



Shree Renuka Sugars Ltd.,

Factory : C/o Deshbhakta Ratnapanna
Kumbhar Panchaganga SSK Ltd.
Ganganagar, Ichalkaranji,
Tq. Hatkanagale, Dist. Kolhapur.
Tel. : 0230-2441776 to 80
Fax : 0230-2441515
e-mail : panchaganga@renukasugars.com

Ref: SRSL/ENVI/RO-MOEFCC/318/2019-20

Date: 24/12/2019

To,
Hon'ble Regional Officer
Additional Principal Chief Conservator of Forests (C),
Ministry of Environment, Forest and Climate Change,
Regional Office (WCZ), Ground Floor, East Wing,
New Secretariat Building Civil Lines,
Nagpur.

Sent through RAD
on 25/12/19

Sir,

Sub: Submission of half yearly compliance to the Environment Clearance of Co-generation Plant capacity -30 MW at Desh Bhakt Ratnappa Kubhar SSK Ltd, Ichalkaranji, Kolhapur District leased by Shree Renuka Sugars Ltd.

Ref: SEAC 2009/CR16/TC2, dated: 18th November 2009.

This has reference to the above subject and cited reference. We would like to submit the point wise compliance to Environmental Clearance of Co-generation Plant capacity - 30 MW for the period from April 2019 to Sept 2019

This is for your kind information and perusal please.

Thanking You,

Yours' Faithfully,

File
GENERAL MANAGER

For, Shree Renuka Sugars Unit-DB.R.K.Panchaganga SSK
Ganganagar Ichalkaranji.

Encl: EC compliance with annexries.



Date: 18.12.2019

**M/S Desh Bhakt Ratnappa Kumbhar Panchaganga SSK Ltd,
Inchalkaraji, Kolhapur.**

Compliance to the Environmental Clearance for Co-generation Plant 30 MW.

Ref: SEAC 2009/CR16/TC2, Dated: 18th November 2009

Sub: 30 MW Co-generation Project at Desh Bhakt Ratnappa Kumbhar Panchaganga SSK Ltd, Inchalkaraji, Kolhapur- Environmental clearance reg.

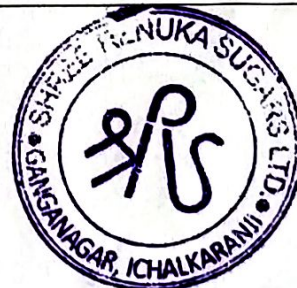
Sr. No	Conditions	Compliance
1	This has reference to your communication No. SREL/panchaganaga/Co-gen/09-10 dated 4 th July, 2009 on the above mentioned subject. The proposal was considered as per the EIA Notification-2006, by the state Level Environment Committee in its 12 th meeting & recommended for prior Environmental Clearance by State Level Environment Impact Assessment Authority (SEIAA). Proposal was considered by the state Level Environment Impact Assessment Authority in its 16 th meeting held on 7 th November, 2009.	Noted the contents
2.	It is noted that the proposal is for grant of Environmental Clearance for 30 MW CO-generation Project at Desh Bhakt Ratnappa Kumbhar Panchaganga SSK Ltd, Inchalkaranji, Kolhapur. The Project considered by SEAC under Category 'B2' of EIA Notification 2006, and Screening category is 1(d).	Noted.
	<p>Project information from documents submitted by you and considered by SEAC & SEIAA is summarized as below:</p> <p>Name of the Project: Environmental clearance for 30 MW Cogeneration Project at Desh Bhakt Ratnappa Kumbhar Panchganga SSK Ltd, Inchalkaranji, Kolhapur.</p> <p>Project Proponent: M/s. Desh Bhakt Ratnappa Kurnbhar Panchganga SSK Ltd, Inchalkaranji, Kolhapur.</p> <p>Location of the project:</p>	<p>Noted and the project 30 MW Co-generation plant is implemented and operated on location M/s. Desh Bhakt Ratnappa Kumbhar Panchganga SSK Ltd, Inchalkaranji, Tal: Hatkanagale, Dist: Kolhapur, Stat: Maharashtra.</p> <p>The existing Sugar plant capacity - 5000 TCD is established and operated since from 1976 year.</p>



