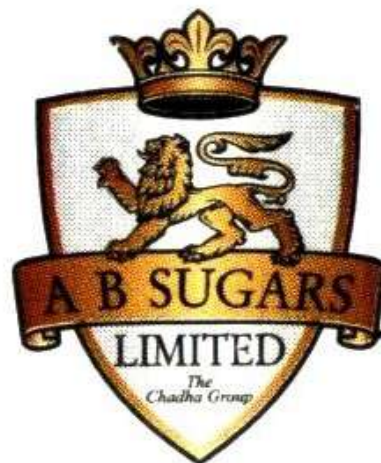


Environment Audit Report & Environmental Statement for **F.Y. 2022-23**

A.B. SUGARS LTD.

(Distillery Division)

**Vill. Randhawa, P.O. Panwan
Dasuya, Distt. Hoshiarpur
Punjab - 144205**



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I wish to express my sincere thanks to Sh. Alok Pardhan, Vice President for his constant support & encouragement.

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CHAPTER – 1

INTRODUCTION

1.1 OVERVIEW

Environmental regulations are becoming increasingly complex and costly for both private and public sector regulated entities as rapid industrialization and urbanization has caused environment degradation of varied nature. Degradation of Environment poses great threat to eco-system and general health of public. There is need to take effective steps by an individual entrepreneur to arrest environment degradation. Federal agencies, however, differ from the private sector in how they must comply with those regulations. Thus, Federal agencies are being asked to do more with less -- comply with all applicable environmental regulations while utilizing fewer resources to accomplish the goal of full compliance. An environmental audit is one tool that an industry can use to comply with the regulations, as well as to improve the efficiency of operations and conserve limited fiscal and labour resources. A number of factors must be considered when designing and implementing an environmental audit program. In developing an effective audit program, an agency environmental manager must always remain aware that:

- (1) the audit program should complement and contribute to the company mission
- (2) securing funding for the audit program and the implementation of audit findings must be an integral part of the agency budgeting process.

1.2 EPA'S 1986 ENVIRONMENTAL AUDIT POLICY

The 1986 audit policy states that "it is EPA policy to encourage the use of environmental auditing by regulated industries to help, achieve and maintain compliance with environmental laws and regulation, as well as to help identify and correct unregulated environmental hazards." The policy also specifically endorses environmental auditing at federal facilities.

In the 1986 policy, EPA defines environmental auditing as “a systematic, documented, periodic, and objective review of facility operations and practices related to meeting environmental requirements.”

The policy identifies several objectives for environmental audits: -

- Verifying compliance with environmental requirements
- Evaluating the effectiveness of in-place environmental management systems; and
- Assessing risks from regulated and unregulated materials and practices.

1.3 DEFINITION – ENVIRONMENTAL AUDIT

The environmental audit is a management tool consisting of a systematic, documented, periodic and objective evaluation of environmental performance, management systems and equipment with the aim of firstly, facilitating management control of environmental practices and secondly, assessing compliance with an operation's or activity's environmental policies, including meeting regulatory requirements. Examples include:

- internal auditing of systems and procedures for measuring, recording and reporting performance data
- independent validation of systems and procedures for measuring, recording, and reporting performance data
- Independent evaluations and commentaries by external experts regarding an organisation's economic, environmental, and social performance and/or management processes.

1.4 ENVIRONMENTAL AUDITING – BACKGROUND

Under Environment (Protection) Act, 1986, it is obligatory on the part of every industry to submit Environment Audit Report & Environmental Statement for the preceding financial year on or before 30th of September every year. So, it is mandatory requirement from the Punjab Pollution Control Board for submission of Environment Audit Report & Environmental Statement every year. Environmental auditing is an internal management

tool for use by an organization or activity in carrying out its environmental management responsibilities.

Auditing is a long-established tool commonly used to evaluate and monitor financial and production performance. In recent years, the audit tool has been adapted to workplace environmental programs, systems and practices to evaluate their effectiveness and to identify deficiencies that require corrective action.

Auditing all or part of that system can measure the performance of a company's environmental management system. The results of such audits can assist companies in demonstrating their commitment to continuously improving their environmental performance. Full commitment from senior company management is essential if the audit process is to be a success. This commitment requires an involvement and interest in the whole audit process. The environmental audit is a voluntary action which can be undertaken by the manager of an organization or activity or by a third party and which serves as an instrument for managing and monitoring the environment.

1.5 WHY ENVIRONMENTAL AUDIT IS REQUIRED?

An environmental audit can provide valuable information to help a company to meet the agreed standards of environmental performance (which should be defined in company policy) and stay ahead of the requirements placed on them by law.

The possible functions and benefits of an environmental audit are:

Management

- Demonstrate a visible commitment to improving an organisation's environmental performance.
- Use as a basis for the development of environmental management policies or efforts to improve existing plans.



- Identify environmental risks, impacts and review of management controls and systems and associated liabilities, liabilities and risks from past and present activities of the site or surroundings and implementation of recommendations.
- Review process and plant operating procedures or activity's current environmental standards of operation and company environmental management procedures, including emergency response planning, monitoring and reporting systems and planning for future changes in Processes or Regulations.
- Increasing actions undertaken or needing to be undertaken by an organization or activity to meet environmental goals such as sustainable development, Responsible Care®, recycling and efficient use of resources.

Financial

- Prevention of financial losses: through remediation or the closure of an organization or activity; government restrictions or negative publicity caused by bad management or monitoring of the environment.
- Fair assessment of financial implications of environmental issues, liabilities and impact of new regulations.
- Highlight where costs can be saved (e.g. through energy conservation or minimisation, improved use of raw materials, process changes, waste reduction, reuse and recycling etc).

Training

- To facilitate the sharing of best environmental practices and increase in the awareness of the management and staff of an organization regarding environmental policies and responsibilities.
- Assessment of training, knowledge and awareness of employees.

Reporting

- Provision of an environmental audit report for use by an organization, or activity in dealings with environmental groups, government and the mass media.
- Provision of information required by insurance companies, financial institutions, shareholders and other stakeholders.

It is also important to recognise the limitations of the audit process when deciding to conduct an environmental audit. The following points may be helpful to remember in this respect:

- An audit should not be used as a chance to tell the audited unit how to do their job
- It is not a technical investigation in itself (although can be used in support).
- It should not be used to provide a public statement of performance (although it may be used to back up and support any such statements made).



CHAPTER – 2

OBJECTIVE OF ENVIRONMENTAL STATEMENT

The Ministry of Environment, Forests & Climate Change (MOEF & CC) Govt. of India vide notification no. G.S.R. 329 (E) dated 13.03.1992 and G.S.R. 386 (E) dated 22.04.1993 made some amendments in the Environment (Protection) Rules, 1986 framed under Environment (Protection) Act, 1986.

Rule 14 of the above stated EPA rules reads as under: -

“Every person carrying on an industry, operation or process requiring consent under section 25 of the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974) or under section 21 of the Air (Prevention and Control of Pollution) Act, 1981 (14 of 1981) or both or authorization under the Hazardous Wastes (Management and Handling) Rules, 1989 issued under the Environment (Protection) Act, 1986 (29 of 1986) shall submit an environmental statement for the financial year ending the 31st March in Form V to the concerned State Pollution Control Board on or before the thirtieth day of September every year, beginning 1993.”

According to the said rule, each and every industry is required to submit Environmental Statement by 30th September every year for the preceding financial year ending 31st March.

M/s A.B. Sugars Ltd. (Distillery Division) has engaged the services of Er. R.K. Gupta, Former S.E.E., Punjab Pollution Control Board and has been recognised as Chartered Engineer by the PPCB. The consultant is Proprietor of M/s R4 Enviro, Environmental Consultants who has engaged by the industry for preparing the Environmental Statement of the industry for the financial year 2022-23. The Environment Audit Report & Environmental Statement has been prepared in compliance to the provisions of the EPA, Rules 1986 as amended to date.

CHAPTER – 3

MANUFACTURING PROCESS

ABOUT THE INDUSTRY

M/s A.B. Sugars Ltd. (Distillery Division), Village Randhawa, P.O. Panwan, Tehsil. Dasuya, Distt. Hoshiarpur was established in July, 2004 in the premises of M/s A.B. Sugars Ltd. (Sugar Division), Village Randhawa, P.O. Panwan, Tehsil. Dasuya, Distt. Hoshiarpur (Formerly known as Guru Teg Bahadur Sugars Ltd.). The Distillery Division is correlated with sugar manufacturing unit. The process of the distillery is based on molasses as raw materials for the production of potable alcohol.

At present installed capacity of primary product Potable Alcohol/Rectified Spirit is 60 KL/day (molasses based) which is further processed, blended and bottled as Country and IMFL (Indian Made Foreign Liquor), a high quality liquor.

MANUFACTURING PROCESS

The industry is engaged in the manufacturing of IMFL & Country Liquor. The industry has manufactured Extra Neutral Alcohol (ENA) @ 1654.345 KL, Absolute Alcohol (AA) @ 7528.973 KL during the financial year 2022-23. The total production of the industry is 9183.318 KL during the financial year 2022-23. The main raw material of the industry is Molasses. The industry used Molasses @ 41832.3 MT during the financial year 2022-23.

Process Description

The industry has the installed capacity of RS/ENA production 60 KL/day. Further, this RS/ENA has been used in manufacturing the IMFL and Country Liquor. The manufacturing process flow diagram has been shown in figure 3.1. The basic raw material of the industry is molasses from the Sugar Division. The molasses are lifted by tankers from Sugar Division and stored in storage tanks of distillery. In case of molasses, mono sugars present in molasses can be easily consumed by micro-organism yeast and during their life cycle biological reaction takes place producing Alcohol.

Various process details of potable alcohol are given below:

1. Molasses
2. Fermentation
3. Distillation
4. Blending
5. RS/ENA/AA
6. Bottling (IMFL & Country Liquor)

Fermentation

In fermentation following steps has been performed as detail below:

1. Yeast Propagation
2. Fermenter's filling and Alcohol production by Distillation

Molasses are pumped from storage tanks to fermentation process. The incoming molasses are first weighed with help of load cell based system and then fed to tank. From this tank, molasses are feed in yeast propagation stage in fermenters.

Yeast is developed on lab scale and then it will come in yeast vessel stages (Yv1, Yv2 & Yv3) and pre-fermenter stage. After this, yeast cell mass is transferred in individual fermenters. The industry have 07 Nos. of fermenters in fermentation process.

The molasses along with water filled based on specific gravity filling pattern, which result in maximizing the yield of alcohol from plant. The total cycle time is about 30-32 hrs. with higher fermentation efficiencies.

The system can be operated on continuous or feed-batch continuous mode of operation. In fermentation process approx. 9.0% to 10% alcohol has achieved. This fermented wash is collected in wash tank, from where it is pumped to distillation process to increase the concentration of alcohol.

Distillation

Distillation process is Multi-pressure system with simultaneous production of Rectified spirit, extra neutral alcohol or ethanol.

This process utilizes seven columns namely Analyzer, Degasifying, Pre-rectifier, Extractive Distillation column, Rectifier-cum-Exhaust, Impure spirit purification and simmering columns.

