



ANDHRA PRADESH POLLUTION CONTROL BOARD
ZONAL OFFICE: VIJAYAWADA

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CONSENT ORDER FOR ESTABLISHMENT

Order No : G-886/APPCB/ZO-VJA/CFE/RED/2019-

Date : 07.05.2019.

Sub: APPCB-ZO-VJA – CFE – M/s. Mahindra Waste To Energy Solutions, Sy.No. 892/49/A, Piduguralla (V&M), Guntur District – Consent for Establishment of the Board under Section 25 of Water (Prevention & Control of Pollution) Act, 1974 and Under Section 21 of Air (Prevention & Control of Pollution) Act, 1981 – Issued – Reg.

Ref:

1. Industry's CFE application received at RO, Guntur on 22.02.2019 through APOCMMS.
2. R.O's inspection report received at ZO, Vijayawada on 07.03.2019.
3. CFE Committee meeting held on 12.03.2019.
4. ZO Lr.Dt.26.03.2019 addressed to the industry regarding payment of balance CFE fee of Rs.49,500/-.
5. Industry's representation Lr.Dt.18.04.2019 regarding submission of information.
6. RO, Guntur mail Dt.23.04.2019 regarding payment of balance CFE fee of Rs.49,500/-.
7. CFE Committee meeting held on 26.04.2019.

- I. In the reference 1st cited, an application was submitted to the Board seeking Consent for Establishment (CFE) to carry out the following activity to produce the following products with installed capacities as mentioned below, with a project cost of Rs.5.50 Crores.

Sl.No.	Starting Raw Materials	Quantity
1.	Wet Municipal Solid Waste	20.28 tons / day
2.	Garden Waste	2.03 tons / day
3.	Cow dung	1 ton / day

Sl.No.	Name of the Products	Quantity
1.	20 tons / day Bio-Methanation plant to process the segregated organic waste to produce Bio CNG	2027.8 kgs / day
2.	Compost	6.67 tons / day

- II. As per the application, the above activity is to be located at Sy.No. 892/49/A, Piduguralla (V&M), Guntur District in an area of 4 acres.
- III. The above site was inspected by the Assistant Environmental Engineer, A.P.Pollution Control Board, Regional Office, Guntur on 28.02.2019 and observed that the site is surrounded by

North : NTR housing colony by APTIDCO

South : Vacant lands followed by Railway track

East : FSTP followed by abandoned quarry pits & seetarampuram reserve forest

West : Donka road

- IV. The Board, after careful scrutiny of the application, verification report of Regional Officer and recommendations of the CFE Committee, hereby issues **CONSENT FOR ESTABLISHMENT** to your activity Under Section 25 of Water (Prevention & Control of Pollution) Act 1974 and Section 21 of Air (Prevention & Control of Pollution) Act, 1981 and the rules made there under. **This order is issued to manufacture the products as mentioned at para (1) only.**

- V. This Consent order issued is subject to the conditions mentioned in the Annexure.
- VI. This order is issued from pollution control point of view only. Zoning and other regulations are not considered.
- VII. **This order is valid for period of 7 years from the date of issue.**

Encl: Schedule 'A' & Schedule 'B'

JOINT CHIEF ENVIRONMENTAL ENGINEER

To

**M/s. Mahindra Waste To Energy Solutions,
C/o. Sri Ch. Surya Prakash Raju,
Mahindra Towers, GM Bhosale Marg,
PK Kurne Chowk, Mumbai,
Worli, Mumbai – 400 018.
E-mail ID : cspraju.micro@gmail.com**

Copy to the EE, RO, Guntur for information and necessary action.