<p>Inchalkaranji, Tal- Hatkanangale Dist - Kolhapur. Latitude: 17°04'N Longitude: 76° 14'E Type of Project: Power Project: Power Generation: 30 MW Co- generation. Total Plot Area: 8000 Sq.m. Built up Area: 2000 Sq.m, Estimated Cost of the project: Rs.94.19 Cr.</p>	
<p>Water Requirement: 574cum/day; source: Sugar factory scheme. Wastewater Generated: Effluent generated from sugar factory shall be 46 cum/day (Consent to establishment-16 cum/day)</p>	<p>The water requirement and effluent generation from sugar factory and implemented Co-generation plant is attached as an Annexure- Ia.The water consumption and waste water generation for sugar and co-generation plants are within the stipulated limits mentioned in consent to operate condition. The generated effluent from sugar and co-generation plant is being treated in ETP plant. The existing ETP capacity is having 750 cum/day. Further we proposed primary clarifier and tertiary treatment like Multi Media filter and Activated Carbon filter with existing ETP facility to further improve the treated effluent quality. The schematic process flow sheet of ETP IS attached as Annexure - Ib.During this period our plant is not in operation & this is off season of sugar plant.</p>
<p>Process: Co- generation will be done through steam turbines of double extraction condensing route (DEC). Saving of bagasse has become possible with modem instrumentation. It is proposed to install machinery and equipment in the power manufacturing process.</p>	<p>The high pressure 67 ata Boiler having capacity 140 THP is provided with turbine having double extraction cum condensate mode .The boiler and turbine are provided with fully automated DCS system.</p>



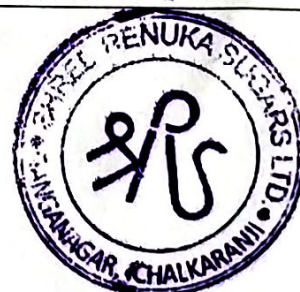
	<ul style="list-style-type: none">One Boiler of 140 TPH capacity and 67 bar steam pressure. Boilers at 485 degree C temp and using steam turbines for T.G set.	One Boiler capacity having 140 THP with 67 ata, steam temperature 485 degree C and steam turbines is established and operated in place of earlier old 7 No. Boiler.																																				
	<ul style="list-style-type: none">The surplus power is generated by the steam required for process, passing through Turbo alternator set of 30 MW working rating of DEC type suitable for boiler steam parameters and 11KV volt, 3 phases in 50 cycles per second generation volt.	The extracted steam from Turbo alternator set of 30 MW is utilized for captive Co-generation plant and sugar process and surplus power is exported to Maharashtra Govt. The power generated is having 11KV volt and in 3 phases.																																				
	Fuel: Bagasse Bagasse requirement: 60T/Hr Boiler: 1 of 140 TPH (instead of existing 7 of total capacity 157 TPH) Comparison of boilers:	The bagasse is used as fuel for 140 TPH Boiler and Co-gen plant is established and operated with only one 140 TPH boiler in place of 7 No. earlier old Boilers to reduce the emission load.																																				
	<table><tr><th>Sr. No</th><th>Particulars</th><th>Old Boiler</th><th>New Boiler</th></tr><tr><td>1</td><td>Boiler Capacity</td><td>157 TPH</td><td>140 THP</td></tr><tr><td>2</td><td>Working Pressure</td><td>21 Bar</td><td>76 Bar</td></tr><tr><td>3</td><td>Fuel used</td><td>Bagasse</td><td>Bagasse</td></tr><tr><td>4</td><td>Calorific value</td><td>2270 Kcal/kg</td><td>2270 Kcal/kg</td></tr><tr><td>5</td><td>Moisture</td><td>50%</td><td>50%</td></tr><tr><td>6</td><td>Manner feeding</td><td>Spreader stroker</td><td>Spreader roker</td></tr><tr><td>7</td><td>Heat transfer factor</td><td>Less than 70%</td><td>More 70%</td></tr><tr><td>8</td><td>Quality of feed water</td><td>Less</td><td>DM water</td></tr></table>	Sr. No	Particulars	Old Boiler	New Boiler	1	Boiler Capacity	157 TPH	140 THP	2	Working Pressure	21 Bar	76 Bar	3	Fuel used	Bagasse	Bagasse	4	Calorific value	2270 Kcal/kg	2270 Kcal/kg	5	Moisture	50%	50%	6	Manner feeding	Spreader stroker	Spreader roker	7	Heat transfer factor	Less than 70%	More 70%	8	Quality of feed water	Less	DM water	
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	9	Bagasse consumption	78.5 TPH	60 TPH	
	Solid waste generation: Fly ash: 21.6 MT/day, Disposal : sold to brick manufacturers, composting.			The daily generated fly ash is being sold to brick manufacturing and Farmers as soil conditioner.	
	•Green belt development: 2400 sq. m. area for green belt. Total 1500 trees shall be planted			The Bagasse yard surrounding 2400 sq m' area is green developed with having 1620 trees are planted. The trees are Casurina, Silver Oak, Eucalyptus, Ashok etc. The tree planted photographs are attached as an Annexure -II	
	Air pollution control Measures: • Electrostatic precipitator will be installed to reduce dust emission level & RCC Chimney is of the height of 75 meters. • The project proponent shall install regular monitoring system for SPM and SO ₂ . • In place of 7 Existing boilers, provision of one new will be a better idea. • Stacks being less in numbers but more in height, better dispersion will be achieved. • Presently only mechanical dust collector is in place, Electrostatic precipitator will be introduced which will arrest more dust from escaping into the atmosphere.			•Electrostatic precipitator as air pollution control equipment and RCC stack height of 75 meter are provided for 140 TPH Boiler. •The regular online monitoring system is installed and operated for SPM as per CPCB directions and Consent condition. •One high pressure Boiler is provided instead of earlier seven No. low pressures Boiler. •The ESP is provided in place of mechanical dust collector for boiler 140 TPH The photograph of ESP and stack is attached as Annexure -III Boiler 140 TPH is operating only.	
xi	Environmental Management Plan: EMP capital cost will be Rs. 4 crores and recurring cost will be Rs. 50 Lakhs			The capital cost For Environmental management plan is Rs. 4.77 Crores and recurring cost per year is Rs. 30.20 The detail of EMP expenditure cost is attached as Annexure IV .	
3	The proposal has been considered by SEIAA in its 16 th meeting dated on 7 th November 2009 and decide to accord Environmental Clearance to the said project under the			Noted.	