The Analyzer, Degasifying and Pre-rectifier columns are operated under vacuum, where as extractive distillation, ISP column and simmering columns are operated under atmospheric condition. The Rectifier-exhaust column is under pressure.

The steam is injected through thermo-siphon boiler into columns and condensate is collecting in tank, which is transferred to boiler. The industry also recycling spent- lees from rectifier column to extractive distillation column. A faint stream after cooling is also sent to fermenters.

In the distillation scheme offered the extractive distillation, rectifier-exhaust and simmering column are designed for ENA, whereas other columns are designed RS. In this configuration, the industry can simultaneously draw RS and ENA from the plant. RS and ENA produced from the plant are stored in receiver rooms, from where it is transferred to bottling section for liquor use. Main feature of distillation are as follows:

1. Low steam consumption
2. Alcohol effluent ratio is low as direct steam to column is not provided, steam is given through boiler.
3. Generation of steam condensate help to reduce the water consumption in boiler.
4. Reuse of waste water as spent-lees in column.

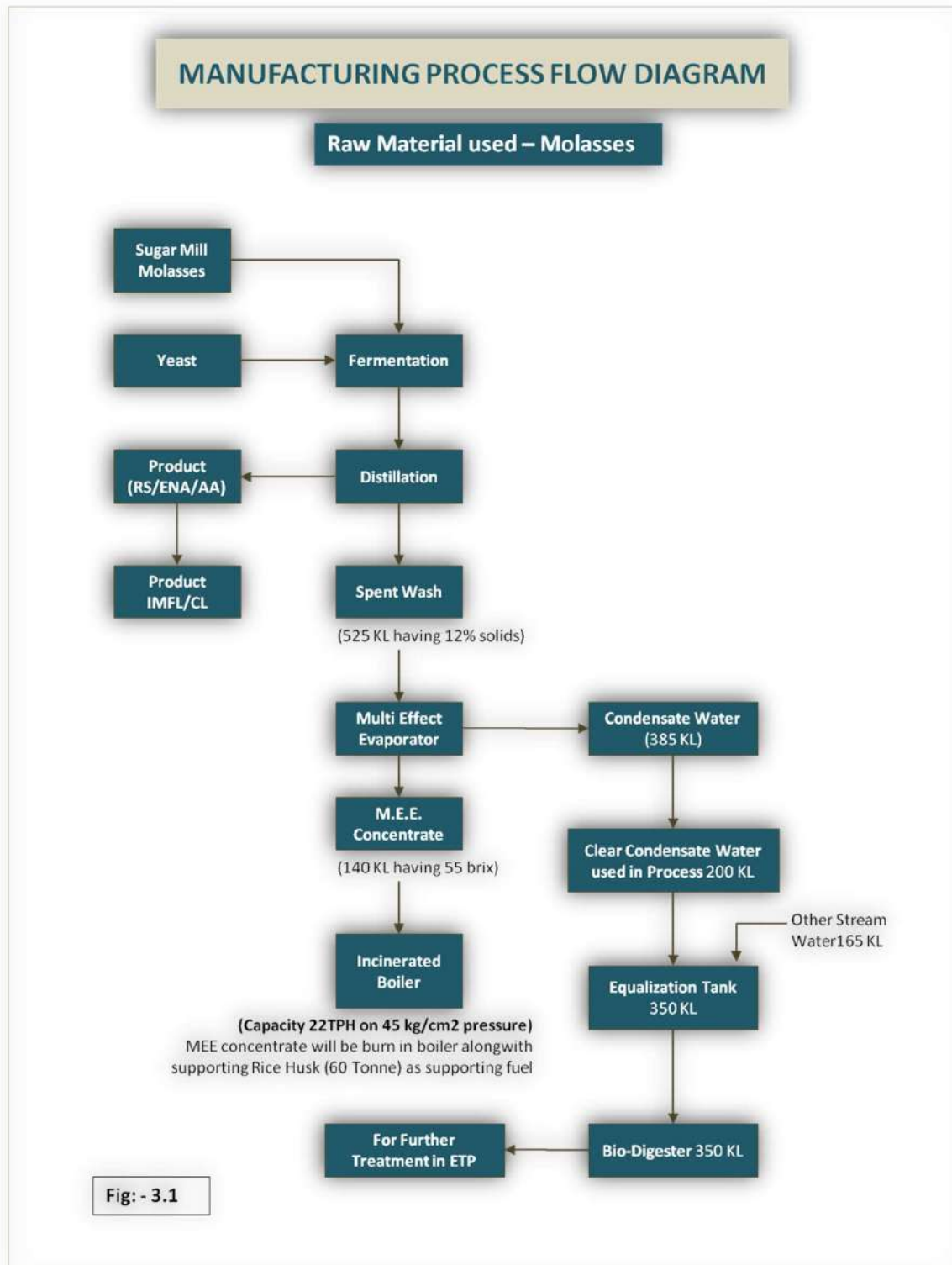
After separation of alcohol from Molasses fermented wash remaining liquid is called as spent wash in the bottom of analyzer column. This spent wash is taken into MEE plant effluent concentration. Further MEE concentrate is burnt into incinerated boiler for achieving zero discharge.

Blending

RS/ENA is diluted with the D/M water and blended with various flavours and caramel to produce IMFL/Country Liquor.

Bottling

Blending liquor is used for the bottling as final products i.e. IMFL & Country Liquor.



CHAPTER – 4

WATER REQUIREMENT

The industry is using ground water for industrial process, cooling, boiler feed and domestic use. For the purpose, the industry has installed 03 Nos. tubewells as under:-

Sr. No.	Year of Construction	Depth (meters)	Diameter (mm)	Discharge m ³ /hr	Operational hours/day	H.P. of Pump	Whether fitted with water meter
1.	Tubewell/ 2004	300	300	65	4/270	40	Yes
2.	Tubewell/ 2004	300	300	65	4/270	40	Yes
3.	Tubewell/ 2004	300	150	25	4/270	25	Yes

- The total water consumption of the industry is 1, 02,735 KL during the financial year 2022-23. The consumption of water for domestic use was 5,475 KL, the remaining consumption was 18,441 KL for process use i.e. Fermentation & Distillation process, 22,858 KL for boiler feed, 55,169 KL for cooling towers, 196 KL for bottle washing and 596 KL for blending purpose for 300 days during the financial year 2022-23.
- The industry has maintained record of ground water abstraction. Digital Water Flow water meters have been installed. Water meter readings are recorded on daily basis.

- Record of energy consumption for abstraction of ground water has also maintained by the industry.
- The industry has also maintained record of consumption of water for every activity.
- The industry has been granted Ad-interim permission/NOC from the Punjab Water Regulation & Development Authority (PWRDA) for extraction of ground water @ 900 KLD vide Ad-interim permission No. PWRDA/06/2021/L3/101 dated 15.06.2021. The copy of the same is attached herewith as **Annexure – 4.1**. The industry has also applied for NOC regarding abstraction of ground water on dated 17.03.2023 under the new directions dated 27.01.2023.

Annexure – 4.1



PUNJAB WATER REGULATION AND DEVELOPMENT AUTHORITY
SCO 149-152, SECTOR 17, CHANDIGARH – 160017
ad interim PERMISSION FOR EXTRACTION OF GROUNDWATER

Name of Unit	M/s A B Sugars Ltd. (Distillery Division)		
Activity of Unit:	Industrial		
Address of Unit:	M/s A B Sugars Ltd. (Distillery Division), Vil. Randhawa, P.O- Panwan, Dasuya, Hoshiarpur, Punjab.	PIN Code: 144205	
Assessment Unit (Block):	Dasuya	Category: Yellow	
District:	Hoshiarpur		
Correspondence Address:	M/s A B Sugars Ltd. (Distillery Division), Vil. Randhawa, P.O- Panwan, Dasuya, Hoshiarpur, Punjab.	PIN Code: 144205	
Unit ID	0470100120		
Permission Number	PWRDA/06/2021/L3/101		Dated: 15.06.2021
Project Status:	Existing Unit		
Permission Type:	ad-interim Permission		
Validity Period:	For a period of three months from the date of publication of the final guidelines by the Authority, or for three years from the date of grant of this ad interim permission, whichever is earlier.		
Ground Water Extraction Permitted: 900 m ³ /day			
Fresh Water		Saline Water	
m ³ /day	m ³ /month*	m ³ /day	m ³ /month*
900	27,000	-	-

*Note:- Month is taken as 30 days for calculation of charges.

Fees and Charges Paid:

A. Application Fees for Groundwater Extraction:

Volume of Groundwater Extraction Applied For per day (in m ³ /day)	Fees Deposited (in Rs.)
900	16,000/- (20% Covid-19 rebate applied)

B. Advance Deposit equivalent to two months of charges for the permitted quantity of groundwater extraction:

Category of Area	Extraction Permitted: (m ³ /day)	900	Amount Deposited (Rs.)
Yellow	Charges for two months		7,54,560/- (20% Covid-19 rebate applied)
	<10 m ³ /day	10-100 m ³ /day	
	3,600	75,600	8,64,000

C. Tube-well Registration Fee paid:

No. of existing tube-wells	No. of Proposed tube-wells	No. of total tube-wells	Registration Fee applicable per tube-well	Total Registration Fee Paid (Rs.)
03	Nil	03	10,000/-	24,000/- (20% Covid-19 rebate applied)

D. Total Amount Paid (Rs.):

Application Fee	Advance Deposit	Tube-well Registration Fee	Total (Rs.)
16,000/-	7,54,560/-	24,000/-	7,94,560/-

NOTE: This permission is granted in terms of the Draft Punjab Guidelines for Groundwater Extraction and Conservation published on November 12, 2020 under section 15 of the Punjab Water Resources (Regulation and Management) Act 2020 and is subject to the conditions given overleaf.

Dated: 15th June, 2021
Place: CHANDIGARH



15.6.2021
Signature
J K Jain, A.O.L-3



ad interim PERMISSION CONDITIONS

- 1) The permission is valid for a period of three months from the date of publication of the final guidelines by the Authority, or for three years from the date of grant of this ad interim permission, whichever is earlier. The unit will apply again for Permission within one month after the publication of the final Guidelines.
- 2) Since, this Permission has been issued on the basis of self-assessment by the applicant and without any site inspection or verification of documents submitted by the applicant, hence the Authority may inspect the unit and documents at any time. In case any material difference is found in the information submitted and the site conditions or documents, the Authority may suspend the permission granted immediately and may revoke or modify the permission after giving a notice to the Unit.
- 3) The unit shall comply with the provisions of the Punjab Water Resources (Management and Regulation) Act, 2020, and the Regulations and Directions issued thereunder.
- 4) A Unit operational prior to 12/11/2020 shall be liable to pay groundwater extraction charges w.e.f. 12th Nov, 2020. A unit which is yet to begin operations shall be liable to pay the charges from the date of commencement of extraction of groundwater.
- 5) The unit shall install a water meter at each of its extraction structures within 60 days of issue of this permission letter (Refer Para 7.1 of the Draft Guidelines.)
- 6) Till the installation of water meter the Unit shall pay the full amount for the entire volume of groundwater permitted.
- 7) The Unit shall self-record the water meter readings in the format set by the Authority on the first working day of every month and submit the same and pay the applicable charges to PWRDA by 10th of every month.
- 8) Units permitted to extract 50m³/day or more groundwater shall communicate water level data to PWRDA in the first week of every month. (Refer para 7.2 of the Draft Guidelines).
- 9) This Permission does not absolve the unit of its obligations to obtain other required statutory and administrative clearances from appropriate authorities.
- 10) The issue of this Permission does not imply that other statutory or administrative clearances shall necessarily be granted to the unit by the concerned authorities.
- 11) This Permission is being issued without any prejudice to the directions of any court of law in cases related to groundwater or any other related matters.
- 12) Water conservation credit claims (if any) will be examined and verified separately.
- 13) In view of the Covid-19 epidemic, the Groundwater Charges in the Draft Guidelines will be reduced by 20% till July 31st, 2021.
- 14) Since, the unit has not paid the GST. Hence, it will be bound to deposit the same within 7 days as and when required by the Authority.