SCHEDULE – A

- 1) Progress on implementation of the project shall be reported to the concerned Regional Office, A.P. Pollution Control Board once in six months.
- 2) Separate energy meters shall be provided for Effluent Treatment Plant (ETP) and Air Pollution Control equipments to record energy consumed.
- 3) The industry should display online data outside the main factory gate, on quantity and nature of hazardous chemicals being used in the plant, water & air emissions and hazardous & solid wastes generated within the factory premises, as per the orders of the Hon'ble Supreme Court in Writ Petition WP (C) No. 657/1995, Dt.14.10.2003. If such data is not made available, the unit should be asked to show cause or even be asked to close down.
- 4) The industry shall obtain Consents for Operation from APPCB, as required under sec. 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 and under Section 21/22 of the Air (Prevention & Control of Pollution) Act, 1981 and Authorization under Hazardous and Other Wastes (Management, Handling & Transboundary Movement) Rules, 2016 before commencement of the activity, including trial production.
- 5) Notwithstanding anything contained in this conditional letter or consent, the Board hereby reserves its right and power under Section 27 (2) of Water (Prevention & Control of Pollution) Act, 1974 and under Section 21 (4) of Air (Prevention & Control of Pollution) Act, 1981 to review any or all the conditions imposed herein and to make such alternation as deemed fit and stipulate any additional conditions by the Board.
- 6) The Consent of the Board shall be exhibited in the factory premises at a conspicuous place for the information of the inspection officers of different departments.
- 7) Compensation is to be paid for any environmental damage caused by it, as fixed by the Collector and District Magistrate as civil liability.
- 8) The Rules and Regulations notified by Ministry of Law and Justice, Government of India, regarding the Public Liability Insurance At, 1991 shall be followed.
- 9) If the industry is aggrieved by this order made by A.P. Pollution Control Board under Section 25 of Water (Prevention & Control of Pollution) Act' 1974 and Section 21 of Air (Prevention & Control of Pollution) Act' 1981 he may within 30 days from the date on receipt of the order prefer an appeal to Appellate Authority, Hyderabad - 500 004.

SCHEDULE - B

Committee recommendations:

The consent for establishment committee in its meeting held on 26.04.2019, examined the clarification submitted by the industry in response to ZO, Vijayawada letter dated.26.03.2019. **Earlier**, the consent for establishment committee in its meeting held on 12.03.2019, examined the CFE application of the industry and the CFE verification report submitted by RO, Guntur and i) the committee observed that the industry proposes to establish a waste to energy plant by installing 2 nos. of MSW compost platforms of 500 m² each, with a total capacity of 6.67 Tons/day, anaerobic digester of 1200 m³ capacity to produce bio CNG - 2027.8 Kgs/day at Sy.No. 892/49/A, Piduguralla (V&M), Guntur District, ii) the industry has acquired total area of 5 acres (4 acres for waste to energy plant and 1 acre for Sanitary landfill (SLF) and a built up of 2 acres), iii) the proponent has submitted CFE application through OCMMS and paid CFE fee of Rs. 16,500/- vide online challan No. 187824985, Dt: 22.02.2019 under Green category and RO reported that the proponent has to pay balance CFE fee of Rs. 49,500/- under Red–Hazardous category on the project cost of Rs 5.50 crores, iv) the proposed site is surrounded by North: NTR housing colony by APTIDCO at a distance of 175 mts.; South: Vacant lands followed by Railway Track; East: FSTP followed by abandoned quarry pits & Seetampuram Reserve Forest West: Donka Road, v) the digester waste is proposed to be used as manure (compost), vi) the industry proposes to send road sweepings, drain silts, mechanical sweeping wastes to SLF of 40 m x 30 m pit, vii) the industry proposes to consume 10 KL/day of water for process and 5.5 KL/day of water for domestic purpose and proposed to generate leachate of 1 KL/day and 4.0 KL/day of domestic wastewater, viii) RO submitted that 8 out of 13 municipalities in Guntur District are members of the waste to energy plant under construction at Kondaveedu Village, Edlapadu Mandal, Guntur District (M/s. Jindal Urban Waste Management (Guntur)

