

Pre – Feasibility Report

For

Proposed Expansion of Sugarcane crushing capacity from 4,500 TCD to 10,000 TCD, Co-gen power plant from 14 MW to 36.5 MW and to establish a distillery of 150 KLPD unit to produce Ethanol using multi feedstock and captive power plant 8.5 MW

By

**M/s. Gokak Sugars Limited
Kolavi Village, Gokak Taluk,
Belgaum**

Prepared by



SAMRAKSHAN

Accreditation No. NABET/EIA/1922/IA0051

F- 4, 1st Floor, Swastik Manandi Arcade

SC Road, Sheshadripuram

Bangalore - 560 020



GOKAK SUGARS LIMITED

Factory :

KOLAVI, Taluk : GOKAK - 591 344

Dist. : BELGAUM, State : KARNATAKA

Country : INDIA. CIN : U15429KA2000PLC026433

Phone : 08332-264160, 264350, Fax : (08332) 264161

Email : stores.kolavi@renukasugars.com

AUTHORIZATION LETTER BY PROJECT PROPONENT

M/s. Gokak Sugars Limited management hereby authorize Mr. Anand Dodabasannavar, Unit Head to sign/ execute and submit the necessary papers, applications, agreements, documents etc., to be submitted by the company to MoEF & CC and other regulatory authorities in connection with Environmental clearance for the company as per details below:

Sl. No.	Unit Location	Particular
1	M/s. Gokak Sugars Limited at Survey No.238 & 263, Kolavi Village, Gokak Taluk ,Belgaum District, Karnataka	Environmental Clearance for proposed to expand the sugar plant from 4500 TCD to 10,000 TCD Cogeneration unit from 14 MW to 36.5 MW with installation of new distillery plant of capacity 150 KLD and to use the multi-feed stock.

RESOLVED FURTHER THAT, Mr. Anand Dodabasannavar, Unit Head is hereby authorized to take necessary actions on behalf of the Company for making any alterations, additions, corrections to the documents, papers, forms etc., filed/to be filed with Government authorities as and when required.

For, M/s. Gokak Sugars Limited.,

Vijendra Singh

Executive Director



GOKAK SUGARS LIMITED

Factory :

KOLAVI, Taluk : GOKAK - 591 344
Dist. : BELGAUM, State : KARNATAKA
Country : INDIA. CIN : U15429KA2000PLC026433
Phone : 08332-264160, 264350, Fax : (08332) 264161
Email : stores.kolavi@renukasugars.com

Date: 28.02.2022

To,

The Member Secretary : Industry - 2,
Ministry of Environment Forest and Climate Change,
Room No - 232, Agni Block,
Indira Paryavaran Bhavan, Jor Bagh Road,
New Delhi - 110 003

Dear Sir,

Sub: Submission of application in Form 1 and Prefeasibility Report for grant of Terms of References (TOR's) in respect of the Expansion of Sugar plant from 4500 TC to 10000 TCD and Cogeneration unit from 14 MW to 36.5 MW with installation of new distillery plant of capacity 150 KLD at Survey No.238 & 263, Kolavi Village, Gokak Taluk , Belgaum District, Karnataka by M/s Gokak Sugars Limited.

With reference to the above we have established a sugar and Cogeneration plant of sugarcane crushing capacity for 4500 TCD and Cogeneration unit 14 MW.

Now we are proposing for Expansion of Sugar plant from 4500 TCD to 10000 TCD and Cogeneration unit from 14 MW to 36.5 MW with installation of new distillery plant of capacity 150 KLD at the above-mentioned premises to produce Ethanol. The activity is covered under EIA Notification 2006 (Schedule 5(g) and 5 (j) Category 'A').

The following documents are submitted:

1. Form-1
2. Prefeasibility report
3. Related documents & annexures

We trust that the same is in order and request you to kindly acknowledge the and grant us the standard ToR for carrying out EIA studies.

Thanking you,

Yours faithfully,

For M/s Gokak Sugars ltd.,



FORM 1

(I) Basic Information

1	Name of the Project	Expansion of Sugar plant capacity from 4500 TCD to 10,000 TCD with Cogeneration unit from 14 MW to 36.5 MW and installation of new distillery of capacity 150 KLD to manufacture Ethanol using multi feedstock (Sugarcane syrup/ B/C heavy molasses/ grains) and captive power plant of 8.5 MW by M/s Gokak Sugars Ltd
2	Sl. No. in the schedule	Serial No. 5(g),5(j) & 1(d) - "A" Category in the schedule under EIA notification - 2006
3	Proposed capacity/area/length/tonnage to be handles/command area/lease area/number of wells to be drilled	<ol style="list-style-type: none"> 1) Sugar Plant expansion: to enhance the crushing capacity from 4500 TCD to 10000 TCD. 2) Cogeneration unit expansion: 14 MW to 36.5 MW 3) Distillery Plant: Establishment of new 150 KLD capacity and captive power plant of 8.5 MW <p>Expansion is within existing industry premises.</p>
4	New / Expansion / Modernization	Expansion
5	Existing capacity / Area etc.,	<ul style="list-style-type: none"> • Sugar plant 4500 TCD • Co - generation of 14 MW <p>Total Plot area of industry premises-74 Hectares</p>
6	Category of project i.e., 'A' or 'B'	'A'category
7	Does it attract the general condition? If yes, please specify.	No
8	Does it attract the specific condition? If yes, please specify.	No
9	Plot/Survey/Khasra No.	Survey No. 238 & 263,
	Village	Kolavi
	Tehsil	Gokak
	District	Belagaum
	State	Karnataka
10	Nearest railway station/airport along with distance in Kms.	Gokak Railway Station - 29 km, North West/ Belagavi Airport- 44 km, South West
11	Nearest Town, City, District	<ul style="list-style-type: none"> • Nearest town: Gokak at 7.3 km in North



	Headquarters along with distance in Kms.	• District Headquarters: Belgaum at 53 km in South West
12	Village Panchayats, Zilla Parishad, Municipal Corporation, Local body (Complete postal addresses with telephone nos. to be given)	Zilla Parishad address:4360/A, Kacheri Galli, Khade Bazar, Raviwar Peth, Belagavi, Karnataka 590001
13	Name of the applicant	Mr. Anand Dodabasannavar
14	Registered address	Survey No. 238 & 263, Kolavi Village, Gokak Taluk, Pin:591344 Belgaum District
15	Address for correspondence	Same as above
	Name	Mr. Anand Dodabasannavar,
	Designation (Owner/Partner/CEO)	General Manager
	Address	Survey No. 238 & 263, Kolavi Village, Gokak Taluk, Pin:591344 Belgaum District
	Pin Code	591344
	E - mail	anand.dodabasannavar@renukasugars.com
	Telephone No.	08332-264160/264350
16	Details of alternative Sites examined, if any. Location of these sites would be shown on a topo sheet.	No alternative sites have been considered since the expansion of sugar cogeneration complex and establishment of distillery is proposed within the existing industrial premises.
17	Interlinked Projects	NA
18	Whether separate application of interlinked project has been submitted?	NA
19	If yes, date of submission	NA
20	If no, reason	NA
21	Whether the proposal involves approval/clearance under: if yes, details of the same and their status to be given a) The Forest (Conservation) Act 1980? b) The wildlife (Protection) Act, 1972? c) The C R Z Notification, 1991?	NA



Del

22	Whether there is any Government Order/Policy relevant/relating to the site?	Agricultural land is converted for industrial operation. No additional land is required for proposed expansion. The proposed expansion will be taken within premises.
23	Forest land involved (Hectares)	Nil
24	Whether there is any litigation pending against the project and/or land in which the project is propose to be set up? a) Name of the court b) Case No. c) Orders/directions of the court, if any and its relevance with the proposed project.	No

(ii)Activity

1. Construction, operation or decommissioning of the Project involving actions, which will cause physical changes in the locality (topography, land use, changes in water bodies, etc.,)

Sl. No	Information/Checklist confirmation	Yes /No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
1.1	Permanent or temporary change in land use, land cover or topography including increase in intensity of land use (with respect to local land use plan)	No	The project is an expansion of the existing industry within the available facility. No additional land will be acquired. There is no permanent or temporary change in land use, land cover or topography.
1.2	Clearance of existing land, vegetation and buildings?	No	<ul style="list-style-type: none"> Existing vacate land within the factory premises will be utilized for expansion of the project. There will not be any clearance of land and there will not be demolition of buildings at the site.
1.3	Creation of new land uses?	No	There will not be change in existing land use.
1.4	Pre-construction investigations e.g. bore houses, soil testing?	Yes	Preconstruction investigations will be carried out before taking up erection of machineries.
1.5	Construction works?	Yes	Construction and erection of:



			<ul style="list-style-type: none"> • sugar plant by increasing the capacity to 10000 TCD. • New 150 KLPD Ethanol plant • Installation 110 TPH boiler for Sugar & Cogeneration plant, 1X45 TPH Incineration boiler for distillery plant operation . • Upgradation of ETP <p>However, it will not cause any physical changes in the locality</p>
1.6	Demolition works?	No	Nil
1.7	Temporary sites used for construction works or housing of construction workers?	Yes	Local manpower will be utilized for the civil works of expansion project. Temporary labour camp for 50 workers will be provided.
1.8	Above ground buildings, structures or earthworks including linear structures, cut and fill or excavations (Calculation for earth work estimation)	Yes	All the structures will be located above ground will not cause any change in land use.
1.9	Underground works including mining or tunneling?	No	NA
1.10	Reclamation works?	No	NA
1.11	Dredging?	No	NA
1.12	Offshore structures?	No	NA
1.13	Production and manufacturing processes?	Yes	<p><u>Sugar manufacturing process:</u></p> <ol style="list-style-type: none"> 1. Sugarcane crushing 2. Clarification of the extracted juice 3. Concentration of the clarified juice 4. Crystal white sugar <p><u>Distillery process:</u></p> <ol style="list-style-type: none"> 1. Yeast culture preparation. 2. Sugar syrup dilution 3. Fermentation 4. Distillation 5. Purification/Anhydrous Alcohol extraction. 6. Grain milling, decantation and DDGS dryer



[Handwritten signature]

1.14	Facilities for storage of goods or materials?	Yes	<p>Sugar is bagged and stored in godowns.</p> <table border="1" data-bbox="871 286 1426 835"> <thead> <tr> <th rowspan="2">Sl. No.</th> <th rowspan="2">Materials stored</th> <th colspan="2">Capacity/ area</th> </tr> <tr> <th>Existing</th> <th>Proposed</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Molasses</td> <td>4000 MT & 5000 MT</td> <td></td> </tr> <tr> <td>2</td> <td>Bagasse</td> <td>3.5 Acre</td> <td>3 Acre</td> </tr> <tr> <td>3</td> <td>Acid Storage</td> <td>30 m³</td> <td></td> </tr> <tr> <td>4</td> <td>Sugar Cane(yard)</td> <td>8 Acre</td> <td>7 Acre</td> </tr> <tr> <td>5</td> <td>Press mud yard</td> <td>4 Acre</td> <td>2 Acre</td> </tr> </tbody> </table>	Sl. No.	Materials stored	Capacity/ area		Existing	Proposed	1	Molasses	4000 MT & 5000 MT		2	Bagasse	3.5 Acre	3 Acre	3	Acid Storage	30 m ³		4	Sugar Cane(yard)	8 Acre	7 Acre	5	Press mud yard	4 Acre	2 Acre
Sl. No.	Materials stored	Capacity/ area																											
		Existing	Proposed																										
1	Molasses	4000 MT & 5000 MT																											
2	Bagasse	3.5 Acre	3 Acre																										
3	Acid Storage	30 m ³																											
4	Sugar Cane(yard)	8 Acre	7 Acre																										
5	Press mud yard	4 Acre	2 Acre																										
1.15	Facilities for treatment or disposal of solid waste or liquid effluents?	Yes	<p>Solid Waste Sugar plant and distillery</p> <table border="1" data-bbox="887 925 1394 1839"> <thead> <tr> <th>Details of the Solid waste</th> <th>Quantity in TPD</th> <th>Mode of Disposal</th> </tr> </thead> <tbody> <tr> <td>Bagasse</td> <td>3000</td> <td>Used as boilers fuel</td> </tr> <tr> <td>Boiler Ash</td> <td>14</td> <td rowspan="2">Mixed with press mud and used for making organic manure</td> </tr> <tr> <td>ETP Sludge</td> <td>0.5</td> </tr> <tr> <td>Press mud</td> <td>400</td> <td>Used as a raw material for making organic manure</td> </tr> <tr> <td>Yeast sludge</td> <td>0.25</td> <td>Sold to Farmers as Manure</td> </tr> <tr> <td>DDGS</td> <td>112</td> <td>Used as cattle feed</td> </tr> </tbody> </table> <p>Liquid effluents i) Sugar and Co-gen effluent:</p>	Details of the Solid waste	Quantity in TPD	Mode of Disposal	Bagasse	3000	Used as boilers fuel	Boiler Ash	14	Mixed with press mud and used for making organic manure	ETP Sludge	0.5	Press mud	400	Used as a raw material for making organic manure	Yeast sludge	0.25	Sold to Farmers as Manure	DDGS	112	Used as cattle feed						
Details of the Solid waste	Quantity in TPD	Mode of Disposal																											
Bagasse	3000	Used as boilers fuel																											
Boiler Ash	14	Mixed with press mud and used for making organic manure																											
ETP Sludge	0.5																												
Press mud	400	Used as a raw material for making organic manure																											
Yeast sludge	0.25	Sold to Farmers as Manure																											
DDGS	112	Used as cattle feed																											



Dej

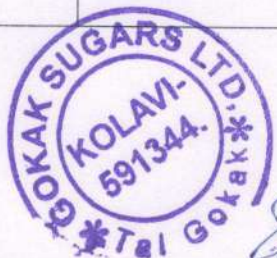
			<ul style="list-style-type: none"> At present ETP of capacity 500 KLD is established. A new ETP for the expansion of sugar plant is planned along with CPU. The treated effluent is used for irrigation and treated condensate is reused for cooling tower and utility <p>ii) Distillery Plant: The effluents generated are spent wash, spent lees, process condensate and utility effluents. For worst case scenario considering 225 KLPD Ethanol Production using C heavy molasses, the first stream of raw spent wash 1411 KLD is concentrated in FEE & MEE. The concentrated spent wash 338 KLD is used as fuel in 45 TPH incineration boiler. FEE and MEE condensate 1082 KLD and Spent lees 168 KLD is treated in CPU and reused in process and distillery cooling tower makeup.</p> <p>iii) Domestic effluent: Treated in septic tank and soak pit. The same will be continued after expansion.</p>
1.16	Facilities for long term housing of operational workers?	Yes	A residential colony 40 houses for labourers and 4 Officers block is provided within industry premises.
1.17	New road, rail or sea traffic during construction or operation?	No	Existing road / transport facilities will be used during construction and operation phase.
1.18	New road, rail, air waterborne or other transport infrastructure including new or altered routes and stations, ports, airports etc.	No	NA
1.19	Closure or diversion of existing transport routes or infrastructure leading to changes in traffic movements?	No	NA
1.20	New or diverted transmission lines or pipelines?	No	NA
1.21	Impoundment, damming,	No	NA



	culver ting, realignment or other changes to the hydrology of watercourses or aquifers?		
1.22	Stream crossings?	No	NA
1.23	Abstraction or transfers of water from ground or surface waters?	Yes	The water supply is from Hulikatti M.I tank. Permission issued by Government of Karnataka to draw 883 KLD for sugar industry. Copy appended. Water withdrawal permission for distillery yet to be taken separately.
1.24	Changes in water bodies or the land surface affecting drainage or run-off?	No	There will be no changes in water bodies on the land surface affecting drainage or runoff
1.25	Transport of personnel or materials for construction, operation or decommissioning?	Yes	The existing road will be utilized for access to the site for transportation of material and personnel during operation phase.
1.26	Long-term dismantling or decommissioning or restorationworks?	No	Not applicable
1.27	Ongoing activity during decommissioning which could have an impact on the environment?	No	Not applicable
1.28	Influx of people to an area in either temporarily or permanently?	Yes	Due to proposed expansion about 271 additional workers will be employed from villages around the industry.
1.29	Introduction of alien species?	No	No alien species will be introduced
1.30	Loss of native species or genetic diversity?	No	There is no loss of native species or genetic diversity at site.
1.31	Any other actions?	No	Not applicable

2. Use of Natural resources for construction or operation of the Project (such as land, water, materials or energy, especially any resources which are non-renewable or in short supply):

Sl. No	Information/checklist confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
--------	------------------------------------	--------	--



2.1	Land especially undeveloped or agricultural land (ha)	No	Agricultural land is already converted for industrial use.																			
2.2	Water (expected source & competing users) unit: KLD	Yes	Source - Hulikatti MI tank The water supply is from Hulikatti M.I tank. Permission issued by Government of Karnataka to draw 883 KLD for sugar industry. Copy appended. Water withdrawal permission for distillery yet to be taken separately.																			
2.3	Minerals (MT)	No	Not applicable																			
2.4	Construction material - stone, aggregates, sand / soil (expected source - MT)	Yes	Will be sourced from local suppliers. The construction involves erection of new equipment, augmenting the existing equipment for higher production and establishing new distillery unit.																			
2.5	Forests and timber (source- MT)	No	Nil																			
2.6	Energy including electricity and fuels (source, competing users) Unit: fuel (MT), energy (MW)	Yes	The source of power supply is from own co-gen power plant of (existing 14 MW + proposed 22.5 MW) and captive power plant capacity 8.5 MW. <table border="1" data-bbox="925 1187 1444 1568"> <thead> <tr> <th rowspan="2">Particulars</th> <th colspan="3">Power requirement in MWH</th> </tr> <tr> <th>Existing</th> <th>Proposed</th> <th>Total after expansion</th> </tr> </thead> <tbody> <tr> <td>Sugar plant</td> <td>5.2</td> <td>5.8</td> <td>11.0</td> </tr> <tr> <td>Ethanol plant -150 KLPD</td> <td>-</td> <td>4</td> <td>4.0</td> </tr> <tr> <td>Total</td> <td>5.2</td> <td>9.8</td> <td>15</td> </tr> </tbody> </table>	Particulars	Power requirement in MWH			Existing	Proposed	Total after expansion	Sugar plant	5.2	5.8	11.0	Ethanol plant -150 KLPD	-	4	4.0	Total	5.2	9.8	15
Particulars	Power requirement in MWH																					
	Existing	Proposed	Total after expansion																			
Sugar plant	5.2	5.8	11.0																			
Ethanol plant -150 KLPD	-	4	4.0																			
Total	5.2	9.8	15																			
2.7	Any other natural resources (use appropriate standard units)	No	NA																			

3. Use, storage, transport, handling or production of substances or materials, which could be harmful to human health or the environment or raise concerns about actual or perceived risks to human health.

Sl No	Information/Checklist confirmation	Yes /No	Details thereof (with approximate quantities/rates, wherever possible) with source
-------	------------------------------------	---------	--



			of information data
3.1	Use of substances or materials, which are hazardous (as per MSIHC rules) to human health or the environment (flora, fauna, and water supplies)	Yes	HCl and NaOH for regeneration of DM plant. HSD for DG sets. Production of Ethanol, storage and transportation. Dedicated storage tankers are provided for storage of finished products.
3.2	Changes in occurrence of disease or affect disease vectors (e.g. insect or water borne diseases)	No	Occupational Health tests are carried out regularly for all the employees. No indication of disease vectors.
3.3	Affect the welfare of people e.g. by changing living conditions?	Yes	Positive impact. There will be improvement in Socio Economic condition of the people around the project site; like direct/ indirect employment opportunities and improvement in infrastructural facilities
3.4	Vulnerable groups of people who could be affected by the project e.g. hospital patients, children, the elderly etc.,	No	
3.5	Any other causes	No	--

4. Production of solid wastes during construction or operation or Decommissioning (MT/Month)

Sl. No	Information/Checklist confirmation	Yes /No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
4.1	Spoil, overburden or mine wastes	No	NA
4.2	Municipal waste (domestic and or commercial wastes)	Yes	Construction phase Around 75 kg/d of municipal waste is generated from the workers during construction phase. The waste will be segregated at source. The organic waste 45 kg/day is composted and 30 kg/day is inorganic waste.



			<p>Operational phase</p> <p>Around 110 kg/d of municipal waste is generated from the workers during construction phase. The waste will be segregated at source. The organic waste 66 kg/day is composted and 44 kg/day is inorganic waste.</p>								
4.3	Hazardous wastes (as per Hazardous Waste Management Rules)	Yes	<table border="1"> <thead> <tr> <th rowspan="2">Hazardous waste Generated</th> <th>Quantity Existing</th> </tr> </thead> <tbody> <tr> <td>Used oil</td> <td>0.115 KL/A</td> </tr> <tr> <td>Waste residue containing oil</td> <td>0.369 MT/A</td> </tr> <tr> <td>Empty Barrels</td> <td>0.1 MT/A</td> </tr> </tbody> </table>	Hazardous waste Generated	Quantity Existing	Used oil	0.115 KL/A	Waste residue containing oil	0.369 MT/A	Empty Barrels	0.1 MT/A
Hazardous waste Generated	Quantity Existing										
	Used oil	0.115 KL/A									
Waste residue containing oil	0.369 MT/A										
Empty Barrels	0.1 MT/A										
4.4	Other industrial process wastes		Detailed in Sl. No. 1.15								
4.5	Surplus product	No	Nil								
4.6	Sewage sludge or other sludge from effluent treatment	Yes	<p>Domestic sewage of 88 KLD generated from the industry is treated in septic tank and disposed to soak pit.</p> <p>ETP sludge of 0.5 TPD and yeast sludge of 0.25 TPD is used in composting.</p> <p>Sludge from the sugar ETP and septic tank is taken to Sludge drying beds and dried sludge is used for making organic manure.</p>								
4.7	Construction or demolition wastes	No	No demolition proposed. Construction debris will be reused.								
4.8	Redundant machinery or equipment	No	Nil								
4.9	Contaminated soils or other materials	No	No soil or materials will be contaminated.								
4.10	Agricultural wastes	No	Nil								
4.11	Other solid wastes	No	Nil								

5. Release of pollutants or any hazardous, toxic or noxious substances to air (Kg/hr)



Sl. No.	Information/Checklist confirmation	Yes /No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
5.1	Emissions from combustion of fossil fuels from stationary or mobile sources	Yes	HSD is used for DG sets. Emission are SO ₂ , NO _x and CO.
5.2	Emissions from production processes	Yes	<ul style="list-style-type: none"> • Particulate matter from existing boiler 90 TPH will be emitted • Particulate matter from proposed boiler 1X110 TPH & • Particulate matter & SO₂ from proposed 45 TPH Incineration boiler. • CO₂ emission from 225 KLD ethanol production will be 94.4 TPD
5.3	Emissions from materials handling including storage or transport	Yes	Fugitive emissions are contributed from bagasse, coal and fly ash management and handling.
5.4	Emissions from construction activities including plant and equipment	Yes	Cranes, trucks and other equipment will be used for erection; emissions are not significant.
5.5	Dust or odors from handling of materials including construction materials, sewage and waste	Yes	Dust - fugitive emission due to storage of bagasse and from construction activity. The storages will be covered as far as practicable. For sewage already, septic tank and soak pit is provided.
5.6	Emissions from incineration of waste	Yes	Spent wash will be incinerated in the incineration boiler along with bagasse. Emissions will be particulates.
5.7	Emissions from burning of waste in open air (e.g. slash materials, construction debris)	No	Nil. There will be no open air burning of wastes
5.8	Emissions from any other sources	No	Nil

6.Generation of Noise and Vibration, and Emissions of Light and Heat

Sl. No.	Information/Checklist confirmation	Yes/ No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data



6.1	From operation of equipment e.g., engines, ventilation plant, crushers	Yes	Operation of boilers and DG sets, milling section, compressors, motors, TG set. All vibrating and noise producing equipment will be provided with noise dampeners and acoustic enclosures. All hot surfaces will be insulated to conserve heat and reduce radiation.
6.2	From industrial or similar processes	Yes	It will be controlled by good engineering practices.
6.3	From construction or demolition	Yes	Noise due to construction is confined to project site.
6.4	From blasting or piling	No	No blasting or piling activity is planned
6.5	From construction or operational traffic	Yes	Vehicular movements by the workers and movement of raw materials and finished products. There will be regulated movement of vehicles
6.6	From lighting or cooling systems	Yes	Cooling tower exhaust fans
6.7	From any other sources	No	NA

7. Risks of contamination of land or water from releases of pollutants into the ground or into sewers, surface waters, groundwater, coastal waters or the sea:

Sl No	Information/Checklist confirmation	Yes /No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
7.1	From handling, storage, use or spillage of hazardous materials	Yes	All hazardous materials will be stored in containers on impervious platform. Storage of finished product Ethanol/RS/ENA will be stored in MS tanks with the approval from the concerned authorities. It will have proper tank forms as per guidelines.
7.2	From discharge of sewage or other effluents to water or the land (expected mode and place of discharge)	Yes	The plant will have facilities to operate on ZLD concept for distillery plant as explained in Sl. No. 1.15. sugar treated effluent will be utilized for irrigation.



7.3	By deposition of pollutants emitted to air into the land or into water	yes	Emissions from boilers are controlled by APC equipment viz., ESP and chimneys of required height as stipulated by PCB. The emission norms as prescribed by KSPCB will be met. The emission is basically from bio fuel burning. Hence, no adverse impact on land and water is anticipated.
7.4	From any other sources	Yes	Yeast sludge will be composted.
7.5	Is there a risk of long-term buildup of pollutants in the environment from these sources?	No	Nil

8. Risk of accidents during construction or operation of the Project, which could affect human health or the environment

Sl. No	Information/Checklist confirmation	Yes /No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
8.1	From explosions, spillages, fires etc., from storage, handling, use or production of hazardous substances	Yes	Risk of accident due to storage of finished product
8.2	From any other causes	No	Not applicable
8.3	Could the project be affected by natural disasters causing environmental damage (e.g. Floods, earthquakes, landslides, cloudburst etc.,)?	No	Project is in the seismic zone II. So far it is not affected by earth quake.

9. Factors which should be considered (such as consequential development) which could lead to environmental effects or the potential for cumulative impacts with other existing or planned activities in the locality.

Sl. No	Information/Checklist confirmation	Yes /No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
--------	------------------------------------	---------	--



[Handwritten signature]

9.1	Lead to development of supporting utilities, ancillary development or development stimulated by the project which could have impact on the environment e.g.: Supporting infrastructure (roads, power supply, waste or wastewater treatment, etc.), housing development, extractive industries, supply industries and others.	Yes	The project involves expansion and establishment of new unit proposal hence additional developmental activities stimulated by the proposed activity are expected. Along with the existing infrastructures, erection of new equipment and construction of new unit is necessary to support the development. There will be marginal consequential development which is not likely to lead to any significant environmental effect. There will be some positive consequential development with respect to socio-economic status.
9.2	Lead to after-use of the site, which could have an impact on the environment	No	Existing land converted for industrial purpose will be used for expansion. The development of the industry is the permanent one.
9.3	Set a precedent for later developments	Yes	Net positive impact of the surrounding area is expected.
9.4	Have cumulative effects due to proximity to other existing or planned projects with similar effects	No	No other projects in the vicinity are on the anvil

Environmental Sensitivity:

Sl. No	Areas	Name/ Identity	Aerial distance (within 15 km.) Proposed project location boundary
1	Areas protected under international conventions, national or local legislation for their ecological, landscape, cultural or other related value	No	-
2	Areas which are important or sensitive for ecological reasons - Wetlands, watercourses other water bodies, coastal zone,	Yes	Reserve forests are in the West, south and east directions of the project site. The nearest reserved forest/



	biospheres, mountains, and forests.		dense mixed jungle and with scrub vegetation is 200m from the plant boundary towards west
3	Areas used by protected, important or sensitive species of flora or fauna for breeding, nesting, foraging, resting, overwintering, migration	No	Nil
4	Inland, coastal, marine or underground waters	No	Nil
5	State, National boundaries	No	Nil
6	Routes or facilities used by the public for access to recreation or other tourist, pilgrim areas	No	Nil
7	Defense installations	No	Nil
8	Densely populated or built-up area	Yes	Gokak - 7.3 km towards North
9	Areas occupied by sensitive man-made land uses (hospitals, schools, places of worship, community facilities)	Yes	Hospitals and schools are located in nearby Villages and Gokak - 7.3 km towards North
10	Areas containing important, high quality or scarce resources (ground water resources, surface resources, forestry, agriculture, fisheries, tourism, minerals)	No	NA
11	Areas already subjected to pollution or environmental damage (Those where existing legal environmental standards are exceeded).	No	NA
12	Areas susceptible to natural hazard which could cause the project to present environmental problem (earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions)	No	NA



"I hereby give undertaking that the data and information given in the application and enclosures are true to the best of my knowledge and belief and I am aware that if any part of the data and information submitted is found to be false or misleading at any stage, the Project will be rejected and clearance given, if any to the project will be revoked at our risk and cost".

Date:28.02.2022

Place: Kolavi



For Gokak Sugars Ltd.,



PROPOSED TERMS OF REFERENCE

5(g) and 5(j): STANDARD TERMS OF REFERENCE FOR CONDUCTING ENVIRONMENT IMPACT ASSESSMENT STUDY FOR DISTILLERIES AND SUGAR INDUSTRY AND INFORMATION TO BE INCLUDED IN EIA/EMP REPORT

A) STANDARD TERMS OF REFERENCE

- 1) Executive Summary
- 2) Introduction
 - i. Details of the EIA Consultant including NABET accreditation
 - ii. Information about the project proponent
 - iii. Importance and benefits of the project
- 3) Project Description
 - i. Cost of project and time of completion
 - ii. Products with capacities for the proposed project.
 - iii. If expansion project, details of existing products with capacities and whether adequate land is available for expansion, reference of earlier EC if any.
 - iv. List of raw materials required and their source along with mode of transportation.
 - v. Other chemicals and materials required with quantities and storage capacities
 - vi. Details of Emission, effluents, hazardous waste generation and their management.
 - vii. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract)
 - viii. Process description along with major equipments and machineries, process flow sheet (quantative) from raw material to products to be provided
 - ix. Hazard identification and details of proposed safety systems.
 - x. Expansion/modernization proposals:
 - a) Copy of all the Environmental Clearance(s) including Amendments thereto obtained for the project from MOEF/SEIAA shall be attached as an Annexure. A certified copy of the latest Monitoring Report of the Regional Office of the Ministry of Environment and Forests as per circular dated 30th May, 2012 on the status of compliance of conditions stipulated in all the existing environmental clearances including Amendments shall be provided. In addition, status of compliance of Consent to Operate for the ongoing existing operation of the project from SPCB shall be attached with the EIA-EMP report.
 - b) In case the existing project has not obtained environmental clearance, reasons for not taking EC under the provisions of the EIA Notification 1994 and/or EIA Notification 2006 shall be provided. Copies of Consent to Establish/No Objection Certificate and Consent to Operate (in case of

units operating prior to EIA Notification 2006, CTE and CTO of FY 2005-2006) obtained from the SPCB shall be submitted. Further, compliance report to the conditions of consents from the SPCB shall be submitted.

4) Site Details

- i. Location of the project site covering village, Taluka/Tehsil, District and State, Justification for selecting the site, whether other sites were considered.
- ii. A toposheet of the study area of radius of 10km and site location on 1:50,000/1:25,000 scale on an A3/A2 sheet. (including all eco-sensitive areas and environmentally sensitive places)
- iii. Details w.r.t. option analysis for selection of site iv. Co-ordinates (lat-long) of all four corners of the site.
- iv. Google map-Earth downloaded of the project site.
- v. Google map-Earth downloaded of the project site.
- vi. Layout maps indicating existing unit as well as proposed unit indicating storage area, plant area, greenbelt area, utilities etc. If located within an Industrial area/Estate/Complex, layout of Industrial Area indicating location of unit within the Industrial area/Estate.
- vii. Photographs of the proposed and existing (if applicable) plant site. If existing, show photographs of plantation/greenbelt, in particular.
- viii. Land use break-up of total land of the project site (identified and acquired), government/ private - agricultural, forest, wasteland, water bodies, settlements, etc shall be included. (Not required for industrial area)
- ix. A list of major industries with name and type within study area (10km radius) shall be incorporated. Land use details of the study area.
- x. Geological features and Geo-hydrological status of the study area shall be included.
- xi. Details of Drainage of the project upto 5km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided. (mega green field projects).
- xii. Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.
- xiii. R&R details in respect of land in line with state Government policy

5) Forest and wildlife related issues (if applicable):

- i. Permission and approval for the use of forest land (forestry clearance), if any, and recommendations of the State Forest Department. (if applicable)

- ii. Landuse map based on High resolution satellite imagery (GPS) of the proposed site delineating the forestland (in case of projects involving forest land more than 40 ha)
- iii. Status of Application submitted for obtaining the stage I forestry clearance along with latest status shall be submitted.
- iv. The projects to be located within 10 km of the National Parks, Sanctuaries, Biosphere Reserves, Migratory Corridors of Wild Animals, the project proponent shall submit the map duly authenticated by Chief Wildlife Warden showing these features vis-à-vis the project location and the recommendations or comments of the Chief Wildlife Warden thereon.
- v. Wildlife Conservation Plan duly authenticated by the Chief Wildlife Warden of the State Government for conservation of Schedule I fauna, if any exists in the study area.
- vi. Copy of application submitted for clearance under the Wildlife (Protection) Act, 1972, to the Standing Committee of the National Board for Wildlife

6) Environmental Status

- i. Determination of atmospheric inversion level at the project site and site-specific micro meteorological data using temperature, relative humidity, hourly wind speed and direction and rainfall.
- ii. AAQ data (except monsoon) at 8 locations for PM10, PM2.5, SO2, NOX, CO and other parameters relevant to the project shall be collected. The monitoring stations shall be based CPCB guidelines and take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests.
- iii. Raw data of all AAQ measurement for 12 weeks of all stations as per frequency given in the NAQQM Notification of Nov. 2009 along with - min., max., average and 98% values for each of the AAQ parameters from data of all AAQ stations should be provided as an annexure to the EIA Report.
- iv. Surface water quality of nearby River (100m upstream and downstream of discharge point) and other surface drains at eight locations as per CPCB/MoEF & CC guidelines.
- v. Whether the site falls near to polluted stretch of river identified by the CPCB/MoEF & CC, if yes give details.
- vi. Ground water monitoring at minimum at 8 locations shall be included.
- vii. Noise levels monitoring at 8 locations within the study area.
- viii. Soil Characteristic as per CPCB guidelines.
- ix. Traffic study of the area, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc.
- x. Detailed description of flora and fauna (terrestrial and aquatic) existing in the study area shall be given with special reference to rare, endemic

and endangered species. If Schedule-I fauna are found within the study area, a Wildlife Conservation Plan shall be prepared and furnished.

- xi. Socio-economic status of the study area

7) Impact and Environment Management Plan

- i. Assessment of ground level concentration of pollutants from the stack emission based on site specific meteorological features. In case the project is located on a hilly terrain, the AQIP Modelling shall be done using inputs of the specific terrain characteristics for determining the potential impacts of the project on the AAQ. Cumulative impact of all sources of emissions (including transportation) on the AAQ of the area shall be assessed. Details of the model used and the input data used for modelling shall also be provided. The air quality contours shall be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any.
- ii. Water Quality modelling - in case of discharge in water body.
- iii. Impact of the transport of the raw materials and end products on the surrounding environment shall be assessed and provided. In this regard, options for transport of raw materials and finished products and wastes (large quantities) by rail or rail-cum road transport or conveyor cum-rail transport shall be examined.
- iv. A note on treatment of wastewater from different plant operations, extent recycled and reused for different purposes shall be included. Complete scheme of effluent treatment. Characteristics of untreated and treated effluent to meet the prescribed standards of discharge under E(P) Rules.
- v. Details of stack emission and action plan for control of emissions to meet standards.
- vi. Measures for fugitive emission control.
- vii. Details of hazardous waste generation and their storage, utilization and management. Copies of MOU regarding utilization of solid and hazardous waste in cement plant shall also be included. EMP shall include the concept of waste-minimization, recycle/reuse/recover techniques, Energy conservation, and natural resource conservation.
- viii. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 2009. A detailed plan of action shall be provided.
- ix. Action plan for the green belt development plan in 33 % area i.e. land with not less than 1,500 trees per ha. Giving details of species, width of plantation, planning schedule etc. shall be included. The green belt shall be around the project boundary and a scheme for greening of the roads used for the project shall also be incorporated.
- x. Action plan for rainwater harvesting measures at plant site shall be submitted to harvest rainwater from the roof tops and storm water drains to recharge the ground water and also to use for the various activities at the project site to conserve fresh water and reduce the water requirement from other sources.

- xi. Total capital cost and recurring cost/annum for environmental pollution control measures shall be included.
- xii. Action plan for post-project environmental monitoring shall be submitted.
- xiii. Onsite and Offsite Disaster (natural and Man-made) Preparedness and Emergency Management Plan including Risk Assessment and damage control. Disaster management plan should be linked with District Disaster Management Plan.

8) Occupational health

- i. Plan and fund allocation to ensure the occupational health & safety of all contract and casual workers.
- ii. Details of exposure specific health status evaluation of worker. If the workers' health is being evaluated by pre designed format, chest x rays, Audiometry, Spirometry, Vision testing (Far & Near vision, colour vision and any other ocular defect) ECG, during pre-placement and periodical examinations give the details of the same. Details regarding last month analysed data of above-mentioned parameters as per age, sex, duration of exposure and department wise.
- iii. Details of existing Occupational & Safety Hazards. What are the exposure levels of hazards and whether they are within Permissible Exposure level (PEL). If these are not within PEL, what measures the company has adopted to keep them within PEL so that health of the workers can be preserved.
- iv. Annual report of health status of workers with special reference to Occupational Health and Safety.

9) Corporate Environment Policy

- i. Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
- ii. Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA.
- iii. What is the hierarchical system or administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions? Details of this system may be given.
- iv. Does the company have system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism shall be detailed in the EIA report.

- 10) Details regarding infrastructure facilities such as sanitation, fuel, restroom etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase.

11) Enterprise Social Commitment (ESC)

- i. Adequate funds (at least 2.5 % of the project cost) shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details along with timebound action plan shall be included. Socio-economic development activities need to be elaborated upon.

12) Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case.

13) A tabular chart with index for points wise compliance of above TO

B) SPECIFIC TERMS OF REFERENCE FOR EIA STUDIES FOR DISTILLERIES

1. List of existing distillery units in the study area along with their capacity and sourcing of raw material.
2. Number of working days of the distillery unit.
3. Details of raw materials such as molasses/grains, their source with availability.
4. Details of the use of steam from the boiler.
5. Surface and Ground water quality around proposed spent wash storage lagoon, and compost yard.
6. Plan to reduce spent wash generation within 6-8 KL/KL of alcohol produced.
7. Proposed effluent treatment system for molasses/grain based distillery (spent wash, spent lees, condensate and utilities) as well as domestic sewage and scheme for achieving zero effluent discharge (ZLD).
8. Proposed action to restrict fresh water consumption within 10 KL/KL of alcohol production.
9. Details about capacity of spent wash holding tank, material used, design consideration. No. of piezometers to be proposed around spent wash holding tank.
10. Action plan to control ground water pollution.
11. Details of solid waste management including management of boiler ash, yeast, etc. Details of incinerated spent wash ash generation and its disposal.
12. Details of bio-composting yard (if applicable).
13. Action plan to control odour pollution.