X-----X

CHAPTER – 5

WATER POLLUTION GENERATION & ITS MANAGEMENT

The Spent Wash from the plant is fed to Evaporator Plant and the total quantum of the same was 27,698 KL. This spent wash was fed into Incinerator Boiler as boiler feed. The effluent from condensate from the evaporator plant & bottle washing etc. was sent to Equalization Tank followed by bio-digester and for further treatment in ETP. The industry has common Effluent Treatment Plant (ETP) with A.B. Sugars Ltd. (Sugar Division) to treat the trade effluent as well domestic effluent. The treated effluent from the ETP is discharged on to land for plantation on their own land of the industry.

EFFLUENT TREATMENT PLANT (ETP)

The effluent generated from the industry is treated in the Effluent Treatment Plant (ETP) installed in A.B. Sugars Ltd. (Sugar Division) of the industry. The ETP installed is based on biological treatment. The capacity of the Effluent Treatment Plant (ETP) installed is 3500 m³/day.

Process Details

In the manufacturing process of distillery, the liquid effluent containing BOD, COD, Oil and grease and suspended solid are generated. The industry treats its trade effluent in the Effluent Treatment Plant (ETP) which has been set up commonly in the Sugar Division of the industry for the treatment of effluent having total capacity 3500 m³/day.

The ETP comprise of the following units:

1. Bar Screening
2. Oil and Grease Trap
3. Anaerobic Filter
4. Aerobic Reactor
5. Secondary Sedimentation Tank
6. Sludge Drying Beds

The treated effluent is used for irrigation which meets with the desired norms. Aqueous discharges from power plant blow down, sluice water from the bottom ash handling system, boiler chemical cleaning solutions as well as variety of low volume wastes including ion exchange regeneration solution from the de-mineralising water plant, RO reject water, boiler blow down sewerage system discharge from building and plant floor drains etc. are also treated in the same Effluent Treatment Plant (ETP).

The Effluent Treatment Plant (ETP) installed by the industry is operated regularly to achieve the norms prescribed by the Punjab Pollution Control Board. The concentration of various pollutants remains well below the prescribed norms. The treated effluents are utilized in the plantation area of 55 Acres which has been developed as per Karnal Technology. No stagnation of effluent is there inside or outside the industry.

The Drawing of Effluent Treatment Plant (ETP) installed at Sugar Division of the industry is as per Figure 5.1.

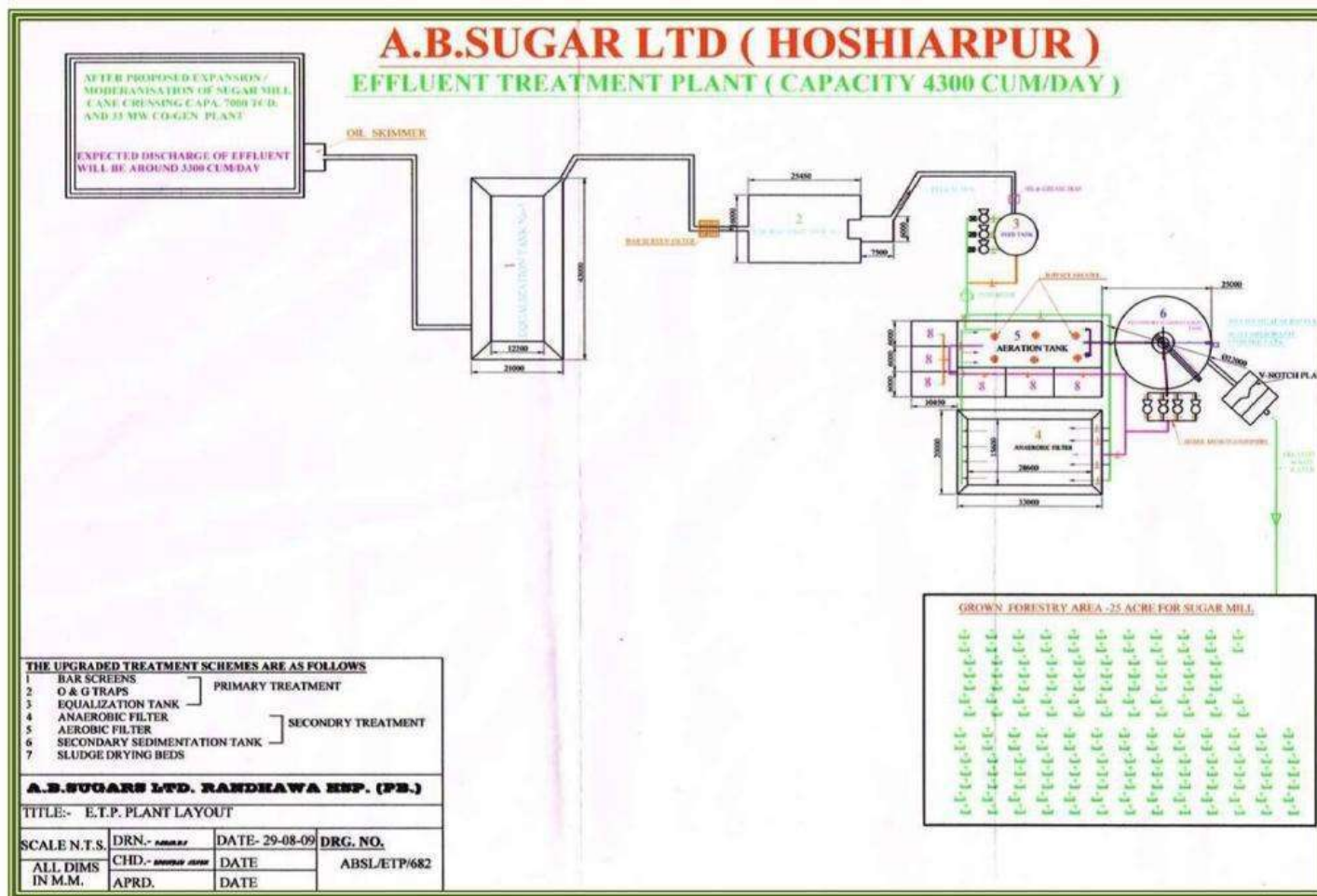


Fig - 5.1 – ETP Flow Diagram of AB Sugars Ltd. (Sugar Division)

CHAPTER – 6

AIR POLLUTION GENERATION & ITS MANAGEMENT

The industry has installed 01 no. Incinerator Boiler having steam generation capacity of 22 TPH. Paddy Husk, Coal, Mustered/Mungra/Other Fuel were mainly used as fuel in boiler installed by the industry. The quantity of fuel consumption in the boilers is Paddy Husk @ 11689 MT, Coal @ 2583 MT and Mustered/Mungra/Other Fuel @ 2849 MT during the financial year 2022-23. The boiler having capacity 22 TPH is provided with Pre-separator & Electro Static Precipitator (ESP) as Air Pollution Control Devices.

Multi Effect Evaporator (MEE)

Multi Effect Evaporator (MEE) Plant have five (5) stages of concentration having 2 effects on falling film principle and three effects are on forced circulation principle.

Spent Wash after distillation has to de-sludge by using a settling tanks then it is taken in one evaporator feed collection tank. Evaporator system is as follows

- In first effect there are two Forced circulation Evaporators. The Calandria-1B and 1C are used for this.
- The second stage has one falling film calandria. The Cal-2 is used for this purpose.
- The third stage has forced circulation Calandria Cal -3. Cal -3 is used for this.
- The fourth stage has two falling film Calandrias in series. Cal – 4a&b is only used for this.
- The fifth stage have two Forced Circulation Calandrias. Calandrias 5D1 and 5D2 are used for this purpose.
- All the calandrias have their respective vapour separators.
- Steam condensate is separately pumped out by pump (at approx. 60°C) to boiler feed water tank.
- Evaporated process condensate is flashed as usual internal and is pumped out separately by condensate pump.

Basis of Design:

Effluent type	:	Raw Spent Wash
No. of Effects	:	5
Feed Rate kg/h	:	28000
Feed Concentration	:	12%
Feed Temperature	:	50°C
Product Rate (Concentrate) kg/h	:	5600
Product Concentration	:	60%
Product Temperature approx.	:	75°C -85°C
Total Water Evaporation kg/h	:	22400

Raw spent wash having 12% solids is concentrated in this evaporator upto 60% solids and then this concentrated material is fed in incinerator boiler of 22 TPH. Clear condensate water is recycled back in fermentation process or cooling towers.

Incinerator Boiler

Incinerator boiler of 22 TPH has been installed for burning of this concentrated spent wash having 55% to 60% solids (slop). The typical analysis of slops produced from concentration unit contains:

Carbon	28.25%
Hydrogen	3.4%
Nitrogen	1.01%
Oxygen	13.24%
Sulphur	0.28%

Phosphorus	<0.01%
Moisture	40.54%
Ash	14.28%

Burning Process

As the gross calorific value of this slop is lower than 1859 Kcal/hr, therefore boiler with slop can be burn in the help of support fuel which helps to maintain the uniform furnace temperature required for combustion. The slop is pumped from the slop storage tank to the boiler with the help of specially designed positive displacement pumps. Then the concentrated slops are injected by a specially designed high pressure spray nozzles from a certain pre described height into the boiler furnace. When burning only slops, the steam output can reach 1.7 to 1.8 MT per MT of slops and balance steam is generated by the support fuel. The flue gas from the burning of slops first pass the ash separator in the furnace outlet where the part of coarse ash is separated, secondly pass through the special design back and boiler tank to release the heat and heat the boiler water and finally then pass through the ash separator and ID fan which is discharged at low temperature into the atmosphere through stack of adequate height.

Steam Circulation

The biological energy of the organic particles in the slops energy after can be converted to the thermal burning which is used in the boiler to produce high pressure steam. The high pressure steam is passed through the steam turbine which generates power and low pressure steam, part of the low pressure steam can be used as the heating media in Multi Effect Evaporators where the concentration of slops is occurred and part of the low pressure steam is used as heating media for alcohol production, saving the energy consumption in production. The waste water is concentrated and then burned. The thermal energy from the burning is used for concentration and alcohol production. Steam is recycled and ash is reused as fertilizer as it contains high potash.

