

**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 14<sup>th</sup> 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%.

The case was presented by the Project Manager, M/s Sagar MSW Solutions Private Limited wherein during deliberations it was informed to the committee by the PP that Municipal Corporation, Sagar has entered in to an agreement with M/s Ramky Enviro for the execution of the project. M/s Ramky Enviro has constituted a SPV with the name M/s Sagar MSW Solutions Private Limited for the execution of the project.

The case was earlier discussed in the 273<sup>rd</sup> SEAC meeting dated 01/04/2016 wherein as per the observation of the committee all the formalities for obtaining EC are to be completed by PP or his authorized person only, which in this case is Municipal Corporation, Sagar. The M/s Sagar MSW Solutions Pvt. Ltd is only a concessioner of the project. The M/s Sagar MSW Solutions Pvt. Ltd appearing as PP were unable to produce any document issued by Municipal Corporation, Sagar authorizing them to obtain EC on their behalf. The committee is, therefore, of the view that M/s Sagar MSW Solutions Pvt.

Ltd be asked to submit a clarification to this effect with supporting documents from Municipal Corporation, Sagar.

PP vide their letter dated 29/04/2016 has submitted a letter of Commissioner, Sagar Municipal Corporation wherein it is mentioned that *“Sagar Municipal Corporation hereby provides Authorization to Sagar MSW Solutions Private Limited to obtain Environmental Clearance on Sagar Municipal Corporation’s behalf”*.

The case was presented by the PP (Mr. Karunakar Nune, Executive, HR, Sagar Municipal Corporation), and representatives of M/s Sagar MSW Solutions Private Limited, Hyderabad and Shri Chakradhar, Ramky Enviro, Hyderabad. Committee after deliberations decide that since Commissioner, Sagar Municipal Corporation, Sagar have authorize M/s Sagar MSW Solutions Private Limited, Hyderabad, Standard TOR as prescribed by the MoEF & CC for conducting EIA studies be issued along with following additional TOR’s:

1. How the waste would be segregated while protecting the health of the workers so as not to cause adverse effect on them should be discussed in EIA.
2. How the lechates will be handled be discussed in the EIA.
3. It is proposed that “animal caracals” will be incinerated. Is it possible to recover bones and utilize for other purpose?
4. MSW handling technology should be frezed for all the wastes and worst case scenario be studied and discussed in the EIA.
5. The proposed site is close to railway station, the probable impact be discussed in EIA and mitigative measures should form the part of EMP.
6. Preventive measures that will be taken to prevent fire due to methane generation be discussed in the EIA.
7. PP and their consultant informed that they have already stared EIA study including data collection, survey, monitoring etc and requested to use the same. The committee agreed to their request.

**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 14<sup>th</sup> 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%.

The case was presented by the Project Manager, M/s Katni MSW Solutions Private Limited in 273<sup>rd</sup> SEAC meeting dated 01/04/2016 wherein during deliberations it was informed to the committee by the PP that Municipal Corporation, Katni has entered in to an agreement with M/s Ramky Enviro for the execution of the project. M/s Ramky Enviro has constituted a SPV with the name M/s Katni MSW Solutions Private Limited for the execution of the project.

The case was earlier discussed in the 273<sup>rd</sup> SEAC meeting dated 01/04/2016 wherein as per the observation of the committee all the formalities for obtaining EC are to be completed by PP or his authorized person only, which in this case is Municipal Corporation, Katni. The M/s Katni MSW Solutions Pvt. Ltd is only a concessioner of the project. The M/s Katni MSW Solutions Pvt. Ltd appearing as PP was unable to produce any document issued by Municipal Corporation, Katni authorizing them to obtain EC on their behalf. The committee is, therefore, of the view that M/s Katni MSW Solutions Pvt. Ltd be asked to submit a clarification to this effect with supporting documents from Municipal Corporation, Katni.

PP vide their letter dated 29/04/2016 has submitted a letter of Commissioner, Katni Municipal Corporation issued on dated 28/04/2016 wherein it is mentioned that “नगर पालिक निगम, कटनी सीमा क्षेत्र एवं बरही, कैमोर, विजयराघवगढ़, एवं सिहोरा नगर पंचायत परिषद् सीमा क्षेत्र में ठोस अपशिष्ट प्रबंधन कार्य हेतु नगर पालिक निगम, कटनी एवं रामकी इन्चायरो इंजी. प्राई. लि., हैदराबाद से दिनांक 07/5/15 को कन्सेशन अनुबंध निष्पादित किया गया है । कन्सेशन अनुबंध के प्रावधान अनुसार एकीकृत ठोस अपशिष्ट प्रबंधन योजना कार्य के निष्पादन हेतु उक्त एजेंसी के द्वारा कटनी एम.एस.डब्ल्यू. मैनेजमेंट प्राई. लि., नाम

से एस.पी.व्ही. गटित की गई है, जिससे नोवेशन अनुबंध नगर पालिक निगम, कटनी द्वारा किया गया है। कन्सेशन अनुबंध के प्रावधान अनुसार पर्यावरण स्वीकृति संबंधी कार्यवाही एस.पी.व्ही. द्वारा ही निष्पादित की जाना है। अतः अनुरोध है कि एकीकृत टोस अपशिष्ट प्रबंधन कटनी को कार्य योजना हेतु अधिकृत कटनी एम.एस.डब्ल्यू. मैनेजमेंट प्राई.लि. को नियमानुसार पर्यावरण स्वीकृत प्रदान किये जाने का कष्ट करें।”.

The case was presented by the PP (Mr. Surendra Mishra, Project Engineer, Katni Municipal Corporation), representatives of M/s Katni MSW Solutions Private Limited, Hyderabad and Dr. B Chakradhar of Ramky Enviro, Hyderabad. Committee after deliberations decide that since Commissioner, Katni Municipal Corporation, Katni have authorize M/s Katni MSW Solutions Private Limited, Hyderabad, Standard TOR as prescribed by the MoEF&CC for conducting EIA studies be issued along with following additional TOR's:-

1. How the waste would be segregated while protecting the health of the workers so as not to cause adverse effect on them should be discussed in EIA.
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5. The proposed site is close to railway station, the probable impact be discussed in EIA and mitigative measures should form the part of EMP.
6. Preventive measures that will be taken to prevent fire due to methane generation be discussed in the EIA.
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