14. Arrangements for installation of continuous online monitoring system (24x7 monitoring device)

C) SPECIFIC TERMS OF REFERENCE FOR EIA STUDIES FOR SUGAR INDUSTRY

1. Complete process flow diagram describing each unit, its processes and operations in production of sugar, along with material and energy inputs and outputs (material and energy balance).
2. Details on water balance including quantity of effluent generated, recycled & reused. Efforts to minimize effluent discharge and to maintain quality of receiving water body.
3. Details of effluent treatment plant, inlet and treated water quality with specific efficiency of each treatment unit in reduction in respect to fall concerned / regulated environmental parameters.
4. Number of working days of the sugar production unit.
5. Details of the use of steam from the boiler.
6. Details of proposed source-specific pollution control schemes and equipment to meet the national standards.
7. Collection, storage, handling and transportation of molasses.
8. Collection, storage and handling of bagasse and press mud.
9. Fly ash management plan for coal based and bagasse and action plan.
10. Details on water quality parameters such as Temperature, Colour, pH, BOD, COD, Total Kjeldhal Nitrogen, Phosphates, Oil & Grease, Total Suspended Solids, Total Coli form bacteria etc.
11. Details on existing ambient air quality and expected, stack and fugitive emissions for PM10, PM2.5, SO₂*, NO_x*, etc., and evaluation of the adequacy of the proposed pollution control devices to meet standards for point sources and to meet AAQ standards. (*-As applicable)



Quality Council of India



National Accreditation Board for Education & Training

Certificate of Accreditation

Samrakshan

Swastik Manandi Arcade, F-4, 1st Floor, S.C. Road, Sheshadripuram, Bangalore - 560 020

The organization is accredited as **Category-A** under the QCI-NABET Scheme for Accreditation of EIA Consultant Organization, Version 3: for preparing EIA-EMP reports in the following Sectors –

Sl.No	Sector Description	Sector (as per)		Cat.
		NABET	MoEFCC	
1	Thermal power plants	4	1 (d)	A
2	Synthetic organic chemicals industry (dyes & dye intermediates; bulk drugs and intermediates excluding drug formulations; synthetic rubbers; basic organic chemicals, other synthetic organic chemicals and chemical intermediates)	21	5 (f)	A
3	Distilleries	22	5 (g)	A
4	Sugar Industry	25	5 (j)	B
5	Common hazardous waste treatment, storage and disposal facilities (TSDFs)	32	7 (d)	A
6	Bio-medical waste treatment facilities	32A	7 (da)	B
7	Common effluent treatment plants (CETPs)	36	7 (h)	B
8	Building and construction projects	38	8 (a)	B
9	Townships and Area development projects	39	8 (b)	B

Note: Names of approved EIA Coordinators and Functional Area Experts are mentioned in SA AC minutes dated July 02, 2021 posted on QCI-NABET website.

The Accreditation shall remain in force subject to continued compliance to the terms and conditions mentioned in QCI-NABET's letter of accreditation bearing no. QCI/NABET/ENV/ACO/21/1973 dated September 20, 2021. The accreditation needs to be renewed before the expiry date by Samrakshan, Bangalore following due process of assessment.

Sr. Director, NABET
Dated: September 20, 2021

Certificate No.
NABET/EIA/1922/SA 0138

Valid up to
25.07.2022

For the updated List of Accredited EIA Consultant Organizations with approved Sectors please refer to QCI-NABET website.



Pre – Feasibility Report

For

Proposed Expansion of Sugarcane crushing capacity from 4,500 TCD to 10,000 TCD, Co-gen power plant from 14 MW to 36.5 MW and to establish a distillery of 150 KLPD unit to produce Ethanol using multi feedstock and captive power plant 8.5 MW

By

**M/s. Gokak Sugars Limited
Kolavi Village, Gokak Taluk,
Belgaum**

Prepared by



SAMRAKSHAN

Accreditation No. NABET/EIA/1922/IA0051

F- 4, 1st Floor, Swastik Manandi Arcade

SC Road, Sheshadripuram

Bangalore - 560 020

CONTENT SHEET

Sl. No	Particulars	Pg Nos
	CHAPTER 1 - EXECUTIVE SUMMARY	01 - 04
	CHAPTER 2 - INTRODUCTION OF THE PROJECT AND BACKGROUND INFORMATION	05 - 08
2.1	Identification of the project	05
2.2	Project proponent	05
2.3	Brief description of nature of the project	05
2.4	Need for the project and its importance to the country or region	06
2.5	Demand-supply gap	07
2.6	Imports vs. indigenous production	07
2.7	Export possibility	07
2.8	Domestic/Export markets	07
2.9	Employment generation (Direct and indirect)	07
	CHAPTER 3 - PROJECT DESCRIPTION	09 - 32
3.1	Type of project including interlinked and interdependent projects, if any,	09
3.2	Location of the project (Map showing general location, specific location, project boundary and project site layout with co-ordinates)	09
3.3	Map showing general location, specific location, project boundary	10
3.4	Project site layout with coordinates	11
3.5	Topo map	14
3.6	Details of alternative sites considered	15
3.7	Magnitude of operation	15
3.8	Process description	15
3.8.1	Sugar manufacturing	15
3.8.2	Process description	19
3.8.3	Process description for ethanol production using grain as raw material	20
3.8.4	Manufacturing process for anhydrous (Fuel-Ethanol) alcohol	23
3.9	Raw material & fuel requirement	23
3.9.1	Raw material requirement for sugar process	23
3.9.2	The raw materials required for distillery process, source of procurement and transportation mode	23
3.9.3	Requirement of fuel, its source and mode of transportation	24
3.10	Resource optimization/recycling envisaged in the project	24
3.11	Availability of water its source, energy/power requirement and source	25
3.12	Energy requirement	29

3.13	Quantity of wastes to be generated (liquid and solid) and scheme for management/disposal	30
3.13.1	Sugar & co-gen plant	30
3.13.2	Distillery plant	30
3.13.3	Domestic sewage	30
3.13.4	Solid waste generation and management from sugar & distillery	30
3.13.5	Hazardous waste generation and management from sugar & distillery	31
3.14	Air environment and management	31
3.15	Schematic representation of the feasibility drawing which give information of EIA purpose	32
	CHAPTER 4 - SITE ANALYSIS	33 - 35
4.1	Connectivity	33
4.2	Land form, land use and land ownership	34
4.3	Topography, existing land use pattern	34
4.4	Existing infrastructure	34
4.5	Soil classification	34
4.6	Climatic data from secondary sources	35
4.7	Social infrastructure available	35
	CHAPTER 5 - PLANNING BRIEF	36 - 37
5.1	Planning concept (Types of industries, facilities, transportation etc. town & country planning/ development authority classification)	36
5.2	Population projection	36
5.3	Land use planning (Breakup along with green belt etc)	36
5.4	Assessment of infrastructure demand (physical & Social)	36
5.5	Amenities/facilities	36
	CHAPTER 6 - PROPOSED INFRASTRUCTURE	38 - 39
6.1	Industrial area (processing area)	38
6.2	Residential area (Non-processing area)	38
6.3	Green belt	38
6.4	Social infrastructure	38
6.5	Connectivity (traffic and transportation/road/rail/metro/water ways etc.,)	39
6.6	Drinking water management (source and supply of water)	39
6.7	Sewage management	39
6.8	Industrial waste	39
6.9	Solid waste management	39
6.10	Power requirement & supply/source	39
	CHAPTER 7 - REHABILITATION & RESETTLEMENT PLAN (R&R)	40

7.1	Policy to adopted (central/state) in respect of the project affected person including home oustees, land oustees and landless labour (a brief outline to be given)	40
	CHAPTER 8 - PROJECT SCHEDULE & COST ESTIMATES	41
8.1	Likely date to start of construction and likely date of completion (Time schedule for the project to be given)	41
8.2	Estimated project cost along with analysis on terms of economic viability of the project	41
	CHAPTER 9 - ANALYSIS OF PROPOSAL (FINAL RECOMMENDATIONS)	42
9.1	Financial and social benefits with special emphases on the benefit to the local people including tribal population, if any, in the area	42

LIST OF TABLES

Sl. No	Particulars	Pg Nos
1.1	Existing consents with capacities	01
1.2	Salient features of the plant	02
2.1	List of directors	05
2.2	Area statement	06
2.3	Details of existing and after expansion scenario of distillery	06
2.4	Manpower requirements	08
3.1	Location of the project	09
3.2	Co-ordinates of the project site	11
3.3	The details of the raw material for the sugar plant	23
3.4	Raw material details for distillery	23
3.5	Types of fuel & mode of transportation	24
3.6	Fresh water sugar plant	25
3.7	Fresh water use for the 150 KLD distillery unit process	26
3.8	Effluent treatment method in distillery plant	30
3.9	Solid waste quantity generation and management from sugar & distillery	30
3.10	Hazardous waste quantity generation and management from sugar & distillery	31
3.11	Sources of air pollution and air pollution control measure	31
4.1	Transport facilities to project site	33
4.2	Land use pattern of the sugar, co-generation and distillery complex	34
4.3	Meteorological data of Belgaum for the year 2021	35
8.1	Cost of the project	41

LIST OF FIGURES

Sl. No	Particulars	Pg Nos
3.1	Plant layout on the google map	10
3.2	Layout of the plant	13
3.3	Topo map of the plant 10 km radius	14
3.4	Sugar manufacturing process	17
3.5	Material Balance of 10000 TCD sugarcane crushing capacity	18
3.6	Process flow chart for molasses based distillery	20
3.7	Process flow chart of grain-based distillery plan	22
3.8	Material/water balance for 225 KLPD Ethanol using sugarcane juice/syrup as feed stock	26
3.9	Material/water balance for 225 KLPD Ethanol using B Heavy Molasses as feed stock	27
3.10	Material/water balance for 150 KLPD Ethanol using C Heavy Molasses as feed stock	28
3.11	Material/water balance for 150 KLPD Ethanol using Grain as feed stock	29

LIST OF ANNEXURES

Annexure No.	Particulars
1	Existing EC and consents
2	Site layout plan and location map
3	Topo map
4	Water withdrawal permission

CHAPTER 1

EXECUTIVE SUMMARY

M/s. Gokak Sugars Limited, is located at Survey Nos. 238 and 263 of Kolavi Village, Gokak Taluk, Belgaum District, Karnataka. The total land area is 74 Hectares (182.86 Acres or 7,40,000 sq. meters). The plant was established in the year 2008.

At present the sugar plant is operating with crushing capacity of 4500 TCD and co-generation power plant of capacity 14 MW.

Since the capacity of the sugar plant is less than 5000 TCD and co-gen plant is 14 MW it is exempted from seeking Environment Clearance under the EIA Notification 2006. However, the plant has approached the Department of Ecology and Environment, Government of Karnataka for grant of Environment Clearance the same was granted. The details of the EC and CTO/CFO are in chapter 1.1

Table 1.1 Existing consents with capacities

Sl. No	Environment Clearance	Number and date of issue	Capacity
1	Environment Clearance issued by Department of Ecology and Environment, GOK	Letter No. FEE 20 ECO 2009 dated 21.01.2010	Sugarcane crushing capacity 2,500 TCD with 14 MW co-gen plant.
2	Consent To Establishment	CFE-CELL/TGSL/EIA-140/2003-2004/84 dated 23.02.2004	
4	Consent to Expansion	Consent No. PCB/143/HPI/2010/1621	Expansion of sugar crushing capacity from 2500 to 4500 TCD
5	Consent for Operation	Consent No. AW-301132 dated 04.10.2016	Sugarcane crushing capacity 4,500 TCD with 14 MW co-gen plant.
6		Consent No. AW-326544 dated 02.09.2021 valid up to 30.6.2026	

Now, it is proposed to increase the sugarcane crushing capacity from 4,500 TCD to 10,000 TCD, co-generation power plant capacity from 14 MW to 36.5 MW and to establish a new distillery unit of capacity 150 KLPD plant and captive power plant of 8.5 MW to produce;

- 225 KLPD Ethanol using sugarcane juice/ syrup
- Or
- 225 KLPD Ethanol using B-heavy molasses

M/s. GOKAK SUGARS LTD.,

Or

- 150 KLPD Ethanol using C-heavy molasses.
- or
- 150 KLPD using grain as raw material

The salient features of the project is in Table 1.2.

Table 1.2 Salient features of project

Sl. No	Particulars	Details			
1	Project Activity Schedule as per EIA notification 2006 & amendment	Schedule 5 (g), 5(j) and 1(d) – Sugar, Distilleries and cogeneration power plant			
2	Area of the plot	Total area 74 ha			
3	Cost of the project	Cost (In Rs. Crore)	Existing	Proposed	Total
		Sugar industry	140.25	250	390.25
		Co-generation			
		Distillery	-	210	210
4	Water source & requirement	<ul style="list-style-type: none"> ▪ The withdrawal of water is permitted from Minor Irrigation Tank, Hulikatti, through a canal located within the premises of project site. ▪ Quantity: Water drawl permission issued by Government of Karnataka to draw 883 KLD (11.38Mcf per year) for sugar industry. ▪ Total freshwater requirement after expansion for <ul style="list-style-type: none"> a) Sugar industry - 720 KLD b) Distillery - 697 KLD 			
5	Employees	Manpower Details	Existing	Proposed	
		Gokak Sugars Limited Sugar and distillery	194	400	
		Temporary (IPT)	244	300	
		GRPS Securities	31	40	
		Grand Total	469	740	

6	Waste water generation	<p>Sugar industry:</p> <ul style="list-style-type: none"> • Process effluent (mill, juice, boiling and lab washing) from sugar industry is treated in ETP and used on land for irrigation • Excess condensate is treated and reused in sugar process and co-gen cooling tower makeup. <p>Distillery</p> <ul style="list-style-type: none"> • Distillery Raw spent wash is concentrated in FFE and MEE and the concentrate raw spent wash is incinerated in incineration boiler of 45 TPH. • Condensate from FEE, MEE, spent lees and other utility effluents is treated in CPU of capacity 1500 KLD and treated water is reused in process dilution and cooling tower makeup. • The distillery plant will work on the principle of ZLD system. • Sewage effluent is sent to individual septic tank and soak pit. 																	
7	Air Pollution Sources and control equipment	<p>Existing boilers:</p> <p>Sugar and co-gen: 90 TPH ESP is provided along Chimney stack height is 70m, AGL</p> <p>Proposed:</p> <ul style="list-style-type: none"> • Sugar and co-gen: 110 TPH bagasse boiler ESP and chimney 70m AGL • Distillery: 45 TPH incineration boiler with ESP and chimney of 60m AGL <p>DG set:</p> <ul style="list-style-type: none"> • 750 kVA – 1 No. APC: Stack height of 9m ARL • 200 kVA – 1 No. APC: Stack height of 6m ARL 																	
8	Solid waste	<table border="1"> <thead> <tr> <th data-bbox="619 1417 703 1507">Sl. No.</th> <th data-bbox="703 1417 932 1507">Details of the Solid waste</th> <th data-bbox="932 1417 1401 1507">Utilization existing and after proposed expansion</th> </tr> </thead> <tbody> <tr> <td data-bbox="619 1507 703 1552">1</td> <td data-bbox="703 1507 932 1552">Bagasse</td> <td data-bbox="932 1507 1401 1552">Used as fuel in boiler</td> </tr> <tr> <td data-bbox="619 1552 703 1597">2</td> <td data-bbox="703 1552 932 1597">Pressmud</td> <td data-bbox="932 1552 1401 1597">Given to farmers for composting</td> </tr> <tr> <td data-bbox="619 1597 703 1641">3</td> <td data-bbox="703 1597 932 1641">ETP sludge</td> <td data-bbox="932 1597 1401 1686" rowspan="2">Used in manure preparation</td> </tr> <tr> <td data-bbox="619 1641 703 1686">4</td> <td data-bbox="703 1641 932 1686">Sludge (Yeast)</td> </tr> <tr> <td data-bbox="619 1686 703 1769">5</td> <td data-bbox="703 1686 932 1769">Boiler Ash</td> <td data-bbox="932 1686 1401 1769">Sold to brick manufacturers / used for manure preparation.</td> </tr> </tbody> </table>	Sl. No.	Details of the Solid waste	Utilization existing and after proposed expansion	1	Bagasse	Used as fuel in boiler	2	Pressmud	Given to farmers for composting	3	ETP sludge	Used in manure preparation	4	Sludge (Yeast)	5	Boiler Ash	Sold to brick manufacturers / used for manure preparation.
Sl. No.	Details of the Solid waste	Utilization existing and after proposed expansion																	
1	Bagasse	Used as fuel in boiler																	
2	Pressmud	Given to farmers for composting																	
3	ETP sludge	Used in manure preparation																	
4	Sludge (Yeast)																		
5	Boiler Ash	Sold to brick manufacturers / used for manure preparation.																	
9	Hazardous waste generation and mangement	<table border="1"> <thead> <tr> <th data-bbox="571 1794 831 1915" rowspan="2">Hazardous waste Generated</th> <th data-bbox="831 1794 1118 1839">Quantity</th> <th data-bbox="1118 1794 1422 1915" rowspan="2">Mode of disposal</th> </tr> <tr> <th data-bbox="831 1839 1118 1915">Existing</th> </tr> </thead> <tbody> <tr> <td data-bbox="571 1915 831 1924"></td> <td data-bbox="831 1915 1118 1924"></td> <td data-bbox="1118 1915 1422 1924"></td> </tr> </tbody> </table>	Hazardous waste Generated	Quantity	Mode of disposal	Existing													
Hazardous waste Generated	Quantity	Mode of disposal																	
	Existing																		

		<table border="1"> <tr> <td>Used oil</td> <td>0.115 KL/A</td> <td>Collected in secured manner and sent to reprocessors</td> </tr> <tr> <td>Waste residue containg oil</td> <td>0.369 MT/A</td> <td>Collected in secured manner and sent to reprocessors</td> </tr> <tr> <td>Empty Barrels</td> <td>0.1 MT/A</td> <td>Sent to recyclers</td> </tr> </table>	Used oil	0.115 KL/A	Collected in secured manner and sent to reprocessors	Waste residue containg oil	0.369 MT/A	Collected in secured manner and sent to reprocessors	Empty Barrels	0.1 MT/A	Sent to recyclers
Used oil	0.115 KL/A	Collected in secured manner and sent to reprocessors									
Waste residue containg oil	0.369 MT/A	Collected in secured manner and sent to reprocessors									
Empty Barrels	0.1 MT/A	Sent to recyclers									
10	Details Forest/reserve forests if any	Reserve forests are in the West, south and east directions of the project site. The nearest reserved forest/ dense mixed jungle and with scrub vegetation is 200m from the plant boundary towards west									
11	Nearest village and town	<ul style="list-style-type: none"> • Kolavi town is located 0.8 Km towards North East direction • Hulikatti village is located at 2.0 Km from East direction • Tavag village is located at 1.8 Km towards North West direction • Gili Hosur village is located at South direction • Makalgeri town is 4.9 Km towards South East direction • Gokak town is located at 7.3 Km towards North direction 									
12	Water bodies	<ul style="list-style-type: none"> • Hulikatti Lake is located at 2 Km towards South East direction • Tavag Lake is located at 3.4 Km towards South West direction • Shiltibhavi Lake is located at 6.6 KM towards South East direction • Lake located near Hanumapura village at 6.5 Km towards South East direction • Ghataprabha River is flowing at 10.5 Km towards North direction 									

CHAPTER 2

INTRODUCTION OF THE PROJECT AND BACKGROUND INFORMATION

2.1 Identification of the Project

M/s. Gokak Sugars Limited, is located at Kolavi village, Gokak Taluk, Belgaum District in Karnataka state. It is an integrated sugar and co-generation power plant. Now they propose to add a distillery for ethanol production.

2.2 Project Proponent

M/s Gokak Sugars Limited is a Public incorporated on 22 February 2000. It is classified as Non-govt company and is registered at Registrar of Companies, Bangalore. Its authorized share capital is Rs. 360,000,000 and its paid up capital is Rs. 351,745,408.

Gokak Sugars Limited's Corporate Identification Number is (CIN) U15429KA2000PLC026433 and its registration number is 26433. The Board of Directors is given in Table 2.1

Table 2.1 List of Directors

Sl. No.	Name of the director
1	Shripad Rajaram Nerlikar
2	Vijendra Singh,
3	Madhu Ramachandra Rao
4	Bharat Vallabhdas Mehta,

2.3 Brief Description of nature of the Project

The objective of the proposed project is expansion;

- Increase the sugarcane crushing capacity from 4,500 TCD to 10,000 TCD
- Co-generation power plant capacity from 14 MW to 36.5 MW
- To establish a new distillery unit of capacity 150 KLPD and captive power plant of 8.5 MW to produce ethanol in the following configuration;
 - ❖ 225 KLPD Ethanol using sugarcane juice/ syrup
Or
 - ❖ 225 KLPD Ethanol using B-heavy molasses
Or
 - ❖ 150 KLPD Ethanol using C-heavy molasses.
Or
 - ❖ 150 KLPD using grain as raw material

The expansion of sugarcane crushing capacity and proposed distillery unit will be within the existing sugar plant premises of 74 hectares. The details of the land utilization is in Table 2.2.

Table 2.2 Area Statement

Sl. No.	Purpose of land utilization	Area covered hectares	% of total land
1	Build up area of factory including sugar plant, power plant, switch yard, godown, store, workshop, WTP, cooling tower etc ETP, Cane yard, Bagasse, press mud and ash storage	15.00	20.27
2	Vacant land, Lawn & Road, Open space & Provision for expansion. Residential area,	28.82	38.95
3	Greenbelt belt and parking:	30.18	40.78
	Total land	74.00	100

Table 2.3 Details of existing and after expansion scenario of distillery

Sl. No.	Product	Feedstock	Existing capacity	Proposed plant capacity	Out put
Sugar plant Expansion					
1	Sugar cane crushing capacity in TCD	Sugarcane	4,500	5,500	10,000
2	Co-generation power plant in MW		14	22.5	36.5
Distillery unit					
3	Ethanol in KLPD	Sugarcane Syrup during sugar crushing season	-	150	225
		B-heavy molasses	-	150	225
		C-heavy molasses	-	150	150
		Grain		150	150

2.4 Need for the Project and Its Importance to the Country or Region

Sugar is a labour-intensive industry, up the entire value-chain from cane-growing to sugar and alcohol production. Across several states in the county, it is the main source of employment. It is source of livelihood farmers and their families and provides direct employment skilled and also to semi-skilled laborers in sugar mills and allied industries across the nation.

M/s. GOKAK SUGARS LTD.,

The various by-products of sugar industry also contribute to the economic growth and promote a number of allied industries. Sugarcane has emerged as a multi-product crop used as a basic raw material for the production of sugar, ethanol, paper, electricity and besides a cogeneration of ancillary product. Molasses from sugar cane is used for alcohol production and livestock feeding since it is highly nutritious.

In India, the vast majority of ethanol is produced from sugarcane molasses, a by-product of sugar. Ethanol blended fuel can help in reducing crude oil imports. The Government of India is encouraging the distilleries to produce more Ethanol to achieve the target and is planned to achieve 10% blending of ethanol with petrol by 2022 and 20 % by 2025.

Apart from this bagasse obtained from sugarcane crushing continues to be as a fuel. But it is also suitable raw material for paper industry. 30% of cellulose requirement comes from agricultural residues. However, since the mills are scattered all over the country, collection of surplus bagasse poses a problem and makes paper units uneconomical.

Gokak sugars aspires to be part of national program to meet the Ethanol production target. Hence the expansion of the sugar plant and setting up of distillery is planned with different feed stock from sugar plant available in the vicinity of the project.

2.5 Demand-supply gap

Currently petrol with 10% ethanol blend (E10) is being retailed by various Oil Marketing Companies (OMCs) in India, wherever it is available. However, as sufficient quantity of ethanol is not available, only around 50% of petrol sold is E10 blended, while remaining is unblended petrol (E0). The current level of average ethanol blending in the country was 5% during the supply Year 2019-20. Due to several interventions in the supply side of ethanol, the Ministry of Petroleum aims to achieve 10% ethanol blending levels in the Ethanol Supply Year (ESY) – 2021-22 i.e., April, 2022.

2.6 Imports Vs. Indigenous production

Ethanol produced will be for the use by oil companies in India.

2.7 Export Possibility

There is no proposal for export. Ethanol will not be exported.

2.8 Domestic/Export Markets

In the existing and proposed expansion, the ethanol is supply to Oil Marketing Company (OMC) for blending with petrol.

2.9 Employment Generation (Direct and Indirect) is in Table 2.4

Table 2.4 Manpower requirements

Manpower Details	Existing Manpower only for the sugar and cogen.			Proposed Manpower Sugar, cogen.and distillery		
	Permanent	Seasonal	Total	Permanent	Seasonal	Total
Sugars, Co-gen unit and distillery	135	59	194	250	150	400
Temporary (IPT)	60	184	244	75	225	300
GRPS Securities	31		31	40		40
Total	195	274	469	325	415	740

CHAPTER 3

PROJECT DESCRIPTION

3.1. Type of Project Including Interlinked and Interdependent Projects, If Any.

The byproducts and sugar syrup produced in the sugar plant of Gokak Sugars Limited is used in distillery for Ethanol production. Bagasse from sugarcane crushing and concentrated raw spent wash from distillery is used as fuel to fire the boilers. Press mud and ETP sludge are utilized in composting process.

3.2 Location of the Project (Map Showing General Location, Specific Location, Project Boundary and Project Site Layout with Coordinates)

Location of the project and other salient features are in Table 3.1.

Table 3.1 Location of the project

Sl. No.	Particulars	Information
1	Location	M/s. Gokak Sugars Limited, Survey Nos. 238 and 263, Kolavi Village, Gokak Taluk, Belgaum District, Karnataka.
2	Total land Area	74 Hectares
3	Nearest highway	SH – 1 (Gokak- Ankalgi Road)
4	Nearest Railway station	Gokak Railway Station - 29 km, North West
5	Nearest Airport	Belagavi Airport- 44 km, South West
6	Settlements	Kolavi Village – 2.3 km, North East Hulikatti Village – 4.0 km, North East
7	Water bodies	There is canal flowing within the project premises Gataprabha River- 15.5 km, North Malaprabha River – 18.3 km in North East
8	Ecological Sensitive Area	There are no ecological sensitive areas within 10 km radius
9	Nearest town	Ankalgi – 19.3 km, South West
10	District Head Quarters	Belgaum – 53 km, South West
11	Source of water supply	The withdrawal of water is permitted from minor irrigation tank, Hulikatti
12	Connectivity to project site	<ul style="list-style-type: none"> • Gokak to Belgaum Road is adjacent to factory compound towards North East direction • Pachhapur - Railway station is located at 16.3 Km towards West direction Belagavi Airport is located at 33 Km towards South West direction
13	Water body	<ul style="list-style-type: none"> • Hulikatti Lake is located at 2 Km towards South East direction

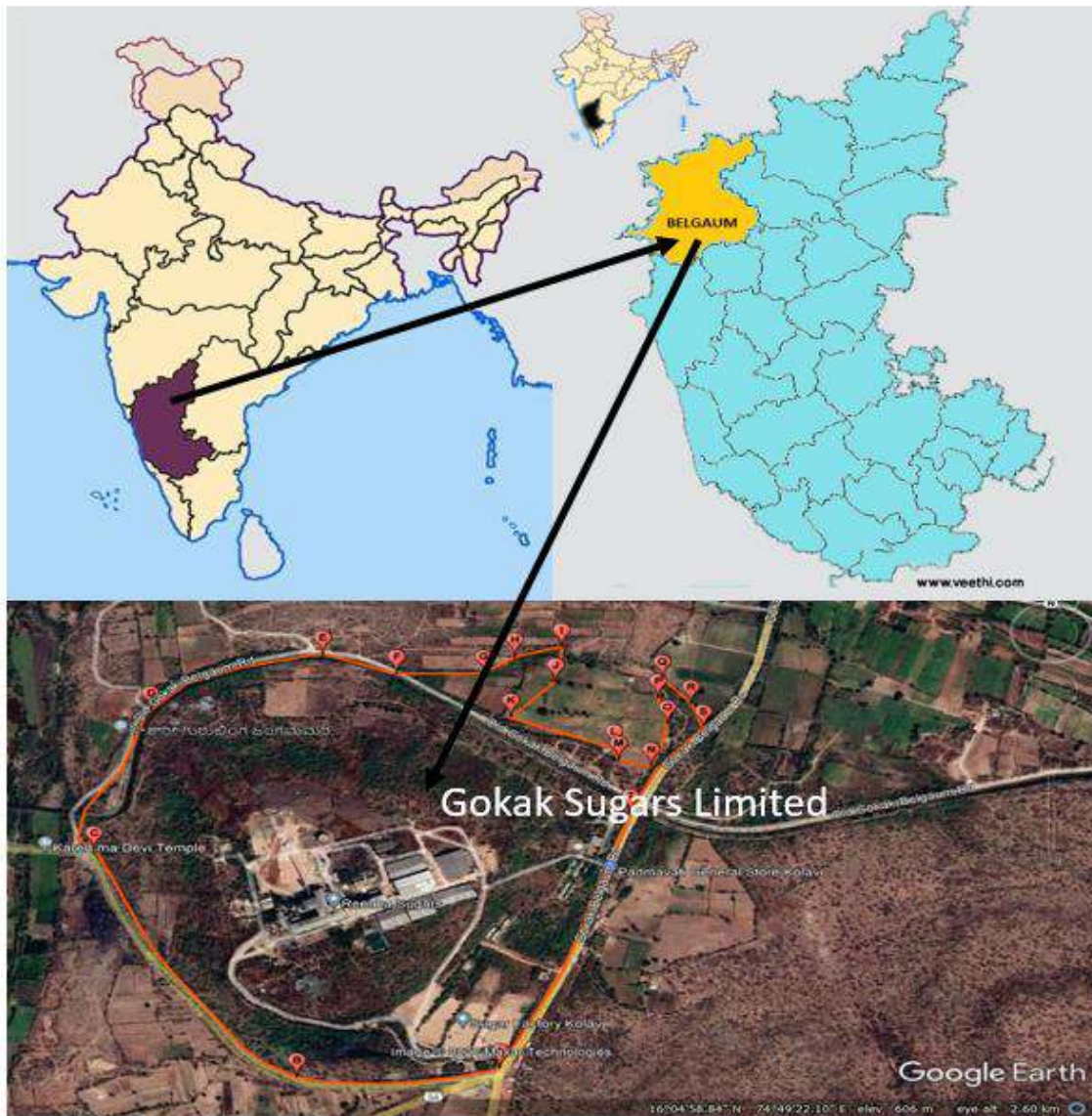
		<ul style="list-style-type: none"> • Tavag Lake is located at 3.4 Km towards South West direction • Shiltibhavi Lake is located at 6.6 KM towards South East direction • Lake located near Hanumapura village at 6.5 Km towards South East direction • Ghataprabha River is flowing at 10.5 Km towards North direction • Shirur Dam is located at 20 Km towards South West direction
14	Nearest Settlements	<ul style="list-style-type: none"> • Kolavi town is located 0.8 Km towards North East direction • Hulikatti village is located at 2.0 Km from East direction • Tavag village is located at 1.8 Km towards North West direction • Gili Hosur village is located at South direction • Makalgeri town is 4.9 Km towards South East direction • Gokak town is located at 7.3 Km towards North direction

3.3 Map Showing General Location, Specific Location, Project Boundary

Map showing the general location, specific location and project boundary is in Fig 3.1



Fig 3.1 Plant layout on the google map



3.4 Project Site Layout with Coordinates

The coordinates of the project are in Table 3,2:

Table 3.2 Co-ordinates of the project site

Description	Latitude	Longitude
A	16° 4'31.15"N	74°49'57.34"E
B	16° 4'30.38"N	74°49'44.34"E
C	16° 4'49.17"N	74°49'31.12"E
D	16° 5'0.80"N	74°49'34.82"E
E	16° 5'5.42"N	74°49'45.94"E
F	16° 5'3.82"N	74°49'50.70"E
G	16° 5'3.85"N	74°49'56.32"E
H	16° 5'5.28"N	74°49'58.34"E
I	16° 5'6.12"N	74°50'1.37"E

M/s. GOKAK SUGARS LTD.,

J	16° 5'3.18"N	74°50'0.98"E
K	16° 5'0.20"N	74°49'58.08"E
L	16° 4'57.63"N	74°50'4.74"E
M	16° 4'56.63"N	74°50'5.05"E
N	16° 4'56.11"N	74°50'7.14"E
O	16° 4'59.66"N	74°50'8.22"E
P	16° 5'1.86"N	74°50'7.61"E
Q	16° 5'3.49"N	74°50'7.91"E
R	16° 5'1.39"N	74°50'9.78"E
S	16° 4'59.31"N	74°50'10.56"E
T	16° 4'52.23"N	74°50'5.78"E

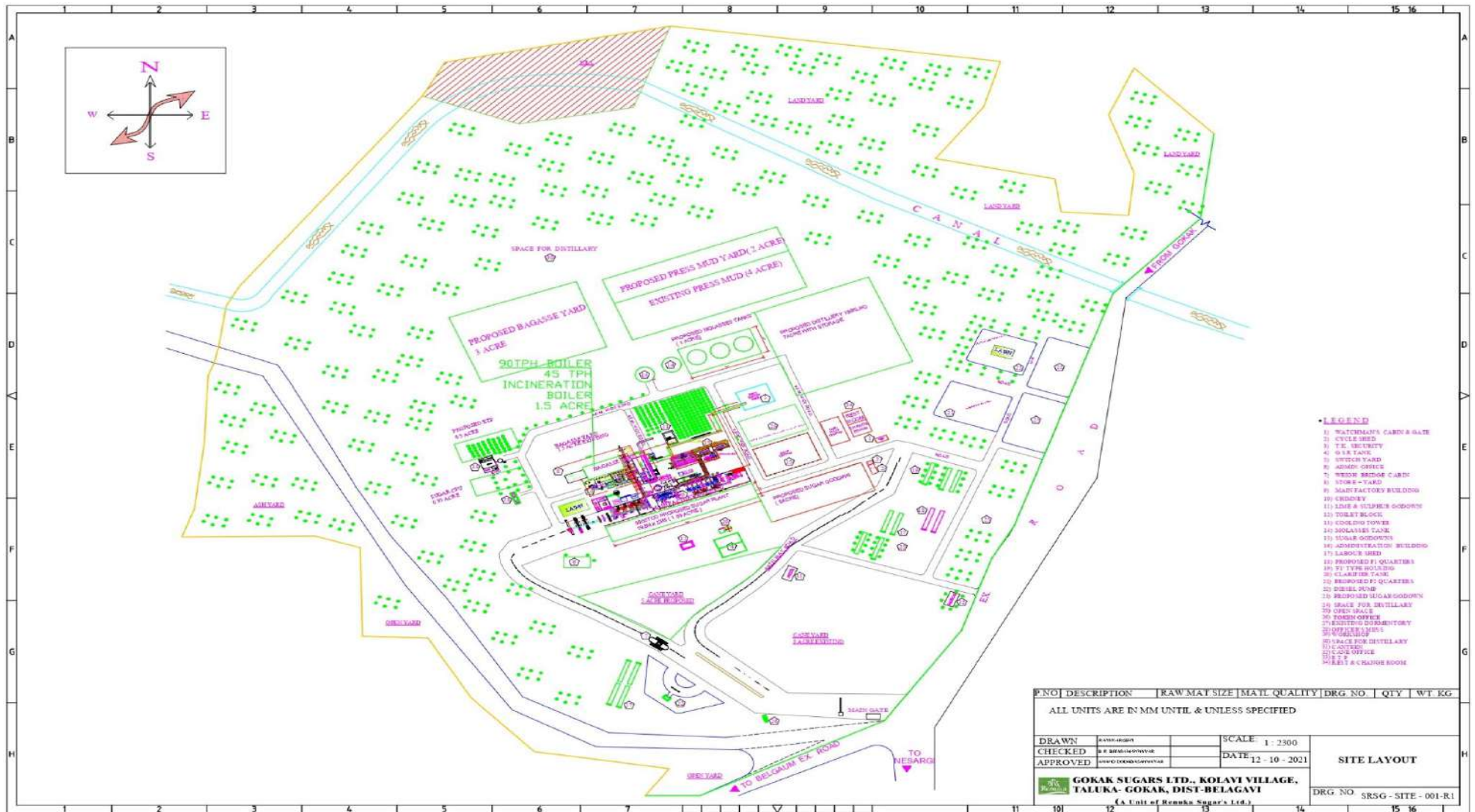


Figure 3.2 Layout of the plant

3.5 Topo map: Topo map of the plant is in Figure 3.3

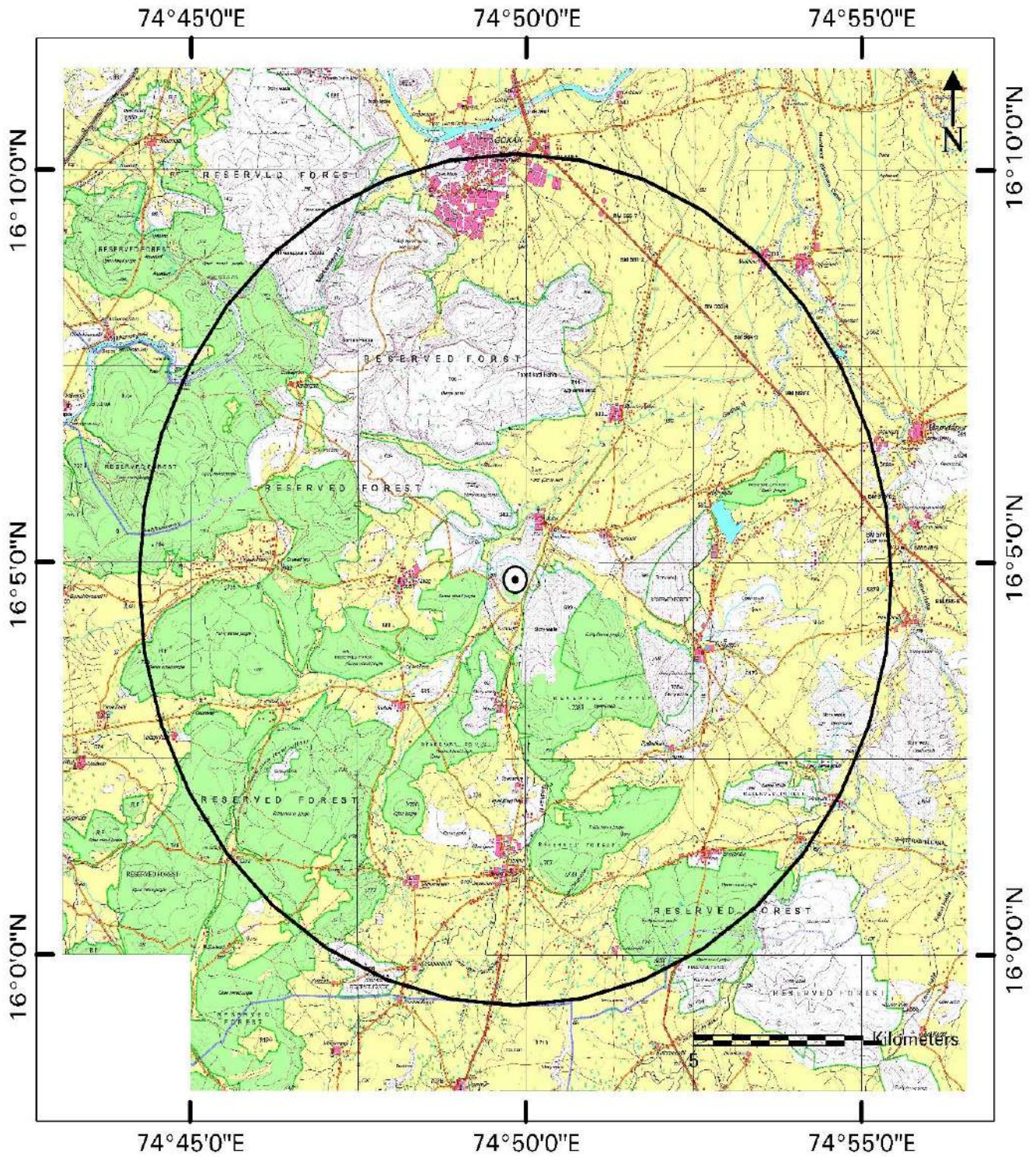


Figure 3.3: Topo map of the plant 10 km radius

Reserve forest is located in South-to-South West direction and East Direction from the project site.