Limited). The Piduguralla Municipality is one among the 5 left over Municipalities for disposal of MSW for waste to energy. Now, it is proposed to dispose the urban waste generated at Piduguralla Municipality through waste to energy by generating Bio gas from anaerobic digestion & bottling. **However**, ix) the nearest habitation is Kummaripalem, which is existing at a distance of 125 m towards South, NTR housing colony is existing at a distance of 175 m towards North and houses of Pulichintala rehabilitation existing at a distance of 125 m towards West, whereas, as per the SWM guidelines, the distance between the boundary of the site and boundary of the village (human habitation) shall be atleast 500 mts., x) the SLF is located at a distance of 125 mts. from the human habitation, whereas, it shall be located at 200 mts. from Highway, habitation, public park and water supply wells, as per SWM guidelines, xi) the industry has not furnished details of buffer zone between the solid waste processing and disposal facility (SLF), which should be 200 mts. as per specifications for sanitary landfills issued under Solid Waste Management Rules,2016 for **“solid waste processing and disposal facility, exceeding 5 Tons/day of installing capacity” i.e., 5 Tons/day of MSW**, xii) the proponent has not furnished the details of MSW generation from Piduguralla municipality and quality of waste suitable for digestion, xiii) the proponent has not submitted land documents, sale deed of the proposed site, xiv) the proponent has not furnished the setback distance between the proposed site and MDR / Village road, xv) the RO, Guntur stated that the design details of SLF, leachate generation and disposal, adequacy of landfill for the daily waste generation and its compliance to siting guidelines and operating procedures prescribed under SWM Rules,2016 may be reviewed **while consider to issue** CFE under Air & Water Act duly stipulating conditions applicable. Sri C. Surya Prakash Raju, representative of the facility attended the meeting and informed that they will process 2500 Kgs/day (2.5 Tons/day) of MSW collected from Piduguralla municipality and operate the facility, as per the MSW Rules. He further mentioned that the siting guidelines are not applicable to the facility, as they will process less than 5 Tons/day. After detailed discussion, the committee recommended to issue CFE order to the industry for processing 2.5 Tons/day of MSW, as the siting guidelines are not applicable to the facility as the proposed processing is < 5 Tons/day of MSW after payment of balance CFE fee of Rs.49,500/-. Accordingly, a letter was addressed to the industry on 26.03.2019. **Now**, the EE,RO, Guntur vide e.mail dated.23.04.2019 informed that the industry has paid balance CFE fee of Rs.49,500/-. The industry vide their letter dated.18.04.2019 stated that they had requested for extension of time for payment of the balance CFE fee. Further, stated that “we approached ULB regarding allocation of other land for SLF in compliance with SWM 2016 guidelines and we received letter from ULB from Municipal Commissioner, Piduguralla municipality”, also stated that “ULB informed us that the allocated 4 acres of land for the construction of Bio-Methanation and compost project was an existing compost/dumping yard of Piduguralla Municipality since year 2010. And ULB will allocate fresh land for SLF in due course of time. The industry requested to issue CFE to set up “20 TPD Bio-methanation plant to process the segregated organic waste and to produce BIO-CNG & Organic Manure” in the allocated 4 acres of land, stating that as soon as ULB allocate land for SLF (in compliance with SWM 2016 guidelines) then they would file separate application for CFE for SLF”. Finally, the industry stated that “in this regard we are humbly requesting your good office to issue CFE for setting up “20 TPD Bio-methanation plant to process the segregated organic waste and to produce BIO-CNG & Organic manure”. After detailed discussion, the committee recommended to issue CFE to the industry with conditions to setup “20 Tons/day Bio –Methanation plant to process the segregated organic waste and to produce bio CNG and organic manure, without sanitary landfill in the premises”.

Water :

- 1) The source of water is bore well & tankers and the maximum permitted water consumption is as follows:

Sl. No.	Purpose	Water Consumption (KLD)
1.	Process	10.0
2.	Domestic	5.5
	Total	15.5

- 2) The Effluent Treatment Plant (ETP) shall be constructed and commissioned along with the commissioning of the activity. All the units of the ETP shall be made impervious to prevent ground water pollution.

- 3) The domestic effluent shall be treated to on land for irrigation standards, stipulated under Environment (Protection) Rules, 1986, notified and published by Ministry of Environment and Forests, Government of India as specified in schedule VI vide G.S.R.422 (E), dt.19.05.1993 and its amendments thereof, and additional standards / conditions stipulated by APPCB.
- 4) The maximum Waste Water Generation (KLD) shall not exceed the following:

Sl. No.	Purpose	Wastewater Generation (KLD)
1.	Leachate from compost platforms	1.0
2.	Domestic	4.0
	Total	5.0

Effluent Source	Standards to be complied	Mode of final disposal
Leachate from compost flat forms	pH – 5.5-9.0, Total Suspended Solids (TSS) – 200.00 mg/l, Biochemical Oxygen Demand (BOD) – 100.00 mg/l, Oil and Grease (O&G) – 10.00 mg/l.	After treatment in ETP, the treated leachate on land shall be utilized for on land irrigation within the premises duly meeting the Board's standards of BOD - 100 mg/ltr.
Domestic waste water	----	Septic tank followed by soak pit.