	provisions of Environment Impact Notification, 2006 subject to implementation of the following terms and conditions.	
i	"Consent for Establishment" shall be obtained from Maharashtra Pollution Control Board under Air and Water Act and a copy shall be submitted to the Environment department before start of any construction work at the site.	The consent for establishment is obtained from Maharashtra Pollution Control Board.
ii	No land development/construction work preliminary or otherwise relating to the project shall be taken up without obtaining due clearance from respective authorities	Noted the condition and agreed.
ii	No additional land shall be used /acquired for any activity of the project without obtaining proper permission.	The project is established and operated within the factory premises and there is no additional land is used for implementation of the project.
Iv	No fuel other then mentioned above including coal shall be used without obtaining proper permission	Only bagasse is used as fuel. No other fuels are used.
V	For controlling fugitive natural dust, regular sprinkling of water & wind shields at appropriate distances in vulnerable areas of the plant shall be ensured.	The water spray tanker is being operated on the roads and open area to avoid fugitive and natural dust emission.
vi	Regular monitoring of the air quality, including SPM & SO2 levels both in work zone and ambient air shall be carried out in and around the power plant and records shall be maintained. The location of monitoring stations and frequency of monitoring shall be decided in consultation with Maharashtra Pollution Control Board (MPCB) & submit report accordingly to MPCB.	The four location of the monitoring station are provided for monitoring the AAQ. The monitoring is being carried out regularly from the empanelled laboratory and same is being submitted to MPCB office regularly. During this period our plant not in operation & this is off season for sugar plant.
vii	A detailed scheme for rainwater harvesting shall be prepared and implemented to recharge ground water.	We are in process for rain water harvesting to recharge the ground water.
viii	Periodic monitoring of ground water shall be undertaken and results analyzed to ascertain any change in the quality of water. Results shall be regularly submitted to the Maharashtra Pollution Control Board.	The ground water is analyzed regularly. During this period our plant not in operation & this is off season for sugar plant.



ix	Leq of Noise level shall be maintained as per standards. For people working in the high noise area, requisite personal protective equipment like earplugs etc. shall be provided.	The earplugs and ear muffs are provided to workers those are working in high noise area.
x	The overall noise levels in and around the plant shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures, etc. On all sources of noise generation. The ambient noise levels shall confirm to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989	The high noise equipments like turbine, DG sets are provided with acoustic enclosures and these area are separated with other working area. The ambient Noise level is being monitored regularly. During this period our plant not in operation & this is off season for sugar plant.
xi	Green belt shall be developed & maintained around the plant periphery. Green Belt Development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO/ Agriculture Dept.	The total area is 59.4 hectare, out of that for green belt 23% (13.66 hectare) area is provided for development of plantation. Out of 33% green belt area about 23% is planted and proposed for green belt is 10 % which will be completed within two year. The existing and year wise proposed plantation detail with layout map is attached as an Annexure V
xii	Adequate safety measures shall be provided to limit the risk zone within the plant boundary, in case of an accident. Leak detection devices shall also be installed at strategic places early detection and warning.	The Fire hydrant system is installed at manufacturing process and wherever necessary like bagasse yard, Boiler area etc. The fire extinguisher and sand buckets are kept in fire sensitive zones. The First aid are provided at each section.
xiii	Occupational health surveillance of the workers shall be done on a regular basis and record maintained as per Factories Act.	The occupational health surveillance of the workers is carried on a regular basis and records are maintained as per the factories act.
xiv	Project Proponent shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling.	The Fire hydrant system is installed at manufacturing process and wherever necessary like bagasse yard, Boiler area etc. The fire extinguisher and sand buckets are kept in fire sensitive zones.
xv	The project authorities must strictly comply with the rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Waste (Management and	The Hazardous waste authorization is obtained from MPCB. the hazardous waste waste oil and residue containing oil are being stored and disposed as