Ash Arresting/Collection

Furnace has enough space for ash collection and ash doors are provided for the purpose. Ash is collected from bottom of Furnace, Super Heater, Economizer, Air pre-heater & Cyclone through belt conveyor and collected in Ash bunker, from where it is disposed off.

Dust Collector

Electro Static Precipitator (ESP)

The precipitator comprises no. of dust collecting plates – rows in parallel forming a multi parallel gas path and with discharge electrodes freely suspended within this path. These all are housed in an MS casing complete with Flat bottom type ash collecting hopper.

Method of Gas Filtration

A single-phase high voltage current is impressed on the discharge electrodes from a high voltage transformer rectifier unit with control sets. The necessary primary supply voltage and control feed backs for these units are fed from the control panels separately housed nearby containing all necessary control gears for operation of these sets. The gases entering the precipitator, comes under the influence of high static electricity set-up by the high potential difference between the discharge and collecting electrodes. This causes the ash in the gases to get ionized to be driven towards the collecting electrodes and adhere on electrodes. Thus, the dust particles are separated from the flue gas. The clean gases then passes out of the precipitator.

The deposited ash is removed from the collecting plates by rapping them on one end at an interval causing the dust to dislodge and to fall into the hopper beneath the collecting fields. Rapping is also applied to the discharge electrode to remove the dust deposited on them due to positively charged particles.

The dust, which is precipitated, is collected in the hopper installed below these arrangements.

Efficiency of the System

The system is most efficient and proven to be best technology. Now, the clean gases are discharged at adequate height into the atmosphere with the help of ID fan and chimney.

Particle size in microns	>2
Loading grains per cubic feet	> 1 (2000 mg/tttm ³)
Collection efficiency weight %	<99
Gas velocity meter per second	<1.0
Emission	<100 rng/Nm ³

This complete system ensure the clean atmosphere in the around the industry.

Flue Gases Discharge

The flue gases passing through wet scrubber or ES_p is discharged into atmosphere through existing stacks. The online camera and SPM monitoring system is already working and connected to PPCB & CPCB.

The industry has installed 01 no. D.G. set of capacity 750 KVA having adequate stack height of 6.0 metre above roof level. The industry used HSD @ 21600 litres as fuel in D.G. set during the financial year 2022-23.

- D.G. set has been provided with canopy.
- The industry is getting the stack emissions analysed periodically from the PPCB Lab/ Approved labs by PPCB. The concentration of SPM always remains within the limits prescribed by PPCB.
- The boiler has been provided with proper adequate stack height i.e. 15 metres above the roof level and 45 metres above the ground level.

CHAPTER – 7

SOLID WASTE GENERATION & ITS MANAGEMENT

The source of generation of solid waste from the industry is Paddy Husk Ash, Coal Ash & Other Fuel Ash which is generated from the burning of Paddy husk, coal and other fuel in the boiler furnace. The total Ash generation during the year under report is 3872 MT.

The ash, so, generated is rich in potash and has been lifted to the nearby farmers for utilization in their fields as a fertilizer.

CHAPTER – 8

STATUTORY PERMISSIONS

The industry has obtained the Consent to Operate under the Water (Prevention & Control of Pollution) Act, 1974 & the Air (Prevention & Control of Pollution) Act, 1981. The details of the same are as under: -

- Consent to operate under the Water (Prevention & Control of Pollution) Act, 1974, granted vide Punjab Pollution Control Board letter no. **CTOW/Renewal/HSP/2019/10712959** dated 15.10.2019 valid upto 14.10.2021 and then further renewed vide no. **CTOW/Renewal/HSP/2021/16517009** dated 08.11.2021 valid upto 31.03.2024. (Copies Attached)
- Consent to operate under the Air (Prevention & Control of Pollution) Act, 1981, granted vide Punjab Pollution Control Board letter no. **CTOA/Renewal/HSP/2019/10713117** dated 15.10.2019 valid upto 14.10.2021 then further renewed vide no. **CTOA/Renewal/HSP/2021/16516964** dated 21.10.2021 valid upto 31.03.2024. (Copies Attached)



PUNJAB POLLUTION CONTROL BOARD

ZONAL OFFICE JALANDHAR.

Website:- www.ppcb.gov.in

Office Dispatch No : Registered/Speed Post Date:
Industry Registration ID: R12HSP36832 Application No : 16517009

To,
Sh Manmeet Singh
A/5, ram Nath Colony, Civil Line
Rampur, Rampur-244901

Subject: Renewal of 'Consent to Operate' an outlet u/s 25/26 of Water (Prevention & Control of Pollution) Act, 1974 for discharge of effluent.

With reference to your application for obtaining Renewal of 'Consent to Operate' an outlet for discharge of the effluent u/s 25/26 of Water (Prevention & Control of Pollution) Act, 1974, you are, hereby, authorized to operate an industrial unit for discharge of the effluent(s) arising out of your premises subject to the Terms and Conditions as mentioned in this Certificate.

1. Particulars of Consent to Operate under Water Act, 1974 granted to the industry

Consent to Operate Certificate No.	CTOW/Renewal/HSP/2021/16517009
Date of issue :	08/11/2021
Date of expiry :	31/03/2024
Certificate Type :	Renewal
Previous CTO No. & Validity :	CTOW/Renewal/HSP/2019/10712959 From:15/10/2019 To:14/10/2021

2. Particulars of the Industry

Name & Designation of the Applicant	Alok Pradhan, (Asstt. Vice President (distt))
Address of Industrial premises	A.b. Sugars Ltd (distillery Division), Vill. Randhawa, P.o. Panwan, Tehsil Dasuya, Dasuya, Hoshiarpur-144205
Capital Investment of the Industry	8460.598 lakhs
Category of Industry	Red
Type of Industry	Distilleries
Scale of the Industry	Large
Office District	Hoshiarpur
Consent Fee Details	Rs. 211700/- (including Rs. 500/- as application form fee) vide UTR No/Ref. No. SBINR52021080736397233 dated 07.08.2021 under Air Act & Rs. 211200/- UTR No. SBINR52021080736397363 dated 07.08.2021 under Water Act, 1974
Raw Materials(Name with quantity per day)	MOLASSES @ 270 Metric Tonnes/Day GRAIN @ 160 Metric Tonnes/Day

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A.b. Sugars Ltd (distillery Division), Vill. Randhawa, P.o. Panwan, Tehsil Dasuya, Dasuya, Hoshiarpur, 144205
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Products (Name with quantity per day)	ALCOHOL(RS/ENA/ETHANOL) @ 60 Kilo Liters/Day Power @ 1.5 MW.
By-Products, if any, (Name with quantity per day)	FUSEL OIL @ 0.06 Kilo Liters/Day
Details of the machinery and processes	As per application.
Details of the Effluent Treatment Plant	ETP of Sugar Division for Trade Effluent @ 400 KLD STP of Sugar Division for Domestic Effluent @ 12 KLD
Mode of Disposal	Trade effluent onto land for plantation through ETP of Sugar Division after primary treatment in Distillery Division. Domestic effluent onto land for plantation through STP of Sugar Division.
Standards to be achieved under Water (Prevention & Control of Pollution) Act, 1974	As prescribed by the Board.

08/11/2021

(Arun Kakkar)
Environmental Engineer

For & on behalf

of

(Punjab Pollution Control Board)

Endst. No.: []

[]

[]

Dated:

A copy of the above is forwarded to the following for information and necessary action please:

Environmental Engineer, Regional Office, Hoshiarpur.

08/11/2021

(Arun Kakkar)
Environmental Engineer

For & on behalf

of

(Punjab Pollution Control Board)



TERMS AND CONDITIONS

A. GENERAL CONDITIONS

1. This consent is not valid for getting power load from the Punjab State Power Corporation Limited or for getting loan from the financial institutions.
2. The industry shall apply for renewal/further extension in validity of consent atleast two months before expiry of the consent.
3. The industry shall ensure that the effluent discharging through the authorized outlet shall confirm to the prescribed standards as applicable from time to time.
4. The industry shall plant minimum of three suitable varieties of trees at the density of not less than 1000 trees per hectare all along the boundary of the industrial premises.
5. The achievement of the adequacy and efficiency of the effluent treatment plant/pollution control devices/re-circulation system installed shall be the entire responsibility of the industry.
6. The industry shall ensure that the Hazardous Wastes generated from the premises are handled as per the provisions of the Hazardous Wastes(Management, Handling and Trans boundary Movement) Rules, 2008 as amended time to time , without any adverse effect on the environment, in any manner
7. The responsibility to monitor the effluent discharged from the authorized outlet and to maintain a record of the same rests with the industry. The Board shall only test check the accuracy of these reports for which the industry shall deposit the samples collection and testing fee with the Board as and when required.
8. The industry shall submit balance sheet of every financial year to the concerned Regional Office by 30th June of every year.
9. The industry shall submit a yearly certificate to the effect that no addition/up-gradation/ modification/modernization has been carried out during the previous year otherwise the industry shall apply for the varied consent.
10. During the period beginning from the date of issuance and the date of expiration of this consent, the applicant shall not discharge floating solids or visible foam.
11. Any amendments/revisions made by the Board in the tolerance limits for discharges shall be applicable to the industry from the date of such amendments/revisions.
12. The industry shall not change or alter the manufacturing process(es) so as to change the quality and/or quantity of the effluents generated without the written permission of the Board.
13. Any upset conditions in the plant/plants of the factory, which is likely to result in increased effluent and/or result in violation of the standards lay down by the Board shall be reported to the Environmental Engineer, Punjab Pollution Control Board of concerned Regional Office immediately failing which any stoppage and upset conditions that come to the notice of the Board/its officers, will be deemed to be intentional violation of the conditions of consent.
14. The industry shall provide terminal manhole(s) at the end of each collection system and a manhole upstream of final outlet (s) out of the premises of the industry for measurement of flow and for taking samples.
15. The industry shall for the purpose of measuring and recording the quantity of water consumed and effluent discharged, affix meters of such standards and at such places as approved by the Environmental Engineer, Punjab Pollution Control Board of the concerned Regional Office.
16. The industry shall maintain record regarding the operation of effluent treatment plant i.e. record of quantity of chemicals and energy utilized for treatment and sludge generated from treatment so as to satisfy the Board regarding regular and proper operation of pollution control equipment.
17. The industry shall provide online monitoring equipment/s for the parameters as decided by concerned Regional Office with the effluent treatment plant/air pollution control devices installed, if applicable.
18. The pollution control devices shall be interlocked with the manufacturing process of the industry.
19. The authorized outlet and mode of disposal shall not be changed without the prior written permission of the Board.
20. The industry shall comply with the conditions imposed by the SEIAA / MOEF in the environmental clearance granted to it as required under EIA notification dated 14/9/06, if applicable.
21. The industry shall obtain and submit Insurance cover as required under the Public Liability Insurance Act, 1991.
22. The industry shall not use any unauthorized out-let(s) for discharging effluents from its premises. All unauthorized outlets, if any, shall be connected to the authorized outlet within one month from the date of issue of this consent.