3.6 DETAILS OF ALTERNATIVE SITES CONSIDERED

No alternate site is considered as the expansion of sugar factory and the new distillery is planned within the existing 74 hectares of land in an area earmarked for expansion.

3.7 MAGNITUDE OF OPERATION

Magnitude of existing and proposed operation is given in Table 2.2

3.8 Process Description

3.8.1 Sugar manufacturing:

Sugar cane is the main raw material. The details of the process in brief is as under;

- **WEIGHING:** Sugar Cane received at gate is verified for its status & weighed at weighing bridge and the details of former is noted. Weighed cane is sent for cane unloading at feeder table.
- **PREPARED CANE:** cane is dumped on cane feeding table with help of cane unloaders, cane prepared through Cane kicker, cane leveled and cane chopper and prepared cane feed in to mill.
- **MILL:** Prepared cane feed in to mill to extract juice for extracting more juice from the cane we are adding water of temperature 70-75 deg C these juice collecting in a tank called mixed juice tank and then it is pumped to boiling house for further processing.
- **BOILING HOUSE:** In boiling house mixed juice is heated in juice heater and maintains the temperature of 70-75 Deg C then this heated mixed juice taken in reaction tank.
- **REACTION TANK:** In juice reaction tank juice is treated by adding Milk of lime and maintain the pH 7
- **TREATED JUICE HEATER:** Treated juice again heated up to 101-103 Deg C then sent in to clarified
- **CLARIFIER:** In clarifier treated juice is separated in two parts i.e. clear juice and muddy juice
- **ROTARY VACUUM FILTER:** Muddy juice is taken in to RVF in RVF separating the press mud and clear filtrate juice, Press mud sent out and clear filtrate is taken into juice reaction tank to maintain the pH of the same.

M/s. GOKAK SUGARS LTD.,

- CLEAR JUICE HEATER: Clear juice taken in to heater and maintain the temperature at 108-110 Deg C and then sent in to evaporators
- EVAPORATOR: In evaporator clear juice is Concentrated at 55-60 Bx it is called syrup
- PAN SECTION: In pan section we are adopted 3 massecuite boiling system i.e. A massecuite, B Massecuite & C Massecuite.
- A MASSECUITE BOILING: In this boiling feeding material is Dry Seed + Melt + Syrup taken + A Light
- B MASSECUITE BOILING: in this boiling feeding material is A Heavy
- C MASSECUITE BOILING: In this boiling feeding material is B Heavy + C light
- CRYSTALLIZERS: A,B & C Massecuites are dropped in respective crystallizers and same is pumped in to centrifugal section for curing
- CENTRIFUGAL SECTION: We are having 02 types of centrifugal machines i.e. Batch type and Continuous type machines
- BATCH TYPE MACHINES: In batch type centrifugal machine A Massecuite curing is done during curing white Sugar, A heavy & A light molasses are separated these molasses used for further boiling and white sugar is sent for bagging after bagging it is sent to sugar godown.

The process flow chart is given in Figure 3.4

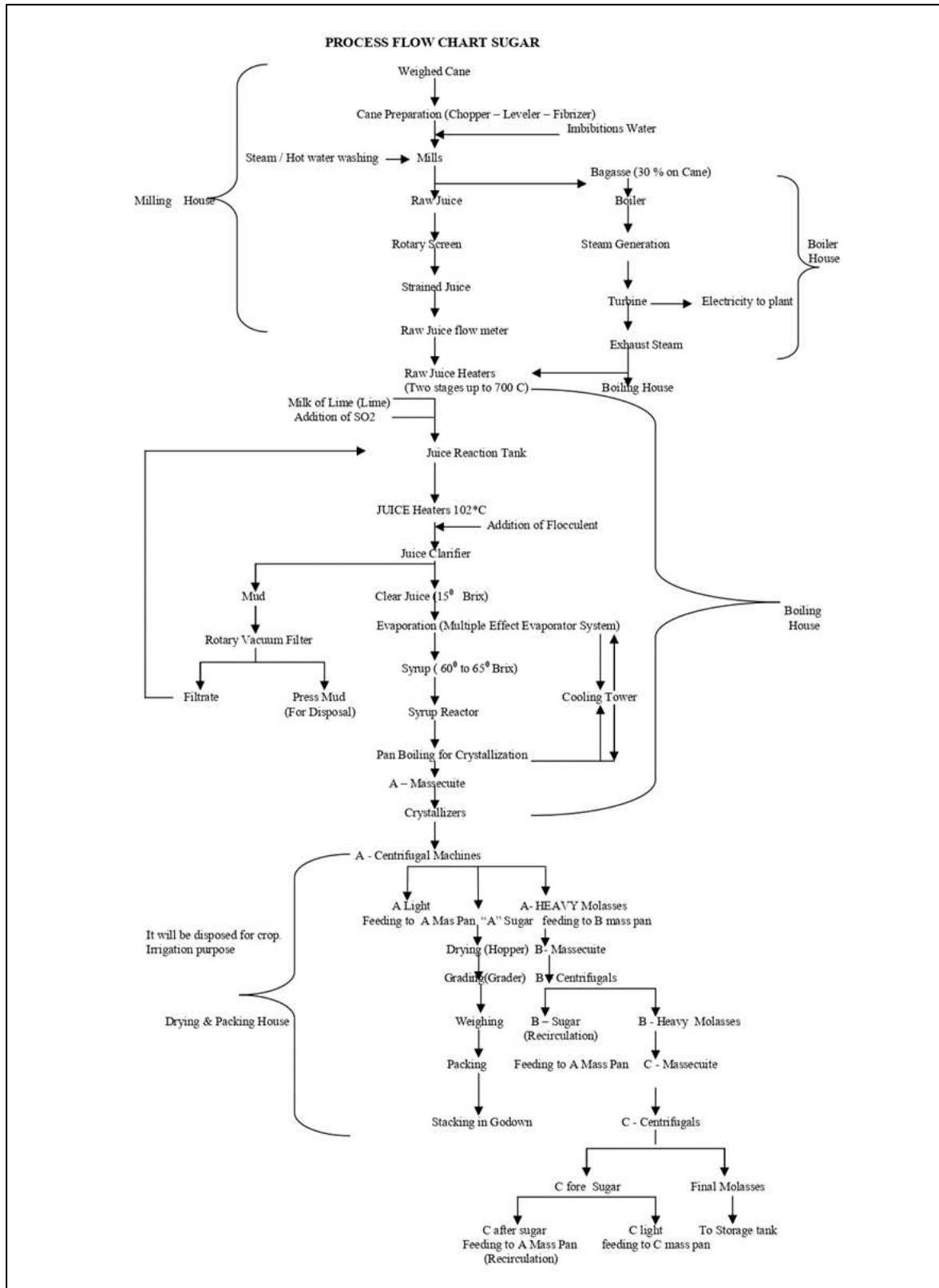


Figure 3.4 Sugar manufacturing process

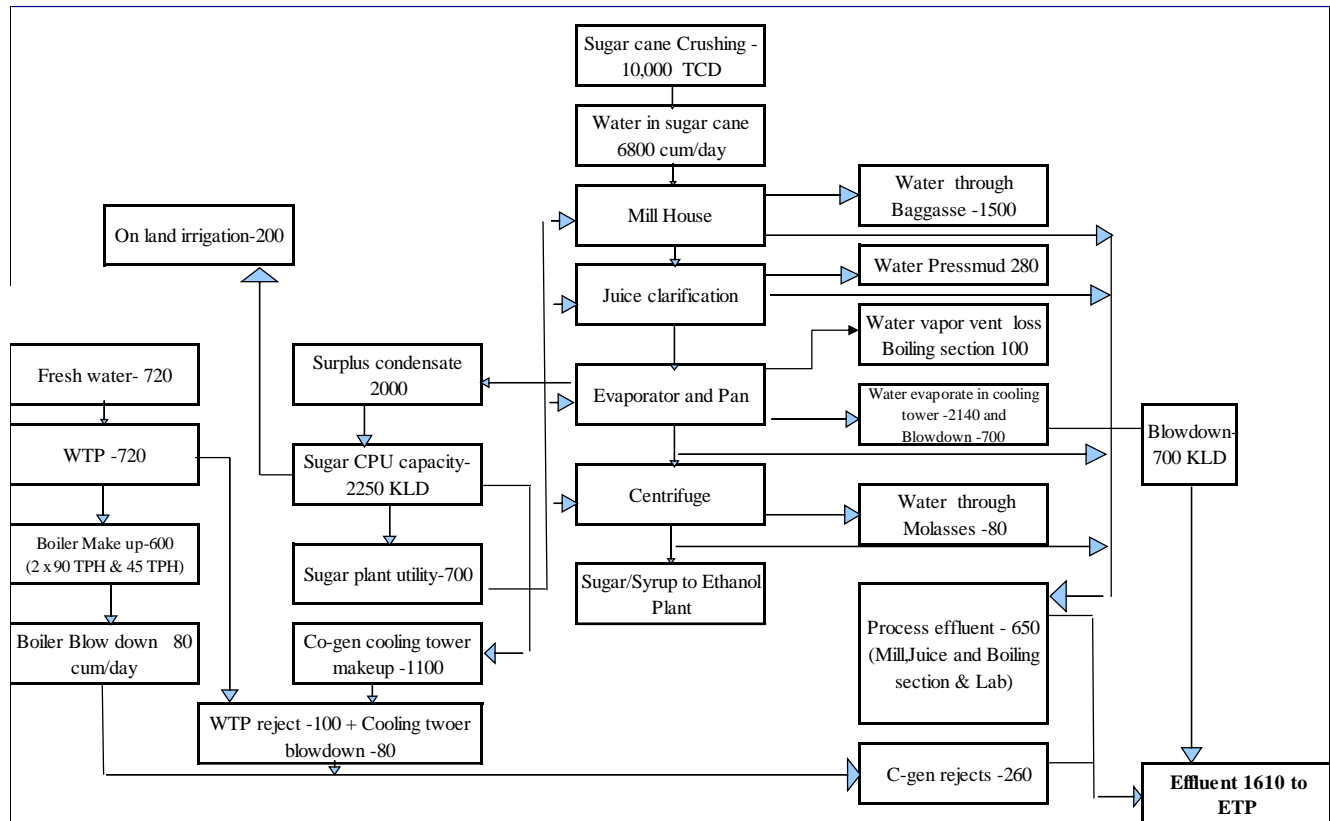


Figure 3.5 Material Balance of 10000 TCD sugarcane crushing capacity

Distillery process:

The main process involved in manufacture of Ethanol from sugarcane syrup/sugarcane juice /molasses/grain are as mainly fermentation and distillation the details are as under;

Fermentation is based on FED BATCH process. The different stages of fermentation are;

A) Sugarcane syrup/juice/Molasses preparation and fermentation

- Syrup /Juice / molasses handling and distribution
- Yeast propagation
- Pre-fermentation
- Fermentation
- Carbon Di Oxide recovery

B) Distillation (fermented wash to Rectified Spirit, Ethanol)

- Analyser Column
- Degasifying Column
- Pre-Rectifier Column
- Rectifier cum Exhaust Column
- Recovery /Evaporator Column
- Molecular Sieve Dehydration System

M/s. GOKAK SUGARS LTD.,

3.8.2 Process description is as under;

(A) FERMENTATION SECTION

Molasses/ sugarcane syrup/juice handling and distribution –

The main raw material C-Heavy/B-Heavy/sugarcane syrup/juice/grain from Day Storage is transferred to Receiving Tank. In case of sugar syrup, the syrup produced during the process of manufacture of sugar is tapped after sugarcane milling, juice extraction and heating. The tapped sugar juice is inoculated with yeast for yeast activation.

Yeast Propagation –

Culture Yeast is grown in laboratory during plant start-up.

Pre-Fermentation-

Dilute molasses media/sugarcane juice/syrup is prepared in Yeast Vessel as a media for yeast cell propagation. Temperature is maintained by recirculation of cooling water through jacket of yeast vessels. Propagated cell mass from yeast vessel is transferred to yeast activation vessel to build up cell mass required for fermentation by cell mass transfer Pump.

Fermentation –

The Fermentation process is engineered to operate in '*Fed-Batch Mode*'. The purpose of fermentation is to convert the fermentable Sugars into alcohol. During Fermentation, Sugars are broken down into Alcohol and Carbon-Di-Oxide.

Carbon Di Oxide Generation & Recovery-

During the fermentation CO₂ will be released. CO₂ bottling plant is proposed for processing of liquefied CO₂ and used for commercial purpose.

(B) DISTILLATION PROCESS

Multi Pressure Vacuum Distillation

Post fermentation, the next stage in the manufacture of alcohol is to separate alcohol from fermented wash and to concentrate it to 95 % alcohol called as Rectified Spirit.

Multi-pressure distillation system for production of Rectified Spirit and ENA consists of distillation columns namely –

- Analyser column
- pre-reactor column
- Extraction column (Purifier column)
- Rectification Column
- Refining Column
- Fusel Oil column

BENEFITS OF MULTI-PRESSURE DISTILLATION:

- Since the analyser column operates under vacuum, the formation of by-products such as acetaldehyde, acetic acid, acetyls minimized there by improving quality of alcohol
- Pre-rectification column ensures removal of sulphur compounds/mercaptans and also reduces load of lower boiling volatile compounds passing on to Rectifier cum exhaust column
- The chances of scaling due to invert solubility of certain precipitating inorganic salts are minimized in vacuum distillation
- Vacuum distillation requires low steam consumption with re-boiler

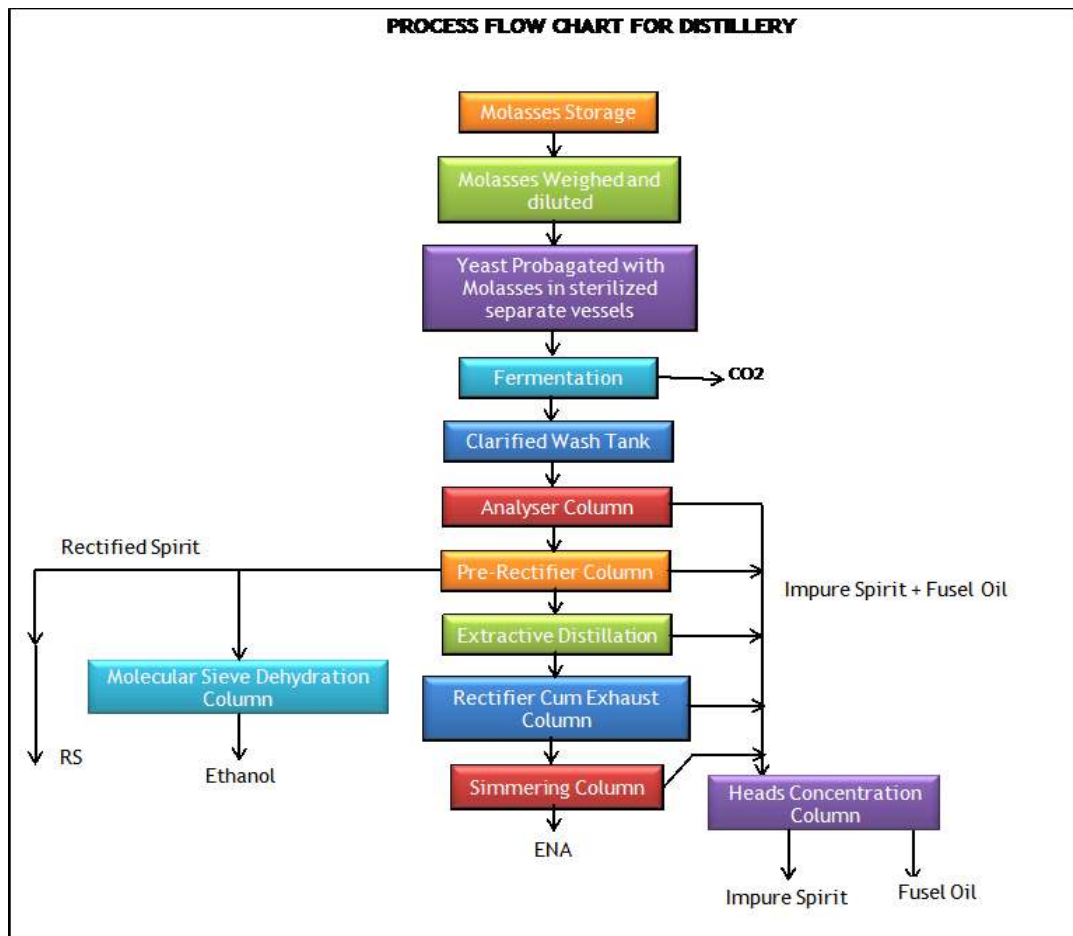


Figure 3.6 Process Flow Chart for Molasses based Distillery

3.8.3 Process description for Ethanol production using Grains as raw material

The main process operations are:

1. Grain Milling and Liquefaction Section

Milling is required to reduce the particle size of raw material (Grain) after cleaning.

The grain is then fed to the Hammer Mills to mill and produce flour of desired particle size.

M/s. GOKAK SUGARS LTD.,

The lower particle size increases the total surface area per unit weight and makes the starch accessible to gelatinization during slurry preparation.

The flour is then made in to slurry with water and this slurry is then further sent for liquefaction.

A. Liquefaction Section

Liquefaction initiates the conversion of starch into simple molecules of dextrin. It is divided into three sub processes.

B. Pre Liquefaction

This involves partial liquefaction of starch, in presence of enzyme, at a temperature well below the gelatinization temperature

The gentle mixing of flour with hot water is carried out to eliminate any lump formation. The slurry is then transferred to a main slurry tank, where chemicals required for maintaining the stability of the enzymes and for adjusting pH and also some portion of liquefaction enzyme is added. The slurry is then pumped to a high-pressure jet cooker using slurry transfer pumps.

C. Jet Cooking

This step involves the cooking of starch slurry with live steam so as to instantaneously raise its temperature. This gelatinizes and opens up starch molecules, thus making it accessible to enzyme action. Jet cooking also sterilizes the slurry.

D. Post Liquefaction

The jet-cooked slurry is again held at high temperature in presence of enzyme to complete the process of liquefaction in the liquefaction tank. The pH is adjusted in this tank as the liquefaction enzyme is at its best an activity.

2. Partial Pre Saccharification-Process

The Saccharification is carried out using amylo glycosidase enzyme to initiate the Saccharification. The addition of Saccharifying enzyme & holding for 1 hour will help in release of initial sugars.

3. Fermentation and Distillation of grain substrate

Further process of the liquified grain substrate will be through the common fermentation and distillation system as any one of the feed stocks will be used for production i.e, either molasses/sugar syrup/grain.

4.Integrated Evaporation Scheme:

The spent wash/SLOP is concentrated in falling film evaporator. The condensate is transferred for further treatment and recycled.

The system operates under vacuum. Water-ring vacuum pumps are used to maintain a desired vacuum. Cooling water from cooling tower is used in the surface condensers for condensing the vapors.

5.Decantation and During for Grain Based Process

Decantation section comprises of a centrifuge decanter for separation of suspended solids from spent wash coming out of grain distillation plant. Wet cake has 30-32% solids (w/w) as removed from bottom of decanter which can be sold directly in wet form as cattle feed (DWGS).

Thin slops coming out of decanter are collected in a tank and partly recycled into the process and further for evaporation for concentration up to 35-40% w/w solids. The concentrated thin slops called as Syrup is mixed with wet cake and sold in wet form as cattle feed (DWGS) or the entire mixture can be dried in a DDGS Dryer and then sold in dry form as cattle feed (DDGS).

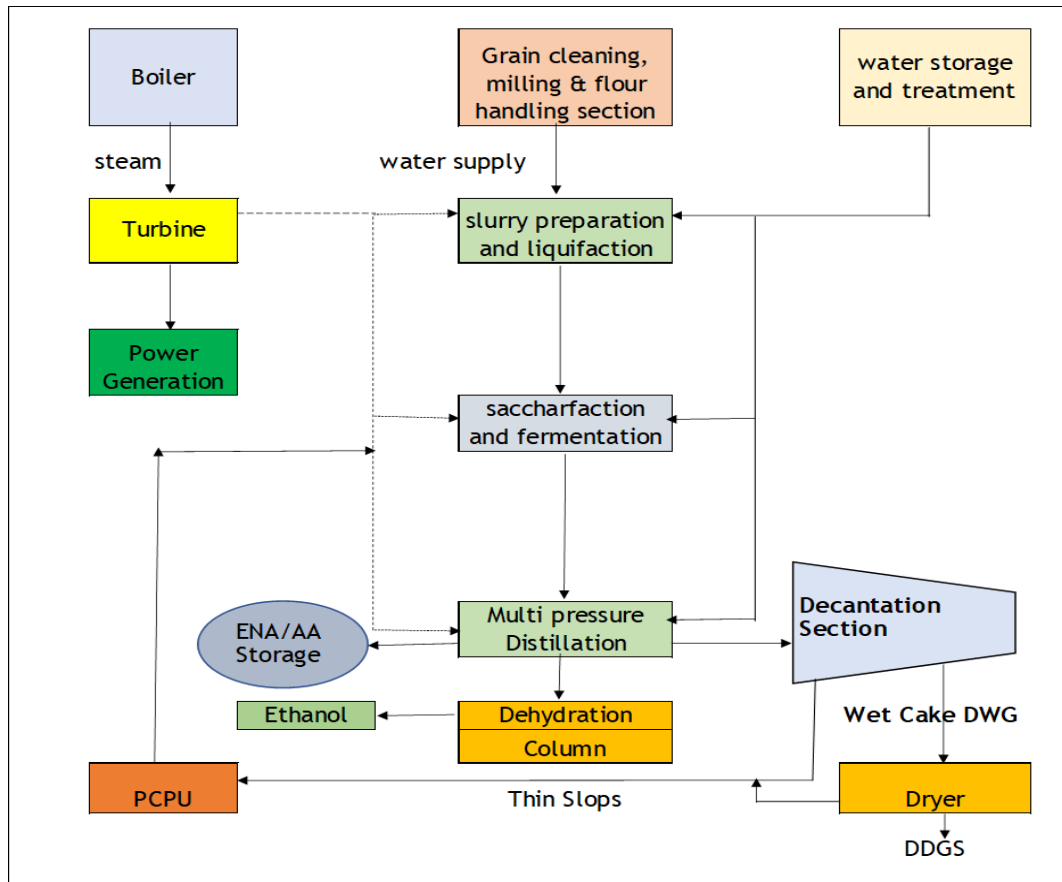


Figure 3.7 Process flow chart of grain-based distillery plan

3.8.4 Manufacturing Process for Anhydrous (Fuel-Ethanol) Alcohol:

Dehydration with Molecular Sieve Process is to increase the alcohol content in the spirit to 99.8 to 99.9%. Molecular sieves are synthetic adsorbents and are developed for vapor phase ethanol dehydration.

The water vapor molecules are having strong dipoles and elasticity. They are drawn into the pores and condensed at the wall of the pores. Ethanol vapor bigger in size passes through the bed without getting into the pores of the molecular sieves. While passing through the molecular sieve bed water is absorbed and absolute alcohol vapour at 99.8 – 99.9 % v/v is removed, which is then condensed and cooled in sent to respective receivers and storage tank as Ethanol.

3.9 Raw Material & Fuel Requirement

3.9.1 Raw material requirement for sugar process

Table 3.3 Details of the raw material for the sugar plant

Sl. No.	Raw material particulars	Quantity
1	Sugar cane	10000TCD
2	Mill sanitation kg/d	28
3	Flocculant for juice clarification(kg/d)	3
4	Lime(kg/d)	2520
5	Dextranaze enzymatic(kg/d)	5
6	Biocide for filtrate juice(kg/d)	7.5
7	Sulphur (kg/d)	1700
8	Ortho Phosphoric Acid (kg/d)	220
9	Caustic Soda (kg/d)	25

3.9.2 The raw materials required for distillery process, source of procurement and transportation mode is given in Table 3.4 below.

Table 3.4 Raw material details for distillery

Sl. No.	Raw Materials	Proposed 150 KLPD plant	Source	Mode of transport
1	B Heavy Molasses TPD	774	From adjacent parent sugar plant	By pipeline
2	Sugar Syrup, TPD during season	726		
3	C-heavy molasses	600		
4	Grains, TPD during off-	-	Local market	By trucks

	season			
5	Sulphuric acid, LPD	44	Local	HDPE sealed Barrels
6	Defoamer, TPM	7.5	Belagavi	HDPE sealed Barrels
7	DAP (Di-ammonium phosphate) TPM	2.8	Local	HDPE Bags
8	Urea, TPM	3	Local	HDPE Bags
9	Dry Yeast kg/d	18	Belagavi	Plastic containers

3.9.3 Requirement of Fuel, Its Source and Mode of Transportation

At present in the sugar plant there is one Boiler of 90 TPH it is catering to the sugar plant for steam and for cogeneration. In the expansion it is proposed to add additional 110 TPH boiler in sugar plant. For distillery an incineration boiler of 45 TPH is proposed. The fuel used is bagasse in sugar plant boiler and for incineration boiler the fuel is concentrated spent wash and supplemented with Bagasse /coal. The scenario of requirement of fuel is shown in Table 3.5 below.

Table 3.5 Types of fuel & mode of transportation

Sl. No.	Capacity of boiler	Fuel	Fuel qty. In TPD	Transportation
1	1X 90 TPH (existing)	Bagasse	1028	Feeding through belt conveyer from bagasse yard in sugar plant.
2	1X110 TPH (Proposed)	Bagasse	1320	Feeding through belt conveyer from bagasse yard in sugar plant.
2	45 TPH	Conc. Spent Wash & Bagasse/ Coal (70:30)	408 170	<ul style="list-style-type: none"> • Direct feeding to boiler through pipeline • Coal procured from Indian market

3.10 Resource Optimization/Recycling Envisaged In The Project

M/s. Gokak Sugars Limited is an integrated sugar, cogeneration and distillery plant. There is a synergy in the system, i.e., the by-products bagasse and molasses from sugar plant are the raw material for the distillery. Bagasse is used as fuel in boiler along with concentrated spent wash and biogas as supplementary fuel to meet the steam requirement. The boiler is also an incineration boiler for the concentrated spent wash disposal and to produce captive power.

M/s. GOKAK SUGARS LTD.,

Sugar plant is meeting its water requirement for various process operations from the condensate generated in the process of sugar making. Fresh water is used only for the boiler as it requires the fresh demineralized water. The CPU excess condensate is used for cooling tower and also it supplements the distillery requirement.

The distillery requires water for dilution of molasses for fermentation, dilution in re-distillation and purification of alcohol, scrubbing of alcohol vapours, cooling tower makeup, washing and sterilization of fermenters, boiler feed water makeup, pump and compressor sealing etc., The water consumption in the distillery is minimized by adoption of various conservation measures like Recycle, Reuse and Reduce as mentioned below.

- Technology improvement such as multi pressure distillation, use of re-boilers in distillation columns, is inbuilt in the process system. Use of spent wash for dilution of molasses/sugar syrup, evaporation and concentration of spent wash and burning it in boiler as fuel. Thus, the spent wash management of ZLD is achieved and excess steam is used to generate power
- Spent wash is concentrated and incinerated in boiler to produce steam for the distillery and also produce the captive power.
- The condensate from MEE, spent leese, DM plant reject, boiler blow down and cooling tower bleed are treated in CPU and reused for cooling tower make up, molasses dilution and washing. Thus, distillery will work on the principle of zero liquid discharge (ZLD).
- The ash from the incineration is having high potash content it will be used for soil conditioning.
- DDGS rich in protein will be used as cattle feed

3.11 Availability of Water Its Source, Energy/Power Requirement and Source

- Water withdrawal permitted from Minor Irrigation Tank, Hulikatti.
- Quantity: Water drawl permission issued by Government of Karnataka to draw 883 KLD (11.38Mcf per year) for sugar industry. An agreement is made between the Executive Engineer, Minor Irrigation and GWDD Division, Belgaum dated 25th Sept 2020. The agreement is valid for five years i.e., up to September 2025.
- Total freshwater requirement after expansion for
 - a. Sugar industry - 720 KLD
 - b. Distillery - 697 KLD

Fresh water requirement after expansion of sugar plant and cogeneration is in Table 3.6. The fresh water requirement for the distillery is in Table 3.7.

Table 3.6 Fresh water sugar plant

Sl. no.	Description	Fresh water requirement in KLD	Total fresh water	Water in liters /ton of
---------	-------------	--------------------------------	-------------------	-------------------------

		existing	proposed	Requirement in KLD	cane crushing
1	Fresh water for boiler	256	464	720	72
2	Domestic	43	50	93	-

Table 3.7 Fresh water use for the 150 KLD distillery unit process

Sl. No.	Description	Fresh water requirement in KLD	KL/KL of Ethanol
1	B-heavy molasses as feed stock	558	2.48
2	C-Heavy Molasses	697	4.64
3	Sugarcane syrup	401	1.78
3	Grains as feedstock	371	1.64

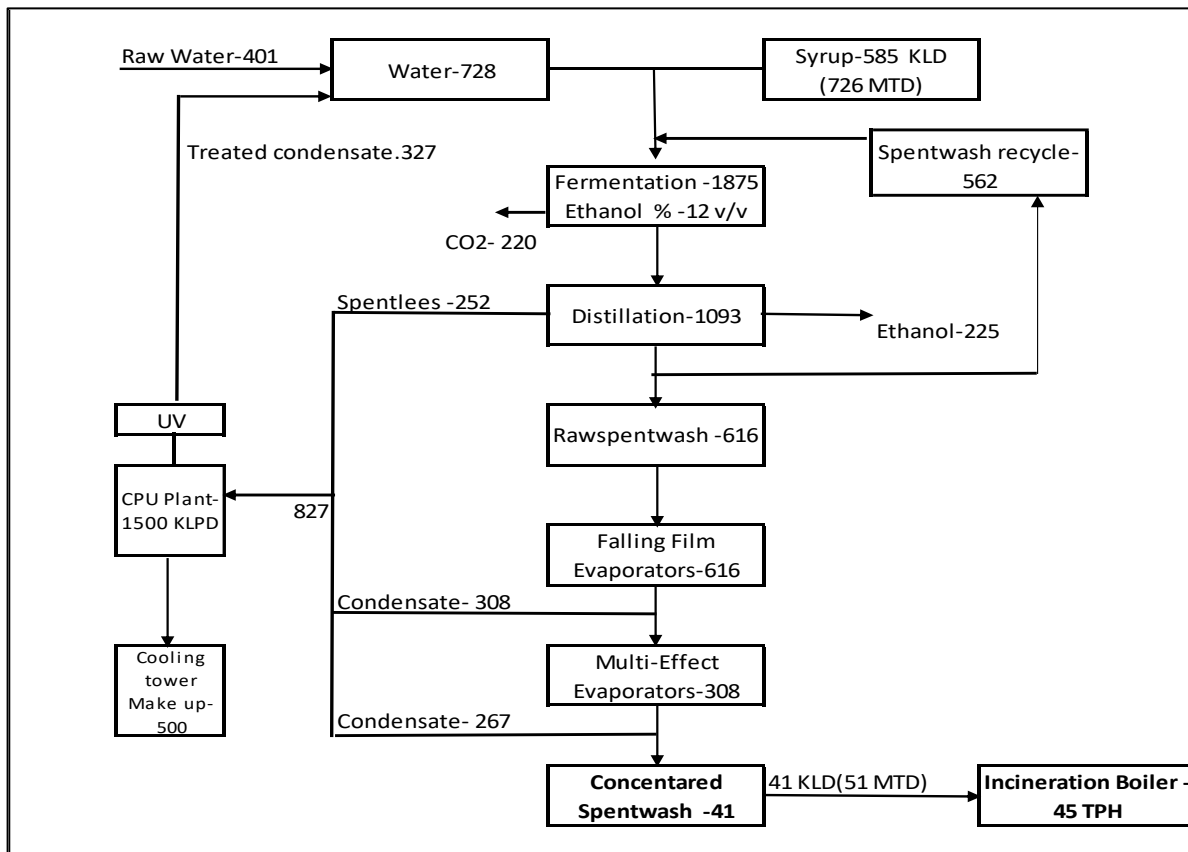


Figure 3.8 Material/water balance for 225 KLPD Ethanol using sugarcane juice/syrup as feed stock

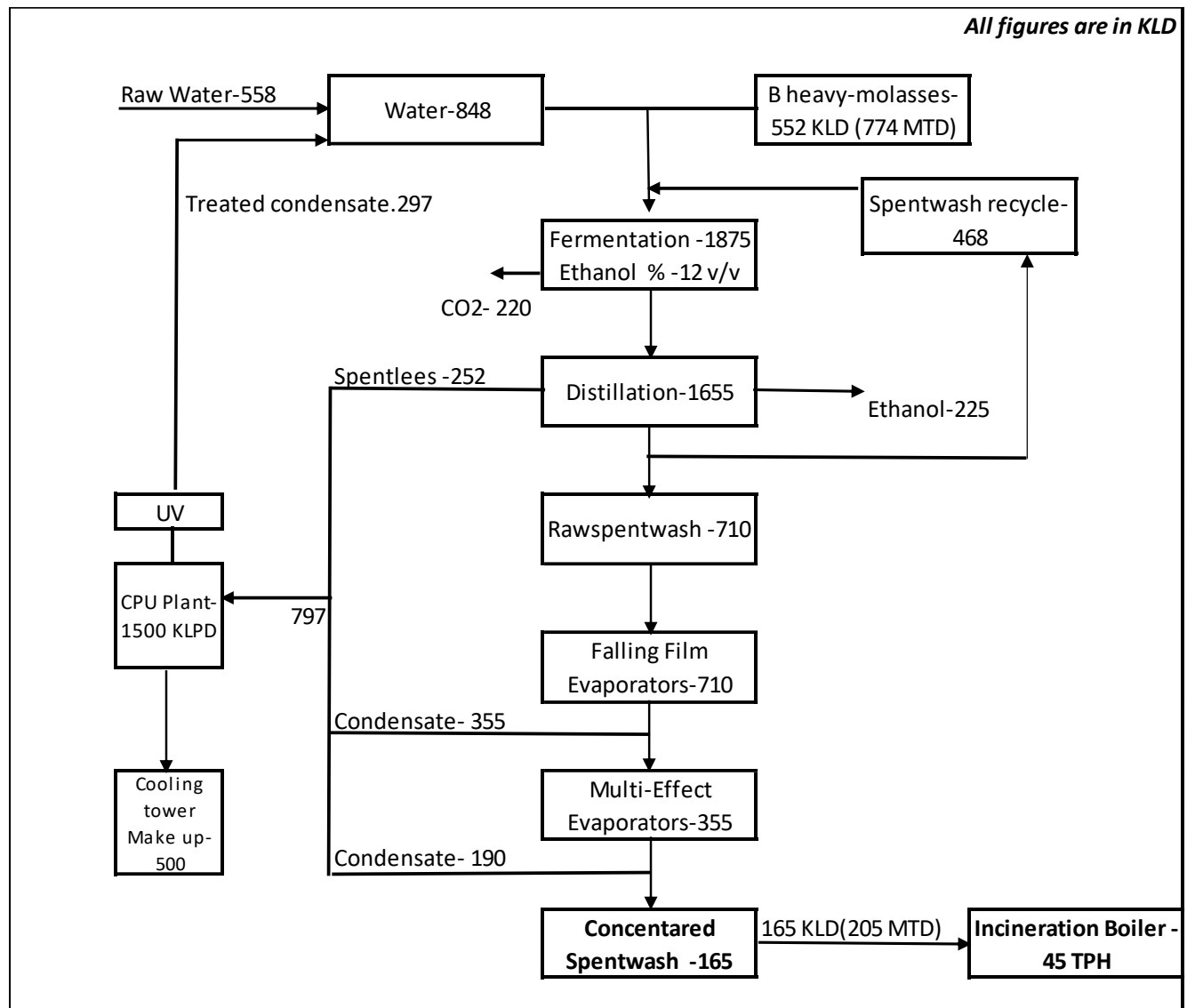


Figure 3.9 Material/water balance for 225 KLPD Ethanol using B Heavy Molasses as feed stock