	Handling) Rules, 2003. Authorization from the MPCB shall be obtained for collections /treatment/storage/disposal of hazardous wastes.	per the Hazardous Waste (Management and Handling) Rules, 2003. The every year Form IV is submitted to MPCB.
xvi	Regular mock drills for the on-site emergency management plan shall be carried out. Implementation of changes / improvements required, if any, in the on-site management plan shall be ensured.	The regular mock drills for the on-site emergency management plan is carried out regularly.
xvii	A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.	The separate environment management cell with qualified staff is established. The list of environment management staff is attached as Annexure – VI
xviii	Transportation of ash will be through closed containers and all measures should be taken to prevent spilling of the ash.	The ash transportation is being done through tractor and is covered with HDPE sheet.
xix	Separate silos will be provided for collecting and storing bottom ash and fly ash.	The silos are provided for collecting and storing of bottom ash and fly ash.
xx	Separate funds shall be allocated for implementation of environmental protection measures/EMP along with item-wise breaks-up. These cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year-wise expenditure should reported to the MPCB & this department	The capital cost For Environmental management plan is Rs. 4.77 Crores and recurring cost per year is Rs. 30.20 The detail of EMP expenditure cost is attached as Annexure VII
xxi	The project management shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Marathi language of the local concerned within seven days of issue of this letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the Maharashtra Pollution Control Board and may also be seen at Website at http://envis.maharashtra.gov.in	The advertise for accorded Environmental Clearance is published in two local paper one Marathi and other one is in English language.



xxii	Project management should submit half yearly compliance reports in respect of the stipulated prior environment clearance terms and conditions in hard & soft copies to the MPCB & this department, on 1 st June and 1 st December of each calendar year.	The half yearly compliance report for EC conditions will be submitted to your good office and MPCB office with hard and soft copies.
xxiii	A copy of the clearance letter shall be sent by proponent to the concerned Municipal Corporation and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.	The copy of the clearance is provided to the concerned authorities and also uploaded on company website. Website 'http://www.renukasugars.com/en/environmental-compliance.html'
xxiv	The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely, SPM, RSPM, SO ₂ and NO _x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the factory in the public domain.	The EC stipulated conditions compliance and results of monitored data has been updated in our website. Website 'http://www.renukasugars.com/en/environmental-compliance.html' and simultaneously sent to the Regional Office of the SPCB.
xxv	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.	The EC conditions compliance and results of monitored data is being submitted half yearly to the respective Regional Office of MoEF (by e-mail), the respective Zonal Office of CPCB and the SPCB.



xxvi	The environmental statement for each financial year ending 31 st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the Respective Regional offices of MoEF by e-mail.	The every year Environment statement for each financial year ending 31 st March in Form V is being submitted to State Pollution Control Board. The Environment statement last financial year 2018-19 is attached as an Annexure VIII and also uploaded on our company website. The Website 'http://www.renukasugars.com/en/environmental-compliance.html' and sent to respective regional offices of MoEF by e-mail.
xxvi i	The environmental clearance is being issued without prejudice to the court case pending in the court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision of the Hon'ble court will be binding on the project proponent. Hence this clearance does not give immunity to the project proponent in the case filed against him.	Noted the condition and agreed.
4	The Environment department reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the department or for that matter, for any other administrative reason.	Noted the condition and agreed.
5	Validity of Environment Clearance: The environmental clearance accorded shall be valid for a period of 5 years to start of production operations by the power plant.	Noted the condition. The Co-generation plant is established in 2009 year.
6	In case of any deviation or alteration in the project proposed from those submitted to this department for clearance, a fresh reference should be made to the department to assess the adequacy of the condition(s) imposed and to incorporate additional environmental protection measures required, if any	Noted the condition and agreed.
7	The above stipulations would be enforced among others under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection)	Noted.