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A.b. Sugars Ltd (distillery Division), Vill. Randhawa, P.O. Panwan, Tehsil Dasuya, Dasuya, Hoshiarpur, 144205

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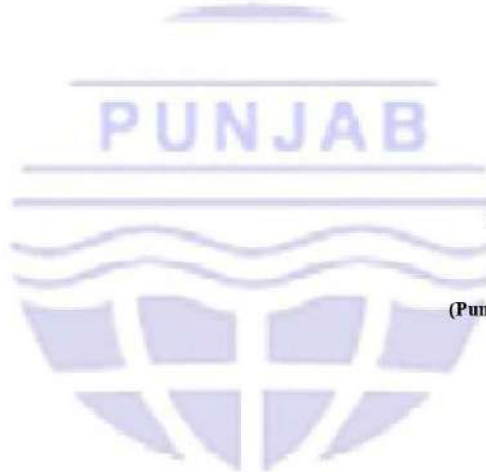


23. The industry shall make necessary arrangements for the monitoring of effluent being discharged by the industry and shall monitor its effluents:-
 - (i) Once in Year for Small Scale Industries.
 - (ii) Four in a Year for Large/Medium Scale Industries.
 - (iii) The industry will submit monthly reading/ data of the separate energy meter installed for running of effluent treatment plant/re-circulation system to the concerned Regional Office of the Board by the 5th of the following month.
24. The industry shall provide electromagnetic flow meters at the source of water supply, at inlet/outlet of effluent treatment plant within one month and shall maintain the record of the daily reading and submit the same to the concerned Regional Office by the 5th of the following month.
25. The Board reserves the right to revoke this consent at any time in case the industry is found violating any of the conditions of this consent and/or the provisions of Water (Prevention & Control of Pollution) Act, 1974 as amended from time to time.
26. The issuance of this consent does not convey any property right in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Central, State or Local Laws or Regulations.
27. The consent does not authorize or approve the construction of any physical structures or facilities for undertaking of any work in any natural watercourse.
28. Nothing in this consent shall be deemed to neither preclude the institution of any legal action nor relieve the applicant from any responsibilities, liabilities or penalties to which the applicant is or may be subjected under this or any other Act.
29. The industry shall make necessary and adequate arrangements to hold back the effluent in case of failure of septic tank.
30. The diversion or bye pass of any discharge from facilities utilized by the applicant to maintain compliance with the terms and conditions of this consent is prohibited except.
 - (i) Where unavoidable to prevent loss of life or some property damage or
 - (ii) Where excessive storm drainage or run off would damage facilities necessary for compliance with terms and conditions of this consent. The applicant shall immediately notify the consent issuing authority in writing of each such diversion or bye-pass.
31. The industry shall ensure that no water pollution problem is created in the area due to discharge of effluents from its industrial premises.
32. The industry shall comply with the code of practice as notified by the Government/ Board for the type of industries where the siting guidelines/ code of practice have been notified.
33. Solids, sludge, filter backwash or other pollutant removed from or resulting from treatment or control of waste waters shall be disposed off in such a manner to prevent any pollutants from such materials from entering into natural water.
34. The industry shall re-circulate the entire cooling water and shall also re-circulate/reuse to the maximum extent the treated effluent in processes
35. The industry shall make necessary and adequate arrangements to hold back the effluent in case of failure of re-circulation system/ effluent treatment plant.
36. The industry shall make proper disposal of the effluent so as to ensure that no stagnation occurs inside and outside the industrial premises during rainy season and no demand period.
37. Where excessive storm water drainage or run off, would damage facilities necessary for compliance with terms and conditions of this consent, the applicant shall immediately notify the consent issuing authority in writing of each such diversion or bye-pass.
38. The industry shall submit a detailed plan showing therein the distribution system for conveying waste-water for application on land for irrigation along with the crop pattern for the year.
39. The industry shall ensure that the effluent discharged by it is toxicity free.
40. The industry shall not irrigate the vegetable crops with the treated effluents which are used/ consumed as raw.
41. Drains causing oil & grease contamination shall will be segregated. Oil & grease trap shall be provided to recover oil & grease from the effluent.

42. The industry shall establish sufficient number of piezometer wells in consultation with the concerned Regional Office, of the Board to monitor the impact on the Ground Water Quantity due to the industrial operations, and the monitoring shall be submitted to the Environmental Engineer of the concerned Regional Office by the 5th of every month.
43. The industry shall ensure that its production capacity & quantity of trade effluent do not exceed the quantity mentioned in the consent and shall not carry out any expansion without the prior permission/NOC of the Board.

B. SPECIAL CONDITIONS

- (1) The industry shall ensure that the entire spent wash generating from distillery section is consumed in incinerator boiler and there is no discharge/ disposal of spent wash other than incinerator boiler, in any case.
- (2) The industry shall continue to operate the tube-well & treatment facility provided for ground water remediation purposes.
- (3) The industry shall maintain the record of effluent of various streams discharged after pretreatment facility for further treatment in ETP being operated & maintained by Sugar Division.
- (4) The industry shall maintain the record of domestic effluent discharged for treatment in STP being operated & maintained by Sugar Division.
- (5) The industry shall also be liable for action as per provisions of the Water Act, 1974, in case the Sugar Division failed to upgrade the ETP as per details submitted for up-gradation, before the start of sugar mill in coming crushing season and to achieve the parameters prescribed at the outlet of ETP as well as STP.



08/11/2021

(Arun Kakkar)
Environmental Engineer

For & on behalf
of

(Punjab Pollution Control Board)



PUNJAB POLLUTION CONTROL BOARD

ZONAL OFFICE JALANDHAR

Website:- www.ppcb.gov.in

Office Dispatch No : _____ Registered/Speed Post _____ Date: _____
Industry Registration ID: R12HSP36832 Application No : 10712959

To,
Sh Manmeet Singh
A/5,ram Nath Colony, Civil Line
Rampur,Rampur-244901

Subject: Renewal of 'Consent to Operate'an outlet u/s 25/26 of Water (Prevention & Control of Pollution) Act, 1974 for discharge of effluent.

With reference to your application for obtaining Renewal of Consent to Operate an outlet for discharge of the effluent u/s 25/26 of Water (Prevention & Control of Pollution) Act, 1974, you are, hereby, authorized to operate an industrial unit for discharge of the effluent(s) arising out of your premises subject to the Terms and Conditions as mentioned in this Certificate.

1. Particulars of Consent to Operate under Water Act, 1974 granted to the industry

Consent to Operate Certificate No.	CTOW/Renewal/HSP/2019/10712959
Date of issue :	15/10/2019
Date of expiry :	14/10/2021
Certificate Type :	Renewal
Previous CTO No. & Validity :	CTOW/Varied/HSP/2017/5246519 From:08/08/2017 To:07/08/2019

2. Particulars of the Industry

Name & Designation of the Applicant	Alok Pradhan, (Asstt. Vice President (distt))
Address of Industrial premises	A.b. Sugars Ltd (distillery Division), Vill. Randhawa, P.o. Panwan, Tehsil Dasuya, Dasuya,Hoshiarpur-144205
Capital Investment of the Industry	8336.72 lakhs
Category of Industry	Red
Type of Industry	Distilleries
Scale of the Industry	Large
Office District	Hoshiarpur

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Consent Fee Details	Deposited Rs. 440000/- vide UTR No/Ref. No. SBINR52017030100022368 dated 01.03.2017 and Rs. 52,800/- UTR No. SBIN119201941088 dtd 20/07/2019 under Water Act, 1974 Rs. 440000/- vide UTR No/Ref. No. SBINR52017030100023048 dated 01.03.2017 and Rs. 53,300/- UTR No. SBIN119201941302 dtd 20/07/2019 under Air Act, 1981 (including Rs. 500/- as application form fee). Adequate up to 31/03/2022 under both Acts. Rs. 14,400/- vide R.No. 06/5183 dated 02/08/2019 as NOC regularization fee.
Raw Materials(Name with quantity per day)	MOLASSES @270Metric Tonnes/Day GRAIN @ 160Metric Tonnes/Day
Products (Name with quantity per day)	ALCOHOL(RS/ENA/ETHANOL) @60Kilo Liters/Day
By-Products, if any,(Name with quantity per day)	FUSEL OIL @0.06Kilo Liters/Day
Details of the machinery and processes	As per project report
Details of the Effluent Treatment Plant	Trade Effluent @ 480.0 KLD Domestic Effluent @ 12.0 KLD
Mode of Disposal	PLANTATION BURNING IN INCINERATED BOILER (22 TPH/DAY)
Standards to be achieved under Water(Prevention & Control of Pollution) Act, 1974	As prescribed by the Board.



Samita

15/10/2019

(Samita)
Environmental Engineer

For & on behalf

of

(Punjab Pollution Control Board)

Endst. No.:

Dated:

A copy of the above is forwarded to the following for information and necessary action please:

EERO Hoshiarpur.

Samita

15/10/2019

(Samita)
Environmental Engineer

For & on behalf

of

(Punjab Pollution Control Board)



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A.b. Sugars Ltd (distillery Division), Vill. Randhawa, P.o. Panwan, Tehsil Dasuya, Dasuya, Hoshiarpur, 144205
Page 3