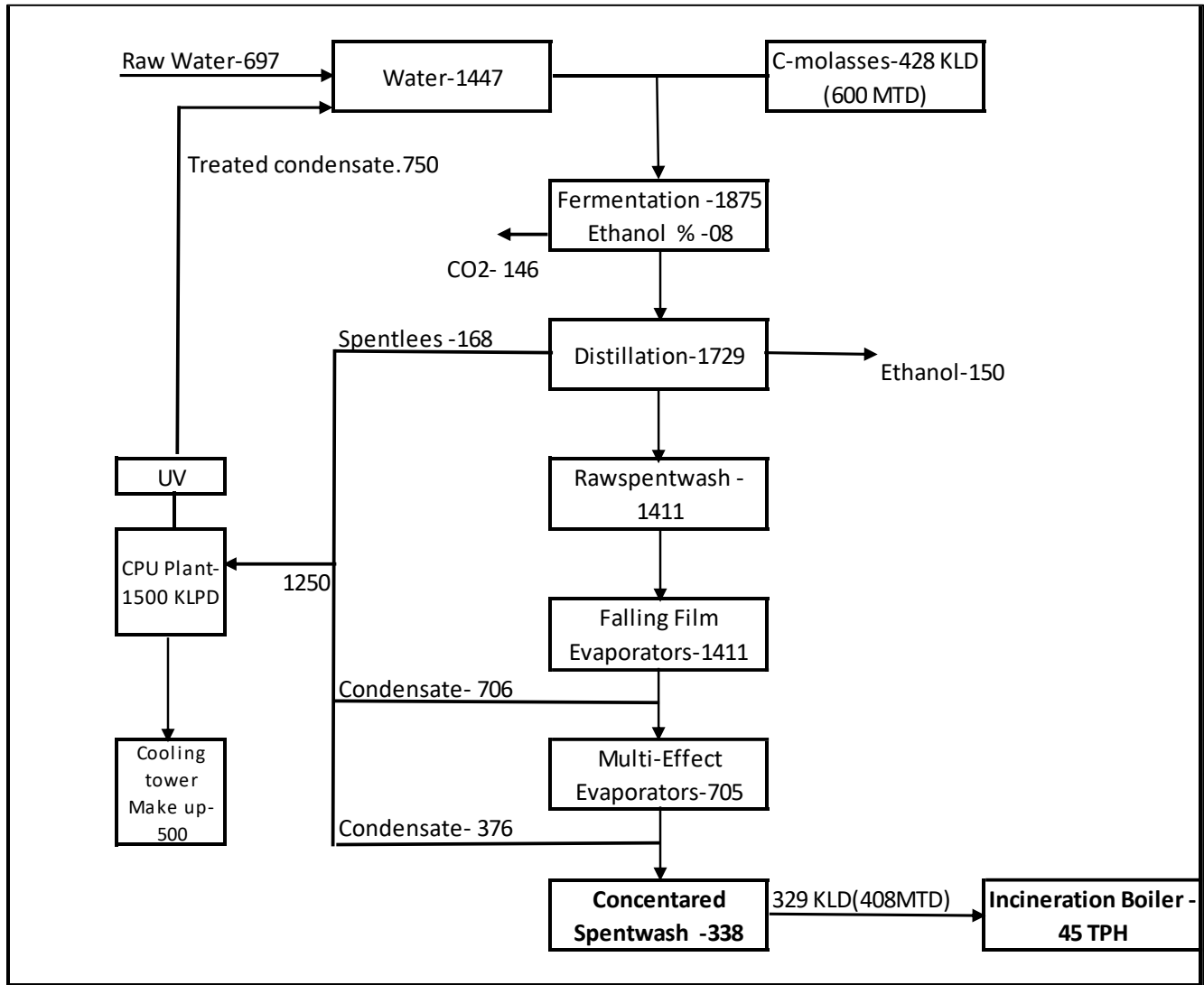


Figure 3.10 Material/water balance for 150 KLPD Ethanol using C Heavy Molasses as feed stock

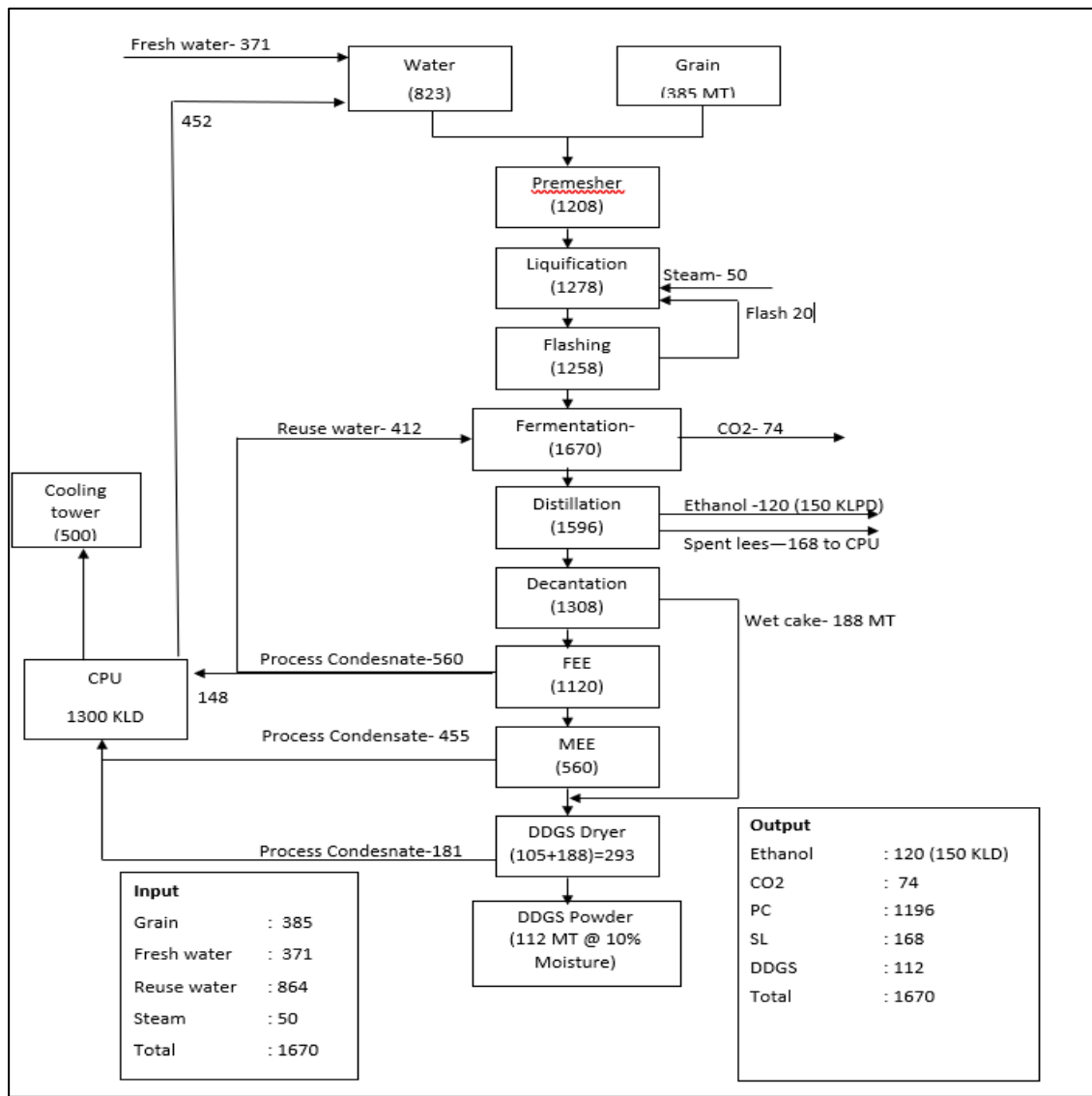


Figure 3.11 Material/water balance for 150 KLPD Ethanol using Grain as feed stock

3.12 Energy Requirement

A. Power requirement

Power requirement for the plant ;

- At Present: 5.2 MW/Hr for 4500 TCD
- After expansion: 11.0 MW/Hr for 10000 TCD Sugar plant & Distillery for capacity 150 KLPD is 4MW/hr

3.13 Quantity of wastes to be generated (liquid and solid) and Scheme for their Management/disposal

3.13.1 Sugar & Co-gen plant

- Existing effluent generation consented quantity from sugar plant 344 KLD
- Effluent generation after expansion
 - process effluent - 650 KLD
 - Co-gen, cooling tower and WTP reject - 260 KLD
 - Sugar cooling tower blow down - 700 KLD

3.13.2 Distillery plant

Table 3.8 Effluent treatment method in Distillery plant

Sl. No	Particulars	Waste water generation in KLD				Remarks
		C Heavy Molasses 225 KLD	B Heavy Molasses 225 KLD	Sugar syrup 225 KLD	Grains 150 KLD	
1	Raw Spent wash	1411	710	616	1120	Concentrated spent wash is incinerated in 45 TPH boiler
2	Concentrated spent wash	338	165	41	560	
3	Spent lees	168	252	252	168	Treated in CPU and recycled. Recycled for molasses dilution/cooling tower make up, Ash quenching and dust suppression
4	Condensate from FFE & MEE	1082	545	575	455	
5	Boiler blow-down			25		
6	DM plant reject			17		
7	Cooling tower bleed			25		

3.13.3 Domestic sewage

Sewage of 75 KLD will be treated in septic tank and soak pit and overflow will be diverted to sugar plant CPU or distillery CPU.

3.13.4 Solid waste generation and management from sugar & distillery

Table 3.9 Solid waste quantity generation and management from sugar & distillery

Sl. No.	Details of the solid waste	Quantity in MT/day	Mode of Collection	Mode of Disposal
---------	----------------------------	--------------------	--------------------	------------------

1	Bagasse	3000	Collected in Bagasse yard	Used as a boiler fuel.
2	Boiler Ash	14	Collected in silos	Mixed with press mud and used for making organic manure.
3	ETP Sludge	0.5	collected from centrifuge and used for green belt	Used in green belt
4	Press mud	400	collected in press mud storage yard	Given to farmers for making manure.
5	Yeast sludge	0.25	Collected from fermentation section	Used as a raw material for making organic manure.
6	DDGS	112	Collected in HDPE containers	Sold as cattle feed

3.13.5 Hazardous waste generation and management from sugar & distillery

Table 3.10 Hazardous waste quantity generation and management from sugar & distillery

Sl No	Particular	Quantity	Mode of disposal
1	Used oil	0.115 KL/A	Sent to authorized reprocessors
2	Waste residue containing oil	0.369 MT/A	Sent to authorized reprocessors
3	Empty barrels	0.1 MT/A	sent to recyclers

3.14 Air Environment and Management

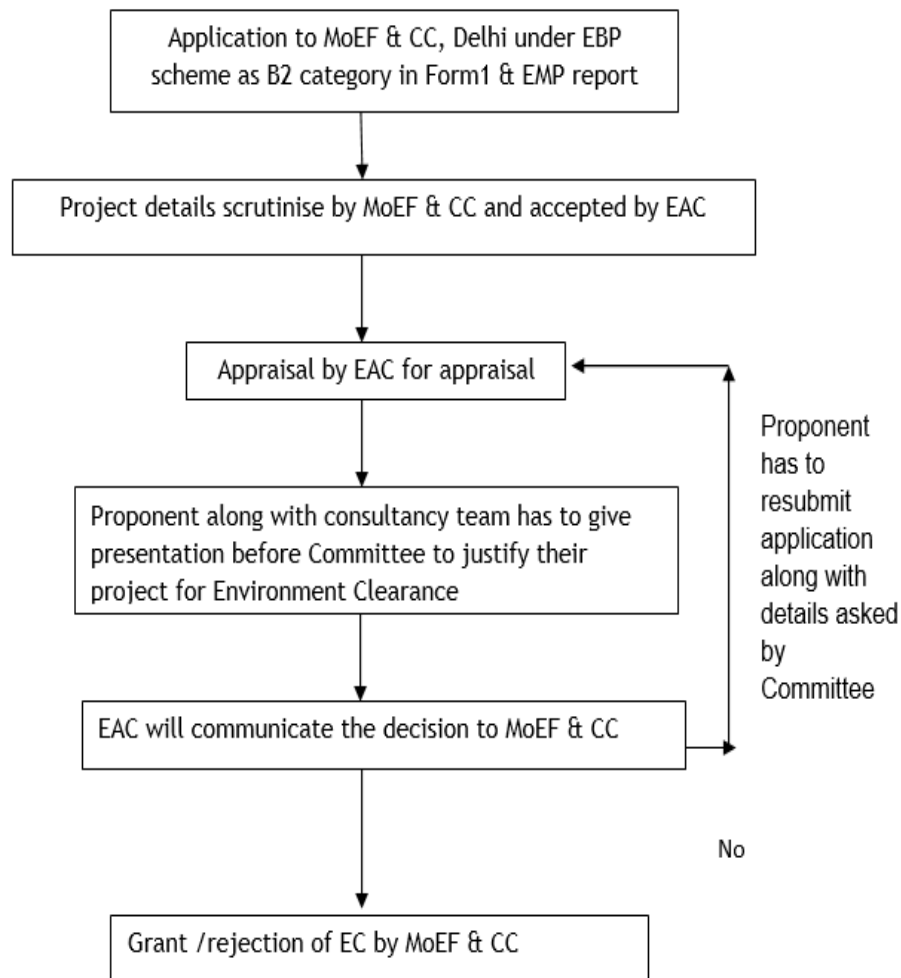
The details of the APC measures are in the Table 3.11;

Table 3.11 Sources of Air pollution and Air Pollution control measure

Sl. No.	Source of air pollution	Fuel	Consumption	Chimney height (M) AGL	APC equipment proposed	Remark
1	Existing conventional boiler of 90 TPH	Bagasse	43 TPH bagasse,	70 m	ESP	Existing
2	Proposed conventional boiler of 110 TPH	Bagasse	55 TPH bagasse,	70 m	ESP	proposed

3	Proposed incineration Boiler 45 TPH	Spent wash	17 TPH	60 m	ESP	proposed
4	DG Set - 750 kVA – 1 No.	Diesel	158 LPH	9m ARL	Acoustic Enclosure	Existing
5	DG set- 200 kVA – 1 No.	Diesel	42 LPH	6m ARL	Acoustic Enclosure	Existing

3.15 Schematic Representation of the Feasibility Drawing Which Give Information of EIA Purpose



CHAPTER 4

SITE ANNALYSIS

4.1 Connectivity

The project site is well connected to major cities by Road and railway. The nearest Airport is Belgaum Airport which is located at a distance of about 51.52 km towards west from the project site. Connectivity to the project site and other features is detailed in the Table 4.1.

Table 4.1 Connectivity and other features around the project site

Sl. No.	Particulars	Information
1	Location	M/s. Gokak Sugars Limited, Survey Nos. 238 and 263, Kolavi Village, Gokak Taluk, Belgaum District, Karnataka.
2	Total land Area	74 Hectares
3	Nearest highway	SH – 1 (Gokak- Ankalgi Road)
4	Nearest Railway station	Gokak Railway Station - 29 km, North West
5	Nearest Airport	Belagavi Airport- 44 km, South West
6	Nearest town	Ankalgi – 19.3 km, South West
7	District Head Quarters	Belgaum – 53 km, South West
8	Source of water supply	The withdrawl of water is permitted from minor irrigation tank, Hulikatti
9	Connectivity to project site	<ul style="list-style-type: none"> • Gokak to Belgaum Road is adjacent to factory compound towards North East direction • Pachhapur - Railway station is located at 16.3 Km towards West direction Belagavi Airport is located at 33 Km towards South West direction
10	Nearest Settlements	<ul style="list-style-type: none"> • Kolavi town is located 0.8 Km towards North East direction • Hulikatti village is located at 2.0 Km from East direction • Tavag village is located at 1.8 Km towards North West direction • Gili Hosur village is located at South direction • Makalgeri town is 4.9 Km towards South East direction • Gokak town is located at 7.3 Km towards North direction

Note: All distances mentioned are aerial distance

4.2 Land Form, Land Use and Land Ownership

The industrial land is surrounded by agricultural fields and reserve forests. Land is owned by Gokak Sugars Ltd. The main cultivation is sugar cane. The present land use is converted for industrial purpose by the Deputy Commissioner, Belgaum, Government of Karnataka for industrial purpose. The plant facilities are spread over 74 Hectares. The Land breakup & land use details of the project site are given in Table 4.2;

Table 4.2: Land use pattern of the sugar, co-generation and distillery complex

Sl. No.	Purpose of land utilization	Area covered hectares	% of total land
1	Build up area of factory including sugar plant, power plant, switch yard, godown, store, workshop, WTP, cooling tower etc ETP, Cane yard, Bagasse, press mud and ash storage	15.00	20.27
2	Vacant land, Lawn & Road, Open space & Provision for expansion. Residential area,	28.82	38.95
3	Greenbelt belt and parking:	30.18	40.78
	Total land	74.00	100

4.3 Topography, existing land use pattern

The terrain is undulating in 10 km radius from the factory site.

There are reserved forests and agricultural lands in this area. Sugarcane cultivation is the main activity.

4.4 Existing infrastructure

The infrastructure of the project at present is operating sugar factory and Cogen with all allied facilities alike storage, ETP, utilities, Air pollution control measures, administration block, sugar godown vehicle parking area etc., the layout plan of the plant is given in Figure 3.2

4.5 Soil Classification

By and large, black soil is predominant in the project area and surrounding 10 km.

4.6 Climatic data from secondary sources

The metrological data reflecting minimum, maximum temperature in °C, relative humidity in %, rainfall in mm and wind speed in kmph for the year 2021 is in Table 4.3

Table 4.3: Meteorological data of Belgaum for the year 2021

Month	MAX	MIN	MRF	RH	WS
January	29	21	133.7	56	14
February	31	21	6.7	42	17.2
March	36	24	0	36	15.4
April	35	23	25.2	50	20
May	30	22	172.3	70	21.2
June	25	20	503.1	85	19.8
July	25	20	293.8	90	22.1
August	25	20	60.8	86	20.9
September	25	19	26.1	90	21.1
October	28	20	70.8	78	13.8
November	26	19	82.8	80	16.8
December	29	17	3.5	64	14.8

Source: *worldweatheronline.com*

Legend:

Max: Monthly mean maximum temperature in Deg. Celsius

Min: Monthly mean minimum temperature in Deg. Celsius

MRF: Monthly total rainfall in mm

RH: Monthly mean relative humidity in %

WS: wind speed in kmph

4.7 Social infrastructure available

The factory is adjacent to Kolvi village, Gokak Taluk of Belgaum district. At nearest town is Gokak. Facilities such as schools, hospitals, community halls, markets, colleges, all religion's worship places are established. The village has also has telecommunication facilities. The factory is well connected by road network of State and national highways.

The villages around are benefited by the existence of Gokak Sugars Limited as most of the farmers are supplying the sugarcane grown by them to the factory and also the local villages have been employed by the factory. The overall economy in this area is benefitted by GSL. The industry is also supporting the villages by health camps and various CSR activities being carried out regularly.

CHAPTER 5

PLANNING BRIEF

5.1 Planning concept (Types of industries, facilities, transportation etc. town & country planning/ development authority classification.

The main activity in 15 km radius from the industry is agriculture and one large scale industry M/s Roquette Riddhi Siddhi Ltd is at a distance of about 7 km towards north. There is no other industrial activity in 15 km radius. The proposed expansion is within the existing operating industry premises. The entire infrastructure facilities required for operation of the industry is provided and other common infrastructural facilities such as roads, power supply, transportation are well provided by the concerned local authority.

5.2 Population Projection

The villages around the industry has already reached its optimal population growth in view of the presence of GSL. The industry is supporting the villagers by employing them for both skilled and unskilled jobs. There is no significant migration from this village to outside or from other places to these villages. Man power required for the proposed expansion project will be met from the local villages completely. The increase in number of employees is given in chapter 2, Table 2.1

5.3 Land use planning (breakup along with green belt etc)

The land use pattern is as shown in the Table. 4.2

5.4 Assessment of infrastructure demand (physical & social)

The existing infrastructure in the vicinity is adequate for the industry. There is no necessity of additional requirement in terms of raw material availability, road ways, water from river etc.

The society in large will be benefitted by the proposed expansion as explained in Chapter 4 section 4.7.

5.5 Amenities/Facilities

Basic amenities/facilities have been provided in the plant. The plant comprises of well laid internal roads, health care facilities, canteen for officers and workers, captive power supply to the factory

M/s. GOKAK SUGARS LTD.,

and excess being exported to state grid. Employees have been provided with PPE's. For emergency, separate ambulance and occupational health center is established.

For treatment of industrial effluent for the existing operation, ETP is provided for the sugar plant effluent and the treated effluent is used for experimental farming and for green belt. For air pollution control ESP and chimney are provided.

CHAPTER 6

PROPOSED INFRASTRUTURE

6.1 Industrial area (processing area)

Existing infrastructure facilities (Plant and machinery, building, security shed, toilet etc.) are utilized for proposed expansion activity augmented with additional new equipments in sugar plant. A new distillery complex with captive powerplant will be provided. The existing ETP in the sugar plant will be upgraded to treat the effluents to the standards prescribed. The treated effluent will be used for agriculture with controlled application and with the consent of private land owners. The distillery will be provided with effluent concentration and incineration facilities for the concentrated spent wash disposal. The lean effluent will be treated and reused. The distillery will work on the principle of ZLD.

The CO₂ bottling plant will be installed to recover the CO₂ emitted during fermentation process. For Grain based production, the necessary infrastructure for preparation of grain feedstock will be installed.

6.2 Residential area (Non- processing area)

Already a colony is established for the officers and workers. There will not be additional residential facility proposed.

6.3 Green Belt

40.78 % of total area, 30 Hectares is already developed as green belt. about 16219 tree saplings have been planted within the premises. The trees like Acacia, Mangi flora indica, Delonix regia (Gulmohar), Pongamia pinnata (Karangji), Azardirachta Indica (Neem),Ficus religiosa (Peepal),(RainTree),Dalbergiasissoo(Shisham),Tactonagrandis(Apata)Ficusglomerata (Umber), Ficusbenghaleensis (Vad,Banyah),Cocoonut, Grevillea robusta (Silver Oak),Arali Basari, Tamarind (Hunachi), Almond etc have been planted.

6.4 Social Infrastructure

Schools, colleges, hospitals & healthcare centers, shops & bazaars, community centers, etc. are all available in nearby town Gokak , 7 km away from project site.

M/s. GOKAK SUGARS LTD.,

6.5 Connectivity (traffic and transportation/road/rail/metro/water ways etc.,)

The site is well connected by road ways and railways. The site has access of telephone, internet and mobile connectivity. The Connectivity details are in Table 4.1

6.6 Drinking water management (source and supply of water)

Drinking water will be sourced from the Hulikatti Minor irrigation tank. The workers and for the residence in the colony the water is treated and supplied.

6.7 Sewerage Management

The domestic sewage generated from the industry is treated in septic tanks and soak pits. The same will be followed for expansion project also.

6.8 Industrial Waste

Detailed in chapter 3.

6.9 Solid Waste Management

Detailed in chapter 3.

6.10 Power requirement & supply/source

Detailed in chapter 3

CHAPTER 7

REHABILITATION & RESETTLEMENT PLAN(R&R)

7.1 Policy to adopted (central/state) in respect of the project affected person including home oustees, Land oustees and landless labour (a brief outline to be given).

The project does not attract Rehabilitation and Resettlement (R & R) Plan as the proposed as the expansion is in the existing industry premises.

CHAPTER 8

PROJECT SCHEDULE & COST ESTIMATES

8.1 Likely date to start of construction and likely date of completion (Time schedule for the project to be given)

As soon as the EC is accorded, KSPCB will be approached to get CFE and take up the erection of new additional machineries to meet the expansion after getting CFE. The work will be completed within 10 months from the zero date. It is planned to take up the expansion work during the 2021- 22 crushing season.

8.2 Estimated project cost along with analysis on terms of Economic Viability of the Project

Table 8.1: Cost of the project

Cost (in Rs. Crore)	Existing	Proposed	Total
Sugar industry	140.25	250	390.25
Co-generation			
Distillery	-	210	210

CHAPTER 9

ANALYSIS OF PROPOSAL (FINAL RECOMMENDATIONS)

9.1 Financial and Social benefits with special emphases on the benefit to the local people including tribal population, if any, in the area.

With the implementation of proposed expansion project, the socio-economic status of the local people will further improve substantially. The land rates in the area will improve in the nearby areas due to the proposed activity. Local people will be provided with employment opportunities both in skilled and unskilled works.

Financial Benefits:

Benefits and advantages of Distillery

- The efficiency and Commercial viability of Sugar Factories will improve.
- Farmers will get higher price for Sugar Cane.
- The land area for sugarcane cultivation will increase and also high yielding varieties of sugarcane plantation will be attempted through R & D activities
- It also helps in minimizing the demand supply gap of ethanol, by achieving the 20 % blending of ethanol with petrol by 2025.

Social Benefits:

- Greater employment for local populations
- Contributes to rural economic development

Other Benefits:

- Revenues to the State and Central exchequers.
- By production of ethanol and mixing with petrol reduces the usage of fossil fuel, thereby saving the foreign exchange.

Photographs from Existing sugar plant





Photographs of proposed project site for distillery unit



List of Annexures

Annexure No.	Particulars
1	Existing EC and consents
2	Site layout plan and location map
3	Topo map
4	Water withdrawal permission

ANNEXURE 1
EXISTING EC AND CONSENTS

8th Floor, Subhas Chandra
Bose Building (Public Utility Building)
M.G. Road, Bangalore - 560 001
Phone : 558 1388/383
558 8142, 558 6520

ಕರ್ನಾಟಕ ಸರ್ಕಾರದ ಪರಿಸರ ಮತ್ತು ಜಲ ಸಂರಕ್ಷಣೆ ಇಲಾಖೆ
(ಪ್ರದೇಶೀಯ ಮಟ್ಟದ ಕಛೇರಿ)
ಎಂ.ಜಿ. ರೋಡ್, ಬೆಂಗಳೂರು - 560 001
ಫೋನ್ : 558 1388/383
558 8142, 558 6520

NO.CFE-CELL/TGSL/EIA-140/2003-2004/ 84

DATE 23 FEB 2004

/ BY REGD. POST WITH ACK. DUE /

TO:

The Chairman
The Gokak Sugars Limited
211/2B, Plot No.3, Yogikall Road
Gokak - 591 307
Belgaum District.

Sir,

Sub: Consent for Establishment (CFE) under the Water and Air Act for establishment of 2,500 TCD capacity Sugar Plant with 14 MW Co-generation Plant at Sy.No.238 & 263, Kolavi Village, Gokak Taluk, Belgaum District, by M/s.The Gokak Sugars Limited.

- Ref:
1. This office letter No.203, dated 13.4.2000.
 2. Your CFE application under Water Act & Air Act received on 19.12.2003 in Regional Office, Belgaum.
 3. Inspection of your proposed industry site by Environmental Officer, KSPCB, Regional Office, Belgaum, on 3.9.2003.
 4. Proceedings of the Consent Committee meeting held on 9.1.2004.
 5. Your letter received on 9.1.2004.

ಸಾರಾಂಶ

The Board with reference to CFE application cited under reference (1) hereby issue consent for establishment and clearance from the water and air pollution control point of view for establishment of 2,500 TCD capacity Sugar Plant with 14 MW Co-generation Plant at Sy.No.238 & 263, Kolavi Village, Gokak Taluk, Belgaum District, by M/s.The Gokak Sugars Limited, provided the following conditions stated below are complied with:

1. The Project is to be cleared from all others angles of environment by the Committee constituted by Department of Environment & Ecology, Government of Karnataka



Karnataka State Pollution Control Board, 1 ಸರ್ಕಾರಿ ರಾಜ್ಯ ಪರಿಸರ ಮತ್ತು ಜಲ ಸಂರಕ್ಷಣೆ ಇಲಾಖೆ, ಬೆಂಗಳೂರು.

2. No construction work, preliminary or otherwise, relating to the setting up of the project may be undertaken till the environmental clearance from the Environment Clearance Committee, Department of Environment & Ecology, Government of Karnataka.

I. WATER POLLUTION CONTROL:

1. The total trade effluent generation shall not exceed 100 Lit/Ton of cane crushing. The total trade effluent discharge at 2,500 TCD crushing shall not exceed 250 m³/Day.
2. The applicant shall revise the effluent treatment plant proposals; so as to meet the norms under charter on Corporate Responsibilities for Environment Protection (CREP) issued by the Central Pollution Control Board i.e the total trade effluent generation shall not exceed 100 Liters/Ton of cane crushing. Also, the applicant shall revise the said proposal by adopting two stage extended aeration system. The revised proposals shall be submitted for approval of the Board within 30 days from the date of issue of this clearance letter.
3. (a) The finally treated effluent shall meet the standards given under **Annexure-I** and used entirely on land for gardening/irrigation within the factory own land.
(b) The applicant shall provide 15 days storage capacity for treated effluent to take care of irrigation.
(c) At no point of time the effluent shall be discharged outside into nalla or into canal, stream or river.
4. The sewage effluent shall be disposed into Septic Tank & Soak Pit. No overflow from the Soak Pit is allowed. The Septic Tank and Soak Pit shall be designed as per IS 2470 Part - I and Part - II.
5. **All the treatment units shall be made totally impervious.**
6. **The effluent treatment plant shall be operated continuously.**
7. If the treatment plants do not achieve the effluent standards stipulated in **Annexure-I** or if it is found to be inadequate, then the industry shall have to modify the units so as to meet the standards with prior consent of the Board.
8. The industry shall make enough provision to store molasses in steel tanks covered with proper roofing to protect the molasses from rain water. Molasses storing in open pits/lagoons is not permitted.
9. The applicant shall submit detailed storm water management plan including design details in order to avoid any runoff from effluent treatment plant area, bagasse yard, pressmud storage yard and ash handling area reaching into Ghataprabha Canal, within 30 days from the date of issue of this consent for establishment.

10. The applicant shall submit detailed agricultural management plan within 30 days from the date of issue of this consent for establishment.
11. The industry shall have a stormwater management plan including rain water harvesting, etc
12. The applicant is liable to reinstate or restore, damage or destroyed elements of environment at his cost, failing which, the applicant/occupier as the case may be shall be liable to pay the entire cost of remediation or restoration and pay in advance an amount equal to the cost estimated by Competent Agency or Committee

II. AIR POLLUTION CONTROL:

1. The discharge of emission from the premises of the applicant shall pass through the stacks/chimneys wherefrom the Board shall be free to collect the samples at any time in accordance with the provisions of the Act and Rules made thereunder.
2. The daily/hourly rate of emissions discharged and the tolerance limits of the constituents forming the emissions in each of the stacks/chimneys shall not exceed the limits laid down in **Annexure-II**.
3. a) The chimney heights shall be provided as per the guidelines for stack heights given in **Annexure-II**.
b) The industry shall provide port holes for sampling the emissions and access platforms for carrying out stack sampling and provide electrical outlet points and other arrangements for all stacks/chimneys and other sources of emissions so as to collect samples of emissions by the Board or the applicant at any time in accordance with the provisions of the Act and Rules made therein. The details of the location of sampling port holes, the platforms, the electrical outlet point etc. are detailed in **Annexure-III**.
4. The industry shall at its own cost get the samples of emissions collected and get them analyzed in any Laboratory every month for the parameters indicated in condition No.2 from the sampling port holes provided as per condition No.3 and shall submit in duplicate, the analysis results to the Regional Office of the Board at Belgaum, within seven days from the date of collection of samples.
5. The industry shall not change or alter either the quality or quantity or rate of emission or install/replace or alter the air pollution control equipments, change in raw material or manufacturing process resulting in change in quality and/or quantity of emissions, shall be intimated to Board and shall obtain prior approval of the Board by furnishing all the information.
6. a) The industry shall provide and maintain at its own cost two Ambient Air Quality Monitoring stations for monitoring Suspended Particulate Matter, Sulphur Dioxide, Nitrogen Oxide, Hydro Carbons, Carbon Monoxide and monitor the same

once in a month. The data collected shall be maintained in a Register and a monthly extract be sent to the Board.

- b) The ambient air quality monitoring station shall be located in consultation with this Board. The period of 08 hours monitoring shall be such as to cover the cycle of 24 hours atleast once in week.
7. The industry shall provide and maintain at his own cost a meteorological station to collect the data on wind velocity, direction, temperature, humidity, rainfall etc., and daily reading shall be recorded and the extract be sent to the Board once in a month.
8. The applicant shall collect and store bagasse & ash properly to avoid fugitive emissions.
9. The applicant shall ensure that, no smell nuisance is caused to the public because of storage of molasses, pressmud.

III. NOISE POLLUTION CONTROL:

1. The industry shall ensure that the ambient noise levels within its premises shall not exceed the limits specified in the Environment (Protection) Rules.
2. The applicant shall provide acoustic measures to the DG Sets as per Sl. No. 94 in Schedule-I of Environment (Protection) Rules.

IV. SOLID WASTE (OTHER THAN HAZARDOUS WASTE) DISPOSAL:

1. The industry shall collect, treat and dispose off all solid waste generated from the process and from the effluent treatment plant other than wastes covered under the Hazardous Waste (Management & Handling) Rules, in such manner so as not to cause environmental pollution.

V. WATER CESS:

1. The industry shall comply the provisions of Water (Prevention and Control of Pollution) Cess Act, 1977, by installing water meters, filing water cess returns in the Form-I and other provisions as contained in the said Water (Prevention and Control of Pollution) Cess Act 1977, and 2003.

VI. HAZARDOUS WASTES (MANAGEMENT & HANDLING) RULES 1989 & 2000:

1. The industry shall apply and obtain authorization under Hazardous Waste (Management & Handling) Amended Rules 2002, and comply with the conditions of the authorization.

VII. GENERAL :

1. The industry shall not be commissioned for trial or regular production unless the effluent treatment plant and air pollution control equipment as approved by the Board is completed/installed in all respects to the satisfaction of the Board. The industry shall ensure that the treatment plant is completed and commissioned simultaneously along with construction of the factory and erection of machineries.
2. The industry shall furnish the detailed programme of work in the form of PERT Chart for implementation of water and air pollution control works. Physical progress on the works shall be informed to the Board every month.
3. During the operation of the plant, if the liquid effluents from the industry or solid waste disposal do not conform to the standards prescribed by the Board, the industry shall shut down the plant and effect modification to the treatment works/control equipments so as to render the effluent and emissions to the prescribed standards.
4. The Industry shall adopt best available technology with respect to pollution control as and when it is available.
5. The Board reserves the right to review, impose additional condition or conditions, revoke, change or alter the terms and conditions.
6. The industry shall not undertake expansion/diversification/modernization, change of location of site etc., without the prior clearance from this Board.
7. The industry shall take afforestation measures in the factory area, so that greenbelt around the factory premises is maintained at 30%.
8. The industry shall take prior permission for abstraction of ground water from Central Water Authority, Government of India, and provide water meters for measuring the quantity of ground water abstracted.
9. The applicant shall appoint an Environmental Engineer/Scientist for environmental management in the industry.
10. The applicant shall avail training at EMPRI, Karnataka State Pollution Control Board, Bangalore, and furnish the Certificate prior to applying for consent for operation.
11. **This CFE does not give any right to the Party/Project Authority/Industry to forego any legal requirement, that is necessary for setting/operation of the plant.**
12. The industry shall furnish pointwise compliance to the conditions given under this clearance letter within 30 days.

Please note that, this is only consent for establishment issued to you to proceed with the formalities to obtain Environmental Clearance from Environmental Clearance Committee, Department of Environment & Ecology, Government of Karnataka. Establishment of the Sugar Industry & Co-generation Plant shall only be taken up after the clearance from Environmental Clearance Committee, Department of Environment & Ecology, Government of Karnataka.

For the purpose of operation after establishment, a separate consent of the Board for discharge of liquid effluent and the atmospheric emissions shall have to be obtained by filing prescribed consent applications along with consent fees under Water & Air Act. The application for consent has to be made 45 days in advance to your commissioning for trial production of the plant.

The receipt of this letter may please be acknowledged.

FOR AND ON BEHALF OF
KARNATAKA STATE POLLUTION CONTROL BOARD
BANGALORE - 560 001


MEMBER SECRETARY.

Encl.: as above.

Please note that, this is only consent for establishment issued to you to proceed with the formalities to obtain Environmental Clearance from Environmental Clearance Committee, Department of Environment & Ecology, Government of Karnataka. Establishment of the Sugar Industry & Co-generation Plant shall only be taken up after the clearance from Environmental Clearance Committee, Department of Environment & Ecology, Government of Karnataka.

For the purpose of operation after establishment, a separate consent of the Board for discharge of liquid effluent and the atmospheric emissions shall have to be obtained by filing prescribed consent applications along with consent fees under Water & Air Act. The application for consent has to be made 45 days in advance to your commissioning for trial production of the plant.

The receipt of this letter may please be acknowledged.

FOR AND ON BEHALF OF
KARNATAKA STATE POLLUTION CONTROL BOARD
BANGALORE - 560 001

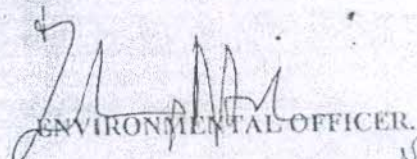
Sd/-

MEMBER SECRETARY.

Encl.: as above.

COPY TO:

1. The Environmental Clearance Committee, Department of Environment & Ecology, Government of Karnataka, with a copy of consent for establishment.
2. The Environmental Officer, KSPCB, Regional Office, Belgaum, for information and to inspect the site of industry during your next visit to the area.
3. EMPRI, Karnataka State Pollution Control Board, Bangalore, for information and necessary action.
4. Technical Cell for information - 17 Category.
5. Master copy (Dispatch).
6. Master copy (CFE-Cell).
7. Office copy.


ENVIRONMENTAL OFFICER.

ಗ್ರಾಮ್ / Grams : "ಜಲರಕ್ಷ" "Jalaraksha"
ಫ್ಯಾಕ್ಸ್ / Fax : 080-25586321
ಈಮೇಲ್ / E-mail : kspcb@kar.nic.in



25581383, 25589112
25588151, 25588270
25588142, 25586520
ವೆಬ್ ಸೈಟ್ / Website : http://kspcb.kar.nic.in

ಕರ್ನಾಟಕ ರಾಜ್ಯ ಮಾಲಿನ್ಯ ನಿಯಂತ್ರಣ ಮಂಡಳಿ
Karnataka State Pollution Control Board

"ಪರಿಸರಭವನ",
4 ಮತ್ತು 5ನೇ ಅಂತಸ್ತು, ನಂ. 49, ಚರ್ಚ್ ಸ್ಟ್ರೀಟ್,
ಬೆಂಗಳೂರು - 560 001, ಕರ್ನಾಟಕ, ಭಾರತ

"Parisara Bhavan"
4th & 5th Floor, # 49, Church Street,
Bangalore - 560 001, Karnataka, INDIA

//BY REGD. POST WITH ACK. DUE//

(This document contains 8 Pages including annexure)

Combined Consent order No. PCB/17 CAT/ GOKAK 08/ 720

Date: 13 FEB 2009

Consent for discharge of effluents under the Water (Prevention and Control of Pollution) Act 1974 and Emissions under the Air (Prevention and Control of Pollution) Act 1981.

- Ref. 1. Application received by the Regional Office, Belgaum on 22.10.2008.
2. Proceedings of the Consent Committee Meeting held on 03.02.2009.

Consent is hereby granted under section 25/26 of Water (Prevention and Control of Pollution) Act 1974 and under Section 21 of Air (Prevention and Control of Pollution) Act 1981 (herein after referred as the Water Act and the Air Act respectively) and the Rules and Orders made there under and subject to the terms and conditions as detailed in the schedule annexed to this order.

Consent is granted to THE PRESIDENT, M/S GOKAK SUGARS LIMITED, Sy. No. 238 & 263, KOLAVI VILLAGE, GOKAK TALUK, BELGAUM DISTRICT, authorizing him to operate their industrial plant and to make discharge of effluents and emissions from the premises as detailed below:

M/s. GOKAK SUGARS LIMITED,
Sy. No. 238 & 263, KOLAVI VILLAGE,
GOKAK TALUK, BELGAUM DISTRICT.

Discharge of effluents under the Water Act:

Sl. No	Description	Permitted Quantity of discharge	Limits specified refer schedule	Place of discharge
1	Trade effluent	250 KLD	As in Annexure I	On land for irrigation on land owned by the industry.
2	Domestic effluent	80 KLD	--	Septic tank & Soak pit

Discharge of air emissions under the Air Act from the following stacks etc.