	Act, 1986 and rules there under, Hazardous Wastes (Management and Handling) Rules, 1989 and its amendments, the public Liability Insurance Act, 1991 and its amendments.	
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WATER BALANCE - PANCHAGANGA UNIT**Sugar Crushing Capacity 5000 TCD****Water balance and Effluent generation and Utilization****Water available from Sugar cane**

Sr. No	Water In	Qty cum/day	Water Out	Qty Cum/day
1	Water available from Sugar cane 68% for Sugar plant 5000 TCD	3400	Loss of Water through Bagasse 15 % on cane	750
			Loss of Water through Press mud 2.8 % on cane	140
			Loss of Water through F.M. 0.4% on cane	20
			Loss of Water through Lime Grit 0.24% on cane	12
			Loss of Water through Vapour vent of Evap.& Pans 0.5%	25
			Loss of Water through Clarifier flash vapour 0.75% on cane	38
			Loss of Water through Spray pond evaporation 24% on cane	1200
			Surplus condensate water	1215
	Total	3400		3400

Condensate utilization -1215 cum/day

After Cooling, surplus condensate -1215-65 = 1150cum/day (Condensate temperature decreases from 75°C to 35°C)

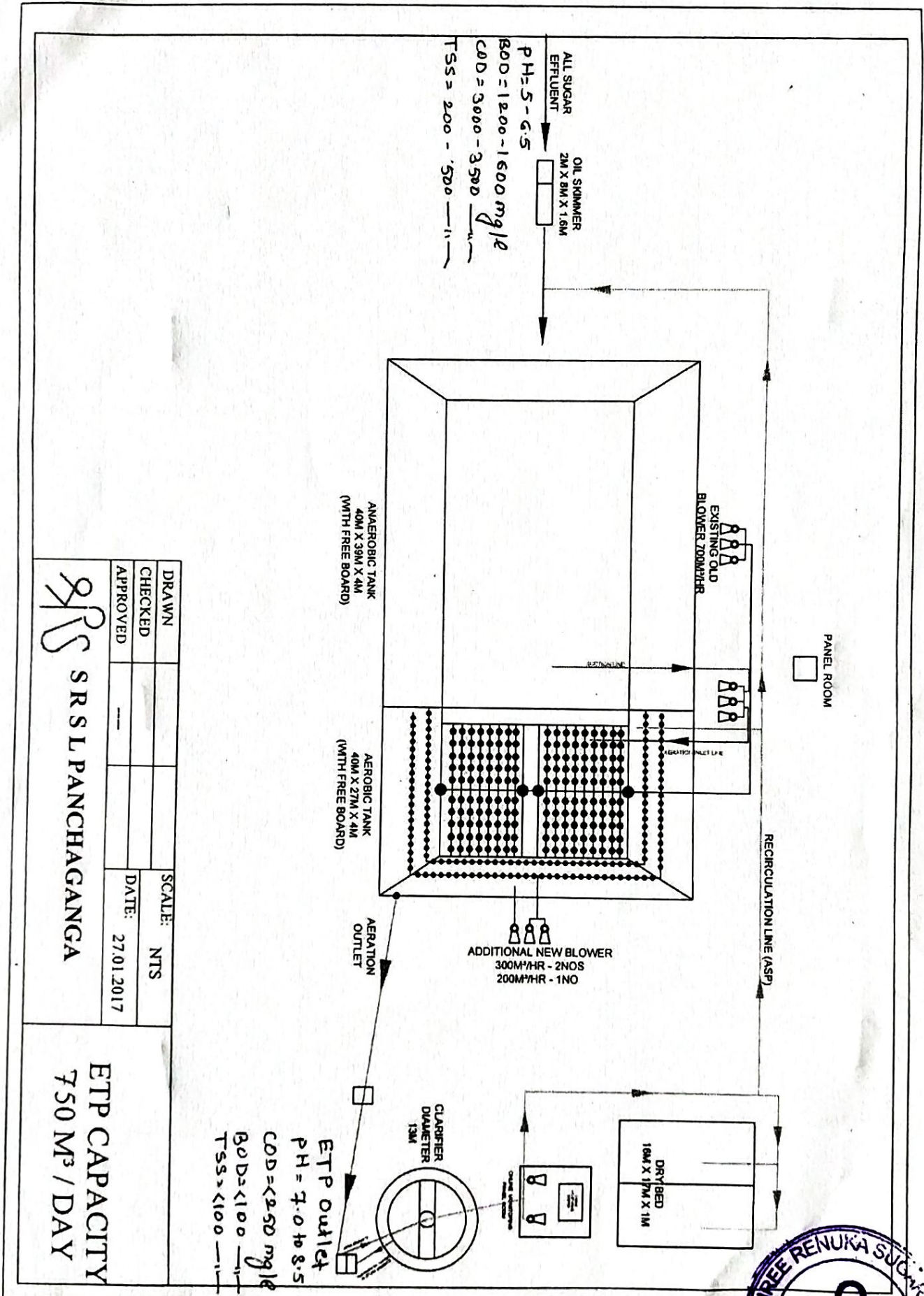
Water Consumption and Effluent generation in cum/day

