not have adequate MSW management facility. Hence realizing the necessity of efficient waste management system, it is proposed to establish an Integrated MSW processing and Disposal Facility on Public Private Partnership (PPP) basis for management of MSW generated in Sagar Town and 10 other surrounding ULBs.

"Sagar MSW Solutions Private Limited (SMSWSPL)" (Project Proponent) was chosen for establishing an Integrated MSW Processing and Disposal Facility in Sagar town. Currently, Sagar Town along with 10 other ULBs generate an average MSW of 180 TPD. All the 10 participating ULBs are within 75 km radius of Sagar Town. Considering the population projection, the Project Proponent proposes to establish a 350 TPD Integrated MSW Processing and Disposal Facility in Sagar Town with facilities such as Composting/Dry Fermentation (for recovery of organics), Materials Recovery Facility (for recovery of recyclables), Refuse Derived Fuel (RDF) facility for recovery of high calorific value waste, Secured Landfill (for disposal of inerts) and Incinerator for leachate treatment/disposal, RDF disposal, and for animal carcass.

The proposed Integrated Waste Management Facility will be established in a land of about 10.50 hectares located within Sagar town. Because this project aims at modernization of existing dumpsite (which is being used for more than 10 years), no alternative sites were considered for development of this facility. The proposed site proves to be the best location considering both the environmental and economical factors.

Sagar District is abound of Deep and Medium Black Soils. Sagar has a borderline climate with hot summers, a somewhat cooler monsoon season and cool winters. Heavy rain falls in the monsoon season in the month of July and August. Sagar experiences maximum precipitation (64% of the total annual) in the month of July and August with 16.5 mm and 19.7 mm rainy days whereas March and April experience least. Summers lasts from March to June whereas December and January are coldest months.

The water requirement for operating the proposed facility is about 10 KLD. It is expected that Sagar Municipal Corporation would supply water to this facility. Otherwise, water requirement would be met through tankers. The energy requirement for operating the proposed facility is about 0.5 MW which will be fulfilled by MPTRANSCO. Sufficient capacity DG Sets (750 KVA) are proposed for power backup.

The current MSW waste generation from Sagar and surrounding ULBs is about 180 TPD. Considering some factor of safety, the proposed Integrated MSW Processing and Disposal Facility will be established to handle about 350 tons of MSW per day (350 TPD).

Based on the waste characteristics, proposed process consists of dry fermentation (Anaerobic digestion), Composting (Aerobic digestion), RDF and Material (Recyclables) recovery facilities. The waste received to the facility will be taken at waste receiving platform after its weightment and inspection process. At the waste receiving platform, bulky / large articles like tyres, boulders etc. will be separated and the same will be sent for further process and the rejects / inert material will be sent for disposal into sanitary landfill. From there the waste will be mechanically segregated using a Trommel / Screens with screen hole size of 100 mm into organic fraction (100 mm in size). The organic fraction of waste will be processed through dry fermentation process to recover bio-gas followed by aerobic composting process in the windrow platform. Upon completion of these anaerobic and aerobic decomposition processes the waste will be routed for coarse segregation / primary screening and segregated into components by size, manual separation of waste components, and separation of ferrous and non-ferrous metals. The segregated materials will be sent for further processing. The final products from the proposed processing plants will be Bio-gas, Compost, Recyclables and RDF. The quantity of the final products resulting from processing facility may vary depending on the characteristics of incoming waste. The quantity of inert / process rejects sent to landfill will be restricted to less than 20%.

Case No. - 5008/2016 The Project Manager, M/s Katni MSW Solutions Private Limited, 6-3-1089/G/10 &11, Gulmohar Avenue, Rajbhavan Road, Somajiguda, Hyderabad-500082 Prior Environment Clearance for development of an Integrated Municipal Solid Waste Processing & Disposal Facility (150 TPD) at Khasra No.-527, Area-6.20 ha .at Khasra no.-527, Village-Padarwara, Tehsil-Katni, District-Katni (M.P.)FoR- ToR

The project is a construction CMSWMF falls under Category 7(i) of Common Municipal Solid Waste Management Facility (CMSWMF) (As per EIA notification dated 14th September 2006 and amended to the date) and involves environmental clearance. Application was forwarded by SEIAA to SEAC for appraisal and necessary recommendations.

The current Municipal Solid Waste (MSW) management system in Katni town and four (4) other surrounding Urban Local Bodies, ULBs (Sehora, Kymore, Barhi, and Vijayaragavagarh) currently do not have adequate MSW management facility. Hence realizing the necessity of efficient waste management system, it is proposed to establish an Integrated MSW processing and Disposal Facility on Public Private Partnership (PPP) basis for management of MSW generated in Katni town and 4 other surrounding ULBs.

"Katni MSW Management Private Limited" (Project Proponent) was chosen for establishing an Integrated MSW Processing and Disposal Facility in Katni town. Currently, Katni town along with 4 other ULBs generate an average MSW of 90 TPD. All the 4 participating ULBs are within 50 km

radius of Katni town. The Project Proponent proposes to establish a 150 TPD Integrated MSW Processing and Disposal Facility in Katni City with facilities such as Composting/Dry Fermentation (for recovery of organics), Materials Recovery Facility, MRF (for recovery of recyclables), Refuse Derived Fuel (RDF) facility for recovery of high calorific value waste, Secured Landfill (for disposal of inert) and an Animal Carcass Incinerator.

The proposed Integrated Waste Management Facility will be established in a land of about 6.20 hectares located within Katni City. No alternative sites were considered for development of this facility. The proposed site proves to be the best location considering both the environmental and economical factors. One additional benefit is that the dumpsite located within the site will be cleared up with progress of sanitary landfill operations.

The water requirement for operating the proposed facility is about 10 KLD. It is expected that Katni Municipal Corporation would supply water to this facility. Otherwise, water requirement would be met through tankers. The energy requirement for operating the proposed facility is about 0.4 MW which will be fulfilled by MPTRANSCO. Sufficient capacity DG Sets (750 KVA) are proposed for power backup.

The current MSW waste generation (considering Katni Town and 4 surrounding ULBs together) is estimated to be about 94 TPD. However, considering the population and waste projections, it is proposed to establish the Integrated Waste Management Facility to handle about 150 TPD (Design Capacity).

Based on the waste characteristics, proposed process consists of dry fermentation (Anaerobic digestion), Composting (Aerobic digestion), RDF and Material (Recyclables) recovery facilities. The waste received to the facility will be taken at waste receiving platform after its weightment and inspection process. At the waste receiving platform, bulky / large articles like tyres, boulders etc. will be separated and the same will be sent for further process and the rejects / inert material will be sent for disposal into sanitary landfill. From there the waste will be mechanically segregated using a Trommel / Screens with screen hole size of 100 mm into organic fraction (100 mm in size). The organic fraction of waste will be processed through dry fermentation process to recover bio-gas followed by aerobic composting process in the windrow platform. Upon completion of these anaerobic and aerobic decomposition processes the waste will be routed for coarse segregation / primary screening and segregated into components by size, manual separation of waste components, and separation of ferrous and non-ferrous metals. The segregated materials will be sent for further processing. The final products from the proposed processing plants will be Bio-gas, Compost, Recyclables and RDF. The quantity of the final products resulting from processing facility may vary depending on the characteristics of incoming waste. The quantity of inert / process rejects sent to landfill will be restricted to less than 20%.