Sl. No	Description of chimney/outlet	Limits specified refer schedule
1	90 TPH Boiler	Annexure-II
2	1000 KVA DG Set	
3	250 KVA DG Set	
4	250 KVA DG Set	

K.M. LINGARAJU
K.M.LINGARAJU
13/2/2009
SENIOR ENVIRONMENTAL OFFICER (EIA-I)

The consent is valid for the manufacture of:

Sl. No	Products & By-products	Maximum Capacity
1	Sugarcane Crushing	2500 TCD

The Consent is granted for the period up to 30.6.2009

FOR AND ON BEHALF OF THE
KARNATAKA STATE POLLUTION CONTROL BOARD


K.M.LINGARAJU

SENIOR ENVIRONMENTAL OFFICER (EIA-I)

✓
To,
THE PRESIDENT
M/s. GOKAK SUGARS LIMITED,
Sy. No. 238 & 263, KOLAVI VILLAGE,
GOKAK TALUK, BELGAUM DISTRICT.

**SCHEDULE
TERMS AND CONDITIONS**

(to accompany consent Combined Consent order No.PCB/17 CAT/ GOKAK 08/ Dated)

I.(A) TREATMENT AND DISPOSAL OF EFFLUENTS UNDER THE WATER ACT.

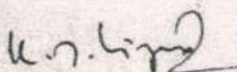
1. The discharge from the premises of the applicant shall pass through the terminal manhole/manholes where from the Board shall be free to collect samples in accordance with the provisions of the Act or Rules made there under.
2. The daily quantity of effluent discharge shall not exceed the limits and shall not contain the constituents in excess of the tolerance limits laid down as indicated in the table below. The applicant shall monitor the quality of effluents for the parameters stipulated as per the frequency indicated.

Sl. No	Description of the effluents	Daily quantity of discharge in KL	Tolerance Limits	Frequency of monitoring
1	2	3	4	5
1	Industrial effluents	250 KLD (Restricted to 100 Liters/ton of cane crushed)	Annexure-I	Weekly.
2	Domestic effluents	80 KLD	Septic tank and soak pit	

3. The applicant shall install and operate the effluent treatment systems as approved in CFE and maintain the same continuously so as to achieve the treated effluent quality as mentioned above.
4. The applicant shall ensure that the operation of effluent treatment plant shall be started at least one month before the starting of cane crushing to achieve desired MLSS so as to meet the prescribed standards from day one of the operation of mill.
5. The applicant shall provide adequate storage capacity for treated effluent to take care off no demand for irrigation. The storage tank shall be impervious.
6. The industry should provide alternate power supply to the ETP for its continuous operation.
7. a) The applicant shall discharge the treated effluents only to the place mentioned in the Consent order. The application of treated effluent for agriculture shall be controlled so as to avoid either flooding of land or ground water contamination.
b) The applicant shall furnish the ownership of land to the Board within 15 days with the location map of irrigation land showing the Sy. Nos. and a list of land with Sy. Nos. if applied on private agricultural lands.

(B) MOLASSES STORAGE

1. The Applicant shall take action to store the Molasses in steel tanks covered with proper roofing.
2. No effluent shall be contained in unlined/katch pits/ponds.
3. The Applicant shall obtain permission from the Board to dispose off the spoiled Molasses.



SENIOR ENVIRONMENTAL OFFICER (EIA-I)

II. TREATMENT AND DISPOSAL OF SEWAGE EFFLUENTS

1. The applicant shall ensure that the sewage effluent is treated in the septic tank and soak pit constructed as per IS 2470 Part-I & II and no overflow from soak pit is allowed.

III. DISCHARGE OF EMISSIONS UNDER THE AIR ACT

1. (a) The discharge of emissions from the premises of the Applicant shall pass through the stacks/chimneys mentioned in **Annexure-II** consent where from the Board shall be free to collect the samples at any time in accordance with the provisions of the Act and Rules made there under. The stacks/chimneys heights shall be as per **Annexure-II**.
2. The rate of emissions discharged and the tolerance limits of the constituents forming the emissions in each of the stacks shall not exceed the limits laid down in Annexure.
3. The applicant shall operate the Air pollution control equipment as specified in the **Annexure-II** continuously so as to ensure that the emission does not exceed the limits specified. The operation of the control equipment shall be synchronized with the operation of the emission source.
4. The Applicant shall provide port holes for sampling the emissions and access platforms for carrying out stack sampling and provide electrical outlet points and other arrangements for all chimneys/stacks and other sources of emissions within 30 days from the date of receipt of this consent order so as to collect samples of emissions by the Board or the Applicant at anytime in accordance with the provisions of the Act and Rules made there in.

IV. LIQUID WASTES

1. The Applicant shall treat and dispose any liquid effluents produced in the course of control of air pollution by scrubbing, conditioning etc., of flue gases in accordance with the provisions of the Water (Prevention and Control of Pollution) Act, 1974. The details of such discharges shall be quantified and monitored immediately after commissioning and details of collection, treatment and disposal shall be furnished to the Board.

V. SELF MONITORING AND REPORTING BY THE INDUSTRY

A. WATER POLLUTION CONTROL

1. The Applicant shall at his own cost get the trade /Sewage effluent samples collected from the manhole chambers specified in condition No.I(A)(1) and analyse the same every month for the parameters indicated in condition No.A(2) and shall submit in duplicate the report to the Regional Officer.
2. -The applicant shall provide effluent flow meters to record the effluent quantity discharged.
3. Monthly extract of daily product manufactured as well as Effluent discharged-sewage/ trade shall be submitted to the Regional Officer regularly every month.
4. Adequate number of observation bore/test wells shall be provided in and around the agricultural land where the treated effluent is used to monitor the ground water quality.


SENIOR ENVIRONMENTAL OFFICER (EIA-I)

5. The applicant shall establish a self monitoring system for monitoring the effluents by procuring necessary monitoring equipment & by establishing a laboratory for
 - (1) Trade effluent quality monitoring.
 - (2) Ground water and surface water monitoring.
 - (3) Flow measures devise on line for treated trade effluent.

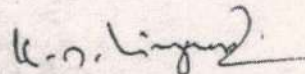
B. AIR POLLUTION CONTROL.

1. The applicant shall at his own cost get the samples of emissions collected and get them analyzed once in a 15 days for the parameters indicated in conditions No.III (1) from the sampling port holes provided as per condition No.III (4) and shall submit in duplicate; the analysis results to the Regional Office of Board.
2. The applicant shall monitor the Ambient Air Quality and monitoring shall be done as per the EP Rules. The AAQM stations shall be fixed in consultation with the Regional Office of the Board.
3. The applicant shall carryout self monitoring of effluents and emissions at the frequency indicated below and furnish the reports of analysis to the area regional officer.
4. The analysis of effluents and emissions may be carried out in house laboratory/ KSPCB approved laboratory/ laboratories approved under EP Act.
5. The applicant shall maintain log books to reflect the working condition of pollution control systems and also self monitoring results and keep it open for inspection.
6. The applicant shall set-up Environmental Cell comprising of qualified and competent personnel for complying with the conditions specified.
7. Applicant shall establish, implement and maintain an Environmental Management System in conformity with ISO 14001:2004 standards.

Sl No	Emissions to be monitored	Frequency of monitoring
1	Emission from the boiler stack	Once in 15 days

C. GENERAL CONDITIONS APPLICABLE TO ALL ACTIVITIES

1. The applicant shall provide water meters for every source of water and shall submit the cess returns regularly as required under Water Cess Act before 5th of every month in the prescribed form.
2. The applicant shall provide flow measuring devices at both inlet and outlet of ETP and maintain logbooks for verification of inspecting officers.
3. The applicant shall not allow the discharge from the other premises to mix with the discharge from his premises. Storm water shall not be allowed to mix with the effluents on the upstream of the terminal manhole where the flow measuring devices are installed.
4. The applicant shall display flow diagram of the pollution control system at the site.
5. The ETP site and the entire premises shall be always kept clean. The ETP site, inspection chambers, outlets, flow measuring points should made easily approachable.



SENIOR ENVIRONMENTAL OFFICER (EIA-I)

6. The applicant shall not change or alter quality or quantity or the rate of discharge or temperature or the route of discharge with out the previous consent of the Board.
7. The applicant shall promptly comply with all orders and instructions issued from time to time by the Board or any other officers of the Board duly authorized in this behalf.
8. The applicant shall display the consent granted in a prominent place for perusal of the inspecting officers of the Board.

VI. SOLID WASTE MANAGEMENT:

1. The applicant shall segregate solid waste from Hazardous Waste/Bio-medical Waste/Municipal Solid Waste and store it properly till treatment/disposal without causing pollution to Environment.

2. The storage & disposal shall be as specified below:

Sl- No	Type of Solid Waste	Mode of storage, treatment and disposal
1	Press mud	Mixed with boiler ash and sold to member farmers as manure
2	Boiler ash	-do-
3	Boiler fly ash	-do-
4	ETP sludge from SDB's	-do-
5	Bagasse	Used as captive fuel

VII. NOISE POLLUTION CONTROL:

1. The applicant shall take steps to control noise levels so as to maintain ambient air quality standard in respect of noise as laid down under the Air Act 1981.

2. The applicant shall provide necessary acoustic enclosures or measures to control noise levels generated from the DG Sets as per Environment Protection Rules, 1986.

3. The applicant, his heirs, legal representatives or assigns shall have no claims what so ever to the continuation or renewal of this consent after expiry of the period of consent.

4. The applicant shall forth with keep the Board informed of any accident of unforeseen act or event of any poisonous, noxious or polluting matter or emissions are being discharged into stream or well or air as a result of such discharge, water or air is being polluted.

5. The Board reserves the right to review, impose additional conditions, revoke, change or alter terms and conditions of this consent.

6. The applicant shall comply with action points stipulated in CREP.

7. The applicant shall make an application for consent at least 120 days before expiry of this consent.

U. N. Singh

SENIOR ENVIRONMENTAL OFFICER (EIA-I)

ANNEXURE - I

SL. No.	Characteristics.	Tolerance limits.
1.	Colour and Odour.	See Note.
2.	Suspended Solids mg/l. Max.	100
3.	pH value.	6 to 8.5
4.	Oil and Grease mg/l. Max.	10
5.	Bio-chemical Oxygen Demand, mg/l. (3 days at 27°C) max.	100

Note: All efforts should be made to remove colour and unpleasant odour as far as practicable.

ANNEXURE - II

Chimney	Chimney Attached to	Minimum Chimney Height to be Provided Above ground level	Rate of emission Nm ³ /Hr.	Constituents to be controlled in the emission.	Tolerance limits Mg/Nm ³	Air Pollution Control equipment to be installed, in addition to Chimney height as per Col (3)
1.	40 TPH Boilers Two numbers.	70 M AGL.	--	SPM	150	ESP
2	1000 KVA DG set	14 M AGL	.....	.....	...	Acoustic enclosure
3	250 KVA DG set	6 M ARL	.....	.....	...	Acoustic enclosure.
4	250 KVA DG set	6 M ARL	....	.....	....	Acoustic enclosure.

K. N. Singh
SENIOR ENVIRONMENTAL OFFICER (EIA-I)

ಗ್ರಾಮ / Grams : "ಜಲರಕ್ಷ" "Jalaraksha"
ಫ್ಯಾಕ್ಸ್ / Fax : 080-25586321
ಈಮೇಲ್ / E-mail : kspcb@kar.nic.in



25581383, 25589112
25588151, 25588270
25588142, 25586520

ವೆಬ್ ಸೈಟ್ / Website : http://kspcb.kar.nic.in

ಕರ್ನಾಟಕ ರಾಜ್ಯ ಮಾಲಿನ್ಯ ನಿಯಂತ್ರಣ ಮಂಡಳಿ Karnataka State Pollution Control Board

"ಪರಿಸರಭವನ",
10ನೇ 5ನೇ ಮಹಡಿಗಳು, ನಂ. 49, ಚರ್ಚ್ ಸ್ಟ್ರೀಟ್,
ಬೆಂಗಳೂರು - 560 001, ಕರ್ನಾಟಕ, ಭಾರತ

"Parisara Bhavan"
1st to 5th Floors, # 49, Church Street,
Bengaluru - 560 001, Karnataka, INDIA

//BY REGD. POST WITH ACK. DUE//

(This document contains 8 Pages including annexure)

Combined Consent order No. PCB/17 CAT/ GOKAK 08/ 2009-10/397 Dated: 31 JUL 2009

Consent for discharge of effluents under the Water (Prevention and Control of Pollution) Act 1974 and Emissions under the Air (Prevention and Control of Pollution) Act 1981.

Ref: 1. Application received by the Regional Office, Belgaum on 04.03.2009.
2. Proceedings of the Consent Committee Meeting held on 29.06.2009.

Consent is hereby granted under section 25 of Water (Prevention and Control of Pollution) Act 1974 and under Section 21 of Air (Prevention and Control of Pollution) Act 1981 (herein after referred as the Water Act and the Air Act respectively) and the Rules and Orders made there under and subject to the terms and conditions as detailed in the schedule annexed to this order.

Consent is granted to **THE PRESIDENT, M/S GOKAK SUGARS LIMITED, Sy. No. 238 & 263, KOLAVI VILLAGE, GOKAK TALUK, BELGAUM DISTRICT**, authorizing him to operate their industrial plant and to make discharge of effluents and emissions from the premises as detailed below:

**M/s. GOKAK SUGARS LIMITED,
Sy. No. 238 & 263, KOLAVI VILLAGE,
GOKAK TALUK, BELGAUM DISTRICT.**

Discharge of effluents under the Water Act:

Sl. No	Description	Permitted Quantity of discharge	Limits specified refer schedule	Place of discharge
1	Trade effluent	250 KLD	As in Annexure I	On land for irrigation on land owned by the industry.
2	Domestic effluent	80 KLD	--	Septic tank & Soak pit

Discharge of air emissions under the Air Act from the following stacks etc.

Sl. No	Description of chimney/outlet	Limits specified refer schedule
1	90 TPH Boiler	Annexure-II
2	1000 KVA DG Set	
3	250 KVA DG Set	
4	250 KVA DG Set	

K. M. Lingaraju
(K.M.LINGARAJU)

SENIOR ENVIRONMENTAL OFFICER (EIA-D)

The consent is valid for the manufacture of :

Sl. No	Products & By-products	Maximum Capacity
1	Sugarcane Crushing	2500 TCD

The Consent is valid for the period from 01.07.2009 to 30.06.2010.

FOR AND ON BEHALF OF THE
KARNATAKA STATE POLLUTION CONTROL BOARD

K.M. Lingaraju
K.M.LINGARAJU

SENIOR ENVIRONMENTAL OFFICER (EIA-I)

To,
THE PRESIDENT
M/s. GOKAK SUGARS LIMITED,
Sy. No. 238 & 263, KOLAVI VILLAGE,
GOKAK TALUK, BELGAUM DISTRICT.

GOVERNMENT OF KARNATAKA

No. FEE 20 ECO 2009

Karnataka Government Secretariat,
M.S. Building
Bangalore, dated: 21.01.2010.

From,

Special Secretary to Government,
Forest Ecology and Environment Department.

To,

✓ The President,
M/s. Gokak Sugars Ltd.,
Kolavi Village, Gokak Taluk,
Belgaum District.
Pin Code-591344

Sir,

Sub:- Issue of Environmental Clearance for establishment of 2,500 TCD capacity sugar plant with 14 MW Co-gen plant at Sy. No. 238 & 263, Kolavi Village, Gokak Taluk, Belgaum District by M/s. Gokak Sugars Ltd-reg.

- Ref:-
1. Your application No. GSL/KOLAVI/ECC/2008-09 dated: 12.02.2009.
 2. Proceedings of State Environmental Clearance Committee Meeting held on 02.09.2009.

M/s. Gokak Sugars Ltd., have submitted the application for environmental clearance for establishment of 2,500 TCD capacity sugar plant with 14 MW Co-gen plant at Sy. No. 238 & 263, Kolavi Village, Gokak Taluk, Belgaum District.

The Karnataka State Pollution Control Board has issued Consent for establishment vides No. CFE-CELL/TGSL/EIA-140/2003-2004/84 dated: 23.02.2004.

On-site Emergency Plan approved by the Factories and Boilers Department vide their approval letter No. CSMC/MAHC/CR-02-18/09-10 dated 20.07.2009.

The subject was discussed in the State Environmental Clearance Committee meeting held on 02.09.2009. Various documents produced by the industry such as Project report, Consent for establishment, On-site Emergency Plan and other connected documents were verified in detail. After discussion, the Committee decided to issue Environmental Clearance to the project.

15. limit noise level to 75 dBA. For people working in high noise area, requisite personal protective equipment like earplugs, etc. shall be provided.
16. regularly carry out the air and water quality monitoring in and around the power plant and records be maintained. Six monthly reports shall be submitted to this Department.
17. advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the this Department and the Karnataka State Pollution Control Board.
18. set up a separate environment management cell with qualified staff for implementation of the stipulated environmental safeguards.
19. allocate separate funds for implementation of Environmental protection measures along with item-wise break-up. These costs 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 shall be reported to this Department and the Regional Director (Environment), Belgaum.
20. inform this Department and the Regional Director (Environment), Ecology and Environment Department, Belgaum regarding the date of financial closure and final approval of the project by the concerned authorities and the dates of start of land development work and commissioning of plant.
21. make a fresh reference to the Department to assess the adequacy of the condition(s) imposed and to add additional environmental protection required, if any, in case of fresh proposal for any deviation or alteration in the project proposed from those submitted to this Department for clearance
22. obtain all other statutory clearances /permissions required to be taken by the company
23. submit six monthly compliance report to these conditions to the Department without fail.
24. display the conditions prominently at the entrance of the project on a suitable size board for the information of the public.
25. maintain the road from project site to main road.
26. execute social commitment plan as per the letter dated 07.10.2009 with a budget not less than 5 lakhs and submit the report to the Department.

II). General Conditions:

1. The Department of Environment and Ecology, Government of Karnataka reserves the right to withdraw this EC subject to any change in the policy by the Government.

Hence, I am directed to accord Environmental Clearance to M/s. Gokak Sugars Ltd., for establishment of 2,500 TCD capacity sugar plant with 14 MW Co-gen plant at Sy. No. 238 & 263, Kolavi Village, Gokak Taluk, Belgaum District subject to the following conditions: -

I) The project proponent shall:-

1. strictly follow the CFE/CFO conditions issued by the KSPCB.
2. strictly follow the conditions of on-site emergency plan approved by the Department of Factories & Boilers.
3. Ensure interlocking arrangement for ESP with separate electric meter should be provided. Daily log book for the electric meter reading should be maintained and monthly extract to be submitted to Regional Director (Environment) Ecology and Environment Department, Belgaum and Regional Office, KSPCB, Belgaum.
4. dispose solid waste in a scientific manner without causing underground and surface water pollution directly or indirectly.
5. adopt rainwater harvesting in the industry within the next 6 months and submit compliance report.
6. not discharge wastewater outside the premises of the industry and details of disposal plan should be submitted within 3 months. Use STP/ETP treated water for sugarcane seed farm/gardening and for toilet flushing and separate pipelines should be laid for the purpose
7. earmark 33% of the project land for green belt and afforest with tree species like: Neem, Alstonia scholaris, Saraca indica, Acacia auricaliformis, Mahgoni, Madhuka indica, Silver oak, Pongamia, Simaruba glauca, etc within 6 months and submit compliance report.
8. utilize solar power for street lighting, common areas lighting and water heating in the industry and also ensure replacement of conventional electric bulbs with CFL within 6 months and submit report.
9. submit a report on the details of health checkup programmes conducted to the Director, Factories & Boilers Department immediately. In future a quarterly report should be submitted in this regard.
10. comply with all the environmental protection measures incorporated in the EMP. Utilization of land shall be restricted to 35 acres which is already in possession of the project authorities.
11. use only bagasse as fuel.
12. ensure 100% utilization of ash from the date of operation of the plant. Ash may also be mixed with press mud and composted and used as manure/ given to farmers.
13. meet water requirement from the existing available water allocation. No ground water shall be drawn for the power plant at any stage.
14. ensure installation of dust extraction and suppression system and water sprinklers for controlling fugitive dust during transport of material and in vulnerable areas of the plant.

2. This EC does not confer any right to the proponent on the site proposed for the project.
3. The Department of Environment and Ecology, Government of Karnataka; and the Regional Office, KSPCB, will monitor the implementation of the stipulated conditions. A complete set of documents including The Environmental Impact Assessment Report and the Environment Management Plan along with the additional information submitted from time to time shall be forwarded to the Regional Office for their use during monitoring.
4. The Karnataka State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre and Deputy Commissioner's office/ Tahsildar's Office for 30 days.
5. In case of any deviation or alteration in the project proposal from that of the proposal submitted for EC, a fresh reference shall be made to this Department to assess the adequacy of the condition(s) imposed and to incorporate additional environmental protection measures required, if any.
6. The project authorities should advertise at least in two local newspapers widely circulated in the State, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the EC letter informing that the project has been accorded EC and a copy of the clearance letter is available with the State Pollution Control Board.
7. The above stipulations shall be enforced along with other relevant laws as under, the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, The Manufacture, Storage and Import of Hazardous Chemical Rules, 1989, Hazardous Wastes (Management and Handling) Rules, 1989, the Public Liability Insurance Act, 1991 and Rules there under.
8. The Department of Environment and Ecology, Government of Karnataka reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the Department.
9. Fugitive dust emission from all the sources shall be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points shall be provided and properly maintained.
10. Measures shall be taken for control of noise levels below 85 dBA in the work environment.
11. Personnel working in dusty areas shall be provided with protective respiratory devices and they shall also be imparted adequate training and information on safety and health aspects.
12. The Ecology and Environment Department or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.

13. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.
14. The issuance of Environment Clearance doesn't confer any right to the project proponent to operate/run the project without obtaining Statutory clearances/sanctions from all other concerned authorities.
15. This clearance is valid for a period of 5 years only from the date of issue. At least 120 days before expiry of the clearance, the proponent shall apply for renewal. Under no circumstances, the industry shall operate without valid renewed EC after the expiry of the validity of this EC.

Yours faithfully,



(B. MANOHAR) 24/1/2013

Under Secretary to Government,
(Ecology and Environment)

Forest, Ecology and Environment Department.

Copy to,

1. Member Secretary, Karnataka State Pollution Control Board, Parisara Bhavan, Church Street, Bangalore-560001.
2. Director, Factories & Boilers Department, Karmika Bhavan, 2nd Floor, Bannerghatta Road, Bangalore-560029.
3. Director, Industries & Commerce Department, Khanija Bhavan, Race Course Road, Bangalore-560001.
4. GPA to Secretary to Government, (Ecology & Environment), Forest, Ecology and Environment Department.
5. Senior Director, Technical Cell, Forest, Ecology and Environment Department.
6. Regional Director (Environment), Ecology and Environment Department, Government of Karnataka, No.1, Charanti Math Building, Shivalaya Road, Sadashiva Nagar, Belgaum.
7. Technical Cell
8. Guard file.



ಕರ್ನಾಟಕ ರಾಜ್ಯ ಮಾಲಿನ್ಯ ನಿಯಂತ್ರಣ ಮಂಡಳಿ
Karnataka State Pollution Control Board

"ಪರಿಸರಭವನ", 1 ರಿಂದ 5ನೇ ಮಹಡಿಗಳು, ನಂ. 49, ಚರ್ಚ್ ಸ್ಟ್ರೀಟ್, ಬೆಂಗಳೂರು - 560 001, ಕರ್ನಾಟಕ, ಭಾರತ
"Parisara Bhavana", 1st to 5th Floor, # 49, Church Street, Bengaluru - 560 001, Karnataka, INDIA

//BY REGD. POST WITH ACK. DUE//

(This document contains 8 Pages including annexure)

Combined Consent order No. PCB/17 CAT/ GOKAK 08/ 540 Dated: 22.9.2010

Consent for discharge of effluents under the Water (Prevention and Control of Pollution) Act 1974 and Emissions under the Air (Prevention and Control of Pollution) Act 1981.

- Ref: 1. Application received by the Regional Office, Belgaum on 08.04.2010.
2. Proceedings of the Consent Committee Meeting held on 26.08.2010.

Consent is hereby granted under section 25 of Water (Prevention and Control of Pollution) Act 1974 and under Section 21 of Air (Prevention and Control of Pollution) Act 1981 (herein after referred as the Water Act and the Air Act respectively) and the Rules and Orders made there under and subject to the terms and conditions as detailed in the schedule annexed to this order.

Consent is granted to **THE PRESIDENT, M/S GOKAK SUGARS LIMITED, Sy. No. 238 & 263, KOLAVI VILLAGE, GOKAK TALUK, BELGAUM DISTRICT**, authorizing him to operate their industrial plant and to make discharge of effluents and emissions from the premises as detailed below:

**M/s. GOKAK SUGARS LIMITED,
Sy. No. 238 & 263, KOLAVI VILLAGE,
GOKAK TALUK, BELGAUM DISTRICT.**

Discharge of effluents under the Water Act:

Sl. No	Description	Permitted Quantity of discharge	Limits specified refer schedule	Place of discharge
1	Trade effluent	250 KLD	As in Annexure I	On land for irrigation on land owned by the industry.
2	Domestic effluent	80 KLD	--	Septic tank & Soak pit

Discharge of air emissions under the Air Act from the following stacks etc.

Sl. No	Description of chimney/outlet	Limits specified refer schedule
PI refer ANNEXURE-II		


SENIOR ENVIRONMENTAL OFFICER

The consent is valid for the manufacture of :

Sl. No	Products & By-products	Maximum Capacity
1	Sugarcane Crushing	2500 TCD
2.	Co generation	14 MW

The Consent is valid for the period from 01.07.2010 to 30.06.2011.

FOR AND ON BEHALF OF THE
KARNATAKA STATE POLLUTION CONTROL BOARD


SENIOR ENVIRONMENTAL OFFICER ✓

To,

✓ THE PRESIDENT,
M/s. GOKAK SUGARS LIMITED,
Sy. No. 238 & 263, KOLAVI VILLAGE,
GOKAK TALUK, BELGAUM DISTRICT.



ಕರ್ನಾಟಕ ರಾಜ್ಯ ಮಾಲಿನ್ಯ ನಿಯಂತ್ರಣ ಮಂಡಳಿ
Karnataka State Pollution Control Board

"ಪರಿಸರ ಭವನ", 1 ರಿಂದ 5ನೇ ಮಹಡಿಗಳು, ನಂ. 49, ಚರ್ಚ್ ಸ್ಟ್ರೀಟ್, ಬೆಂಗಳೂರು-560 001, ಕರ್ನಾಟಕ, ಭಾರತ
"Parisara Bhavan", 1st to 5th Floors, # 49, Church Street, Bangalore - 560 001, Karnataka, INDIA

/By RPAD/

(This document contains 8 Pages including annexure)

Combined Consent order No PCB/143/HPI/2011-12/ 302

16 AUG 2011
Dated: 03.08.2011

Consent for discharge of effluents under the Water (Prevention and Control of Pollution) Act, 1974 and emissions under the Air (Prevention and Control of Pollution) Act, 1981.

- Ref: 1. Consent application filed by the industry under the Water and the Air Acts for the period 2011-12 at the Regional Office, Belgaum on 16.03.2011.
2. Inspection of the industry by the Officer of the Board on 15.04.2011.
3. Proceedings of the Consent Committee Meeting held on 10.06.2011.

ಇಂಕು

Consent is hereby granted under section 25/26 of the Water (Prevention and Control of Pollution) Act, 1974 and under Section 21 of the Air (Prevention and Control of Pollution) Act, 1981 (herein after referred as the Water Act and the Air Act respectively) and the Rules and Orders made there under and subject to the terms and conditions as detailed in the schedule annexed to this order.

Consent is granted to **The General Manager, M/s. Gokak Sugars Limited, Sy. No. 238 & 263, Kolavi Village, Gokak Taluk, Belgaum District**, authorizing him to operate their industrial plant and to make discharge of effluents and emissions from the premises as mentioned above.

Discharge of effluents under the Water Act:

Sl. No.	Description	Permitted Quantity of discharge	Place of discharge
1	Trade effluent	250 KLD	On their own land for irrigation, after treating in ETP to the Standards stipulated in Annexure-I.
2	Domestic effluent	80 KLD	Septic tank & Soak pit

Discharge of air emissions under the Air Act from the following stacks etc.

Sl. No.	Description of chimney/outlet	Limits specified refer schedule
As per Annexure- II		


618
SENIOR ENVIRONMENTAL OFFICER

The consent is valid for the manufacture of:

Sl. No.	Products & By-products	Maximum Capacity
1	Sugarcane Crushing	2500 TCD
2.	Co-generation	14 MW

**THE CONSENT IS GRANTED FOR THE PERIOD
FROM 01.07.2011 TO 30.06.2012.**

For and on behalf of the
Karnataka State Pollution Control Board


SENIOR ENVIRONMENTAL OFFICER

To
The General Manager,
M/s. Gokak Sugars Limited,
Sy. No. 238 & 263, Kolavi Village,
Gokak Taluk, Belgaum District-591 344.



ಕರ್ನಾಟಕ ರಾಜ್ಯ ಮಾಲಿನ್ಯ ನಿಯಂತ್ರಣ ಮಂಡಳಿ
Karnataka State Pollution Control Board

"ಪರಿಸರಭವನ", 1 ರಿಂದ 5ನೇ ಮಹಡಿಗಳು, ನಂ.49, ಚರ್ಚ್ ಸ್ಟ್ರೀಟ್, ಬೆಂಗಳೂರು - 560 001, ಕರ್ನಾಟಕ, ಭಾರತ
"Parisara Bhavana", 1st to 5th Floor, # 49, Church Street, Bengaluru - 560 001, Karnataka, INDIA

/By RPAD/

(This document contains 8 Pages including annexure)

27 SEP 2012

Combined Consent order No PCB/143/HPI/2010/ 708 Dated:
Consent for discharge of effluents under the Water (Prevention and Control of Pollution) Act, 1974 and emissions under the Air (Prevention and Control of Pollution) Act, 1981.

- Ref:** 1. Consent application filed by the industry under the Water and the Air Acts for the period 2012-13 at the Regional Office, Belgaum on 07.04.2012.
2. Inspection of the industry by the Regional Officer Belgaum on 08.04.2012.
3. Proceedings of the Consent Committee Meeting held on 16.06.2012.
4. Proceedings of the Personal Hearing held on 16.08.2012.

ಉಳಿಸಿ

Consent is hereby granted under section 25 of the Water (Prevention and Control of Pollution) Act, 1974 and under Section 21 of the Air (Prevention and Control of Pollution) Act, 1981 (herein after referred as the Water Act and the Air Act respectively) and the Rules and Orders made there under and subject to the terms and conditions as detailed in the schedule annexed to this order.

Consent is granted to **The General Manager, M/s. Gokak Sugars Limited, Sy. No. 238 & 263, Kolavi Village, Gokak Taluk, Belgaum District**, authorizing him to operate their industrial plant and to make discharge of effluents and emissions from the premises as mentioned above.

Discharge of effluents under the Water Act:

Sl. No.	Description	Permitted Quantity of discharge	Place of discharge
1	Trade effluent	250 KLD	On own land for irrigation, after treating in ETP to the Standards stipulated in Annexure-I .
2	Domestic effluent	80 KLD	Septic tank & Soak pit

Discharge of air emissions under the Air Act from the following stacks etc.

Sl. No	Description of chimney/outlet	Limits specified refer schedule
As per Annexure- II		

K. R. Srinivas 25/09/2012
SENIOR ENVIRONMENTAL OFFICER

The consent is valid for the manufacture of:

Sl. No	Products & By-products	Maximum Capacity
1	Sugarcane Crushing	2500 TCD
2.	Co-generation	14 MW

**THE CONSENT IS GRANTED FOR THE PERIOD
FROM 01.07.2012 TO 30.06.2013.**

For and on behalf of the
Karnataka State Pollution Control Board

10-11-12
[Signature]
SENIOR ENVIRONMENTAL OFFICER

✓
To
The General Manager,
M/s. Gokak Sugars Limited,
Sy. No. 238 & 263, Kolavi Village,
Gokak Taluk, Belgaum District-591 344.

SCHEDULE

TERMS AND CONDITIONS

(to accompany Combined Consent order No. PCB/143/HPI/2010/ Dated:)

I. (A) TREATMENT AND DISPOSAL OF EFFLUENTS UNDER THE WATER ACT.

1. The discharge from the premises of the applicant shall pass through the terminal manhole/manholes where from the Board shall be free to collect samples in accordance with the provisions of the Act or Rules made there under.
2. The daily quantity of effluent discharge shall not exceed the limits and shall not contain the constituents in excess of the tolerance limits laid down as indicated in the table below. The applicant shall monitor the quality of effluents for the parameters stipulated as per the frequency indicated.

Sl. No.	Description of the effluents	Daily quantity of discharge in KL	Tolerance Limits	Frequency of monitoring
1	2	3	4	5
1	Industrial effluents	250 KLD	Annexure-I	Weekly.
2	Domestic effluents	80 KLD	Septic tank and soak pit	-

3. The applicant shall install and operate the effluent treatment systems as approved in CFE and maintain the same continuously so as to achieve the treated effluent quality as mentioned above.
4. The applicant shall provide flow meters for measuring inflow & outflow of effluent treatment plant (ETP) and provide separate energy meter for ETP and record hourly readings in a log book for verification of inspecting Officers.
5. The applicant shall ensure that the operation of effluent treatment plant shall be started at least one month before the starting of cane crushing to achieve desired MLSS so as to meet the prescribed standards from day one of the operation of mill.
6. The applicant shall provide adequate storage capacity for treated effluent to take care of no demand for irrigation. The storage tank shall be impervious.
7. The industry should provide alternate power supply to the ETP for its continuous operation.
8. The ETP units should be made easily approachable for the inspecting Officers.
9. The factory authorities shall display the approved flow sheet in the ETP area on a board along with discharge standards stipulated in the consent order.
10. The applicant shall display the treated effluent parameters, as per the latest analysis report of the treated trade effluent, at the ETP location.


SENIOR ENVIRONMENTAL OFFICER

11. The applicant shall paint the name and capacity of each unit of ETP.
12. The applicant shall provide lined and closed drains to convey trade effluents to ETP for further treatment and disposal.
13. a) The applicant shall discharge the treated effluents only to the place mentioned in the Consent order. The application of treated effluent for agriculture shall be controlled so as to avoid either flooding of land or ground water contamination.
b) The applicant shall furnish the ownership of land to the Board within 15 days with the location map of irrigation land showing the Sy. Nos. and a list of land with Sy. Nos. if applied on private agricultural lands.

(B) MOLASSES STORAGE:

1. The applicant shall take action to store the molasses in steel tanks covered with proper roofing.
2. No effluent shall be contained in unlined/ katcha pits/ ponds.
3. The applicant shall obtain permission from the Board to dispose-off the spoiled molasses.

II. TREATMENT AND DISPOSAL OF SEWAGE EFFLUENTS:

The applicant shall ensure that the sewage effluent is treated in the septic tank and soak pit constructed as per IS 2470 Part-I & II and no overflow from soak pit is allowed.

III. DISCHARGE OF EMISSIONS UNDER THE AIR ACT

1. The discharge of emissions from the premises of the applicant shall pass through the stacks/ chimneys mentioned in **Annexure-II** to the consent, where from the Board shall be free to collect the samples at any time in accordance with the provisions of the Act and Rules made there under. The stacks/ chimneys heights shall be as per **Annexure-II**.
2. The rate of emissions discharged and the tolerance limits of the constituents forming the emissions in each of the stacks shall not exceed the limits laid down in Annexure.
3. The applicant shall operate the air pollution control equipment as specified in the **Annexure-II**, continuously so as to ensure that the emission does not exceed the limits specified. The operation of the control equipment shall be synchronized with the operation of the emission source.
4. The applicant shall provide port holes for sampling the emissions and access platforms for carrying out stack sampling and provide electrical outlet points and other arrangements for all chimneys/ stacks and other sources of emissions within 30 days from the date of receipt of this consent order so as to collect samples of emissions by the Board or the applicant at anytime in accordance with the provisions of the Act and Rules made there in.

IV. LIQUID WASTES:

The applicant shall treat and dispose any liquid effluents produced in the course of control of air pollution by scrubbing, conditioning etc., of flue gases in accordance with the provisions of the Water (Prevention and Control of Pollution) Act, 1974. The details of such discharges shall be quantified and monitored immediately after commissioning and details of collection, treatment and disposal shall be furnished to the Board.


SENIOR ENVIRONMENTAL OFFICER

V. SELF MONITORING AND REPORTING BY THE INDUSTRY

A. WATER POLLUTION CONTROL

1. The applicant shall at his own cost get the trade/ sewage effluent samples collected from the manhole chambers specified in condition No. I.A (1) and analyze the same every month through Board/MoEF empanelled laboratory for the parameters indicated in condition No.I. A (2) and shall submit in duplicate the report to the Regional Officer.
2. The applicant shall provide effluent flow meters to record the effluent quantity discharged.
3. Monthly extract of daily product manufactured as well as Effluent discharged- sewage/ trade shall be submitted to the Regional Officer regularly every month.
4. Adequate number of observation bore/ test wells shall be provided in and around the agricultural land where the treated effluent is used to monitor the ground water quality.
5. The applicant shall establish a self monitoring system for monitoring the effluents by procuring necessary monitoring equipment & by establishing a laboratory for;
 - 1) Trade effluent quality monitoring.
 - 2) Ground water and surface water monitoring.
 - 3) Flow measures devise on line for treated trade effluent.

B. AIR POLLUTION CONTROL.

1. The applicant shall at his own cost get the samples of emissions collected and get them analyzed once in 15 days from Board/MoEF empanelled laboratory for the parameters indicated in conditions No.III (1) from the sampling port holes provided as per condition No.III (4) and shall submit in duplicate, the analysis results to the Regional Office of Board.
2. **The applicant shall provide required chimney height to 1000 KVA DG set within one month time.**
3. The applicant shall monitor the Ambient Air Quality and monitoring shall be done as per the EP Rules. The AAQM stations shall be fixed in consultation with the Regional Office of the Board.
4. The applicant shall carryout self monitoring of effluents and emissions at the frequency indicated below and furnish the reports of analysis to the area Regional Officer.

Sl. No.	Emissions to be monitored	Frequency of monitoring
1	Emission from the Boiler stack	Once in 15 days
2	Emission from the 1000 KVA DG Set	Once in a month

5. The analysis of effluents and emissions may be carried out in house laboratory/ KSPCB approved laboratory/ laboratories approved under EP Act.
6. The applicant shall maintain log books to reflect the working condition of pollution control systems and also self monitoring results and keep it open for inspection.
7. The applicant shall set-up Environmental Cell comprising of qualified and competent personnel for complying with the conditions specified.


SENIOR ENVIRONMENTAL OFFICER

8. Applicant shall establish, implement and maintain an Environmental Management System in conformity with ISO 14001:2004 standards.

C. WATER CESS:

The applicant shall comply with the provisions of the Water (Prevention and Control of Pollution) Cess Act, 1977, by installing water meters, filing water cess returns in Form-I and other provisions as contained in the said Water (Prevention and Control of Pollution) Cess Act, 1977 and 2003

D. ENVIRONMENTAL STATEMENT

The applicant shall submit the Environmental Statement every year for the period ending 31st March in Form V as per Rule 14 of Environment (Protection) Rule, 1986 on or before 30th September.