Sr. No	Particulars	Water Consumption	Effluent generation
A.	River water		
1	Domestic (Fresh water)	50	45
	Total	50	45
B.	Water reuse from Cane		
2	Sugar Lab	10	10
3	Sugar Plant	110	110
5	Steam vent and drain	10	10
6	Cooling tower (Cogen) make up	1092 (Fresh water -72 + resue -1020)	50
	Total	1150	180
1	Fresh water for Boiler make up and D M back wash	400	400
	Grand Total	400	580

Note: Total fresh water requirement is =522 cum/day



Amey D



DRAWN		SCALE:	NTS
CHECKED			
APPROVED		DATE:	27.01.2017

SRS S R S L PANCHAGANGA

ETP CAPACITY
750 M³ / DAY





Amn
E









Annexure (III)



Annexure IV			
ENVIRONMENT MANAGEMENT PLAN (EMP)			
Industry has Environment Management Cell comprising of qualified & experienced people EMC consists of MD, Env. & Safety Officer, Lab Analyst, Env. Consultant, ETP Operators. The Capital as well as O & M Costs towards Environmental Management Plan as per following.			
Sr.No	Particular	Capital in Rs Lakhs	O & M/Year in Rs Lakhs
1	The Capital as well as O & M Costs towards Environmental Management will be –	Rs.324.00	Rs.9.35
2	Water Pollution Control – ETP, Online monitoring system to ETP	Rs.95.54	Rs.9.99
3	Solid Waste Disposal	Rs.23.00	Rs.5.36
4	Green Belt Development	Rs.35.00	Rs.5.50
Total		Rs.477.54	Rs.30.20



Annexure V

M/S Desh Bhakt Ratnappa Kumbhar SSK Ltd, Inchalkaranji leased by Shree Renuka Suagars Ltd.
Detail of Green Belt Development

1. Land utilization of Industry

- | | |
|--|--|
| a. Total plot area | : 59.41 Hectares |
| b. Green belt development area | : 19.60 Hectares .i.e 33 % of total plotarea |
| i. Existing green belt developed area | : 13.66 Hectare .i.e 23% of total plot area. |
| ii. Proposed Green belt development area | : 05.94 Hectares i.e 10% pf total plot area. |
| iii. Layout map for existing and proposed Green belt development | |

i. Details of Existing Green Belt Development :

The sugar factory was established in the year 1958 and the green belt developed is having very old and big trees of mix population and species. Only coconut plantation is organized plantation. Other plantation area is mainly having mix population comprising of local ornamental and fruit trees. As the trees are old and more in height with dense canopy, the area occupied by the trees are very large.

1. Criteria For selection of tree species for green belt development.
2. Detail area of Green belt.
3. List of tree species used for the Green Belt Development.



1. For green belt development the tree species are selected on the basis of following criteria.

- ▲ Tolerance to the salt and high TDS water.
- ▲ Efficiency to control fugitive emission.
- ▲ Bioremediation
- ▲ Difference in height and growth habits
- ▲ Aesthetic and pleasing appearance
- ▲ Provide shade
- ▲ Ability to efficiently fixing carbon and nitrogen.
- ▲ Improving waste land
- ▲ To suit subtropical climate and loamy soil characteristics.
- ▲ Sustainability with minimum maintenance
- ▲ Tolerance to water stress and extreme climatic conditions particularly during summer

2. Detail area of Existing Green belt.

Plot Numbers	Location	Area in Hectares
1	Admin Office surrounding area	1.55
2	Sugar Godown back & Front side	3.41
3	Cane yard and cane account	1.53
4	Bagasse yard	2.02
5	Quarters & School	5.15
	Total	13.66