TERMS AND CONDITIONS

A. GENERAL CONDITIONS

1. This consent is not valid for getting power load from the Punjab State Power Corporation Limited or for getting loan from the financial institutions.
2. The industry shall apply for renewal/further extension in validity of consent atleast two months before expiry of the consent.
3. The industry shall ensure that the effluent discharging through the authorized outlet shall confirm to the prescribed standards as applicable from time to time.
4. The industry shall plant minimum of three suitable varieties of trees at the density of not less than 1000 trees per hectare all along the boundary of the industrial premises.
5. The achievement of the adequacy and efficiency of the effluent treatment plant/pollution control devices/recirculation system installed shall be the entire responsibility of the industry.
6. The industry shall ensure that the Hazardous Wastes generated from the premises are handled as per the provisions of the Hazardous Wastes(Management, Handling and Trans boundary Movement) Rules, 2008 as amended time to time , without any adverse effect on the environment, in any manner
7. The responsibility to monitor the effluent discharged from the authorized outlet and to maintain a record of the same rests with the industry. The Board shall only test check the accuracy of these reports for which the industry shall deposit the samples collection and testing fee with the Board as and when required.
8. The industry shall submit balance sheet of every financial year to the concerned Regional Office by 30th June of every year.
9. The industry shall submit a yearly certificate to the effect that no addition/up-gradation/ modification/modernization has been carried out during the previous year otherwise the industry shall apply for the varied consent.
10. During the period beginning from the date of issuance and the date of expiration of this consent, the applicant shall not discharge floating solids or visible foam.
11. Any amendments/revisions made by the Board in the tolerance limits for discharges shall be applicable to the industry from the date of such amendments/revisions.
12. The industry shall not change or alter the manufacturing process(es) so as to change the quality and/or quantity of the effluents generated without the written permission of the Board.
13. Any upset conditions in the plant/plants of the factory, which is likely to result in increased effluent and/or result in violation of the standards lay down by the Board shall be reported to the Environmental Engineer, Punjab Pollution Control Board of concerned Regional Office immediately failing which any stoppage and upset conditions that come to the notice of the Board/its officers, will be deemed to be intentional violation of the conditions of consent.
14. The industry shall provide terminal manhole(s) at the end of each collection system and a manhole upstream of final outlet (s) out of the premises of the industry for measurement of flow and for taking samples.
15. The industry shall for the purpose of measuring and recording the quantity of water consumed and effluent discharged, affix meters of such standards and at such places as approved by the Environmental Engineer, Punjab Pollution Control Board of the concerned Regional Office.
16. The industry shall maintain record regarding the operation of effluent treatment plant i.e. record of quantity of chemicals and energy utilized for treatment and sludge generated from treatment so as to satisfy the Board regarding regular and proper operation of pollution control equipment.
17. The industry shall provide online monitoring equipment^{1/2}s for the parameters as decided by concerned Regional Office with the effluent treatment plant/air pollution control devices installed, if applicable.
18. The pollution control devices shall be interlocked with the manufacturing process of the industry.
19. The authorized outlet and mode of disposal shall not be changed without the prior written permission of the Board.
20. The industry shall comply with the conditions imposed by the SEIAA / MOEF in the environmental clearance granted to it as required under EIA notification dated 14/9/06, if applicable.
21. The industry shall obtain and submit Insurance cover as required under the Public Liability Insurance Act, 1991.
22. The industry shall not use any unauthorized out-let(s) for discharging effluents from its premises. All unauthorized outlets, if any, shall be connected to the authorized outlet within one month from the date of issue of this consent.



23. The industry shall make necessary arrangements for the monitoring of effluent being discharged by the industry and shall monitor its effluents:-
 - (i) Once in Year for Small Scale Industries.
 - (ii) Four in a Year for Large/Medium Scale Industries.
 - (iii) The industry will submit monthly reading/ data of the separate energy meter installed for running of effluent treatment plant/re-circulation system to the concerned Regional Office of the Board by the 5th of the following month.
24. The industry shall provide electromagnetic flow meters at the source of water supply, at inlet/outlet of effluent treatment plant within one month and shall maintain the record of the daily reading and submit the same to the concerned Regional Office by the 5th of the following month.
25. The Board reserves the right to revoke this consent at any time in case the industry is found violating any of the conditions of this consent and/or the provisions of Water (Prevention & Control of Pollution) Act, 1974 as amended from time to time.
26. The issuance of this consent does not convey any property right in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Central, State or Local Laws or Regulations.
27. The consent does not authorize or approve the construction of any physical structures or facilities for undertaking of any work in any natural watercourse.
28. Nothing in this consent shall be deemed to neither preclude the institution of any legal action nor relieve the applicant from any responsibilities, liabilities or penalties to which the applicant is or may be subjected under this or any other Act.
29. The industry shall make necessary and adequate arrangements to hold back the effluent in case of failure of septic tank.
30. The diversion or bye pass of any discharge from facilities utilized by the applicant to maintain compliance with the terms and conditions of this consent is prohibited except.
 - (i) Where unavoidable to prevent loss of life or some property damage or
 - (ii) Where excessive storm drainage or run off would damage facilities necessary for compliance with terms and conditions of this consent. The applicant shall immediately notify the consent issuing authority in writing of each such diversion or bye-pass.
31. The industry shall ensure that no water pollution problem is created in the area due to discharge of effluents from its industrial premises.
32. The industry shall comply with the code of practice as notified by the Government/ Board for the type of industries where the siting guidelines/ code of practice have been notified.
33. Solids, sludge, filter backwash or other pollutant removed from or resulting from treatment or control of waste waters shall be disposed off in such a manner to prevent any pollutants from such materials from entering into natural water.
34. The industry shall re-circulate the entire cooling water and shall also re-circulate/reuse to the maximum extent the treated effluent in processes
35. The industry shall make necessary and adequate arrangements to hold back the effluent in case of failure of re-circulation system/ effluent treatment plant.
36. The industry shall make proper disposal of the effluent so as to ensure that no stagnation occurs inside and outside the industrial premises during rainy season and no demand period.
37. Where excessive storm water drainage or run off, would damage facilities necessary for compliance with terms and conditions of this consent, the applicant shall immediately notify the consent issuing authority in writing of each such diversion or bye-pass.
38. The industry shall submit a detailed plan showing therein the distribution system for conveying waste-water for application on land for irrigation along with the crop pattern for the year.
39. The industry shall ensure that the effluent discharged by it is toxicity free.
40. The industry shall not irrigate the vegetable crops with the treated effluents which are used/ consumed as raw.
41. Drains causing oil & grease contamination shall will be segregated. Oil & grease trap shall be provided to recover oil & grease from the effluent.



42. The industry shall establish sufficient number of piezometer wells in consultation with the concerned Regional Office, of the Board to monitor the impact on the Ground Water Quantity due to the industrial operations, and the monitoring shall be submitted to the Environmental Engineer of the concerned Regional Office by the 5th of every month.
43. The industry shall ensure that its production capacity & quantity of trade effluent do not exceed the quantity mentioned in the consent and shall not carry out any expansion without the prior permission/NOC of the Board.

B. SPECIAL CONDITIONS

- The industry shall ensure that the entire spent wash generated from the Molasses Based Distillery is treated in Zero liquid discharge based ETP comprising of MEE and Incinerator Boiler.
- 2) The industry shall provide pre-treatment facility for treatment of the high COD effluent and other various streams generated from various processes of the Distillery Division before treating it in ETP of Sugar Division.
 - 3) The ETP installed in the Sugar Division shall be upgraded before the start of next crushing season 2019-2020, so that it meets with the norms prescribed by the Board when both Sugar Division & Distillery Division are in operation and when the Sugar Division is not in operation due to off season and only Distillery Division is in operation.
 - 4) The OCEMS installed by the industry with the ETP based on zero liquid discharge shall be connected with the server of the Central Pollution Control Board & Punjab Pollution Control Board, immediately.
 - 5) The industry shall complete the bio-composting of the 1000-1200 KL of sludge lying in one of the Bio digester.
 - 6) Punjab Pollution Control Board shall conduct the groundwater sampling and get it analysed from State Lab (PBTI) and submit the improvement in groundwater quality in the last 3-4 years period.
 - 7) The industry shall prepare an Irrigation Management Plan for the utilization of treated effluent onto land for irrigation and get it approved from the Department of Soil Conservation Punjab and to ensure that no stagnation is exists in the irrigation.
 - 8) The industry shall prepare an Ash Disposal Management Plan for the proposer disposal of the fuel ash.
 - 9) The industry shall comply with all the decisions as above by 30.11.2019.



Samita

15/10/2019

(Samita)
Environmental Engineer

For & on behalf

of

(Punjab Pollution Control Board)



PUNJAB POLLUTION CONTROL BOARD
ZONAL OFFICE, NEAR WATER TANK, FOCAL POINT, JALANDHAR.

Website:- www.ppcb.gov.in

Office Dispatch No : Registered/Speed Post Date:
Industry Registration ID: R12HSP36832 Application No : 16516964

To,
Alok Pradhan
A/5, ram Nath Colony, Civil Line
Rampur, Rampur-244901

Subject: Renewal of 'Consent to Operate' u/s 21 of Air (Prevention & Control of Pollution) Act, 1981 for discharge of emissions arising out of premises.

With reference to your application for obtaining Renewal of 'Consent to Operate' u/s 21 of Air (Prevention & Control of Pollution) Act, 1981, you are hereby, authorized to operate an industrial unit for discharge of the emission(s) arising out of your premises subject to the Terms and Conditions as mentioned in this Certificate.

1. Particulars of Consent to Operate under Air Act, 1981 granted to the industry

Consent to Operate Certificate No.	CTOA/Renewal/HSP/2021/16516964
Date of issue :	21/10/2021
Date of expiry :	31/03/2024
Certificate Type :	Renewal
Previous CTO No. & Validity :	CTOA/Renewal/HSP/2019/10713117 From:15/10/2019 To:14/10/2021

2. Particulars of the Industry

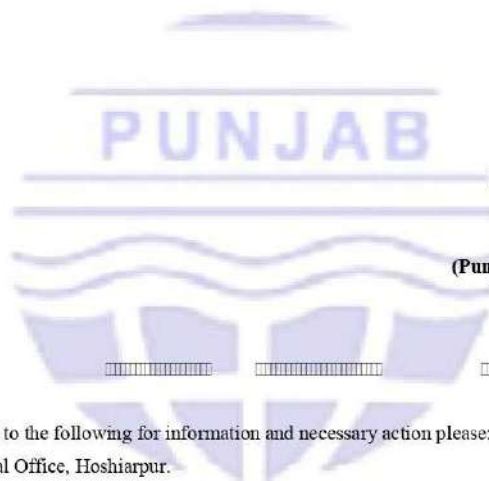
Name & Designation of the Applicant	Alok Pradhan, (Asstt. Vice President (distt))
Address of Industrial premises	A.b. Sugars Ltd (distillery Division), Vill. Randhawa, P.o. Panwan, Tehsil Dasuya, Dasuya, Hoshiarpur-144205
Capital Investment of the Industry	8460.598 lakhs
Category of Industry	Red
Type of Industry	Distilleries
Scale of the Industry	Large
Office District	Hoshiarpur
Consent Fee Details	Rs. 211700/- (including Rs. 500/- as application form fee) vide UTR No/Ref. No. SBINR52021080736397233 dated 07.08.2021
Raw Materials (Name with Quantity per day)	MOLASSES @ 270 Metric Tonnes/Day GRAIN @ 160 Metric Tonnes/Day

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A.b. Sugars Ltd (distillery Division), Vill. Randhawa, P.o. Panwan, Tehsil Dasuya, Dasuya, Hoshiarpur, 144205

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Products (Name with Quantity per day)	<i>ALCOHOL(RS/ENA/ETHANOL) @ 60 Metric Tonnes/Day Power @ 1.5 MW</i>
By-products, if any, (Name with Quantity per day)	<i>FUSEL OIL @ 0.06 Kilo Liters/Day</i>
Details of the machinery and process	<i>As per application.</i>
Quantity of fuel required (in TPD) and capacity of boilers/ Furnace/Thermo heater etc.	<i>Rice Husk/Coal/Spent Wash @ 48 Metric Tonnes/Day in Boiler of capacity 22 TPH. Diesel for 1 no. DG set of capacity 750 KVA.</i>
Type of Air Pollution Control Devices to be installed	<i>Electrostatic precipitator as APCD with boiler. Canopy with DG set.</i>
Stack height provided with each boiler/thermo heater/Furnace etc.	<i>Incinerated Boiler @ 45 (Ground Level)/15(Roof Level)</i>
Sources of emissions and type of pollutants	<i>SPM from boiler & DG set.</i>
Standards to be achieved under Air(Prevention & Control of Pollution) Act, 1981	<i>As prescribed by the Board.</i>





21/10/2021

(Arun Kakkar)
Environmental Engineer

For & on behalf

of

(Punjab Pollution Control Board)

Endst. No.: []

[]

[]

Dated:

A copy of the above is forwarded to the following for information and necessary action please:
Environmental Engineer, Regional Office, Hoshiarpur.