VI. SOLID WASTE MANAGEMENT:

1. The applicant shall segregate solid waste from Hazardous Waste/Bio-medical Waste/Municipal Solid Waste and store it properly till treatment/disposal without causing pollution to Environment.
2. The storage & disposal shall be as specified below:

Sl. No.	Type of Solid Waste	Quantity in TPD	Mode of storage, treatment and disposal
1	Press mud	100	Sold to member farmers as soil conditioner/ manure
2	Boiler ash	11	
3	ETP sludge, Lime sludge	0.1	
4	Bagasse	750	Used as fuel for Boiler.

3. The applicant shall comply with the Fly ash Notification, dated: 03.11.2009 issued from MoEF.
4. The applicant shall go for effective fly ash management as per Fly ash Notification and take precautions not to cause any fugitive emissions/ dust nuisance leading to public complaints.
5. The applicant shall maintain a log book for fly ash generation and disposal.

VII. HAZARDOUS WASTE (MANAGEMENT, HANDLING AND TRANSBOUNDARY MOVEMENT) RULES 2008

The applicant shall comply with the Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2008.

VIII. NOISE POLLUTION CONTROL:

1. The applicant shall take steps to control noise levels so as to maintain ambient air quality standard in respect of noise as laid down under the Air Act, 1981.
2. The applicant shall provide necessary acoustic enclosures or measures to control noise levels generated from the DG Sets as per Environment Protection Rules, 1986.


SENIOR ENVIRONMENTAL OFFICER

IX. GENERAL

1. The applicant shall not allow the discharge from the other premises to mix with the discharge from his premises. Storm water shall not be allowed to mix with the effluents on the upstream of the terminal manhole where the flow measuring devices are installed.
2. The ETP site and the entire premises shall be always kept clean. The ETP site, inspection chambers, outlets, flow measuring points should made easily approachable.
3. The applicant shall not change or alter quality or quantity or the rate of discharge or temperature or the route of discharge with out the previous consent of the Board.
4. The applicant shall promptly comply with all orders and instructions issued from time to time by the Board or any other officers of the Board duly authorized in this behalf.
5. The applicant shall display the consent granted in a prominent place for perusal of the inspecting Officers of the Board. The industry shall display consent order, EC, Environment statement in their website.
6. The applicant, is heirs, legal representatives or assigns shall have no claims what so ever to the continuation or renewal of this consent after expiry of the period of consent.
7. The applicant shall forth with keep the Board informed of any accident of unforeseen act or event of any poisonous, noxious or polluting matter or emissions are being discharged into stream or well or air as a result of such discharge, water or air is being polluted.
8. The Board reserves the right to review, impose additional conditions, revoke, change or alter terms and conditions of this consent.
9. The applicant shall comply with the guidelines under Corporate Responsibilities for Environment Protection (CREP) 2003 issued by Ministry of Environmental Forests and CPCB.
10. The applicant shall make an application for consent at least 120 days before expiry of this consent.
11. The applicant shall comply with the directions of Personal hearing held on 16.08.2012.

FOR AND ON BEHALF OF THE
KARNATAKA STATE POLLUTION CONTROL BOARD


SENIOR ENVIRONMENTAL OFFICER

ANNEXURE - I

Sl. No.	Characteristics.	Tolerance limits.
1.	Colour and Odour.	See Note.
2.	Suspended Solids mg/l.Max.	100
3.	pH value.	6 to 8.5
4.	Oil and Grease mg/l. Max.	10
5.	Bio-chemical Oxygen Demand, mg/l. (3 days at 27°C) max.	100

Note: All efforts should be made to remove colour and unpleasant odour as far as practicable.

ANNEXURE - II

Chimney	Chimney Attached to	Minimum Chimney Height to be Provided Above ground level	Rate of emission Nm ³ /Hr.	Constituents to be controlled in the emission.	Tolerance limits Mg/Nm ³	Air Pollution Control equipment to be installed, in addition to Chimney height as per Col (3)
1.	90 TPH Boiler (Bagasse fired)	70 M AGL.	-	PM	150	ESP
2	1000 KVA DG set	30 M AGL or 6 M ARL which ever is higher	-	NOx NMHC PM CO	710 ppmv 100 75 150	Acoustic enclosure
3	250 KVA DG set	6 M ARL	-	-	-	Acoustic enclosure.
4	250 KVA DG set	6 M ARL	-	-	-	Acoustic enclosure.

NMHC - Non-Methane Hydro Carbon.
ppmv - parts per million by volume.


SENIOR ENVIRONMENTAL OFFICER

ಫ್ಯಾಕ್ಸ್ / Fax : 080-25586321
ಈಮೇಲ್ / E-mail : ho@kspcb.gov.in
ವೆಬ್‌ಸೈಟ್ / Website : http://kspcb.gov.in



17004

25581383, 25589112
25588151, 25588270
25588142, 25586520

ಕರ್ನಾಟಕ ರಾಜ್ಯ ಮಾಲಿನ್ಯ ನಿಯಂತ್ರಣ ಮಂಡಳಿ Karnataka State Pollution Control Board

"ಪರಿಸರಭವನ", 1 ರಿಂದ 5ನೇ ಮಹಡಿಗಳು, ನಂ.49, ಚರ್ಚ್‌ಸ್ಟ್ರೀಟ್, ಬೆಂಗಳೂರು - 560 001, ಕರ್ನಾಟಕ, ಭಾರತ
"Parisara Bhavana", 1st to 5th Floor, # 49, Church Street, Bengaluru - 560 001, Karnataka, INDIA

/By RPAD/

(This document contains -8- Pages including annexure)

Combined Consent order No PCB/143/HPI/2010/ 1185

Date:

11 NOV 2013

Consent for discharge of effluents under the Water (Prevention and Control of Pollution) Act, 1974 and emissions under the Air (Prevention and Control of Pollution) Act, 1981.

- Ref:** 1. Consent application filed by the industry under the Water and the Air Acts for the period 2013-14 at the Regional Office, Belgaum on 27.05.2013 (Reg No. 50442)
2. Inspection of the industry by the Regional Officer -**Chikkodi** on 20.06.2013
3. Interaction meet held on 02-09-2013
4. Proceedings of the Consent Committee Meeting held on 25.09.2013

ಉಳಿವು

Consent is hereby granted under section 25 of the Water (Prevention and Control of Pollution) Act, 1974 and under Section 21 of the Air (Prevention and Control of Pollution) Act, 1981 (herein after referred as the Water Act and the Air Act respectively) and the Rules and Orders made there under and subject to the terms and conditions as detailed in the schedule annexed to this order.

Consent is granted to **The General Manager, M/s. Gokak Sugars Limited, Sy. No. 238 & 263, Kolavi Village, Gokak Taluk, Belgaum District**, authorizing him to operate their industrial plant and to make discharge of effluents and emissions from the premises as mentioned above.

Discharge of effluents under the Water Act:

Sl. No.	Description	Permitted Quantity of discharge	Place of discharge
1	Trade effluent	250 KLD	On land for irrigation, after treating in ETP to the Standards stipulated in Annexure-I.
2	Domestic effluent	80 KLD	Septic tanks & Soak pits

Discharge of air emissions under the Air Act from the following stacks etc.

Sl. No	Description of chimney/outlet	Limits specified refer schedule
		As per Annexure- II


CHIEF ENVIRONMENTAL OFFICER

The consent is valid for the manufacture of:

Sl. No	Products & By-products	Maximum Capacity
1	Sugarcane Crushing	2500 TCD
2.	Co-generation	14 MW

**THE CONSENT IS GRANTED FOR THE PERIOD
FROM 01.07.2013 TO 30.06.2014.**

For and on behalf of the
Karnataka State Pollution Control Board


CHIEF ENVIRONMENTAL OFFICER

✓ To
The General Manager,
M/s. Gokak Sugars Limited,
Sy. No. 238 & 263, Kolavi Village,
Gokak Taluk, Belgaum District-591 344.


CHIEF ENVIRONMENTAL OFFICER

For Office use:

- | | |
|-----------------------|--|
| 1. Size: L/M/S | : Large |
| 2. Category: R/O/G | : Red |
| 3. Capital Investment | : Rs.68.50 Crores |
| 4. Consent Fees paid | : Rs. 75,000/- under each Act |
| 5. DD No.& Date | : No.035167, 035168 dtd:
06.05.2013 |

SCHEDULE

TERMS AND CONDITIONS

(to accompany Combined Consent order No. PCB/143/HPI/2010/ Dated:)

I. (A) TREATMENT AND DISPOSAL OF EFFLUENTS UNDER THE WATER ACT.

1. The discharge from the premises of the applicant shall pass through the terminal manhole/manholes where from the Board shall be free to collect samples in accordance with the provisions of the Act or Rules made there under.
2. The daily quantity of effluent discharge shall not exceed the limits and shall not contain the constituents in excess of the tolerance limits laid down as indicated in the table below. The applicant shall monitor the quality of effluents for the parameters stipulated as per the frequency indicated.

Sl. No.	Description of the effluents	Daily quantity of discharge in KL	Tolerance Limits	Frequency of monitoring
1	2	3	4	5
1	Industrial effluents	250 KLD	Annexure-I	Weekly.
2	Domestic effluents	80 KLD	Septic tanks and soak pits	-

3. The applicant shall operate the effluent treatment systems and maintain the same continuously so as to achieve the treated effluent quality as mentioned above.
4. The applicant shall provide flow meters for measuring inflow & outflow of effluent treatment plant (ETP) and provide separate energy meter for ETP and record hourly readings in a log book for verification of inspecting Officers.
5. The applicant shall ensure that the operation of effluent treatment plant shall be started at least one month before the starting of cane crushing to achieve desired MLSS so as to meet the prescribed standards from day one of the operation of mill.
6. The applicant shall provide adequate storage capacity for treated effluent to take care of no demand for irrigation. The storage tank shall be impervious.
7. The industry should provide alternate power supply to the ETP for its continuous operation.
8. The ETP units should be made easily approachable for the inspecting Officers.
9. The factory authorities shall display the approved flow sheet in the ETP area on a board along with discharge standards stipulated in the consent order.
10. The applicant shall display the treated effluent parameters, as per the latest analysis report of the treated trade effluent, at the ETP location.
11. The applicant shall paint the name and capacity of each unit of ETP.


CHIEF ENVIRONMENTAL OFFICER

12. The applicant shall provide lined and closed drains to convey trade effluents to ETP for further treatment and disposal.
13. a) The applicant shall discharge the treated effluents only to the place mentioned in the Consent order. The application of treated effluent for agriculture shall be controlled so as to avoid either flooding of land or ground water contamination.
b) The applicant shall furnish the ownership of land to the Board within 15 days with the location map of irrigation land showing the Sy. Nos. and a list of land with Sy. Nos. if applied on private agricultural lands.
14. The applicant shall ensure that wastewater generation from Sugar plant is always less than or equal to 100 litres/ tonne of cane crushed.

(B) MOLASSES STORAGE:

1. The applicant shall take action to store the molasses in steel tanks covered with proper roofing.
2. No effluent shall be contained in unlined/ katcha pits/ ponds.
3. The applicant shall obtain permission from the Board to dispose-off the spoiled molasses.

II. TREATMENT AND DISPOSAL OF SEWAGE EFFLUENTS:

The applicant shall ensure that the sewage effluent is treated in the septic tank and soak pit constructed as per IS 2470 Part-I & II and no overflow from soak pit is allowed.

III. DISCHARGE OF EMISSIONS UNDER THE AIR ACT

1. The discharge of emissions from the premises of the applicant shall pass through the stacks/ chimneys mentioned in **Annexure-II** to the consent, where from the Board shall be free to collect the samples at any time in accordance with the provisions of the Act and Rules made there under. The stacks/ chimneys heights shall be as per **Annexure-II**.
2. The rate of emissions discharged and the tolerance limits of the constituents forming the emissions in each of the stacks shall not exceed the limits laid down in Annexure.
3. The applicant shall operate the air pollution control equipment as specified in the **Annexure-II**, continuously so as to ensure that the emission does not exceed the limits specified. The operation of the control equipment shall be synchronized with the operation of the emission source.
4. The applicant shall provide port holes for sampling the emissions and access platforms for carrying out stack sampling and provide electrical outlet points and other arrangements for all chimneys/ stacks and other sources of emissions within 30 days from the date of receipt of this consent order so as to collect samples of emissions by the Board or the applicant at anytime in accordance with the provisions of the Act and Rules made there in.

IV. LIQUID WASTES:

The applicant shall treat and dispose any liquid effluents produced in the course of control of air pollution by scrubbing, conditioning etc., of flue gases in accordance with the provisions of the Water (Prevention and Control of Pollution) Act, 1974. The details of such discharges shall be quantified and monitored immediately after commissioning and details of collection, treatment and disposal shall be furnished to the Board.


CHIEF ENVIRONMENTAL OFFICER

V. SELF MONITORING AND REPORTING BY THE INDUSTRY

A. WATER POLLUTION CONTROL

1. The applicant shall at his own cost get the trade/ sewage effluent samples collected from the manhole chambers specified and analyze the same every month through Board/MoEF empanelled laboratory for the parameters indicated and shall submit in duplicate the report to the Regional Officer.
2. The applicant shall provide effluent flow meters to record the effluent quantity discharged.
3. Monthly extract of daily product manufactured as well as Effluent discharged- sewage/ trade shall be submitted to the Regional Officer regularly every month.
4. Adequate number of observation bore/ test wells shall be provided in and around the agricultural land where the treated effluent is used to monitor the ground water quality.
5. The applicant shall establish a self monitoring system for monitoring the effluents by procuring necessary monitoring equipment & by establishing a laboratory for;
 - 1) Trade effluent quality monitoring.
 - 2) Ground water and surface water monitoring.
 - 3) Flow measures devise on line for treated trade effluent.

B. AIR POLLUTION CONTROL.

1. The applicant shall at his own cost get the samples of emissions collected and get them analyzed once in 15 days from Board/MoEF empanelled laboratory for the parameters indicated in conditions No.III (1) from the sampling port holes provided as per condition No.III (4) and shall submit in duplicate, the analysis results to the Regional Office of Board.
2. **The applicant shall provide the stipulated chimney heights to all the DG sets within one months' time.**
3. The applicant shall monitor the Ambient Air Quality and monitoring shall be done as per the EP Rules. The AAQM stations shall be fixed in consultation with the Regional Office of the Board.
4. The applicant shall carryout self monitoring of emissions at the frequency indicated below and furnish the reports of analysis to the area Regional Officer.

Sl. No.	Emissions to be monitored	Frequency of monitoring
1	Emission from the Boiler stack	Once in 15 days

5. The analysis of effluents and emissions may be carried out in house laboratory/ KSPCB approved laboratory/ laboratories approved under EP Act.
6. The applicant shall maintain log books to reflect the working condition of pollution control systems and also self monitoring results and keep it open for inspection.
7. The applicant shall set-up Environmental Cell comprising of qualified and competent personnel for complying with the conditions specified.
8. Applicant shall establish, implement and maintain an Environmental Management System in conformity with ISO 14001:2004 standards.


CHIEF ENVIRONMENTAL OFFICER

C. WATER CESS:

The applicant shall comply with the provisions of the Water (Prevention and Control of Pollution) Cess Act, 1977, by installing water meters, filing water cess returns in Form-I and other provisions as contained in the said Water (Prevention and Control of Pollution) Cess Act, 1977 and 2003

D. ENVIRONMENTAL STATEMENT

The applicant shall submit the Environmental Statement every year for the period ending 31st March in Form V as per Rule 14 of Environment (Protection) Rule, 1986 on or before 30th September.

VI. SOLID WASTE MANAGEMENT:

1. The applicant shall segregate solid waste from Hazardous Waste/Bio-medical Waste/Municipal Solid Waste and store it properly till treatment/disposal without causing pollution to Environment.
2. The storage & disposal shall be as specified below:

Sl. No.	Type of Solid Waste	Quantity in TPD	Mode of storage, treatment and disposal
1	Press mud	100	Shall be sold to member farmers as soil conditioner/ manure
2	Boiler ash	10	
3	ETP sludge	0.05	
4	Lime Sludge	0.05	Shall be used for leveling and sold to farmers for silo conditioning

3. The applicant shall comply with the Fly ash Notification, dated: 03.11.2009 issued from MoEF.
4. The applicant shall go for effective fly ash management as per Fly ash Notification and take precautions not to cause any fugitive emissions/ dust nuisance leading to public complaints.
5. The applicant shall maintain a log book for fly ash generation and disposal.

VII. HAZARDOUS WASTE (MANAGEMENT, HANDLING AND TRANSBOUNDARY MOVEMENT) RULES 2008

The applicant shall comply with the Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2008.

VIII. NOISE POLLUTION CONTROL:

1. The applicant shall take steps to control noise levels so as to maintain ambient air quality standard in respect of noise as laid down under the Air Act, 1981.
2. The applicant shall provide necessary acoustic enclosures or measures to control noise levels generated from the DG Sets as per Environment Protection Rules, 1986.

IX. SPECIFIC CONDITION:

The decision taken in the meetings held on 02-09-2013 vide proceedings dated 23-09-2013 shall be binding on the occupier


CHIEF ENVIRONMENTAL OFFICER

X. GENERAL

1. The applicant shall not allow the discharge from the other premises to mix with the discharge from his premises. Storm water shall not be allowed to mix with the effluents on the upstream of the terminal manhole where the flow measuring devices are installed.
2. The ETP site and the entire premises shall be always kept clean. The ETP site, inspection chambers, outlets, flow measuring points should be made easily approachable.
3. The applicant shall not change or alter quality or quantity or the rate of discharge or temperature or the route of discharge without the previous consent of the Board.
4. The applicant shall promptly comply with all orders and instructions issued from time to time by the Board or any other officers of the Board duly authorized in this behalf.
5. The applicant shall display the consent granted in a prominent place for perusal of the inspecting Officers of the Board. The industry shall display consent order, EC, Environment statement in their website.
6. The applicant, his heirs, legal representatives or assigns shall have no claims whatsoever to the continuation or renewal of this consent after expiry of the period of consent.
7. The applicant shall forthwith keep the Board informed of any accident or unforeseen act or event of any poisonous, noxious or polluting matter or emissions being discharged into stream or well or air as a result of such discharge, water or air is being polluted.
8. The Board reserves the right to review, impose additional conditions, revoke, change or alter terms and conditions of this consent.
9. The applicant shall comply with the guidelines under Corporate Responsibilities for Environment Protection (CREP) 2003 issued by Ministry of Environmental Forests and CPCB.
10. The applicant shall make an application for consent at least 120 days before expiry of this consent.

FOR AND ON BEHALF OF THE
KARNATAKA STATE POLLUTION CONTROL BOARD


CHIEF ENVIRONMENTAL OFFICER

ANNEXURE - I

Sl. No.	Characteristics.	Tolerance limits.
1.	Colour and Odour.	See Note.
2.	Suspended Solids mg/l.Max.	100
3.	pH value.	6 to 8.5
4.	Oil and Grease mg/l. Max.	10
5.	Bio-chemical Oxygen Demand, mg/l. (3 days at 27°C) max.	100

Note: All efforts should be made to remove colour and unpleasant odour as far as practicable.

TABLE

HYDRAULIC LOADING APPLICABLE FOR DIFFERENT SOILS

Sl. No.	Soil Texture	Loading rate in M ³ /Hec/day
1	Sandy	225 to 280
2	Sandy Loam	170 to 225
3	Loam	110 to 170
4	Clay Loam	055 to 110
5	Clayey	035 to 055

ANNEXURE - II

Chimney	Chimney Attached to	Minimum Chimney Height to be Provided Above ground level	Rate of emission Nm ³ /Hr.	Constituents to be controlled in the emission.	Tolerance limits Mg/Nm ³	Air Pollution Control equipment to be installed, in addition to Chimney height as per Col (3)
1.	90 TPH Boiler (Bagasse fired)	70 M AGL.	-	PM	150	ESP
2	1000 KVA DG set	30 M AGL or 6 M ARL which ever is higher	-	NOx NMHC PM CO	710 ppmv 100 75 150	Acoustic enclosure
3	750 KVA DG set	7 M ARL	-	-	-	Acoustic enclosure.
4	200 KVA DG set	6 M ARL	-	-	-	Acoustic enclosure.
5	250 KVA DG set	6 M ARL	-	-	-	Acoustic enclosure.

NMHC - Non-Methane Hydro Carbon.
Ppmv - parts per million by volume.


CHIEF ENVIRONMENTAL OFFICER



ಕರ್ನಾಟಕ ರಾಜ್ಯ ಮಾಲಿನ್ಯ ನಿಯಂತ್ರಣ ಮಂಡಳಿ
Karnataka State Pollution Control Board

"ಪರಿಸರಭವನ", 1 ರಿಂದ 5ನೇ ಮಹಡಿಗಳು, ನಂ.49, ಚರ್ಚ್‌ಸ್ಟ್ರೀಟ್, ಬೆಂಗಳೂರು - 560 001, ಕರ್ನಾಟಕ, ಭಾರತ
"Parisara Bhavana", 1st to 5th Floor, # 49, Church Street, Bengaluru - 560 001, Karnataka, INDIA

//BY RPAD//

DESPATCHED

NO: PCB/143/HPI/2010 /1621

DATED: 27 JAN 2014

TO,
The General Manager,
M/s. Gokak Sugars Limited,
Sy.No.238 & 263, Kolavi Village,
Gokak Taluk, Belgaum District-591344
Sir,

Sub: Consent for establishment for expansion of sugar crushing capacity from 2500 TCD to 4500 TCD Limited at Sy. No. 238 and 263, Kolavi Village, Gokak Taluk, Belgaum District by M/S Gokak sugars Limited.

- Ref:** 1. Application filed by the industry for Consent for expansion under the Water and the Air Acts at Regional Office, Belgaum-II on 01.10.2012
2. Inspection of the industry by the Regional Officer, Chikkodi on 10.08.2012.
3. Proceedings of the Consent Committee Meeting held on 20.06.2013.
4. B.O Memo to RSEO Dharwad vide No.1606 dated 05.07.2013
5. Inspection of the industry by the Senior Environmental Officer, Dharwad on 22.07.2013. and forwarding report vide No.106 dated: 30.07.2013
6. Board office letter No. PCB/143/HPI/2013/3342/ dtd: 27.08.2013.
7. Industry letter dated 23.08.2013.
8. Industry letter dated 04.09.2013.

With reference to the above, it is to be informed that, the Board hereby accords consent for establishment under the Water (Prevention & Control of Pollution) Act 1974, and the Air (Prevention & Control of Pollution) Act 1981, for expansion of existing sugar crushing capacity from 2500 TCD to 4500 TCD at Survey Number 238 and 263, Kolavi Village, Gokak Taluk, Belgaum District by M/S Gokak sugars Limited subject to the following conditions.

1. This consent for establishment shall be valid for a period of **Five Years** from the date of issue of this order.
2. The applicant shall not undertake expansion/diversification without the prior consent of the Board.


CHIEF ENVIRONMENTAL OFFICER

3. The applicant shall obtain necessary license/clearance from other relevant agencies before taking up construction.
4. The project shall be cleared from all other angles of environment by the committee constituted by Department of Ecology and Environment, Government of Karnataka, Bangalore.
5. The Industry shall comply with all the conditions/guidelines mentioned in the CREP issued by CPCB.

I. WATER POLLUTION CONTROL:

1. The trade Effluent generated from the sugar plant shall not exceed 428 KLD after expansion.
2. The trade effluent generated from the process, shall be treated in the existing ETP (500 KLD) comprising of units as follows and shall meet the standards specified in **Annexure-I**:
 - i) Screen, ii) Oil separator (Oil and Grease trap), iii) Anaerobic Filter, iv) Aeration Tank-I, v) Clarifier I, vi) Aeration Tank-II, vii) Clarifier II, viii) Treated Effluent Sump & ix) Treated Effluent Storage Tank.
3. The treated effluents shall be used on own land for irrigation/ gardening.
4. The Industry shall provide monthly wash tank of adequate capacity and the effluent shall be taken for treatment in the ETP
5. The ETP units should be made easily approachable for the inspecting Officers.
6. The factory authorities shall display the approved flow sheet in the ETP area on a board along with discharge standards stipulated in the consent order.
7. The applicant shall display the name and capacity of each unit of ETP.
8. The applicant shall provide lined and closed drains to convey trade effluents to ETP for further treatment and disposal.
9. All the effluent treatment units shall be made totally impervious. The ETP units shall be operated continuously round the clock.
10. The sewage effluent from the factory shall be treated in septic tank followed by soak pits. There shall not be any overflow from the soak pit. The septic tank and soak pit shall conform to IS 2470 Part – I and Part – II.
11. Industry has to provide a separate drainage system for storm water management. There shall not be any mix up of storm water run-off with treated/ untreated effluent. The applicant shall submit detailed storm water management plan for press mud storage area with suitable storm water collection system (to avoid run-off entering natural drainage system) within 30 days.
12. If the treatment plants do not achieve the effluent standards stipulated in **Annexure-I** or if it is found to be inadequate, then the industry shall have to modify the units so as to meet the standards, with prior consent of the Board
13. The applicant shall ensure that no runoff of effluent from the agricultural use shall reach Gokak River. Industry shall provide a bund at the lowest point to arrest any runoff


CHIEF ENVIRONMENTAL OFFICER

II. WATER CESS:

1. The industry shall comply with the provisions of Water (Prevention and Control of Pollution) Cess Act, 1977, by installing water meters, filing water cess returns in Form-I and other provisions as contained in the said Water (Prevention and Control of Pollution) Cess Act, 1977, and 2003.

III. AIR POLLUTION CONTROL:

1. There shall not be any additional sources of Air Pollution due to expansion.

VI. MOLASSES STORAGE:

- (a) The Applicant shall take action to store the Molasses in steel tanks covered with proper roofing.
- (b) Molasses shall not be contained in katcha pits.
- (c) The Applicant shall obtain permission from the Board to dispose off the spoiled Molasses and it shall be disposed off in a manner as laid down by the Board.

V. NOISE POLLUTION CONTROL:

1. The industry shall ensure that the ambient noise levels within its premises shall not exceed the limits i.e. 75 dB(A) Leq during day time and 70 dB(A) Leq during night time as specified in the Environment (Protection) Rules.

VI. SOLID WASTE (OTHER THAN HAZARDOUS WASTE) DISPOSAL:

1. The industry shall collect, treat and dispose off all solid waste generated from the process other than wastes covered under the Hazardous Waste (Management & Handling) Rules, in such manner so as not to cause environmental pollution.
2. The factory shall dispose off all solid waste generated from the process and from the process and from the effluent treatment plant in a scientific manner without causing underground and surface water pollution directly or indirectly. The solid waste shall be disposed off without causing eye sores to the public.
3. The industry shall store the press mud, Bagasse & ash in such a manner before disposal so as not to cause any pollution

VII. HAZARDOUS WASTES (MANAGEMENT & HANDLING) RULES 1989 & 2003:

1. The industry shall apply and obtain authorization under Hazardous Waste (Management, Handling & Transboundary Movement) Rules 2008, and comply with the conditions of the authorization to handle, store and to dispose hazardous waste generated. The applicant shall apply for authorization under the Rules in Form-I and comply with conditions.
2. The quantity of hazardous waste shall not exceed the quantities mentioned in the authorization to be issued under Hazardous Waste (Management & Handling) Rules.


CHIEF ENVIRONMENTAL OFFICER

VIII. GENERAL:

1. The industry shall not increase the sugarcane crushing for trial or regular production unless the effluent treatment plant as approved by the Board is completed in all respects and necessary air pollution control equipments are installed to the satisfaction of the Board and environment clearance is obtained from Department of Ecology and Environment.
2. During the operation of the plant, if either the emissions from the stacks, chimney or the liquid effluents from the industry or solid waste disposal do not conform to the standards prescribed by the Board, the industry shall shut down the plant for effecting modification to the treatment works/ control equipments so as to render the effluent and emissions to the prescribed standards.
3. The industry shall take afforestation measures in the factory area, so that green belt around the factory premises is maintained.
4. Exact date of commissioning of the plant for expanded production shall be informed to this Board within 45 days in advance so as to make necessary inspection of the plant and the pollution control measures provided by the industry.
5. The applicant shall set up environment cell with qualified engineers & chemists for self monitoring of all pollution control activities and establish required infrastructure (Lab, Samplers, etc.).
6. The Board reserves the right to review, impose additional condition or conditions, revoke, change or alter the terms and conditions.
7. This consent for establishment does not give any right to the Party/ Project Authority/ Industry to forego any legal requirement that is necessary for setting/ operation of the plant.
8. The industry shall furnish point-wise compliance to the conditions given under this consent for establishment within 30 days.
9. The applicant shall comply with the guidelines under Corporate Responsibilities for Environment Protection (CREP) 2003 issued by Ministry of Environmental Forests and CPCB.
10. The applicant shall display Consent orders, Environmental Clearance, Environmental Statement in the website of the industry and update regularly.

Please note that this is only consent for establishment issued to you to proceed with the formalities for establishment of the industry and does not give any right to proceed with trial/regular production. For this purpose, separate consents of the Board for discharge of liquid effluent and the emissions to the air shall have to be obtained by remitting prescribed consent fee. The application for consent has to be made 45 days in advance of commissioning for trial production of the plant.

The receipt of this letter may please be acknowledged.

FOR AND ON BEHALF OF
KARNATAKA STATE POLLUTION CONTROL BOARD


CHIEF ENVIRONMENTAL OFFICER (EIA-I).

Encl.: Annexure-I

Note:

1. It is advised to provide all necessary healthcare facilities to employees & local people and shall carry out routine health survey among employees & local people and tests like Spirometry, Pulseoxymetry, Lung function test, etc.
2. It is advised to regularly check the health of workers exposed to very high noise levels and suitable measures to avoid any ill effects shall be taken.
3. It is advised to take all safety measures to avoid any injury to its employees and local people as per the approved Onsite and Offsite Emergency Plan.


CHIEF ENVIRONMENTAL OFFICER

ANNEXURE - I
ON LAND FOR IRRIGATION

SL. NO.	Characteristics.	Tolerance limits.
1	Colour and Odour.	See Note.
2	Suspended Solids mg/l. Max.	100
3	pH value.	6.5 to 8.5
4	Oil and Grease mg/l. Max.	10
5	Bio-chemical Oxygen Demand, mg/l. (5 days at 20oC) Max.	100

Note: All efforts should be made to remove colour and unpleasant odour as far as practicable.

TABLE
HYDRAULIC LOADING APPLICABLE FOR DIFFERENT SOILS

SL. No.	Soil Texture.	Loading rate in M ³ /Hec/day.
1.	Sandy	225 to 280
2.	Sandy Loam.	170 to 225
3.	Loam.	110 to 170
4.	Clay Loam.	055 to 110
5.	Clayey.	035 to 055


CHIEF ENVIRONMENTAL OFFICER



ಕರ್ನಾಟಕ ರಾಜ್ಯ ಮಾಲಿನ್ಯ ನಿಯಂತ್ರಣ ಮಂಡಳಿ Karnataka State Pollution Control Board

"ಪರಿಸರಭವನ", 1 ರಿಂದ 5ನೇ ಮಹಡಿಗಳು, ನಂ.49, ಚರ್ಚ್‌ಸ್ಟ್ರೀಟ್, ಬೆಂಗಳೂರು - 560 001, ಕರ್ನಾಟಕ, ಭಾರತ
"Parisara Bhavana", 1st to 5th Floor, # 49, Church Street, Bengaluru - 560 001, Karnataka, INDIA

/By RPAD/

(This document contains --8- Pages including annexure)

Combined Consent order No PCB/143/HPI/2010/ 668

Date: 28 AUG 2014

Consent for discharge of effluents under the Water (Prevention and Control of Pollution) Act, 1974 and emissions under the Air (Prevention and Control of Pollution) Act, 1981.

- Ref:** 1. Consent application filed by the industry under the Water and the Air Acts for the period 2014-15 at the Regional Office, Chikkodi on 05.07.2014 (Reg No. 74348)
2. Inspection of the industry by the Regional Officer, Chikkodi on 20.06.2014
3. Proceedings of the Consent Committee Meeting held on 05.08.2014

೪೪೪೪೪೪೪೪

Consent is hereby granted under section 25 of the Water (Prevention and Control of Pollution) Act, 1974 and under Section 21 of the Air (Prevention and Control of Pollution) Act, 1981 (herein after referred as the Water Act and the Air Act respectively) and the Rules and Orders made there under and subject to the terms and conditions as detailed in the schedule annexed to this order.

Consent is granted to **The General Manager, M/s. Gokak Sugars Limited, Sy. No. 238 & 263, Kolavi Village, Gokak Taluk, Belgaum District**, authorizing him to operate their industrial plant and to make discharge of effluents and emissions from the premises as mentioned above.

Discharge of effluents under the Water Act:

Sl. No.	Description	Permitted Quantity of discharge	Place of discharge
1	Trade effluent	344 KLD	On land for irrigation, after treating in ETP to the Standards stipulated in Annexure-I.
2	Domestic effluent	84 KLD	Septic tanks & Soak pits

Discharge of air emissions under the Air Act from the following stacks etc.

Sl. No	Description of chimney/outlet	Limits specified refer schedule
As per Annexure- II		

CHIEF ENVIRONMENTAL OFFICER

The consent is valid for the manufacture of:

Sl. No	Products & By-products	Maximum Capacity
1	Sugarcane Crushing	4500 TCD
2.	Co-generation	14 MW

**THE CONSENT IS GRANTED FOR THE PERIOD
FROM 01.07.2014 TO 30.06.2015.**

For and on behalf of the
Karnataka State Pollution Control Board


CHIEF ENVIRONMENTAL OFFICER

To
The General Manager,
M/s. Gokak Sugars Limited,
Sy. No. 238 & 263, Kolavi Village,
Gokak Taluk, Belgaum District-591 344.

For Office use:

- | | |
|-----------------------|-------------------------------|
| 1. Size: L/M/S | : Large |
| 2. Category: R/O/G | : Red |
| 3. Capital Investment | : Rs. 168.50 Crores |
| 4. Consent Fees paid | : Rs. 75,000/- under each Act |

SCHEDULE

TERMS AND CONDITIONS

(to accompany Combined Consent order No. PCB/143/HPI/2010/ Dated:)

I. (A) TREATMENT AND DISPOSAL OF EFFLUENTS UNDER THE WATER ACT.

1. The discharge from the premises of the applicant shall pass through the terminal manhole/manholes where from the Board shall be free to collect samples in accordance with the provisions of the Act or Rules made there under.
2. The daily quantity of effluent discharge shall not exceed the limits and shall not contain the constituents in excess of the tolerance limits laid down as indicated in the table below. The applicant shall monitor the quality of effluents for the parameters stipulated as per the frequency indicated.

Sl. No.	Description of the effluents	Daily quantity of discharge in KL	Tolerance Limits	Frequency of monitoring
1	2	3	4	5
1	Industrial effluents	344 KLD	Annexure-I	Weekly.
2	Domestic effluents	84 KLD	Septic tanks and soak pits	-

3. The applicant shall operate the effluent treatment systems and maintain the same continuously so as to achieve the treated effluent quality as mentioned above.
4. The applicant shall provide flow meters for measuring inflow & outflow of effluent treatment plant (ETP) and provide separate energy meter for ETP and record hourly readings in a log book for verification of inspecting Officers.
5. The applicant shall ensure that the operation of effluent treatment plant shall be started at least one month before the starting of cane crushing to achieve desired MLSS so as to meet the prescribed standards from day one of the operation of mill.
6. The applicant shall provide adequate storage capacity for treated effluent to take care of no demand for irrigation. The storage tank shall be impervious.
7. The industry should provide alternate power supply to the ETP for its continuous operation.
8. The ETP units should be made easily approachable for the inspecting Officers.
9. The factory authorities shall display the approved flow sheet in the ETP area on a board along with discharge standards stipulated in the consent order.
10. The applicant shall display the treated effluent parameters, as per the latest analysis report of the treated trade effluent, at the ETP location.


CHIEF ENVIRONMENTAL OFFICER

11. The applicant shall paint the name and capacity of each unit of ETP.
12. The applicant shall provide lined and closed drains to convey trade effluents to ETP for further treatment and disposal.
13. a) The applicant shall discharge the treated effluents only to the place mentioned in the Consent order. The application of treated effluent for agriculture shall be controlled so as to avoid either flooding of land or ground water contamination.
b) The applicant shall furnish the ownership of land to the Board within 15 days with the location map of irrigation land showing the Sy. Nos. and a list of land with Sy. Nos. if applied on private agricultural lands.
14. The applicant shall ensure that waste water generation from Sugar plant is always less than or equal to 100 litres/ tonne of cane crushed.

(B) MOLASSES STORAGE:

1. The applicant shall take action to store the molasses in steel tanks covered with proper roofing.
2. No effluent shall be contained in unlined/ katcha pits/ ponds.
3. The applicant shall obtain permission from the Board to dispose-off the spoiled molasses.

II. TREATMENT AND DISPOSAL OF SEWAGE EFFLUENTS:

The applicant shall ensure that the sewage effluent is treated in the septic tank and soak pit constructed as per IS 2470 Part-I & II and no overflow from soak pit is allowed.

III. DISCHARGE OF EMISSIONS UNDER THE AIR ACT:

1. The discharge of emissions from the premises of the applicant shall pass through the stacks/ chimneys mentioned in **Annexure-II** to the consent, where from the Board shall be free to collect the samples at any time in accordance with the provisions of the Act and Rules made there under. The stacks/ chimneys heights shall be as per **Annexure-II**.
2. The rate of emissions discharged and the tolerance limits of the constituents forming the emissions in each of the stacks shall not exceed the limits laid down in Annexure.
3. The applicant shall operate the air pollution control equipment as specified in the **Annexure-II**, continuously so as to ensure that the emission does not exceed the limits specified. The operation of the control equipment shall be synchronized with the operation of the emission source.
4. The applicant shall provide port holes for sampling the emissions and access platforms for carrying out stack sampling and provide electrical outlet points and other arrangements for all chimneys/ stacks and other sources of emissions within 30 days from the date of receipt of this consent order so as to collect samples of emissions by the Board or the applicant at anytime in accordance with the provisions of the Act and Rules made there in.


CHIEF ENVIRONMENTAL OFFICER

IV. LIQUID WASTES:

The applicant shall treat and dispose any liquid effluents produced in the course of control of air pollution by scrubbing, conditioning etc., of flue gases in accordance with the provisions of the Water (Prevention and Control of Pollution) Act, 1974. The details of such discharges shall be quantified and monitored immediately after commissioning and details of collection, treatment and disposal shall be furnished to the Board.

V. SELF MONITORING AND REPORTING BY THE INDUSTRY

A. WATER POLLUTION CONTROL

1. The applicant shall at his own cost get the trade/ sewage effluent samples collected from the manhole chambers specified and analyze the same every month through Board/MoEF empanelled laboratory for the parameters indicated and shall submit in duplicate the report to the Regional Officer.
2. The applicant shall provide effluent flow meters to record the effluent quantity discharged.
3. Monthly extract of daily product manufactured as well as Effluent discharged- sewage/ trade shall be submitted to the Regional Officer regularly every month.
4. Adequate number of observation bore/ test wells shall be provided in and around the agricultural land where the treated effluent is used to monitor the ground water quality.
5. The applicant shall establish a self monitoring system for monitoring the effluents by procuring necessary monitoring equipment & by establishing a laboratory for;
 - 1) Trade effluent quality monitoring.
 - 2) Ground water and surface water monitoring.
 - 3) Flow measures devise on line for treated trade effluent.

