Date: 04.06.2019

Amendment - Expansion of Sugar Plant (5,000 to 10,000 TCD), Co-generation Power Plant (38 to 58 MW) and Distillery Unit (120 to 300 KLPD).

SHREE RENUKA SUGARS LTD, UNIT IV SR.NO.367, VILLAGE – BURLATTI, TAL – ATHANI, DIST - BELGAUM

Amendment Environmental Clearance conditions compliance.

Ref: F. No. J-11011/980/2007- lA II (I), Dated 29th November, 2012

Sr.No.	Conditions	Compliance
1	Kindly refer to your letter dated 16th September, 2011 regarding above mentioned project, wherein you have requested to adopt the treatment technology for 50 % spent wash based on bio-methanation followed by evaporation and bio-composting and remaining 50% spent wash based on concentration followed by incineration.	Noted and same is being followed
2	The Ministry of Environment and Forests had earlier accorded environmental clearance to the distillery unit vide letter no. no J-11011/980/2007-lA II (I) dated 23rd October, 2008 subject to one of the specific condition (S.N. ii). "For treatment of spent wash, for initial one year from the date of environmental clearance, the unit shall adopt concentration followed by bio-composting and after one year the same shall be shifted to concentration in the MEE followed by incineration in the boiler."	Noted the contents
3	The Ministry of Environment and Forests vide even no. letter dated 24th December,2009 had granted one year time with effect from 7.11.2009 for installation of boiler to incinerate the spent wash.	Noted the content
4	The proposal was considered by the Expert Appraisal Committee (lndustry-2) in its18th' 21st and 30th meetings held during 20th-21st January, 2011, 23rd_24th March, 2011 and15th_16th December, 2011 respectively. The Committee recommended the following amendment at S.N. (ii) of the specific condition in the environmental clearance accorded vide Ministry's letter no. J-11011/980/2007-IA II (I) dated 23rd October, 2008 along with other conditions. specific conditions:	Noted the content

	Para 6.0 ;A; S.N ii ; line ; 1 For : "For treatment of spent wash, for initial one year from the date of environmental clearance, the unit shall adopt concentration followed by bio-composting and after one year the same shall be shifted to concentration in the MEE followed by incineration in the boiler."	Noted the content
	Read: Unit shall have following spent wash treatment scheme. Spent wash (i.e. 1500 m3/day) generated from one fermenter (distillery; 150KLPD) shall be treated in Bio-methanation. Treated spent wash shall be evaporated in falling film evaporators to reduce the quantity up to 750m3/day. Concentrated bio-methanated spent wash shall be bio-composted with press mud. Condensate shall be recycled back to process.	The entire spent wash generated from 150 KLPD distillery capacity is being used for Bio-methanation followed by evaporation and concentrated bio-methanated spent wash is being used for making Bio-composting by using press-mud on RCC concreted Compost yard Area 24 Acres . The condensate generated during the evaporation is being recycled back to process after treatment in condensate polishing unit of 1800 M3 per day capacity having Bio-digester followed by 2 stage activated sludge process and Multi Media filter, Activated carbon Filter and softener as tertiary treatment.
	Spent wash (i.e. 930 m3/day) generated from another fermenter (distillery; 150 KLPD) shall be evaporated in falling film evaporators followed by concentration in MEE. Concentrated spent wash shall be incinerated in the incineration boiler. Condensate shall be recycled back to process. "	The entire spent wash generated from another 150 KLPD distillery capacity is being evaporated in Falling Film Evaporator followed by concentration in MEE. Concentrated spent wash is being incinerated in incineration Boiler of 60 TPH capacity. The condensate is being polished in condensate polishing unit and reused in process after treatment in condensate polishing unit of 1800 M3 per day capacity having Bio-digester followed by 2 stage activated sludge process and Multi Media filter, Activated carbon Filter and softener as tertiary treatment.
5	Based on the information submitted by the project proponent, the Ministry of Environment and Forests hereby accords above mentioned amendment at S.N. (ii) of the specific condition in the environmental clearance accorded vide Ministry's letter no. J-11011/980/2007-IA II (I) dated 23rd October, 2008 subject to compliance to the following conditions	Compliance for the environmental clearance accorded vide Ministry's letter no. J-11011/980/2007-IA II (I) dated 23rd October, 2008 is separately given. .