21/10/2021

(Arun Kakkar)
Environmental Engineer

For & on behalf

of

(Punjab Pollution Control Board)



TERMS AND CONDITIONS

A. GENERAL CONDITIONS

1. This consent is not valid for getting power load from the Punjab State Power Corporation Ltd. or for getting loan from the financial institutions.
2. The industry shall apply for renewal /extension of consent at least two months before expiry of the consent.
3. The industry shall not violate any of the norms prescribed under the Air (Prevention & Control of Pollution) Act, 1981, failing which, the consent shall be cancelled / revoked.
4. The achievement of adequacy and efficiency of the air pollution control devices installed shall be the entire responsibility of the industry
5. The authorized fuel being used shall not be changed without the prior written permission of the Board.
6. The industry shall not discharge any fugitive emissions. All gases shall be emitted through a stack of suitable height, as per the norms fixed by the Board from time to time.
7. The industry shall provide port-holes, platforms and/or other necessary facilities as may be required for collecting samples of emissions from any chimney, flue or duct or any other outlets.

Specifications of the port-holes shall be as under:-

- i) The sampling ports shall be provided atleast 8 times chimney diameter downstream and 2 times upstream from the flow disturbance. For a rectangular cross section the equivalent diameter (De) shall be calculated from the following equation to determine upstream, downstream distance:-

$$De = 2 LW / (L+W)$$

Where L= length in mts. W= Width in mts.
 - ii) The sampling port shall be 7 to 10 cm in diameter
8. The industry shall put display Board indicating environmental data in the prescribed format at the main entrance gate.
 9. The industry shall discharge all gases through a stack of minimum height as specified in the following standards laid down by the Board.

(i) Stack height for boiler plants

S.NO.	Boiler with Steam Generating Capacity	Stack heights
1.	Less than 2 ton/hr.	9 meters or 2.5 times the height of neighboring building whichever is more
2.	More than 2 ton/hr. to 5 ton/hr.	12 meters
3.	More than 5 ton/hr. to 10 ton/hr	15 meters
4.	More than 10 ton/hr. to 15 ton/hr	18 meters
5.	More than 15 ton/hr. to 20 ton/hr	21 meters
6.	More than 20 ton/hr. to 25 ton/hr.	24 meters
7.	More than 25 ton/hr. to 30 ton/hr.	27 meters
8.	More than 30 ton/hr.	30 meters or using the formula $H = 14 Qg^{0.3}$ or $H = 74 (Qp)^{0.24}$ Where Qg = Quantity of SO ₂ in Kg/hr. Qp = Quantity of particulate matter in Ton/day.

Note : Minimum Stack height in all cases shall be 9.0 mtr. or as calculated from relevant formula whichever is more.

(ii) For industrial furnaces and kilns, the criteria for selection of stack height would be based on fuel used for the corresponding steam generation.

(iii) Stack height for diesel generating sets:

Capacity of diesel generating set	Height of the Stack	
0-50 KVA	Height of the building	+ 1.5 mt
50-100 KVA	□□-do-	+ 2.0 mt.
100-150 KVA	□□-do-	+ 2.5 mt.
150-200 KVA	□□-do-	+ 3.0 mt.
200-250 KVA	□□-do-	+ 3.5 mt.
250-300 KVA	□□-do-	+ 3.5 mt.

For higher KVA rating stack height H (in meter) shall be worked out according to the formula:

$$H = h + 0.2 (KVA)^{0.5}$$

where h = height of the building in meters where the generator set is installed.

10. The pollution control devices shall be interlocked with the manufacturing process of the industry to ensure its regular operation.
11. The existing pollution control equipment shall be altered or replaced in accordance with the directions of the Board, and no pollution control equipment or chimney shall be altered or as the case may be erected or re-erected except with the prior approval of the Board.
12. The industry will provide canopy and adequate stack with the D.G sets so as to comply with the provision of notification No GSR-371 E dated 17-5-2002(amended from time to time) issued by MOEF under Environment (Protection) Act, 1986.
13. The Govt. of Punjab, Department of Science, Technology & Environment vide its notification no.4/46/92-3ST/2839 dt. 29/12/1993 has put prohibition on the use of rice husk as fuel after 1.4.1995 except the following:-
½In the form of briquettes and use of rice husk in fluidized bed combustion. So the industry shall make the necessary arrangement to comply with the above notification.½
14. The industry shall submit balance sheet of every financial year to the concerned Regional Office by 30th June of every year
15. That the industry shall submit a yearly certificate to the effect that no addition / up-gradation/ modification/ modernization has been carried out during the previous year otherwise the industry shall apply for the varied consent.
16.
 - a) The industry shall ensure that at any time the emission do not exceed the prescribed emissions standards laid down by the Board from time to time for such type of industry /emissions.
 - b) The industry shall ensure that the emissions from each stack shall conform to the following emission standards laid down by the Board in respect of the Industrial Boilers.

Steam Generating capacity A.	Required particulate matter B.	
Area upto 5 Km from Other than 'A' class Other than the periphery of I and Class-II town		
Less than 2 ton/hr.	800 mg/NM3	1200 mg/NM3
2 ton to 10 ton/hr.	500 mg/NM3	1000 mg/NM3
Above 10 ton to 15 ton/hr	350 mg/NM3	500 mg/NM3
Above 15 ton/hr	150 mg/NM3	150 mg/NM3

All emissions normalized to 12% carbon dioxide.

17. The industry shall ensure that the Hazardous Wastes generated from the premises are handled as per the provisions of the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008, without any adverse effect on the environment, in any manner.
18. The air pollution control equipments shall be kept at all time in good running condition and;



- (i) All failures of control equipments.
 - (ii) The emissions of any air pollutant into the atmosphere in excess of the standards lay down by the Board occurring or being apprehended to occur due to accident or other unforeseen act or event. 'Shall be intimated through fax to the concerned Regional Office as well as to the Director of Factories, Punjab, Chandigarh as required under rule 10 of the Punjab State Board for the Prevention and Control of Air Pollution Rules, 1983'.
19. The industry shall plant minimum of three suitable varieties of trees at the density of not less than 1000 trees per hectare all along the boundary of the industrial premises.
20. The industry shall submit a site emergency plan approved by the Chief Inspector of Factories, Punjab as applicable.
21. The industry shall comply with the conditions imposed by the SEIAA/MOEF in the Environmental Clearance granted to it as required under EIA notification dated 14/9/06, if applicable.
22. The industry shall make necessary arrangements for the monitoring of stack emissions and shall get its emissions analyzed from lab approved / authorized by the Board:-
 - (i) Once in Year for Small Scale Industries.
 - (ii) Twice/thrice/four time in a Year for Large/Medium Scale Industries.
23. The industry shall maintain the following record to the satisfaction of the Board :-
 - (i) Log books for running of air pollution control devices or pumps/motors used for it.
 - (ii) Register showing the result of various tests conducted by the industry for monitoring of stack emissions and ambient air.
 - (iii) Register showing the stock of absorbents and other chemicals to be used for scrubbers.
24. The industry will install the separate energy meter for running pollution control devices and shall maintain record with respect to operation of air pollution control device so as to satisfy the Board regarding the regular operation of air pollution control device and monthly reading / record may be sent to the Board by the fifth of the following month.
25. The industry shall provide online monitoring system as applicable, for in stack emission and shall maintain the record of the same for inspection of the Board Officers.
26. The Board reserves the right to revoke the consent granted to the industry at any time, in case the industry is found violating the provisions of Air (Prevention & Control of Pollution) Act, 1981 as amended from time to time.
27. The industry shall comply with any other conditions laid down or directions issued in due course by the Board under the provisions of the Air (Prevention & Control of Pollution) Act, 1981.
28. Nothing in this consent shall be deemed to neither preclude the institution of any legal action nor relieve the applicant from any responsibilities, liabilities or penalties to which the applicant is or may be subjected to under this or any other Act.
29. Any amendments/revisions made by the Board/CPCB/MOEF in the emission/stack height standards shall be applicable to the industry from the date of such amendments/revisions.
30. The industry shall dispose off its solid waste generated by the burning of fuel in an Environmentally Sound Manner within the premises/outside as approved by the Board, to avoid public nuisance and air pollution problem in the area.
31. The industry shall ensure that no air pollution problem or public nuisance is created in the area due to the discharge of emissions from the industry.
32. The industry shall provide adequate arrangement for fighting the accidental leakage/discharge of any air pollutant/gas/ liquids from the vessels, mechanical equipment's etc, which are likely to cause environmental pollution.
33. The industry shall not change or alter the manufacturing process(es) and fuel so as to change the quality/quantity of emissions generated without the prior permission of the Board.
34. The industry shall earmark a land within their premises for disposal of boiler ash in an environmentally sound manner, and / or the industry shall make necessary arrangements for proper disposal of fuel ash in a scientific manner and shall maintain proper record for the same, if applicable.
35. The industry shall obtain and submit Insurance cover under the Public Liability Insurance Act, 1991.
36. The industry shall provide proper and adequate air pollution control arrangements for control emission from its fuel handling area, if applicable.

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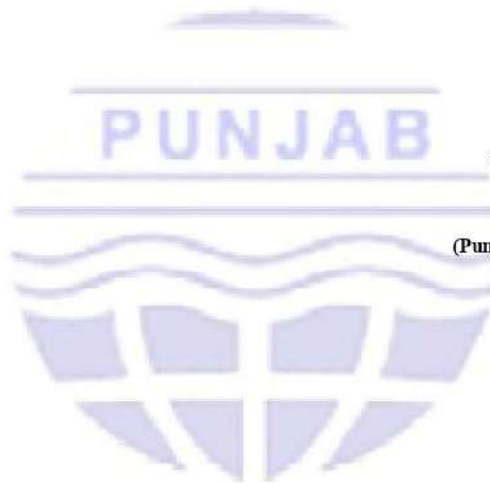
A.b. Sugars Ltd (distillery: Division), Vill. Randhawa, P.o. Panwan, Tehsil Dasuya, Dasuya, Hoshiarpur, 144205

Page 5

37. The industry shall comply with the code of practice as notified by the Government/Board for the type of industries where the siting guidelines / Code of Practice have been notified.
38. The industry shall not cause any nuisance/traffic hazard in vicinity of the area
39. The industry shall ensure that the noise & air emission from D.G. sets do not exceed the standards prescribed for D.G. sets by the Ministry of Environment & Forests, New Delhi.
40. The industry shall ensure that there will not be significant visible dust emissions beyond the property line
41. The industry shall provide adequate and appropriate air pollution control devices to contain emissions from handling, transportation and processing of raw material & product of the industry.
42. The Industry shall ensure that its production capacity does not exceed the capacity mentioned in the consent and shall not carry out any expansion without the prior permission / NOC of the Board.

