

- 1. Case No. - 4963/2016 Shri Vivek Maheshwari, Director, M/s Narmada Sugar Pvt. Limited, Village-Thaini, Post-Bankhedi, District-Hoshangabad (MP)-461990 Prior Environment Clearance for 30 MW Bagasse Based Cogeneration Power Plant at Khasra No. 132/1 C, 133, 135/1, 132/1B, 132/1D, 134, 135/2, 1321A, Village-Pondar, Tehsil-Salichouka, District-Narsingpur (MP) Total Land Area – 4.804 Ha., FoR-ToR. Env. Consultant: Not disclosed.**

This is a project pertaining to co generation power plant. The activity is mentioned at S.N. 1 (d) of the Schedule of EIA Notification 2006 as amended from time to time. Hence the project requires prior Environmental Clearance from the SEIAA. The case was forwarded by SEIAA to SEAC for scoping so as to determine TORs' to carry out EIA and prepare EMP for the project.

**Salient Features**

<b>The proposed bagasse based power plant is co generation plant. The proposed plant will use the baggasse of the parent sugar plant.</b>	
Site Address	132/1c, 133, 135/1, 132/1b, 132/1d, 134, 135/2 - 132/1a, Village – Pondar, Salichouka, Dist -Narsingpur (M.P.)
Production Capacity	30 MW Power Plant (Bagasse based )
Cost of Project	13490 Lac
Baggase Requirement	Bagasse (2.55 lakh tonne per Annum)
Steam Requirement for sugar plant	150 TPH
Net fresh Water Requirement	74 KLD

Capital Cost for Environmental measures ( proposed )	2.5 Crores
Recurring cost for environmental proposed ( Proposed )	To be estimated in EIA/EMP study
Proposed area for plantation	3.65 acres
Existing area of plantation	2 Acres in the area of sugar plant.
Land acquired	Total 40 acres land is in possession of proponent for sugar plant and further 11 acres land has been acquired for installation of CPP unit
Land required for plant and building	3050 sq mt
Direct employment generation	around 150 number
Type of Boiler	Travelling Grate Combustion
Stack Height	80 mt
Pollution control equipment	Hybrid ESP and Dust Extraction Filters
Level of particulate Matter after ESP	< 150 mg/ NM <sup>3</sup>
Ash Generation	3825 TPD
Silo Capacity	50 MT

## Environment setting

S. No.	Particulars	Details
1	Co-ordinate	1. 22°51'12.60"N- 78°39'2.67"E 2. 22°51'16.24"N- 78°38'58.12"E 3. 22°51'22.80"N- 78°39'5.94"E 4. 22°51'18.52"N- 78°39'12.07"E 5. 22°51'12.67"N - 78°39'7.49"E
2	Height above mean sea level	350-347mRL
3	Nearest Town	Gadarwara - 14.0km
4	Nearest Railway Station	Sali Chouka Road - 3.50km - SE
5	Nearest Airport	Jabalpur - 148km
6	Nearest Highway/Road	Pipariya- Gadarwara SH 22 - Adjoining
7	Hills/Valley	None within 10km radius
8	Ecological Sensitive Zone	None within 10km radius
9	Reserve Forest	None within 10km radius
10	Nearest Village	Salichouka - 1.0km - E

11	Nearest River/ Nalla	Dudhi River - 5.0km - W Umar (Shkhi) Nadi - 3.50km - NE Local Nalla - Adjoining - E
12	Other industries in 5 km radius	None
13	Surrounding Features	North : SH-22 South : Agricultural Land East : Agricultural Land West : Agricultural Land

### Raw Material Requirement

Item	Value	
	Season	Off season
Crushing rate, TCH	227.27	-
Bagasse generation at 29.00 % on cane, TPH	65.91	-
Bagacillo / handling loss at 0.80 % on cane, TPH	1.82	-

Bagasse available as fuel at 28.20 % on cane, TPH	64.09	-
Total equivalent bagasse available, MT	225600	-
Bagasse required by new boiler, TPH (MT)	55.15 (211776)	43.75 (43650)
Bagasse saved / available for off season operation, MT	-	13824
Bagasse saved / available for off season operation, MT	-	30000
Days on procured bagasse from group sugar Mills	-	29

The fuel for the cogeneration power plant operation will be bagasse. The bagasse from the storage area and last mill will be conveyed to the boiler by a combination of belt and chain slat conveyors. The system shall have provision for returning the excess bagasse to the storage yard. The bagasse handling system shall be designed for a capacity of about 90 TPH. Bagasse / biomass fuels will be fed to the boiler through series of conveyor belts and silo of suitable size manufactured for 10 minute storage of bagasse to drum feeder driven by variable frequency drive. Rotary drum feeders will feed the fuels to extraction type screw feeder driven by constant speed drives.

### **Water Balance**

	<b>Water Consumption</b>	<b>Waste Water Generation</b>
Unit	Proposed	Proposed
Boiler ( From DM unit)	180 KLD	90 KLD
Aux. Cooling Tower	204 KLD	20 KLD
DM water	300 KLD	120 KLD

Domestic	40 KLD	34 KLD
	554 KLD	264 KLD
Only 74 KLD of ground water shall be abstracted for the purposes of CPP out of total requirement of 554 cum per day water , as 480 KLD water will be available as condensate from sugar manufacturing unit		
Sr. No.	Items	Treatment & Disposal
1.	Domestic	Domestic effluent from will be given treatment in the Sewage Treatment Plant having capacity of 50 cum per day and will be reused for Horticulture Purpose/Ash conditioning
2.	Boiler, WTP and Cooling Tower	Boiler blow down will be neutralised in neutralisation tank and mix with CT blow down and will be reuse in Horticulture activity/Ash conditioning

### **Air Pollution Control Measures**

- ESP will be provided at stack of boiler to control the emission below 150 mg per cubic meter.
- Dust collectors system shall be provided at various material transfer points. Transfer Points and Conveyors will be provided with dry extracting system facilitated with Bag Filters.
- Dense plantations will be developed in and around the plant over area of 2 acres.
- Ambient air quality and stack emission will be regularly monitored to ensure that ambient air quality meets the given standards
- In order to ensure that the fugitive dust emissions due to transportation activity as low as possible, all the roads within the plant areas shall be asphalted.
- All the unpaved roads as well as paved roads will be sprinkled with water.
- Plugging all leakages and enclosing storage and material handling systems.
- All concerned workers shall be provided with dust mask or other safety t .
- Screen House shall be totally enclosed with brick-sheet walls and covered with sheet roofing

## SOLID WASTE MANAGEMENT

Following will be solid waste management practice to be adopted by unit:

- Fly ash from the boiler will be given for brick /cement manufacturing. unit
- Waste papers and boxes will be sold off to vendors/ recyclers
- Used oil from DG set will be given to authorized recyclers.

### Afforestation Plan

Year	Area ( Sq mt)	Number of Plants
1 <sup>st</sup> Year	4000	800
2 <sup>nd</sup> Year	4000	800
3 <sup>rd</sup> Year	3000	600
4 <sup>th</sup> Year	3000	600
5 <sup>th</sup> Year	1850	400
Total	15850	3200
Existing At Sugar unit	2 Acres	100

Project proponent and his consultant presented the salient features of the project, PFR, baseline data and the proposed TOR before the committee. PP also informed that they have started collecting the baseline monitoring data from February 2016.

After presentation committee decided to issue standard TOR prescribed by the MoEF&CC for conducting EIA with following additional TOR;

1. EIA should discuss the possibility of pre-drying of bagasse before burning in the boiler.