B. AIR POLLUTION CONTROL.

1. The applicant shall at his own cost get the samples of emissions collected and get them analyzed once in 15 days from Board/MoEF empanelled laboratory for the parameters indicated in conditions No.III (1) from the sampling port holes provided as per condition No.III (4) and shall submit in duplicate, the analysis results to the Regional Office of Board.
2. The applicant shall monitor the Ambient Air Quality and monitoring shall be done as per the EP Rules. The AAQM stations shall be fixed in consultation with the Regional Office of the Board.
3. The applicant shall carryout self monitoring of emissions at the frequency indicated below and furnish the reports of analysis to the area Regional Officer.

Sl. No.	Emissions to be monitored	Frequency of monitoring
1	Emission from the Boiler stack	Once in 15 days

4. The analysis of effluents and emissions may be carried out in house laboratory/ KSPCB approved laboratory/ laboratories approved under EP Act.
5. The applicant shall maintain log books to reflect the working condition of pollution control systems and also self monitoring results and keep it open for inspection.


CHIEF ENVIRONMENTAL OFFICER

6. The applicant shall set-up Environmental Cell comprising of qualified and competent personnel for complying with the conditions specified.
7. Applicant shall establish, implement and maintain an Environmental Management System in conformity with ISO 14001:2004 standards.

C. WATER CESS:

The applicant shall comply with the provisions of the Water (Prevention and Control of Pollution) Cess Act, 1977, by installing water meters, filing water cess returns in Form-I and other provisions as contained in the said Water (Prevention and Control of Pollution) Cess Act, 1977 and 2003

D. ENVIRONMENTAL STATEMENT

The applicant shall submit the Environmental Statement every year for the period ending 31st March in Form V as per Rule 14 of Environment (Protection) Rule, 1986 on or before 30th September.

VI. SOLID WASTE MANAGEMENT:

1. The applicant shall segregate solid waste from Hazardous Waste/Bio-medical Waste/Municipal Solid Waste and store it properly till treatment/disposal without causing pollution to Environment.
2. The storage & disposal shall be as specified below:

Sl. No.	Type of Solid Waste	Quantity in TPD	Mode of storage, treatment and disposal
1	Press mud	180	Shall be sold to member farmers as soil conditioner/Mannure.
2	Boiler Ash	10	
3	ETP Sludge	0.05	
4	Lime sludge	0.1	Shall be used for leveling and sold to farmers for soil conditioning

3. The applicant shall comply with the Fly ash Notification, dated: 03.11.2009 issued from MoEF.
4. The applicant shall go for effective fly ash management as per Fly ash Notification and take precautions not to cause any fugitive emissions/ dust nuisance leading to public complaints.
5. The applicant shall maintain a log book for fly ash generation and disposal.

VII. HAZARDOUS WASTE (MANAGEMENT, HANDLING AND TRANSBOUNDRY MOVEMENT) RULES 2008

The applicant shall comply with the Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2008.

VIII. NOISE POLLUTION CONTROL:

1. The applicant shall take steps to control noise levels so as to maintain ambient air quality standard in respect of noise as laid down under the Air Act, 1981.


CHIEF ENVIRONMENTAL OFFICER

2. The applicant shall provide necessary acoustic enclosures or measures to control noise levels generated from the DG Sets as per Environment Protection Rules, 1986.

IX. GENERAL

1. The applicant shall not allow the discharge from the other premises to mix with the discharge from his premises. Storm water shall not be allowed to mix with the effluents on the upstream of the terminal manhole where the flow measuring devices are installed.
2. The ETP site and the entire premises shall be always kept clean. The ETP site, inspection chambers, outlets, flow measuring points should be made easily approachable.
3. The applicant shall not change or alter quality or quantity or the rate of discharge or temperature or the route of discharge without the previous consent of the Board.
4. The applicant shall promptly comply with all orders and instructions issued from time to time by the Board or any other officers of the Board duly authorized in this behalf.
5. The applicant shall display the consent granted in a prominent place for perusal of the inspecting Officers of the Board. The industry shall display consent order, EC, Environment statement in their website.
6. The applicant, his heirs, legal representatives or assigns shall have no claims whatsoever to the continuation or renewal of this consent after expiry of the period of consent.
7. The applicant shall forthwith keep the Board informed of any accident or unforeseen act or event of any poisonous, noxious or polluting matter or emissions being discharged into stream or well or air as a result of such discharge, water or air is being polluted.
8. The Board reserves the right to review, impose additional conditions, revoke, change or alter terms and conditions of this consent.
9. The applicant shall comply with the guidelines under Corporate Responsibilities for Environment Protection (CREP) 2003 issued by Ministry of Environmental Forests and CPCB.
10. The applicant shall make an application for consent at least 120 days before expiry of this consent.

FOR AND ON BEHALF OF THE
KARNATAKA STATE POLLUTION CONTROL BOARD


CHIEF ENVIRONMENTAL OFFICER

ANNEXURE - I

Sl. No.	Characteristics.	Tolerance limits.
1.	Colour and Odour.	See Note.
2.	Suspended Solids mg/l.Max.	100
3.	pH value.	6 to 8.5
4.	Oil and Grease mg/l. Max.	10
5.	Bio-chemical Oxygen Demand, mg/l. (3 days at 27°C) max.	100

Note: All efforts should be made to remove colour and unpleasant odour as far as practicable.

TABLE
HYDRAULIC LOADING APPLICABLE FOR DIFFERENT SOILS

Sl. No.	Soil Texture	Loading rate in M ³ /Hec/day
1	Sandy	225 to 280
2	Sandy Loam	170 to 225
3	Loam	110 to 170
4	Clay Loam	055 to 110
5	Clayey	035 to 055

ANNEXURE - II

Chimney	Chimney Attached to	Minimum Chimney Height to be Provided Above ground level	Rate of emission Nm ³ /Hr.	Constituents to be controlled in the emission.	Tolerance limits Mg/Nm ³	Air Pollution Control equipment to be installed, in addition to Chimney height as per Col (3)
1.	90 TPH Boiler (Bagasse fired)	70 M AGL.	-	PM	150	ESP
2	750 KVA DG set	7 M ARL	-	-	-	Acoustic enclosure.
3	200 KVA DG set	6 M ARL	-	-	-	Acoustic enclosure.

NMHC - Non-Methane Hydro Carbon.
Ppmv - parts per million by volume.


CHIEF ENVIRONMENTAL OFFICER



ಕರ್ನಾಟಕ ರಾಜ್ಯ ಮಾಲಿನ್ಯ ನಿಯಂತ್ರಣ ಮಂಡಳಿ
Karnataka State Pollution Control Board

"ಪರಿಸರಭವನ", 1 ರಿಂದ 5ನೇ ಮಹಡಿಗಳು, ನಂ.49, ಚರ್ಚ್‌ಸ್ಟ್ರೀಟ್, ಬೆಂಗಳೂರು - 560 001, ಕರ್ನಾಟಕ, ಭಾರತ

"Parisara Bhavana", 1st to 5th Floor, # 49, Church Street, Bengaluru - 560 001, Karnataka, INDIA

DESPATCHED

/By RPAD/

(This document contains 09 Pages including annexure)

Combined Consent order No PCB/143/HPI/2015/936

Date: 3 SEP 2015

Consent for discharge of effluents under the Water (Prevention and Control of Pollution) Act, 1974 and emissions under the Air (Prevention and Control of Pollution) Act, 1981.

- Ref: 1. Consent application filed by the industry under the Water and the Air Acts for the period 2015-16 at the Regional Office, Chikkodi on 23.06.2015 (Reg No. 93775)
2. Inspection of the industry by the Regional Officer, Chikkodi on 13.07.2015
3. Proceedings of the Consent Committee Meeting held on 03.08.2015

駉駉駉駉

Consent is hereby granted under section 25 of the Water (Prevention and Control of Pollution) Act, 1974 and under Section 21 of the Air (Prevention and Control of Pollution) Act, 1981 (herein after referred as the Water Act and the Air Act respectively) and the Rules and Orders made there under and subject to the terms and conditions as detailed in the schedule annexed to this order.

Consent is granted to **The General Manager, M/s. Gokak Sugars Limited, Sy. No. 238 & 263, Kolavi Village, Gokak Taluk, Belgaum District**, authorizing him to operate their industrial plant and to make discharge of effluents and emissions from the premises as mentioned above.

Discharge of effluents under the Water Act:

Sl. No.	Description	Permitted Quantity of discharge	Place of discharge
1	Trade effluent	344 KLD	On land for irrigation, after treating in ETP to the Standards stipulated in Annexure-I.
2	Domestic effluent	84 KLD	Septic tanks & Soak pits

Discharge of air emissions under the Air Act from the following stacks etc.

Sl. No	Description of chimney/outlet	Limits specified refer schedule
As per Annexure- II		

CHIEF ENVIRONMENTAL OFFICER

The consent is valid for the manufacture of:

Sl. No	Products & By-products	Maximum Capacity
1	Sugarcane Crushing	4500 TCD
2.	Co-generation	14 MW

**THE CONSENT IS GRANTED FOR THE PERIOD
FROM 01.07.2015 TO 30.06.2016.**

For and on behalf of the
Karnataka State Pollution Control Board

**Sd/-
CHIEF ENVIRONMENTAL OFFICER**

To
The General Manager,
M/s. Gokak Sugars Limited,
Sy. No. 238 & 263, Kolavi Village,
Gokak Taluk, Belgaum District-591 344.

Copy to:

1. The Senior Environmental Officer, Dharwad for information.
2. The Regional Officer, Chikkodi for information.
3. Master Register.
4. Case file.


CHIEF ENVIRONMENTAL OFFICER

For Office use:	
1. Size: L/M/S	: Large
2. Category: R/O/G	: Red
3. Capital Investment	: Rs. 126.13 Crores
4. Consent Fees paid	: Rs. 4,50,000/- under each Act

SCHEDULE

TERMS AND CONDITIONS

(to accompany Combined Consent order No. PCB/143/HPI/2015/ Dated:)

I. (A) TREATMENT AND DISPOSAL OF EFFLUENTS UNDER THE WATER ACT.

1. The discharge from the premises of the applicant shall pass through the terminal manhole/manholes where from the Board shall be free to collect samples in accordance with the provisions of the Act or Rules made there under.
2. The daily quantity of effluent discharge shall not exceed the limits and shall not contain the constituents in excess of the tolerance limits laid down as indicated in the table below. The applicant shall monitor the quality of effluents for the parameters stipulated as per the frequency indicated.

Sl. No.	Description of the effluents	Daily quantity of discharge in KL	Tolerance Limits	Frequency of monitoring
1	2	3	4	5
1	Industrial effluents	344 KLD	Annexure-I	Once in 15 days.
2	Domestic effluents	84 KLD	Septic tanks and soak pits	-

3. The applicant shall ensure that the trade effluent is treated in the treatment plant to the standards stipulated in **Annexure-I** and the treated effluent shall be utilized as indicated above.
4. The ETP site and the entire premises shall be always kept clean. The ETP site, inspection chamber, Outlets, flow measuring ponits should be made easily approachable to the inspecting officers.
5. The applicant shall ensure that the waste water generation from sugar unit is less than or equal to 100 lts/ ton of cane crushed.
6. The applicant shall provide flow meters for inflow and outflow of ETP and provide separate energy meter for ETP and record hourly readings in a log book for verification of inspecting Officers.
7. The applicant shall provide adequate storage capacity for treated effluent to take care of no demand for irrigation (15 days holding capacity). The storage tanks shall be impervious.
8. The industry should provide alternate power supply to the ETP or its continuous operation.
9. Industry has to provide a separate drainage system for storm water management & there shall not be mixing of storm water with treated effluent.


CHIEF ENVIRONMENTAL OFFICER

10. The applicant shall discharge the treated effluents only to the place mentioned in the Consent order. The applicant shall discharge the treated effluent only for irrigation on land owned by the industry. The application of treated effluent for agriculture shall be controlled so as to avoid either flooding of land or ground water contamination.
11. The factory authorities shall display the approved flow sheet in the ETP area on a board along with discharge standards stipulated in the consent order.
12. The applicant shall display the treated effluent parameters, as per the latest analysis report of the treated trade effluent, at the ETP location.
13. The applicant shall paint the name and capacity of each unit of ETP.
14. The applicant shall provide lined and closed drains to convey trade effluents to ETP for further treatment and disposal.
15. The applicant shall ensure that the operation of treated effluent treatment plant shall be started at least one month before starting of cane crushing to achieve desired MLSS so as to meet the prescribed standards from day one of the operation of mill.

II. TREATMENT AND DISPOSAL OF SEWAGE EFFLUENTS:

The applicant shall ensure that the sewage effluent is treated in the septic tank and soak pit constructed as per IS 2470 Part-I & II and no overflow from soak pit is allowed.

III. MOLASSES STORAGE:

1. (a) The applicant shall store the molasses only in steel tanks covered with proper roof in.
b) Adequate number of steel tank shall be provided for molasses containment. Containment of molasses in earthen pits is not allowed.
2. The applicant shall obtain permission from the Board to dispose of the spoiled molasses and it shall be disposed off in a manner as laid down by the Board

IV. WATER CESS:

The applicant shall provide water meter at all the intake points as under Section (5) of Water Cess Act and shall file the Water Cess returns regularly and also pay the Cess Assessed with the time stipulated.

V. DISCHARGE OF EMISSIONS UNDER THE AIR ACT:

1. The discharge of emissions from the premises of the applicant shall pass through the stacks/ chimneys mentioned in **Annexure-II** to the consent, where from the Board shall be free to collect the samples at any time in accordance with the provisions of the Act and Rules made there under. The stacks/ chimneys heights shall be as per **Annexure-II**.
2. The applicant shall operate the air pollution control equipment as specified in the **Annexure-II**, continuously so as to ensure that the emission does not exceed the limits specified. The operation of the control equipment shall be synchronized with the operation of the emission source.


CHIEF ENVIRONMENTAL OFFICER

3. The applicant shall provide port holes for sampling the emissions and access platforms for carrying out stack sampling and provide electrical outlet points and other arrangements for all chimneys/ stacks and other sources of emissions within 30 days from the date of receipt of this consent order so as to collect the sample of emissions by the Board or the applicant at any time in accordance with the provision of the Acts & rules made there under
4. The applicant shall maintain port hole, access platforms for carrying out stack sampling with electrical outlet points for sampling the emissions from port holes in all the stacks, as per the guidelines.
5. The applicant shall treat and dispose any liquid effluents produced in the course of control of air pollution by scrubbing, conditioning etc., of flue gases in accordance with the provisions of the Water (Prevention and Control of Pollution) Act, 1974. The details of such discharges shall be quantified and monitored immediately after commissioning and details of collection, treatment and disposal shall be furnished to the Board.

VI. SELF MONITORING AND REPORTING BY THE INDUSTRY

1. The applicant shall at his own cost get the treated trade effluent samples collected from the place specified and analyze the same once in a month for the parameters indicated in **Annexure-I** and report submitted once in a month along with the quantity of water used, waste water generated, treated, and discharged, product manufactured, etc., in a compiled statement to the concerned Regional Office.
2. The applicant shall at his own cost get the samples of emissions collected and get them analyzed once a month for the parameters indicated from the sampling port holes provided
3. The applicant shall carryout the ambient air quality monitoring and submits the report to the Regional Office of the Board. The AAQM stations shall be carried out in all the established stations as per the requirement under the National Ambient Air Quality Monitoring Standards stipulated in Environmental (Protection) Rules, 1986. Monitoring shall include the parameters, PM_{2.5}, PM₁₀ sulphur-di-oxide, Nitrogen Oxide The industry shall furnish statistical analysis for annual average of pollutants at all the locations as per Ambient Air Quality standards Notification once in a year.
4. The applicant shall regularly monitor the ground water of the wells situated in agricultural where treated trade effluent is used for irrigation for water quality parameters and submit report.
5. **The applicant shall install on line continuous stack emission monitoring system for measurement of emissions parameter like PM and monitoring data shall be connected & up loaded to KSPCB and CPCB's servers on or before 30.09.2015.**
6. **The applicant shall install on line continuous effluent quality monitoring system at the out let of sugar plant ETP for the measurement of parameters like flow, pH, COD, BOD, TSS & other consented parameter and monitoring data shall be connected & up loaded to KSPCB and CPCB's servers on or before 30.09.2015.**


CHIEF ENVIRONMENTAL OFFICER

7. The applicant shall:
 - a) Submit the monitoring results as under;
 - i) Data monitored as per prescribed schedule shall be submitted to the Regional Office every month.
 - ii) A compiled data of all monitoring conducted as per schedule during the consent period shall be submitted in hard copy along with Consent application

VII. ENVIRONMENTAL STATEMENT

The applicant shall submit the Environmental Statement every year for the period ending 31st March in Form V as per Rule 14 of Environment (Protection) Rule, 1986 on or before 30th September.

VIII. HAZARDOUS WASTE (MANAGEMENT, HANDLING AND TRANSBOUNDRY MOVEMENT) RULES 2008

The applicant shall comply with the Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2008.

IX. SOLID WASTE MANAGEMENT:

1. The applicant shall segregate solid waste from Hazardous Waste/Bio-medical Waste/Municipal Solid Waste and store it properly till treatment/disposal without causing pollution to Environment.
2. The storage & disposal shall be as specified below:

Sl. No.	Type of Solid Waste	Quantity in TPD	Mode of storage, treatment and disposal
1	Press mud	180	Press mud, yeast sludge and boiler ash/fly ash was stored in the open area and same are being sent to other factories.
2	Boiler Ash	10	
3	ETP Sludge	0.05	

3. The applicant shall comply with the Fly ash Notification, dated: 03.11.2009 issued from MoEF.
4. The applicant shall go for effective fly ash management as per Fly ash Notification and take precautions not to cause any fugitive emissions/ dust nuisance leading to public complaints.
5. The applicant shall maintain a log book for fly ash generation and disposal.

X. NOISE POLLUTION CONTROL:

1. The applicant shall take steps to control noise levels so as to maintain ambient air quality standard in respect of noise as laid down under the Air Act, 1981.
2. The applicant shall provide necessary acoustic enclosures or measures to control noise levels generated from the DG Sets as per Environment Protection Rules, 1986.


 CHIEF ENVIRONMENTAL OFFICER

XI. GENERAL

1. The Board reserves the right to review, impose additional conditions, revoke, change or alter terms and conditions of this consent.
2. This consent for discharging sewage and/ or trade effluents from the factory shall not be taken or construed as the Board's permission to continue to discharge the sewage and/ or trade effluents from the factory into the place (as mentioned in this consent Order) which pollutes the water there-in endangering the life and property of the persons using the said water before, during or after the periods indicated in the Terms and Conditions of this Consent Order
3. The applicant shall not change or alter either the quality or quantity or rate of emission or install/ replace or alter the air pollution control equipment, change in raw material or manufacturing process resulting in change in quality and/ or quantity of emissions without the prior permission of the Board
4. The industry shall not change or alter (a) raw materials or manufacturing process, (b) change the products or product mix (c) the quality, quantity or rate of discharge/ emissions and (d) install/replace/alter the water or air pollution control equipments without the prior approval of the Board.
5. The applicant shall promptly comply with all orders and instructions issued from time to time by the Board or any other officers of the Board duly authorized in this behalf.
6. The applicant shall forthwith keep the Board informed of any accidental discharge of emissions/ effluents into the atmosphere in excess of the standards laid down by the Board. The applicant shall also take corrective steps to mitigate the impact
7. The applicant shall not store any raw materials on naked ground. The applicant shall construct impervious dyke walls/tank form for storage tanks constructed above ground level.
8. The applicant shall display flow diagram of the pollution control system at the site.
9. The applicant shall appoint a qualified environmental engineer/ scientist for environment management in the factory and also establish an environmental cell.
10. Applicant shall maintain the Environmental Management System in conformity with ISO 14001:2004 standards.
11. The applicant shall comply with the guidelines under Corporate Responsibilities for Environment Protection (CREP) 2003 issued by Ministry of Environmental Forests and CPCB.
12. The applicant shall maintain register recording the ambient air quality, stack monitoring and analysis report of treated effluents. The register shall be open for inspection by the Board Officers at all time.


CHIEF ENVIRONMENTAL OFFICER

13. An inspection book shall be opened and made available to the Board Officers during their visit to the factory.
14. The applicant shall provide alternate power supply sufficient to operate all pollution control equipments utilized by the applicant to maintain compliance with the terms and conditions of this consent.
15. The entire premises shall be always kept clean. The effluent holding area, inspection chambers, outlets, flow measuring points should be made easily approachable.
16. The applicant shall display the consent granted in a prominent place for perusal of the inspecting Officers of the Board.
17. The applicant is heirs, legal representatives or assigns shall have no claims what so ever to the continuation or renewal of this consent after expiry of the period of consent.
18. The industry shall transport and store the raw materials in a manner so as not to cause any damage to environment, life and property. The applicant shall be solely responsible for any damages to environment.
19. The applicant shall plant and maintain adequate number of trees in and around the industry to arrest the dust emissions escaping into the surrounding area and improve the environment and aesthetic appearance of the industry and the surrounding
20. A well designed rainwater harvesting shall be put in place. Central Groundwater Authority/ Board shall be consulted for finalization of appropriate rainwater harvesting technology within a period of three months and details shall be furnished. Status of implementation shall be submitted to the Regional Office of the Board.
21. The applicant shall make an application for consent at least 120 days before expiry of this consent.
22. Industry shall comply with all the consent conditions and furnish report within 30 days to the Regional Office.

FOR AND ON BEHALF OF THE
KARNATAKA STATE POLLUTION CONTROL BOARD


CHIEF ENVIRONMENTAL OFFICER

ANNEXURE – I

Sl. No.	Characteristics.	Tolerance limits.
1.	Colour and Odour.	See Note.
2.	Suspended Solids mg/l.Max.	100
3.	pH value.	6 to 8.5
4.	Oil and Grease mg/l. Max.	10
5.	Bio-chemical Oxygen Demand, mg/l. (3 days at 27°C) max.	100

Note: All efforts should be made to remove colour and unpleasant odour as far as practicable.

TABLE

HYDRAULIC LOADING APPLICABLE FOR DIFFERENT SOILS

Sl. No.	Soil Texture	Loading rate in M ³ /Hec/day
1	Sandy	225 to 280
2	Sandy Loam	170 to 225
3	Loam	110 to 170
4	Clay Loam	055 to 110
5	Clayey	035 to 055

ANNEXURE - II

Chimney	Chimney Attached to	Minimum Chimney Height to be Provided Above ground level	Rate of emission Nm ³ /Hr.	Constituents to be controlled in the emission.	Tolerance limits Mg/Nm ³	Air Pollution Control equipment to be installed, in addition to Chimney height as per Col (3)
1.	90 TPH Boiler (Bagasse fired)	70 M AGL.	-	PM	150	ESP
2	750 KVA DG set	7 M ARL	-	-	-	Acoustic enclosure.
3	200 KVA DG set	6 M ARL	-	-	-	Acoustic enclosure.

NMHC - Non-Methane Hydro Carbon.

Ppmv - parts per million by volume.


CHIEF ENVIRONMENTAL OFFICER



**Consent For Operation
(CFO-Air,Water)**

**Consent No. AW-301132
Valid upto: 30/06/2021**

Industry Colour: RED Industry Scale: LARGE

**Karnataka State Pollution Control Board
Parisara Bhavana, No.49, Church
Street, Bengaluru-560001
Tele : 080-25589112/3, 25581383
Fax:080-25586321
email id: ho@kspcb.gov.in**

(This document contains 5 pages including annexure & excluding additional conditions)

Combined Consent Order No. AW-301132 **PCB ID:** 10675 **Date:** 04/10/2016

Combined consent for discharge of effluents under the Water (Prevention and Control of Pollution) Act , 1974 and emission under the Air (Prevention and Control of Pollution) Act , 1981

- Ref:
1. Application filed by the applicant/organization on 15/05/2016
 2. Inspection of the Industry/organization/by RO, Belgaum (Chikkodi) held on 15/05/2016
 3. Proceedings of the CCM dated 31/08/2016 ,held on 27/08/2016

Consent is hereby granted to the Occupier under Section 25(4) of the Water (Prevention & Control of Pollution) Act, 1974 (herein referred to as the Water Act) & Section 21 of Air (Prevention & Control of Pollution) Act, 1981, (herein referred to as the Air Act) and the Rules and Orders made there under and authorized the Occupier to operate /carryout industry/activity & to make discharge of the effluents & emissions confirming to the stipulated standards from the premises mentioned below and subject to the terms and conditions as detailed in the Schedule Annexed to this order.

Location:

Name of the Industry: Gokak Sugars Ltd.
Address: Sy. No.238 & 236, Sy. No.238 & 236, Kolavi Village, Gokak Taluk, Belgaum Distr
Industrial Area: Not In I.A, Kolavi,
Taluk: gokak , District: Chikkodi

Conditions:

a) Discharge of effluents under the Water Act:

Sr	Water Code	WC(KLD)	WWG(KLD)	Remark
1	Boiler Feed	256.000	20.000	Used for bolier
2	Domestic Purpose	104.000	84.000	Used for Prcess
3	Manufacturing Processes	0.000	314.000	Used for Prcess
4	Others	10.000	10.000	Used for Prcess

b) Discharge of Air emissions under the Air Act from the following stacks etc.

Sl. No.	Description of chimney/outlet	Limits specified refer schedule
The details of Sources, control equipments and its specification, type of fuel, constituents to be controlled in emissions etc. are detailed in Annexure-II.		

This consent is issued considering the manufacture of Sugar (excluding Khandsari) / activity.

Sr	Product Name	Applied Qty/Month	Unit
1	Cane Sugar	16875.0000	M.T
2	Electric Power	10080.0000	MWH

This consent is valid for the period from 15/05/2016 to 30/06/2021

For and on behalf of the
Karnataka State Pollution Control Board



S NANDA KUMAR

To,
Gokak Sugars Ltd.
Sy. No.238 & 236, Kolavi
Village, Gokak Taluk,
Belgaum Distr

COPY TO:

- The Environmental Officer, KSPCB, Regional Office Belgaum (Chikkodi) for information and necessary action.
2. Master Register.
 3. Case file.



**Consent For Operation
(CFO-Air,Water)**

Consent No. AW-301132
Valid upto: 30/06/2021

Industry Colour: RED Industry Scale: LARGE

Karnataka State Pollution Control Board
Parisara Bhavana, No.49, Church
Street, Bengaluru-560001
Tele : 080-25589112/3, 25581383
Fax:080-25586321
email id: ho@kspcb.gov.in

(This document contains 5 pages including annexure & excluding additional conditions)

1. Consent Fee paid : Rs. 200

SCHEDULE

TERMS AND CONDITIONS

A. TREATMENT AND DISPOSAL OF EFFLUENTS UNDER THE WATER ACT.

1. The discharge from the premises of the occupier shall pass through the terminal manhole/manholes where from the Board shall be free to collect samples in accordance with the provisions of the Act/Rules made there under.

2(a). The sewage/domestic effluent shall be treated in septic tank and with soak pit. No overflow from the soak pit is allowed. The septic tank and soak pit shall be as per IS 2470 Part-I & Part-II.

2(b). The treated sewage effluent discharged shall conform to the standards specified in Annexure-I.

3(a). The trade effluent generated in the industry shall be treated in the ETP and treated effluent shall conform to the standards stipulated by the Board in Annexure-1

3(b). The trade effluent shall be handed over to CETP and maintain logbook of effluent generated & sent every day.

4. The applicant shall install flow measuring/recording devices to record the discharge quantity and maintain the record.

5. The applicant shall not change or alter either the quality or the quantity or the place of discharge or temperature or the point of discharge without the previous consent/ permission of the Board.

6. The applicant shall not allow the discharge from the other premises to mix with the discharge from his premises. Storm water shall not be allowed to mix with the effluents on the upstream of the terminal manhole where the flow measuring devices are installed.

7. The daily quantity of domestic effluent and trade effluent from the industry shall not exceed the limits as indicated in this consent order:

8. The applicant shall discharge the effluents only to the place mentioned in the Consent order and discharge of treated/untreated outside the premises is not permitted.

B. EMISSIONS:

1. The discharge of emissions from the premises of the applicant shall pass through the air pollution control equipment and discharged through stacks/chimneys mentioned in **Annexure-II** where from the Board shall be free to collect the samples at any time in accordance with the provisions of the Act and Rules made there under. The tolerance limits of the constituents forming the emissions in each of the stacks shall not exceed the limits laid down in Annexure-II.

2. The applicant shall provide port holes for sampling of emission, access platforms for carrying out stack sampling, electrical points and all other necessary arrangements including ladder as indicated in Annexure-II.

3. The applicant shall upgrade/modify/replace the control equipment with prior permission of the Board.

C. WATER CESS:

1. The applicant shall provide water meter at all the intake points as specified under Section (5) of the Water Cess Act, 1977 and shall file the Water Cess returns regularly before fifth of every month and also pay the Cess assessed with the time stipulated.

D. MONITORING & REPORTING:

1. The applicant shall get the samples of effluents & emissions collected and get them analyzed once a month/either by in house monitoring laboratory or through EP approved laboratories for the parameters as Indicated in Annexure I & II.

2. The applicant shall maintain log books to reflect the working condition of pollution control systems and also self monitoring results and keep it open for inspection.



**Consent For Operation
(CFO-Air,Water)**

Consent No. AW-301132
Valid upto: 30/06/2021

Industry Colour: RED Industry Scale: LARGE

Karnataka State Pollution Control Board
Parisara Bhavana, No.49, Church
Street, Bengaluru-560001
Tele : 080-25589112/3, 25581383
Fax:080-25586321
email id: ho@kspcb.gov.in

(This document contains 5 pages including annexure & excluding additional conditions)

E. SOLID WASTE (OTHER THAN HAZARDOUS WASTE) DISPOSAL:

- 1.The applicant shall segregate solid waste from Hazardous Waste, Municipal Solid Waste and store it properly till treatment/disposal without causing pollution to the surrounding Environment.
- 2.The solid waste generated shall be handled & disposed by scientific method without causing eye sore to the general public and to the surrounding environment.

F. NOISE POLLUTION CONTROL:

1. The industry shall ensure that the ambient noise levels within its premises shall not exceed the limits i.e 75 dB(A) Leq during day time and 70 dB(A) Leq during night time as specified in under the Air (Prevention and Control of Pollution) Act, 1981.

G. HAZARDOUS WASTES (MANAGEMENT, HANDLING & TRANSBOUNDARY MOVEMENT) 2008:

The applicant shall comply with the provisions of the Hazardous Wastes (Management, Handling & Transboundary Movement) Rules 2008.

H. GENERAL CONDITIONS:

1. The applicant shall not allow the discharge from the other premises to mix with the discharge from his premises.
2. The applicant shall promptly comply with all orders and instructions issued by the Board from time to time or any other officers of the Board duly authorized in this behalf.
3. The applicant shall set-up Environmental Cell comprising of qualified and competent personnel for complying with the conditions specified.
4. The Board reserves the right to review, impose additional conditions, revoke, change or alter terms and conditions of this consent.
5. The applicant shall forthwith keep the Board informed of any accidental discharge of emissions/effluents into the atmosphere in excess of the standards laid down by the Board. The applicant shall also take corrective steps to mitigate the impact.
6. The applicant shall provide alternative power supply sufficient to operate all Pollution control equipments.
7. The entire premises shall always be kept clean. The effluent holding area, inspection chambers, outlets, flow measuring points should made easily approachable.
8. The applicant shall display the consent granted in a prominent place for perusal of the inspecting officers of the Board.
9. The applicant his heirs, legal representatives or assignee shall have no claims what so ever to the continuation or renewal of this consent after expiry of the validity of consent.
10. The applicant shall make an application for consent for subsequent period at least 45 days before expiry of this consent.
11. The applicant shall develop and maintain adequate green belt all around the periphery.
12. The applicant shall provide rain water harvesting system and shall provide proper storm water management system.
13. This consent is issued without prejudice to any Court Cases pending in any Hon'ble Court
14. The applicant shall furnish the Environmental statement for every financial year ending with 31st March in Form-V as per Environment (Protection) Rules, 1986. The statement shall be furnished before the end of September.
15. The applicant shall display flow diagram of the pollution control system near the pollution control system/s.



**Consent For Operation
(CFO-Air,Water)**

Consent No. AW-301132
Valid upto: 30/06/2021

Industry Colour: RED Industry Scale: LARGE

Karnataka State Pollution Control Board
Parisara Bhavana, No.49, Church
Street, Bengaluru-560001
Tele : 080-25589112/3, 25581383
Fax:080-25586321
email id: ho@kspcb.gov.in

(This document contains 5 pages including annexure & excluding additional conditions)

NOTE:

The following Conditions A [2(b) & 3(b)] mentioned in the schedule are not applicable.

Additional Conditions:

Please see additional condition to the consent order. The Annexure-I & II is applicable for discharge of effluent and emission regulation.

For and on behalf of the
Karnataka State Pollution Control Board



S NANDA KUMAR

Note: All efforts should be made to remove colour and unpleasant odour as far as practicable.

Chimney No.	Chimney attached to	Capacity/ KVA Rating	Minimum chimney height to be provided above ground level (in Mts)	Constituents to be controlled in the emission	Tolerance limits mg/NM3	Fuel	Air pollution Control equipment to be installed, in addition to chimney height as per col.(3)	Date of which air pollution control equipments shall be provided to achieve the stipulated tolerance limits and chimney heights conforming to stipulated heights.
1	D.G. Sets	200	6	PM(mg/NM3), SO2 (PPM), NOx(PPM)	150,100,50	DIE	N.A	Before commissioning.
2	D.G. Sets	750	9	PM(mg/NM3), SO2 (PPM), NOx(PPM)	150,100,50	DIE	N.A	Before commissioning.
3	Boiler	Boiler Capacity 90 TPH	70	PM(mg/NM3), SO2 (PPM), NOx(PPM)	150,100,50	BAG	ESP	Before commissioning.

Note:

N.A : Not Applicable

ESP : E.S.P

Note:

1. The Noise levels within the premises shall not exceed 75 dB (A) leq during day time and 70 dB(A) leq during night time respectively.

2. The DG set shall be provided with acoustic measures as per SI.No.94 in Schedule-I of Environment (Protection) Rules.

3. There shall be no smell or odour nuisance from the industry.



**Consent For Operation
(CFO-Air,Water)**

Consent No. AW-301132
Valid upto: 30/06/2021

Industry Colour: RED Industry Scale: LARGE

Karnataka State Pollution Control Board
Parisara Bhavana, No.49, Church
Street, Bengaluru-560001
Tele : 080-25589112/3, 25581383
Fax:080-25586321
email id: ho@kspcb.gov.in

(This document contains 5 pages including annexure & excluding additional conditions)

LOCATION OF SAMPLING PORTHOLES, PLATFORMS, ELECTRICAL OUTLET.

1. Location of Portholes and approach platform:

Portholes shall be provided for all chimneys, stacks and other sources of emission. These shall serve as the sampling points. The sampling point should be located at a distance equal to at least eight times the stack or duct diameters downstream and two diameters upstream from source of low disturbance such as a Bend, Expansion, Construction Valve, Fitting or Visible Flame for rectangular stacks, the equivalent diameter can be calculated from the following equation.

$$\text{Equivalent Diameter} = \frac{2 (\text{Length} \times \text{Width})}{(\text{Length} + \text{Width})}$$

2. The diameter of the sampling port should not be less than 100 mm dia". Arrangements should be made so that the porthole is closed firmly during the non sampling period
3. An easily accessible platform to accommodate 3 to 4 persons to conveniently monitor the stack emission from the portholes shall be provided. Arrangements for an Electric Outlet Point of 230 V 15 A with suitable switch control and 3 Pin Point shall be provided at the Porthole location.
4. The ladder shall be provided with adequate safety features so as to approach the monitoring location with ease.

[Click Here to View Uploaded Document1](#)



**Consent For Operation
(CFO-Air,Water)**

Consent No. AW-326544
Valid upto: 30/06/2026

Karnataka State Pollution Control Board
Parisara Bhavana, No.49, Church
Street, Bengaluru-560001
Tele : 080-25589112/3, 25581383
Fax: 080-25586321
email id: ho@kspcb.gov.in

Industry Colour: RED Industry Scale: LARGE

(This document contains 5 pages including annexure & excluding additional conditions)

Combined Consent Order No. AW-326544 PCB ID: 10675 Date: 02/09/2021

Combined consent for discharge of effluents under the Water (Prevention and Control of Pollution) Act, 1974 and emission under the Air (Prevention and Control of Pollution) Act, 1981

- Ref: 1. Application filed by the applicant/organization on 01/07/2021
2. Inspection of the Industry/organization/by RO, on 28/06/2021
3. Proceedings of the CCM dated 04/08/2021, held on 30/07/2021

Consent is hereby granted to the Occupier under Section 25(4) of the Water (Prevention & Control of Pollution) Act, 1974 (herein referred to as the Water Act) & Section 21 of Air (Prevention & Control of Pollution) Act, 1981, (herein referred to as the Air Act) and the Rules and Orders made there under and authorized the Occupier to operate /carryout industry/activity & to make discharge of the effluents & emissions conforming to the stipulated standards from the premises mentioned below and subject to the terms and conditions as detailed in the Schedule Annexed to this order.

Location:

Name of the Industry: Gokak Sugars Ltd.
Address: Sy. No.238 & 236, Sy. No.238 & 236, Kolavi Village, Gokak Taluk, Belgaum Distr
Industrial Area: Not In I.A, Kolavi,
Taluk: gokak, District: Chikkodi

CONDITIONS:

a) Discharge of effluents under the Water Act:

Sr	Water Code	WC(KLD)	WWG(KLD)	Remark
1	Boiler Feed	256.000	20.000	
2	Domestic Purpose	43.000	35.000	
3	Manufacturing Processes	0.000	314.000	Excess Condensate reuse-400 KLD
4	Others	10.000	10.000	

b) Discharge of Air emissions under the Air Act from the following stacks etc.

Sl. No.	Description of chimney/outlet	Limits specified refer schedule
The details of Sources, control equipments and its specification, type of fuel, constituents to be controlled in emissions etc. are detailed in Annexure-II.		

The consent for operation is granted considering the following activities/Products;

Sr	Product Name	Applied Qty/Month	Unit
1	Cane Sugar	16875.0000	M.T
2	Electric Power	10080.0000	MWH

This consent is valid for the period from 01/07/2021 to 30/06/2026

To,
Gokak Sugars Ltd.
Sy. No.238 & 236, Kolavi
Village, Gokak Taluk,
Belgaum Distr

COPY TO:

- The Environmental Officer, KSPCB, Regional Office Belgaum (Chikkodi) for information and necessary action.
2. Master Register.
3. Case file.