3 List of tree species used for the Green Belt Development

Sr.No.	Species Name	English Name	No. Of Trees	Height M	Age of tree	Canopy/Area occupied inM	Type
1	anona squamosa	Custard apple	54	10	20	1.06	Evergreen
2	Azadirachta indica	Neem	45	20	35	0.7	Evergreen
3	Cassia fistula	Golden Shower	15	12	20	0.31	Evergreen
4	Casurina equisetifolia		250	10	5	0.45	Evergreen
5	Ficus Benghalensis	Banyan	32	20	40	1.31	Evergreen
6	Ficus religiosa	peepal	45	25	40	0.81	Evergreen
7	Ficus Benjamin	Benjamin tree	25	10	6	0.31	Evergreen
8	Ficus hispida	Umbar	32	15	30	0.7	Evergreen
9	Mangifera indica	Mango	150	20	40	3.81	Evergreen
10	Phyllanthus emblica	Gooseberry	10	5	20	0.9	Evergreen
11	Salix triandra	Almond	31	10	30	0.79	Evergreen
12	Tamarindus indica	Tamarind	52	20	40	1.31	Evergreen
13	Achras sapota	Sapota Chikoo	15	6	25	0.55	Evergreen
14	Cocus Nucifera	Coconut	200	20	30	4.06	Evergreen
15	Polyalthia Longifolia	Ashok	150	16	25	0.56	Evergreen
16	Samanea saman	Rain tree	110	20	40	4.61	Evergreen
17	Grevillea robusta	Silver oak	45	15	25	1.36	Evergreen
18	Psidium guajava	Guava	59	10	25	1.56	Evergreen
19	Hyophorbe legenicaulis	Bottle Palm	70	15	20	1.06	Evergreen
20	Alstonia scholaris	Devill tree	10	16	25	0.81	Evergreen
21	Bauhinia racemosa	Apta	12	5	20	0.47	Evergreen
22	Tectona Grandis	Teak	40	10	20	0.95	Decidious
23	Acacia nilotica	Bhabul	25	10	40	1.06	Evergreen
24	Bambusa vulgaris	Bamboo	25	25	20	1.33	Evergreen
25	Syzygium cumini	Jamun	42	20	30	1.5	Evergreen
26	Butea monosperma	Palas	7	15	25	0.52	Evergreen
27	Nerium oleander	Nerium	140	3	5	0.45	Evergreen
28	Callistemon citrinus	Bottle brush	20	6	20	0.45	Evergreen
Total Green Belt Area Acre						33.76	
Total Green Belt Area Acre						13.66	



ii. Details of proposed plan for Green belt development.

The proposed Green belt development area is 5.94 Hectares. This proposed area will be completed within next three year. The location, type of tree & number of trees are considered for proposed green belt to be completed within next three is as shown in below table.

Sr. No	Location	Area in Hecter	No. of trees	Type of trees	Year of Completion of activity
1.	ETP surrounding, Back side of ETP and Spray pond area	1.955	3510	Grevillea robusta Silver oak),Casurina equisetifolia,Saraca ashoka,Salix triandra (Almond) etc.	20-21
2	Karochi Mala	2.015	5525	Grevillea robusta Silver oak),Casurina equisetifolia, etc.	21-22
3	Cane Office north,back side and Petrol pump area	1.555	2941	Azadirachta idica (Neem),Samanea saman(Rain tree),Salix triandra (Almond),Ficus religiosa (Peepal) etc.	22-23
4	Cane yard (Water tank)	0.415	1941	Grevillea robusta Silver oak),Casurina equisetifolia, etc.	
	Total	5.94	13917		



Annexure VII

Environmental Cell

Sr. No.	Employees Name	Designation
1	Shri Prakash Savant	General Manger
2	Shri Gurusiddanavar Y K	AGM-Environment
3	Shri Vikas Ingrole	Asst.Manager EHS
4	Pandurang Khot	Lab Chemist
Note: No.of ETP operator and Helper -4 No.s		





Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

FORM V

Environmental Audit Report for the financial Year ending the 31st March 2019

Unique Application Number

MPCB-ENVIRONMENT_STATEMENT-0000015931

Submitted Date

06-05-2019

Company Information

Company Name

Shree Renuka Sugars Ltd.,(Unit
DB.R.K.Panchaganga SSK

Application UAN number

000051296

Address

A/P- Ganganagar , Tal- Hatkanangle, Dist-
Kolhapur

Plot no

29

Taluka

Hatkanangle

Village

Kabnoor

Capital Investment (In lakhs)

210.70

Scale

LSI

City

Ichalkaranji

Pincode

416116

Person Name

Shri. Prakash Shrapati Sawant

Designation

General Manager

Telephone Number

09423869501

Fax Number

(0230)2441777-80

Email

vikas.ingrole@renukasugars.com

Region

SRO-Kolhapur

Industry Category

Red

Industry Type

R12 Sugar (excluding Khandsari)