I	No further extension and modification shall be considered in future.	Noted the content and agreed
Ii	In case of change in the scope of the project, fresh proposal for environmental clearance shall be submitted to the Ministry.	Noted the content and agreed
Iii	All the specific conditions and general conditions specified in the environmental clearance accorded vide Ministry's letter no. J-11011/980/2007-IA-11 (l) dated 23rd October, 2008 shall be implemented.	We have implemented specific and general conditions specified in the environmental clearance accorded vide Ministry's letter no. J-11011/980/2007-IA-11 (l) dated 23rd October, 2008.
Iv	No effluent shall be discharged outside the factory premises and 'Zero' discharge shall be maintained.	The required effluent treatment systems are provided to achieve Zero liquid discharge.
V	Whenever incineration boiler is not running, only the capacity equivalent to 150 KLPD distillery shall be operated and equivalent spent wash shall be treated through bio methanation followed by bio-composting.	Noted and capacity equivalent to 150 KLPD Distillery capacity is being operated
Vi	After start up and process stabilization of the bio- methanation plant, Unit shall submit detailed plant performance report in terms of inlet and outlet parameters viz. BOD, COD, gas generation, spent wash flow etc and report submitted to the Ministry's Regional Office at Bangalore and CPCB.	Bio-digester plant Capacity – 1500 M3 per day.(CSTR). The Plant is not operation in this period.
Vii	Separate line and flow meter shall be installed to ensure the spent wash flow monitoring in the different treatment schemes and daily spent wash flow shall not exceed defined flow.	We have provided the separate 6" dia. Stainless steel pipe line and Self display Magnetic flow meter (Forbes Marshall Make) for inlet of the Bio- digester and we will ensure that, the spent wash flow not exceed the limits. Apart from the gas flow meters are also provided on gas line going to Boiler.
Viii	Peizometer wells shall be installed lagoon and composting yard as per CPCB guidelines	The Piezometers wells are provided surrounding of the compost yard and lagoon.
ix	Green belt shall be developed in 33 % of plot area to mitigate the effects of fugitive emissions all around the plant as per CPCB guidelines in consultation with the local DFO. Thick greenbelt with suitable plant species shall be developed around the entire sugar complex including the distillery to mitigate the odor problem. Time bound action plan should be submitted to the Ministry and its respective Regional Office at Bangalore to develop thick greenbelt within 5 years.	The green belt development is already undertaken and about 27446 No. trees of Casuarinas, Eucalyptus, Acacia, Neem, Almond etc. are planted on 77 Acres area. The plantation activity is being followed for continuous improvement. The green belt development details are attached as **Annexure-I.**
X.	Metallic road shall be provided specially around bio-methanation plant area as well as boiler area. Proper lighting arrangement	The Boiler area is provided with the concrete floor and The proper leveled and hard flooring is provided to the Bio-methanation plant area.

	shall be provided in these areas.	The RCC floor will be provided shortly. The proper lighting arrangement is provided for both the areas.
xi	Fly ash from boiler explored to use as manure	Fly ash is being mixed with press mud and used in the composting process.
xii	Regular stack Monitoring for emission from incineration boiler shall be done. Stack height shall be calculated as per $h=14Q^{0.3}$	Stack emission is being monitoring every month by the empanelled laboratory and stack height of 85 m and ESP as air pollution control equipment is provided as per CPCB guideline.
xiii	Monthly performance report of boiler shall be submitted to Ministry's Regional office.	Noted and being submitted.
xiv	Conveyor belt carrying ash from boiler shall be properly covered to reduce the fugitive emissions of dust.	Proper covers are provided to conveyor belt carrying ash.
xv	Spent lees shall be properly treated in the effluent treatment plant and treated effluent shall be recycled and reused.	Spent less is being treated in Condensate polishing unit and recycled to the process after treatment in condensate polishing unit of 1800 M3 per day capacity having Bio-digester followed by 2 stage activated sludge process and Multi Media filter, Activated carbon Filter and softener as tertiary treatment.
6	All other conditions will remain unchanged.	Noted
7	You are requested to keep this letter with the Environmental Clearance accorded vide letter No. F. No. J-11011/980/2007- 1 A II (I) dated 23rd October, 2008	The letter of amended EC is kept with the Environmental Clearance accorded vide letter No. F. No. J-11011/980/2007- 1 A II (I) dated 23rd October, 2008
8	This issue with the prior approval of Competent Authority.	Noted