Consent Fee paid : Rs. 750000



**Consent For Operation
(CFO-Air,Water)**

Consent No. AW-326544
Valid upto: 30/06/2026

Karnataka State Pollution Control Board
Parisara Bhavana, No.49, Church
Street, Bengaluru-560001
Tele : 080-25589112/3, 25581383
Fax:080-25586321
email id: ho@kspcb.gov.in

Industry Colour: RED Industry Scale: LARGE

(This document contains 5 pages including annexure & excluding additional conditions)

SCHEDULE

TERMS AND CONDITIONS

A. TREATMENT AND DISPOSAL OF EFFLUENTS UNDER THE WATER ACT.

1. The discharge from the premises of the occupier shall pass through the terminal manhole/manholes where from the Board shall be free to collect samples in accordance with the provisions of the Act/Rules made there under.

2(a). The sewage/domestic effluent shall be treated in septic tank and with soak pit. No overflow from the soak pit is allowed. The septic tank and soak pit shall be as per IS 2470 Part-I & Part-II.

2(b). The treated sewage effluent discharged shall conform to the standards specified in Annexure-I.

3(a). The trade effluent generated in the industry shall be treated in the ETP and treated effluent shall conform to the standards stipulated by the Board in Annexure-I

3(b). The trade effluent shall be handed over to CETP and maintain logbook of effluent generated & sent every day.

4. The applicant shall install flow measuring/recording devices to record the discharge quantity and maintain the record.

5. The applicant shall not change or alter either the quality or the quantity or the place of discharge or temperature or the point of discharge without the previous consent/ permission of the Board.

6. The applicant shall not allow the discharge from the other premises to mix with the discharge from his premises. Storm water shall not be allowed to mix with the effluents on the upstream of the terminal manhole where the flow measuring devices are installed.

7. The daily quantity of domestic effluent and trade effluent from the industry shall not exceed the limits as indicated in this consent order:

8. The applicant shall discharge the effluents only to the place mentioned in the Consent order and discharge of treated/untreated outside the premises is not permitted.

B. EMISSIONS:

1. The discharge of emissions from the premises of the applicant shall pass through the air pollution control equipment and discharged through stacks/chimneys mentioned in **Annexure-II** where from the Board shall be free to collect the samples at any time in accordance with the provisions of the Act and Rules made there under. The tolerance limits of the constituents forming the emissions in each of the stacks shall not exceed the limits laid down in Annexure-II.

2. The applicant shall provide port holes for sampling of emission, access platforms for carrying out stack sampling, electrical points and all other necessary arrangements including ladder as indicated in Annexure-II.

3. The applicant shall upgrade/modify/replace the control equipment with prior permission of the Board.

C. MONITORING & REPORTING:

1. The applicant shall get the samples of effluents & emissions collected and get them analyzed once a month/either by in house monitoring laboratory or through EP approved laboratories for the parameters as Indicated in Annexure I & II.

2. The applicant shall maintain log books to reflect the working condition of pollution control systems and also self monitoring results and keep it open for inspection.

D. SOLID WASTE (OTHER THAN HAZARDOUS WASTE) DISPOSAL:

1. The applicant shall segregate solid waste from Hazardous Waste, Municipal Solid Waste and store it properly till treatment/disposal without causing pollution to the surrounding Environment.

2. The solid waste generated shall be handled & disposed by scientific method without causing eye sore to the general public and to the surrounding environment.



**Consent For Operation
(CFO-Air,Water)**

Consent No. AW-326544
Valid upto: 30/06/2026

Karnataka State Pollution Control Board
Parisara Bhavana, No.49, Church
Street, Bengaluru-560001
Tele : 080-25589112/3, 25581383
Fax: 080-25586321
email id: ho@kspcb.gov.in

Industry Colour: RED Industry Scale: LARGE

(This document contains 5 pages including annexure & excluding additional conditions)

E. NOISE POLLUTION CONTROL:

1. The applicant shall ensure that the ambient noise levels within its premises shall not exceed the limits i.e 75 dB(A) Leq during day time and 70 dB(A) Leq during night time as specified in under the Air (Prevention and Control of Pollution) Act, 1981.

F. HAZARDOUS AND OTHER WASTES (MANAGEMENT & TRANSBOUNDARY MOVEMENT) Rules 2016:

The applicant shall comply with the provisions of the Hazardous and other Wastes (Management & Transboundary Movement) Rules 2016.

G. GENERAL CONDITIONS:

1. The applicant shall not allow the discharge from the other premises to mix with the discharge from his premises.
2. The applicant shall promptly comply with all orders and instructions issued by the Board from time to time or any other officers of the Board duly authorized in this behalf.
3. The applicant shall set-up Environmental Cell comprising of qualified and competent personnel for complying with the conditions specified.
4. The Board reserves the right to review, impose additional conditions, revoke, change or alter terms and conditions of this consent.
5. The applicant shall forthwith keep the Board informed of any accidental discharge of emissions/effluents into the atmosphere in excess of the standards laid down by the Board. The applicant shall also take corrective steps to mitigate the impact.
6. The applicant shall provide alternate power supply sufficient to operate all Pollution control equipments.
7. The entire premises shall always be kept clean. The effluent holding area, inspection chambers, outlets, flow measuring points should made easily approachable.
8. The applicant shall display the consent granted in a prominent place for perusal of the inspecting officers of the Board.
9. The applicant his heirs, legal representatives or assignee shall have no claims what so ever to the continuation or renewal of this consent after expiry of the validity of consent.
10. The applicant shall make an application for consent for subsequent period at least 45 days before expiry of this consent.
11. The applicant shall develop and maintain adequate green belt all around the periphery.
12. The applicant shall provide rain water harvesting system and shall provide proper storm water management system.
13. This consent is issued without prejudice to any Court Cases pending in any Hon'ble Court
14. The applicant shall furnish the Environmental statement for every financial year ending with 31st March in Form-V as per Environment (Protection) Rules, 1986. The statement shall be furnished before the end of September.
15. The applicant shall display flow diagram of the pollution control system near the pollution control system/s.



**Consent For Operation
(CFO-Air,Water)**

Consent No. AW-326544
Valid upto: 30/06/2026

Karnataka State Pollution Control Board
Parisara Bhavana, No.49, Church
Street, Bengaluru-560001
Tele : 080-25589112/3, 25581383
Fax: 080-25586321
email id: ho@kspcb.gov.in

Industry Colour: RED Industry Scale: LARGE

(This document contains 5 pages including annexure & excluding additional conditions)

NOTE:

The Conditions A(2(b),3(b)) mentioned in the schedule are not applicable.

Additional Conditions:

- 1) The Occupier shall comply with all the additional terms and conditions stipulated in Annexure-I,A,B attached herewith.
- 2) This consent order contains 10 pages including Annexures.

Chimney No.	Chimney attached to	Capacity/ KVA Rating	Minimum chimney height to be provided above ground level (in Mts)	Constituents to be controlled in the emission	Tolerance limits mg/NM3	Fuel	Air pollution Control equipment to be installed, in addition to chimney height as per col.(4)	Date of which air pollution control equipments shall be provided to achieve the stipulated tolerance limits and chimney heights conforming to stipulated heights.
1	D.G. Sets	200	6	PM(mg/NM3), SO2 (PPM), NOx(PPM)	150,100,50	DIE	AEC	Before commissioning.
2	D.G. Sets	750	9	PM(mg/NM3), SO2 (PPM), NOx(PPM)	150,100,50	DIE	AEC	Before commissioning.
3	Boiler	Boiler Capacity 90 TPH	70	PM(mg/NM3), SO2 (PPM), NOx(PPM)	150,100,50	BAG	ESP	Before commissioning.

Note:

AEC : Accoustic Enclosures

ESP : E.S.P

Note:

1. The Noise levels within the premises shall not exceed 75 dB (A) leq during day time and 70 dB(A) leq during night time respectively.
2. The DG set shall be provided with acoustic measures as per SI.No.94 in Schedule-I of Environment (Protection) Rules.
3. There shall be no smell or odour nuisance from the industry.



**Consent For Operation
(CFO-Air,Water)**

Consent No. AW-326544
Valid upto: 30/06/2026

Karnataka State Pollution Control Board
Parisara Bhavana, No.49, Church
Street, Bengaluru-560001
Tele : 080-25589112/3, 25581383
Fax: 080-25586321
email id: ho@kspcb.gov.in

Industry Colour: RED Industry Scale: LARGE

(This document contains 5 pages including annexure & excluding additional conditions)

LOCATION OF SAMPLING PORTHOLES, PLATFORMS, ELECTRICAL OUTLET.

1. Location of Portholes and approach platform:

Portholes shall be provided for all chimneys, stacks and other sources of emission. These shall serve as the sampling points. The sampling point should be located at a distance equal to at least eight times the stack or duct diameters downstream and two diameters upstream from source of low disturbance such as a Bend, Expansion, Construction Valve, Fitting or Visible Flame for rectangular stacks, the equivalent diameter can be calculated from the following equation.

$$\text{Equivalent Diameter} = \frac{2 (\text{Length} \times \text{Width})}{(\text{Length} + \text{Width})}$$

2. The diameter of the sampling port should not be less than 100 mm dia". Arrangements should be made so that the porthole is closed firmly during the non sampling period
3. An easily accessible platform to accommodate 3 to 4 persons to conveniently monitor the stack emission from the portholes shall be provided. Arrangements for an Electric Outlet Point of 230 V 15 A with suitable switch control and 3 Pin Point shall be provided at the Porthole location.
4. The ladder shall be provided with adequate safety features so as to approach the monitoring location with ease.

For and on behalf of the
Karnataka State Pollution Control Board

Signature Not Verified

Digitally signed by
Date: 2021.09.02 13:45:57
+05:30



Form 2 -[Rule 6(2)] Authorization
under Hazardous & Other Wastes
[Management & Transboundary
Movement]Rules,2016

Authorization No: 328580

Valid upto: 30/06/2026

(This document contains 3 pages excluding annexure)

Karnataka State Pollution Control Board
Parisara Bhavana, No.49, Church
Street, Bengaluru-560001
Tele : 080-25589112/3, 25581383
Fax:080-25586321
email id: ho@kspcb.gov.in

Authorization No: 328580 **PCB ID:** 10675 **Date:** 07/12/2021

FORM FOR GRANT OR RENEWAL OF AUTHORISATION BY STATE POLLUTION CONTROL BOARD TO THE OCCUPIERS, RECYCLERS, REPROCESSORS, REUSERS, USER AND OPERATORS OF DISPOSAL FACILITIES

- Ref: 1. Authorization application submitted by the industry/organization on 21/08/2021 at Regional Office.
2. Inspection of the project site/organization by Regional Officer , Belgaum (Chikkodi) on 18/08/2021
3. Proceedings of CCM dated: , held on:

1. Number of authorization 328580 and date of issue 07/12/2021
2. Reference of application No. 20074 Inward Date 21/08/2021
3. General Manager of Gokak Sugars Ltd. is hereby granted an authorization based on the enclosed signed inspection report for Generation, Collection, Reception or any other use of hazardous or other wastes or both on the premises situated at the location **Address:** Sy. No.238 & 236 , Sy. No.238 & 236, Kolavi Village, Gokak Taluk, Belgaum Distr **Industrial Area :** Kolavi , **Taluk :** gokak , **District :** Chikkodi

Details of Authorization:

Category of Hazardous waste as per the Schedule I, II & IV of these rules	Description of Hazardous Waste	Quantity/Annum	Unit	Authorized Mode of Disposal or recycling or utilization or co-processing, etc.,
I	33.1~Empty barrels/containers/liners contaminated with hazardous chemicals /wastes	0.110	M.T	As Per Annexure
I	5.1~Used Spent Oil	0.115	KLT	As Per Annexure
I	5.2~Wastes Residues Containing Oil	0.369	M.T	As Per Annexure

1. The authorization shall be valid for a period upto 30/06/2026

A. General Conditions of authorization:

1. The authorized person shall comply with the provisions of the Environment (Protection) Act, 1986 and the Rules made there under.
2. The authorization or its renewal shall be produced for inspection at the request of an Officer authorized by



Form 2 -[Rule 6(2)] Authorization
under Hazardous & Other Wastes
[Management & Transboundary
Movement]Rules,2016

Authorization No: 328580

Valid upto: 30/06/2026

Karnataka State Pollution Control Board
Parisara Bhavana,No.49, Church
Street,Bengaluru-560001
Tele : 080-25589112/3, 25581383
Fax:080-25586321
email id: ho@kspcb.gov.in

(This document contains 3 pages excluding annexure)

the Karnataka State Pollution Control Board.

3. The person authorized shall not rent, lend, sell, transfer or otherwise transport the hazardous wastes and other wastes except what is permitted through this authorization and without obtaining prior permission of the KSPCB.
4. Any unauthorized change in personnel, equipment or working conditions as mentioned in the application by the person authorized shall constitute a breach of this authorization.
5. The person authorized shall implement Emergency Response Procedure (ERP) for which this authorization is being granted considering all site specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time.
6. The person authorized shall comply with the provisions outlined in the Central Pollution Control Board guidelines on "Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty".
7. It is the duty of the authorized person to take prior permission of the Karnataka State Pollution Control Board to close down the facility.
8. The imported hazardous and other wastes shall be fully insured for transit as well as for any accidental occurrence and its clean-up operation.
9. The importer or exporter shall bear the cost of import or export and mitigation of damages if any.
10. Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time.
11. An application for the renewal of an authorization shall be made '**3**' months before the date of expiry.
12. The Person authorized shall bring to the notice of the Board, if any increase in quantity, change in category and handling operation. In such cases, the authorized Person has to obtain fresh authorization.
13. Karnataka State Pollution Control Board reserves the right to review, impose additional condition or conditions, revoke, change or alter the terms and conditions of this authorization or to suspend or cancel this authorization.
14. The Person authorized shall take steps for reduction and prevention of the waste generated or for recycling or reuse.
15. The authorized person shall maintain the records at site in Form-3 and shall submit the annual returns in Form-4 within 30th June every year for the Period April to March and manifest in Form-10.
16. The record of consumption and fate of the imported hazardous and other wastes shall be maintained.
17. The hazardous and other waste which gets generated during recycling or reuse or recovery or per-



Form 2 -[Rule 6(2)] Authorization
under Hazardous & Other Wastes
[Management & Transboundary
Movement]Rules,2016

Authorization No: 328580

Valid upto: 30/06/2026

Karnataka State Pollution Control Board
Parisara Bhavana,No.49, Church
Street,Bengaluru-560001
Tele : 080-25589112/3, 25581383
Fax:080-25586321
email id: ho@kspcb.gov.in

(This document contains 3 pages excluding annexure)

processing or utilization of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of authorization.

18. The transportation of hazardous waste shall have to be carried out only through registered/authorized vehicles meant for transportation of hazardous waste.
19. The Person Authorized shall not store the Hazardous Waste more than ninety days as per Rule 8 (1).
20. The Person Authorized shall transport and store the raw materials in a manner so as not to cause any damage to environment, life and property. The applicant shall be solely responsible for any damages to environment.
21. Display Boards: The person authorized shall display sign boards at the storage site as “Hazardous Waste Storage Site” and “Danger” and the site shall be provided with accident preventive measures.

Additional Conditions:

General Conditions Nil are not applicable.

For and on behalf of the
Karnataka State Pollution Control Board

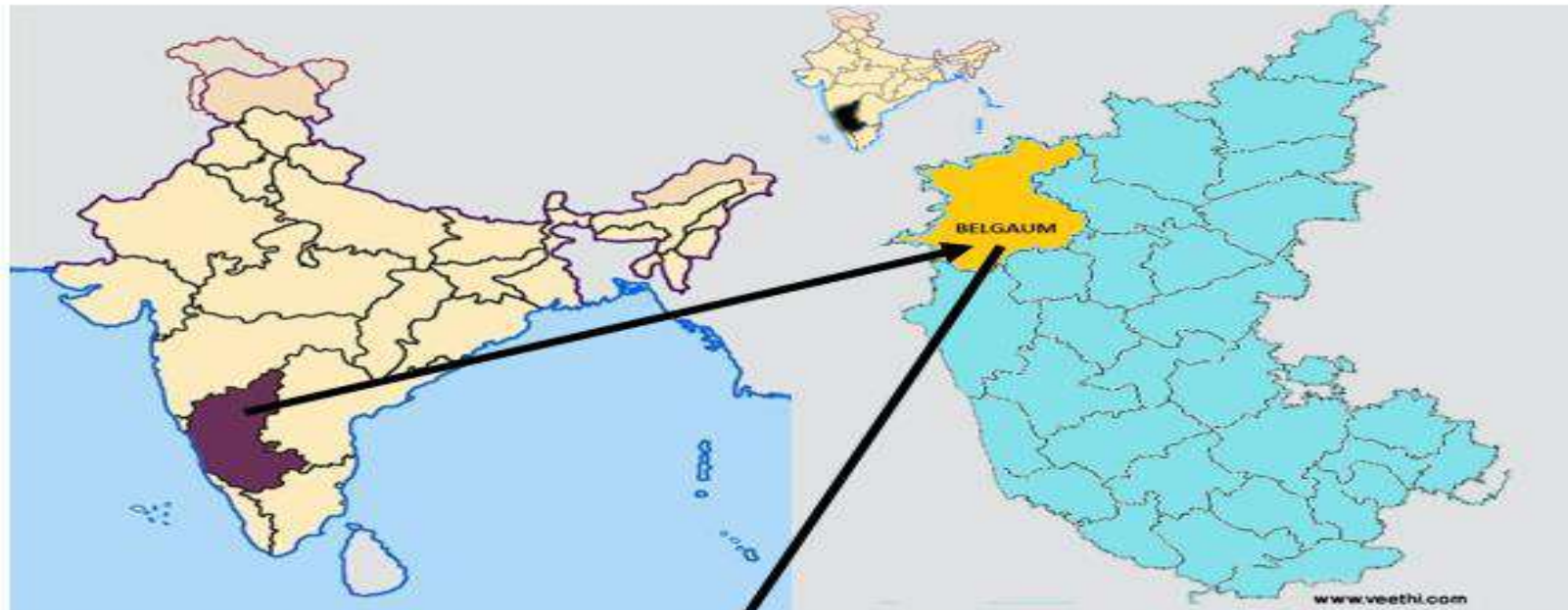
CHIEF/ SENIOR ENVIRONMENTAL OFFICER

COPY TO:

1. The Environmental Officer, KSPCB, Regional Office,for information and to inspect the industry during your next visit to the area.
2. Master copy (Dispatch).
3. Office copy.

Signature Not Verified
Digitally signed by
Date: 2021.12.07 16:15:30
+05:30

ANNEXURE 2
SITE LAYOUT PLAN AND LOCATION MAP



ANNEXURE 3
TOPO MAP

74°45'0"E

74°50'0"E

74°55'0"E

16°10'0"N

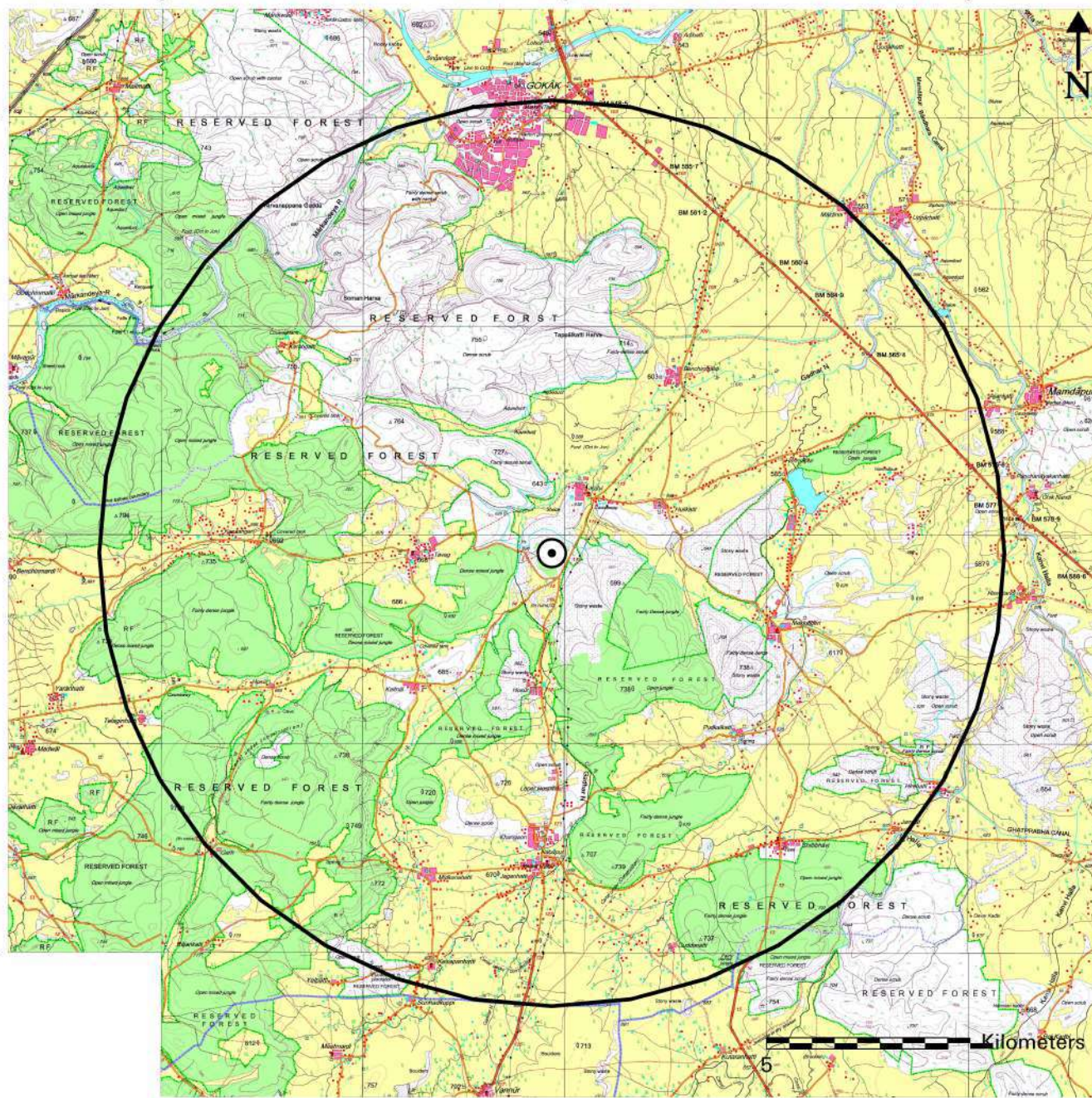
16°5'0"N

16°0'0"N

16°10'0"N

16°5'0"N

16°0'0"N



74°45'0"E

74°50'0"E

74°55'0"E

Annexure 4
Water Withdrawal Permission Letter

ಪ್ರತಿಯನ್ನು ಸಹಾಯಕ ಕಾರ್ಯನಿರ್ವಾಹಕ ಅಭಿಯಂತರರು, ಸಣ್ಣ ನೀರಾವರಿ ಮತ್ತು ಅಂತರ್ಜಲ ಅಭಿವೃದ್ಧಿ ಇಲಾಖೆ, ಉಪವಿಭಾಗ, ಗೋಕಾಕ ಇವರ ಮಾಹಿತಿಗಾಗಿ ಹಾಗೂ ಸೂಕ್ತ ಕ್ರಮಕ್ಕಾಗಿ ಕಳುಹಿಸಿದೆ.

ಕರ್ನಾಟಕ ಸರ್ಕಾರ

ಸಣ್ಣ ನೀರಾವರಿ ಮತ್ತು ಅಂತರ್ಜಲ ಅಭಿವೃದ್ಧಿ ಇಲಾಖೆ

ಸಂ:ಕಾನಿಅ/ಸನೀವಿ/ಅಂ.ಅ.ಇ.ವಿಭಾಗ/ಸಿ-2/2020-21

ಕಾರ್ಯನಿರ್ವಾಹಕ ಅಭಿಯಂತರರ ಕಚೇರಿ

ಸಣ್ಣ ನೀರಾವರಿ ಮತ್ತು ಅಂತರ್ಜಲ ಅಭಿವೃದ್ಧಿ ಇಲಾಖೆ
ವಿಭಾಗ, ಬೆಳಗಾವಿ. ದಿನಾಂಕ :

893

[1] FEB 2021

ಇವರಿಗೆ,

ಗೋಕಾಕ ಶುಗರ್ಸ್, ಲಿಮಿಟೆಡ್,
ಕೊಳವಿ, ತಾ: ಗೋಕಾಕ

ಮಾನ್ಯರೇ,

ವಿಷಯ : ನೀರೆತ್ತುವ ಪರವಾನಿಗೆಯನ್ನು ನವೀಕರಿಸುವ ಕುರಿತು.

- ಉಲ್ಲೇಖ: 1) ಸ.ಕಾ.ನಿ.ಅ. ಸ.ನೀ. ಮತ್ತು ಅಂ.ಅ.ಇ. ಉ.ವಿಭಾಗ, ಗೋಕಾಕ ಇವರ ಪ.ಸಂ. 503,
ದಿನಾಂಕ: 29-09-2020
2) ಮುಖ್ಯ ಅಭಿಯಂತರರು, ಸ.ನೀ. ಮತ್ತು ಅಂ.ಅ.ಇ. (ಉ) ವಲಯ, ವಿಜಯಪುರ
ಇವರ ಪ.ಸಂ. 62, ದಿನಾಂಕ: 04-01-2021

ಮೇಲಿನ ವಿಷಯದನ್ವಯ, ಉಲ್ಲೇಖಿತ (1)ರ ಪತ್ರದಲ್ಲಿ ಸಹಾಯಕ ಕಾರ್ಯನಿರ್ವಾಹಕ ಅಭಿಯಂತರರು, ಸಣ್ಣ ನೀರಾವರಿ ಮತ್ತು ಅಂತರ್ಜಲ ಅಭಿವೃದ್ಧಿ ಇಲಾಖೆ ಉಪ ವಿಭಾಗ, ಗೋಕಾಕ ಇವರು ಗೋಕಾಕ ಶುಗರ್ಸ್ ಲಿಮಿಟೆಡ್, ಕೊಳವಿ, ತಾ: ಗೋಕಾಕ ಅವರ ಕಾರ್ಖಾನೆಯ ಉತ್ಪಾದನೆಗೆ ನೀರನ್ನು ಎತ್ತಲು ಪರವಾನಿಗೆ ನವೀಕರಿಸಲು, ಈ ಕಚೇರಿಗೆ ದಾಖಲೆಗಳನ್ನು ಸಲ್ಲಿಸಿರುವ ಪ್ರಯುಕ್ತ, ಕೆಲವೊಂದು ಷರತ್ತುಗಳೊಂದಿಗೆ ನೀರಿನ ಕರ ಕುರಿತಂತೆ, ಒಡಂಬಡಿಕೆಯ ಪತ್ರವನ್ನು ದಿನಾಂಕ: 23-01-2020 ರಿಂದ 22-01-2025ರ ವರೆಗಿನ ಅವಧಿಗೆ ಪರವಾನಿಗೆಯನ್ನು ನೀಡಿದ ಒಡಂಬಡಿಕೆಯ ಬಾಂಡ ಪೇಪರ ಪ್ರತಿಯನ್ನು ಈ ಪತ್ರದೊಂದಿಗೆ ಲಗತ್ತಿಸಿ ಮುಂದಿನ ಕ್ರಮಕ್ಕಾಗಿ ಕಳುಹಿಸಿದೆ. ಸರ್ಕಾರದ ಆದೇಶ ಸಂ.ಜಸಂಇ/272/ಕೆಬಿಎನ್/2007, ದಿನಾಂಕ:29-11-2019 ರ ಪ್ರಕಾರ ಪರಿಷ್ಕೃತ ದರದಂತೆ ನೀರಿನ ಕರ ಪಾವತಿಸಲು ತಿಳಿಸಿದೆ.

ಇದನ್ನು ತಮ್ಮ ಮಾಹಿತಿಗಾಗಿ ಆದರಪೂರ್ವಕವಾಗಿ ಸಲ್ಲಿಸಿದೆ.

ಅಡಕ: ಮೇಲಿನಂತೆ

ತಮ್ಮ ವಿಶ್ವಾಸಿ,

ಕಾರ್ಯನಿರ್ವಾಹಕ ಅಭಿಯಂತರರು,
ಸಣ್ಣ ನೀರಾವರಿ ಮತ್ತು ಅಂತರ್ಜಲ ಅಭಿವೃದ್ಧಿ ಇಲಾಖೆ
ವಿಭಾಗ ಬೆಳಗಾವಿ.

ಪ್ರತಿಯನ್ನು ಸಹಾಯಕ ಕಾರ್ಯನಿರ್ವಾಹಕ ಅಭಿಯಂತರರು, ಸಣ್ಣ ನೀರಾವರಿ ಮತ್ತು ಅಂತರ್ಜಲ ಅಭಿವೃದ್ಧಿ ಇಲಾಖೆ ಉಪ ವಿಭಾಗ, ಗೋಕಾಕ ಇವರಿಗೆ ಮಾಹಿತಿಗಾಗಿ ಹಾಗೂ ಸೂಕ್ತ ಕ್ರಮಕ್ಕಾಗಿ ಕಳುಹಿಸಿದೆ.



सत्यमेव जयते

INDIA NON JUDICIAL

Government of Karnataka

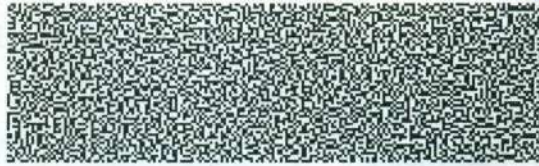
Rs. 100

e-Stamp

Certificate No. : IN-KA25782526806409S
Certificate Issued Date : 19-Sep-2020 03:46 PM
Account Reference : NONACC (FI)/ kacrsf108/ GOKAK5/ KA-BL
Unique Doc. Reference : SUBIN-KAKACRSFL0849425831486556S
Purchased by : GOKAK SUGARS LTD KOLAVI
Description of Document : Article 12 Bond
Description : AGREEMENT
Consideration Price (Rs.) : 0
 (Zero)
First Party : GOKAK SUGARS LTD KOLAVI
Second Party : EXECUTIVE ENGINEER MINOR IRRIGATION DIV BELAGAVI
Stamp Duty Paid By : GOKAK SUGARS LTD KOLAVI
Stamp Duty Amount(Rs.) : 100
 (One Hundred only)

ISSUED BY
Shri Jadisiddeshwar Urban Co-op Credit Society Ltd. Sunadholi Br.Gokak.

MJ
AUTHORISED SIGNATURE



AGREEMENT

Agreement made on the 25th day of September-2020 between the Executive Engineer, M.I. & G.W.D.D. Division, Belagavi acting on behalf of the Governor of Karnataka (hereinafter called ID) of the ONE PART AND

The General Manager, The Gokak Sugars Ltd., Kolavi, Tq:Gokak, Dist:Belagavi (hereinafter called) "Sugar Factory" of the OTHER PART witness as follows-

No.of Corrs.

Del
The General Manager,
Anand Dodabasannaavar
The Gokak Sugars Ltd.,
Unit Head
Gokak Sugars Limited., Kolavi
Tq:Gokak Dist:Belagavi
Tq:Gokak Dist:Belagavi

K.C. Vallu
ಕಾರ್ಯನಿರ್ವಹಣೆ ಅಧಿಕಾರಿಯವರು
Executive Engineer,
M.I. & GWDD Division, Belagavi
ಇಲಾಖೆ, ವಿಭಾಗ, ಬೆಲಗಾವಿ

Printed at www.shresthaapp.com or using e-Stamp Mobile App of Stock Holding Corporation of India Ltd. The e-Stamp is available on the website / Mobile App renders it invalid in the absence of any digital stamp from the Competent Authority.

1. The Sugar Factory has been accorded permission to utilize the water for Industrial purpose from M.I.Tank at Hoolikatti, Tq:Gokak vide G.O.No.SA NI E/41/LIS/ 2010, Bangalore, Dtd: 17-08-2010, issued by Principal Secretary, Water Resources Department (Minor Irrigation) Bangalore.

2. The drawl of water is permitted there is sufficient storage in "M.I.Tank at Hoolikatti, Tq:Gokak. In case there is acute scarcity of "Drinking water" to the downstream village the M.I. & G.W.D.D. Division, Belagavi is free to cut off water supply to the Sugar factory and no claim for compensation of damage will be admitted.

3. No assurance for supply of water shall be given to the said Sugar Factory.

4. The M.I. & G.W.D.D. Division, Belagavi reserve the right for the stoppage of water to the said Sugar facility for valid reasons and in the event of such stoppages the sugar factory shall not entitle to get any compensation or rebate for contingencies that may arise due to such stoppage of water, the use of water by the said factory shall be subjected to the stoppage after one month's notice if the M.I. & G.W.D.D. Division, Belagavi necessitate such a stoppage.

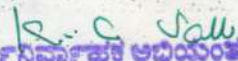
5. The sugar factory shall not draw water exceeding **11.38 Mcft.** Per year or any other lesser quantity that may be specified by M.I. & G.W.D.D. Division from time to time.

6. (a) The factory shall install a standard meter or meters approved by M.I. & G.W.D.D. Division, Belagavi and the site is made accessible to the M.I. & G.W.D.D. Division, Belagavi for checking. The meters shall be replaced for repairs if found defective by the officers of M.I. & G.W.D.D. Division, Belagavi during inspection within three months.

(b) The meter shall be sealed with two separate seal (one on behalf of the M.I. & G.W.D.D. Division, Belagavi and one on behalf of the sugar factory and shall only be accessible to and open for joint inspection and examination by the officers of the M.I. & G.W.D.D. Division, Belagavi and sugar factory duly authorized on the behalf. The reading of the meters shall be taken in the office of Assistant Executive Engineer, M.I. & G.W.D.D Sub Division, Belagavi and the sugar factory duly signed by both the officers.

No. of Corrs.

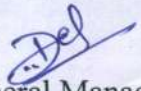

Anand Dodabasenavar
The Gokak Sugars Ltd.,
Gokak Sugars Limited, Kolavi
Tq:Gokak Dist:Belagavi


ಕಾರ್ಯನಿರ್ವಹಣೆ ಅಧಿಕಾರಿ
Assistant Executive Engineer
MI&CWDD Division, Belagavi
3


...3...

- c) The recording of the meters shall be prima-facie evidence of the quantity of water drawn by the sugar factory.
- d) In the event of break down of measuring devices, the quantity of water shall be assessed by the Minor Irrigation Division, Belgaum on the strength of energy consumption, capacity of pumping equipment etc., till such time to meters are rectified or replaced as per the instructions of M.I.& GWDD Division. The decision of the Executive Engineer, M.I.& GWDD Division, Belgaum in this connection shall be final and is binding on the said factory.
- 7) The factory shall deposit with Govt. of Rs. 5,00,000/- (Rs. Five Lakhs only) the amount equal to the estimated charges for one year which amount shall be held by the Govt. as security deposit for the due performance of the terms of this agreement.
- a) The Sugar Factory shall keep a record of all pumping hours and the water so pumped from the tank and shall make those records available to the M.I.& GWDD Division Officers, whenever required by the M.I.& GWDD Division.
- 8) The pumping plant or any other works required for drawing the water by pumps from the tank shall be so housed as not to interfere with the free flow in the tank and shall be subject to the approval of the Executive Engineer concerned.

No. of Corrections. :


General Manager,
The Gokak Sugars Ltd.
Kolavi, Tq. Gokak, Dist:Belgaum.

Anand Dodabasannavar
Unit Head
Gokak Sugars Limited., Kolavi
Tq:Gokak Dist:Belagavi

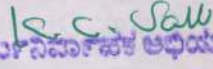

Executive Engineer,
M.I.&GWDD Division,Belgaum.

....4...

- 9) The use of water shall be only for the specific purpose i.e., for use in the said factory for industrial purpose only and for any unauthorized use of water. (except for irrigation and domestic purpose as approved by the Executive Engineer) the said factory is liable to pay additional water rates to be levied as penalty. The ceiling of penalty shall be 3 times of the normal water rate approval by the Government for the period.
- 10) The Sugar Factory should make arrangements to see that the molasses or other Waste products left over after crushing shall not be allowed to be thrown back into tank so as to pollute the Tank water.
- 11) The Sugar Factory shall install the required machinery to remove the pollution and industrial refuse of used water after treatment before allowing the waste water from the sugar factory back into the tank.
- 12) The water drawn by the factory shall be paid at the rate of Rs. 2.00/- Lakhs per Mcft. as G.O. ಜಸಂಇ 272 ಕೆಬಿಎನ್ 2017, ಬೆಂಗಳೂರು, dated : 29-11-2019 or at the rates that may be revised or enhanced subsequently by the Government.
- 13) The water rate shall be paid by half yearly payments (Financial year) by the factory for each period ending with 30th September and 31st March to the Executive Engineer, M.I.& G.W.D.D. Division, Belgaum or to such officer as the Government in writing specify within one month from the date of receipt by the factory of the bill in that behalf. The bill shall be deemed to have been served on the factory if it is sent by registered post addressed to the General Manager. In charge of the said sugar factory or by delivering the same at the office of the sugar factory.

No. of Corrections. :

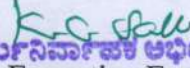

General Manager,
The Gokak Sugars Ltd.
Unit Head
Kolavi, Tq. Gokak, Dist: Belgaum.
Gokak Sugars Limited., Kolavi
Tq: Gokak Dist: Belagavi


K.C. Sall
ವಾಯವ್ಯ ನಿರೀಕ್ಷಾ ವಿಭಾಗ ಅಧ್ಯಯನಾಧಿಕಾರಿ
ಸರ್ಕಾರಿ ನೀರಾವರಿ ಇಲಾಖೆ, ಮೈಸೂರು
Executive Engineer,
M.I. & GWWD Division, Belgaum.

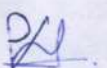
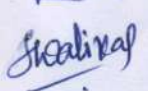
- 14) In case of arrears of water rates, the M.I.& GWDD Division reserves the right to recovery the same as arrears of land revenue.
- 15) The Department also reserves the right of termination of the agreement on breach of any terms there fore by the factory.
- 16) Further that the factory is willing to pay the stamp duty charged if it is more than that now prescribed.
- 17) This agreement shall be for the period for five years i.e., 23-01-2020 to 25-9-2020 as Post-event Period and Date:26-9-2020 to 22-01-2025 ~~titled for five years~~, at the end of which the government reserves the right to renew or revoke the agreement.
- 18) The Executive Engineer, M.I.& GWDD Division, Belgaum reserves the right to revoke or cancel the permission subject to the detriment of availability of water in the M.I.Tank at Hoolikatti.
- 19) The Executive Engineer, M.I.& GWDD Division, Belgaum reserves the right to cancel the permission on the ground of directions from the higher authorities or the Government.

No. of Corrections :


General Manager,
The Gokak Sugars Ltd.
Unit Head
Gokak Sugars Limited., Kolavi
Tr:Gokak Dist:Belagavi


ಕಾರ್ಯನಿರ್ವಾಹಕ ಅಭಿಯಂತರರು
Executive Engineer
ಸಹ ನಿರೀಕ್ಷಾಪಾಲಕರು ಆರೋಗ್ಯ ಮತ್ತು
M.I. & GWDD Division, Belgaum
ಇಲಾಖೆ, ನಿರ್ಧಾನ, ಬೆಳಗಾವಿ

Witness :

1.  P.S. Kulkarni
2.  S.S. Walikar