Last Environmental statement submitted online

yes

Consent Number

1.0/BO/CAC/UAN
NO.0000051296/R/CAC-1901002384

Consent Issue Date

31/01/2019

Consent Valid Upto

31/07/2019

Product Information

Product Name

SUGAR

Consent Quantity

228000

Actual Quantity

97869

UOM

MT/A

Power Generation

262800

76366

Mwh

By-product Information

By Product Name

Pressmud

Consent Quantity

84000

Actual Quantity

21986

UOM

MT/A

Molasses

72000

34786

MT/A

Baggase

564000

210530

MT/A

1) Water Consumption in m3/day

Water Consumption for

Process

Consent Quantity in m3/day

600

Actual Quantity in m3/day

397

Cooling

1042

495



Domestic	80	50
All others	0	0
Total	1722	942

1) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
Sugar Effluent	500	450	CMD
Cogen Effluent	80	22	CMD

2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
Sugar & E P	1.5	1.58	Ton/Ton

3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
Sugar Cane	7.68	7.69	Ton/Ton

4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
Baggase	564000	203022	MT/A

Pollution discharged to environment/unit of output (Parameter as specified in the consent issued)

[A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day)	Concentration of Pollutants discharged (Mg/Lit) Except PH, Temp, Colour	Percentage of variation from prescribed standards with reasons	Standard	Reason
Chemical Oxygen Demand	7.2	16	93	250	Good O & M of ETP
Biological Oxygen Demand	2.7	6	94	100	Good O & M of ETP

[B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day)	Concentration of Pollutants discharged (Mg/NM3)	Percentage of variation from prescribed standards with reasons	Standard	Reason
SPM	560	45.73	70	150	Good O & M of ESP & STACK

HAZARDOUS WASTES

1) From Process

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
5.2 Wastes or residues containing oil	2.5	2.5	MT/A
5.1 Used or spent oil	2.5	2.5	MT/A

2) From Pollution Control Facilities

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
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SOLID WASTES**1) From Process**

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
Boiler Ash	1834	2233	MT/A
ETP SLUDGE	2.5	2.7	MT/A

2) From Pollution Control Facilities

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
NA	NA	NA	CMD

3) Quantity Recycled or Re-utilized within the unit

Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	NA	NA	CMD

Please specify the characteristics (in terms of concentration and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

1) Hazardous Waste

Type of Hazardous Waste Generated	Qty of Hazardous Waste	UOM	Concentration of Hazardous Waste
5.2 Wastes or residues containing oil	2.5	MT/A	Residue containing Oil is burned with baggase as fuel for our own boiler.
5.1 Used or spent oil	2.5	MT/A	Used oil is burned with baggase as fuel for our own boiler.

2) Solid Waste

Type of Solid Waste Generated	Qty of Solid Waste	UOM	Concentration of Solid Waste
BOILER ASH	2233	MT/A	Cent percent of ash sold to brick mfg. Used as manure with compost production.

Impact of the pollution Control measures taken on conservation of natural resources and consequently on the cost of production.

Description	Reduction in Water Consumption (M3/day)	Reduction in Fuel & Solvent Consumption (KL/day)	Reduction in Raw Material (Kg)	Reduction in Power Consumption (KWH)	Capital Investment (in Lacs)	Reduction in Maintenance (in Lacs)
The company has given prior attention to taken on conservation of natural resources & consequently on the cost of prodction	280	230	100	127750	21822	110000

Additional measures/Investment proposal for environmental protection abatement of pollution, prevention of pollution.

[A] Investment made during the period of Environmental Statement**Detail of measures for Environmental Protection**

The design capacity of ETP is 750 M3/d is provided to treat industrial effluent. ETP comprises with screen chamber, Equalisation cum anaerobic tank, aerobic tank, Sec. Clarifier, SDB.The

Environmental Protection Measures

The ETP is operated by qualified staff to control water pollution. The final treated water is disposed to on land for irrigation on 130 acre land & neighboring farmers.

Capital Investment (Lacks)

84



[B] Investment Proposed for next Year

Detail of measures for Environmental Protection Environmental Protection Measures Capital Investment (Lacks)

Pri. Clarifier, Tertiary Treatment

Pri. Clarifier, Tertiary Treatment

24

Any other particulars in respect of environmental protection and abatement of pollution.

Particulars

The industry files regular water cess returns as per the cess act on monthly basis. The industry shall carried out noise level survey within factory area. The industry provides fire fighting training to its own staff. There are no industrial accidents, fire or spillages etc. in season 2018-19. The industry is particular in obeying laws related to protection of environment.

Name & Designation

Prakash S.Sawant General Manager