- 5) Separate meters with necessary pipe-line shall be provided for assessing the quantity of water used for each of the purposes mentioned below.
 - a) Industrial cooling, spraying in mine pits.
 - b) Domestic purposes.
 - c) Processing, whereby water gets polluted and pollutants are easily bio-degradable.
 - d) Processing, whereby water gets polluted and the pollutants are not easily bio-degradable.

Air :

- 6) The industry shall comply with the following for controlling air pollution.

Sl.No.	Source	Capacity	Control Equipment
a)	DG Set	62.5 KVA	<p>Acoustic enclosures.</p> <p>The industry shall provide a minimum stack height (H) to the DG sets as per the following formula</p> $H = h + 0.2 \sqrt{KVA}$ <p>KVA = Total generation capacity, h = Height of building where D.G.Set is installed in meters.</p>

- 7) The generator shall be installed in a closed area with a silencer and suitable noise absorption systems. The ambient noise level shall not exceed 75 dB(A) during day time and 70 dB(A) during night time.
- 8) The industry shall not exceed the following Ambient Air Quality standards measured outside the factory premises at periphery of industry

SO₂ – 80 µg/m³, NO_x – 80 µg/m³, PM_{2.5} – 60 µg/m³, PM₁₀ – 100 µg/m³

Noise levels : Day time (6 AM to 10 PM) - 75 dB(A)

Night time (10 PM to 6 AM) - 70 dB(A).
- 9) The Air Pollution control equipment shall be installed along with the commissioning of the activity.

Solid Waste :

10) The industry shall comply with the following :

Sl.No.	Solid Waste generated from	Total Quantity	Method of Disposal
1.	Waste oil from DG set	50 Ltrs / annum	Shall be disposed to Authorized recyclers / re-processors.
2.	ETP sludge	50 kgs / day	Shall be used as manure.

11) The following rules and regulations notified by the MOE&F, GOI shall be implemented.

- a) Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.
- b) Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989.

Special Conditions :

- 12) The industry shall not establish sanitary landfill at the site, as committed vide letter dated. 18.04.2019 and the proponent shall obtain CFE for the landfill site before approaching the Board for CFO.
- 13) The industry shall produce compost-6.67 Tons/day and BIOCNG-2027 Kgs/day by using solid waste-20.28 Tons/day, garden waste-2.03 Tons/day and cow dung-1 Ton/day.
- 14) The industry shall treat the leachate from compost platforms of 1 KL/day to on land for irrigation standards (BOD-100 mg/lt.) and use the treated leachate on land for irrigation within the premises.
- 15) The industry shall take measures to control odour nuisance while handling the MSW, Cow dung and other raw materials.
- 16) The industry shall not discharge any effluents outside the industry premises under any circumstances.
- 17) The industry shall not cause any air pollution / water pollution / noise pollution / odour nuisance to the surrounding environment.
- 18) The industry shall use the digester waste as manure.
- 19) The facility for processing and disposal of solid waste shall be incorporated in the Town Planning Department's land use plan.
- 20) The industry shall develop green belt in all the vacant places. In future, excess green belt over and above 33 % of total area can be utilized for industrial activity as per requirement of industry. In any case, the minimum greenbelt shall be 33% of the total area.
- 21) The industry shall not operate the industry without obtaining CFO of the Board.
- 22) The industry shall comply with all the directions issued by the Board from time to time.
- 23) Concealing the factual data or submission of false information / fabricated data and failure to comply with any of the conditions mentioned in this order may result in withdrawal of this order and attract action under the provisions of relevant pollution control Acts.
- 24) The Board reserves its right to modify above conditions or stipulate any additional conditions including revocation of this order in the interest of environment protection.
- 25) This Order is issued without prejudice to the rights and contentions of this Board in any court of law.

JOINT CHIEF ENVIRONMENTAL ENGINEER