B. SPECIAL CONDITIONS

The industry shall maintain the arrangements for proper disposal of fuel ash in environmentally sound & scientific manner.



21/10/2021

(Arun Kakkar)
Environmental Engineer

For & on behalf

of

(Punjab Pollution Control Board)



PUNJAB POLLUTION CONTROL BOARD
ZONAL OFFICE JALANDAHR

Website:- www.ppcb.gov.in

Office Dispatch No :	Registered/Speed Post	Date:
Industry Registration ID: R12HSP36832		Application No : 10713117

To,
Alok Pradhan
A/5,ram Nath Colony, Civil Line
Rampur,Rampur-244901

Subject: Renewal of 'Consent to Operate' u/s 21 of Air (Prevention & Control of Pollution) Act, 1981 for discharge of emissions arising out of premises.

With reference to your application for obtaining Renewal of 'Consent to Operate' u/s 21 of Air (Prevention & Control of Pollution) Act, 1981, you are hereby, authorized to operate an industrial unit for discharge of the emission(s) arising out of your premises subject to the Terms and Conditions as mentioned in this Certificate.

1. Particulars of Consent to Operate under Air Act, 1981 granted to the industry

Consent to Operate Certificate No.	CTOA/Renewal/HSP/2019/10713117
Date of issue :	15/10/2019
Date of expiry :	14/10/2021
Certificate Type :	Renewal
Previous CTO No. & Validity :	CTOA/Varied/HSP/2017/5246488 From:08/08/2017 To:07/08/2019

2. Particulars of the Industry

Name & Designation of the Applicant	Alok Pradhan, (Asstt. Vice President (distt))
Address of Industrial premises	A.b. Sugars Ltd (distillery Division), Vill. Randhawa, P.o. Panwan, Tehsil Dasuya, Dasuya,Hoshiarpur-144205
Capital Investment of the Industry	8336.72 lakhs
Category of Industry	Red
Type of Industry	Distilleries
Scale of the Industry	Large
Office District	Hoshiarpur

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A.b. Sugars Ltd (distillery Division), Vill. Randhawa, P.o. Panwan, Tehsil Dasuya, Dasuya, Hoshiarpur, 144205
Page 1



Consent Fee Details	Deposited Rs. 440000/- vide UTR No/Ref. No. SBINR52017030100022368 dated 01.03.2017 and Rs. 52,800/- UTR No. SBIN119201941088 dtd 20/07/2019 under Water Act, 1974 Rs. 440000/- vide UTR No/Ref. No. SBINR52017030100023048 dated 01.03.2017 and Rs. 53,300/- UTR No. SBIN119201941302 dtd 20/07/2019 under Air Act, 1981 (including Rs. 500/- as application form fee). Adequate up to 31/03/2022 under both Acts. Rs. 14,400/- vide R.No. 06/5183 dated 02/08/2019 as NOC regularization fee.
Raw Materials (Name with Quantity per day)	MOLASSES @ 270Metric Tonnes/Day GRAIN @ 160Metric Tonnes/Day
Products (Name with Quantity per day)	ALCOHOL(RS/ENA/ETHANOL) @ 60Metric Tonnes/Day
By-products, if any, (Name with Quantity per day)	FUSEL OIL @ 0.06Kilo Liters/Day
Details of the machinery and process	As per project report
Quantity of fuel required (in TPD) and capacity of boilers/ Furnace/Thermo heater etc.	RICE HUSK/COAL/SPENT WASH @ 48Metric Tonnes/Day
Type of Air Pollution Control Devices to be installed	Electrostatic Precipitator
Stack height provided with each boiler/thermo heater/Furnace etc.	CHIMNEY (22 TPH INCINERATED BOILER)45(Ground Level)/15(Roof Level)
Sources of emissions and type of pollutants	1 No. Power Plant of capacity @ 1.5 MW. 1 No. DG Set @ 750 KVA with canopy.
Standards to be achieved under Air(Prevention & Control of Pollution) Act, 1981	As prescribed by the Board.



Samita

15/10/2019

(Samita)
Environmental Engineer

For & on behalf
of

(Punjab Pollution Control Board)

Endst. No.:

Dated:

A copy of the above is forwarded to the following for information and necessary action please:

EERO Hoshairpur.

Samita

15/10/2019

(Samita)
Environmental Engineer
For & on behalf
of
(Punjab Pollution Control Board)



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A.b. Sugars Ltd (distillery Division), Vill. Randhawa, P.o. Panwan, Tehsil Dasuya, Dasuya, Hoshiarpur, 144205
Page 3

TERMS AND CONDITIONS

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Capacity of diesel generating set	Height of the Stack	
0-50 KVA	Height of the building	+ 1.5 mt.
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100-150 KVA	-do-	+ 2.5 mt.
150-200 KVA	-do-	+ 3.0 mt.
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For higher KVA rating stack height H (in meter) shall be worked out according to the formula:

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Steam Generating capacity A.	Required particulate matter B.	
Area upto 5 Km from Other than 'A' class Other than the periphery of I and Class-II town		
Less than 2 ton/hr.	800 mg/NM3	1200 mg/NM3
2 ton to 10 ton/hr.	500 mg/NM3	1000 mg/NM3
Above 10 ton to 15 ton/hr	350 mg/NM3	500 mg/NM3
Above 15 ton/hr	150 mg/NM3	150 mg/NM3

All emissions normalized to 12% carbon dioxide.

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- (i) All failures of control equipments.
 - (ii) The emissions of any air pollutant into the atmosphere in excess of the standards lay down by the Board occurring or being apprehended to occur due to accident or other unforeseen act or event. 'Shall be intimated through fax to the concerned Regional Office as well as to the Director of Factories, Punjab, Chandigarh as required under rule 10 of the Punjab State Board for the Prevention and Control of Air Pollution Rules, 1983'.
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 - (ii) Register showing the result of various tests conducted by the industry for monitoring of stack emissions and ambient air.
 - (iii) Register showing the stock of absorbents and other chemicals to be used for scrubbers.
24. The industry will install the separate energy meter for running pollution control devices and shall maintain record with respect to operation of air pollution control device so as to satisfy the Board regarding the regular operation of air pollution control device and monthly reading / record may be sent to the Board by the fifth of the following month.
25. The industry shall provide online monitoring system as applicable, for in stack emission and shall maintain the record of the same for inspection of the Board Officers.
26. The Board reserves the right to revoke the consent granted to the industry at any time, in case the industry is found violating the provisions of Air (Prevention & Control of Pollution) Act, 1981 as amended from time to time.
27. The industry shall comply with any other conditions laid down or directions issued in due course by the Board under the provisions of the Air (Prevention & Control of Pollution) Act, 1981.
28. Nothing in this consent shall be deemed to neither preclude the institution of any legal action nor relieve the applicant from any responsibilities, liabilities or penalties to which the applicant is or may be subjected to under this or any other Act.
29. Any amendments/revisions made by the Board/CPCB/MOEF in the emission/stack height standards shall be applicable to the industry from the date of such amendments/revisions.
30. The industry shall dispose off its solid waste generated by the burning of fuel in an Environmentally Sound Manner within the premises/outside as approved by the Board, to avoid public nuisance and air pollution problem in the area.
31. The industry shall ensure that no air pollution problem or public nuisance is created in the area due to the discharge of emissions from the industry.
32. The industry shall provide adequate arrangement for fighting the accidental leakage/discharge of any air pollutant/gas/ liquids from the vessels, mechanical equipment's etc, which are likely to cause environmental pollution.
33. The industry shall not change or alter the manufacturing process(es) and fuel so as to change the quality/quantity of emissions generated without the prior permission of the Board.
34. The industry shall earmark a land within their premises for disposal of boiler ash in an environmentally sound manner, and / or the industry shall make necessary arrangements for proper disposal of fuel ash in a scientific manner and shall maintain proper record for the same, if applicable.
35. The industry shall obtain and submit Insurance cover under the Public Liability Insurance Act, 1991.
36. The industry shall provide proper and adequate air pollution control arrangements for control emission from its fuel handling area, if applicable.



37. The industry shall comply with the code of practice as notified by the Government/Board for the type of industries where the siting guidelines / Code of Practice have been notified.
38. The industry shall not cause any nuisance/traffic hazard in vicinity of the area
39. The industry shall ensure that the noise & air emission from D.G. sets do not exceed the standards prescribed for D.G. sets by the Ministry of Environment & Forests, New Delhi.
40. The industry shall ensure that there will not be significant visible dust emissions beyond the property line
41. The industry shall provide adequate and appropriate air pollution control devices to contain emissions from handling, transportation and processing of raw material & product of the industry.
42. The Industry shall ensure that its production capacity does not exceed the capacity mentioned in the consent and shall not carry out any expansion without the prior permission / NOC of the Board.

B. SPECIAL CONDITIONS

- The industry shall ensure that the entire spent wash generated from the Molasses Based Distillery is treated in Zero liquid discharge based ETP comprising of MEE and Incinerator Boiler.
- 2) The industry shall provide pre-treatment facility for treatment of the high COD effluent and other various streams generated from various processes of the Distillery Division before treating it in ETP of Sugar Division.
 - 3) The ETP installed in the Sugar Division shall be upgraded before the start of next crushing season 2019-2020, so that it meets with the norms prescribed by the Board when both Sugar Division & Distillery Division are in operation and when the Sugar Division is not in operation due to off season and only Distillery Division is in operation.
 - 4) The OCEMS installed by the industry with the ETP based on zero liquid discharge shall be connected with the server of the Central Pollution Control Board & Punjab Pollution Control Board, immediately.
 - 5) The industry shall complete the bio-composting of the 1000-1200 KL of sludge lying in one of the Bio digester.
 - 6) Punjab Pollution Control Board shall conduct the groundwater sampling and get it analysed from State Lab (PBTL) and submit the improvement in groundwater quality in the last 3-4 years period.
 - 7) The industry shall prepare an Irrigation Management Plan for the utilization of treated effluent onto land for irrigation and get it approved from the Department of Soil Conservation Punjab and to ensure that no stagnation is exists in the irrigation.
 - 8) The industry shall prepare an Ash Disposal Management Plan for the proposer disposal of the fuel ash.
 - 9) The industry shall comply with all the decisions as above by 30.11.2019.

Samita

15/10/2019.

(Samita)
Environmental Engineer

For & on behalf

of

(Punjab Pollution Control Board)

CHAPTER – 9

COMPLIANCE OF ENVIRONMENTAL STANDARDS

The industry has common Effluent Treatment Plant (ETP) with M/s A.B. Sugars Ltd. (Sugar Division) for the treatment of industrial as well as domestic effluent. The ETP installed by the industry always remains functional. The industry gets the monitoring conducted of ETP from the laboratory of Punjab Pollution Control Board. All the times, the various parameters are within the limits prescribed by Punjab Pollution Control Board for such discharges on to land for plantation purposes. As per the latest analysis conducted by the Board on dated 02.02.2023 during financial year 2022-23, the various parameters are within the limits prescribed by PPCB. (Analysis Report Attached)

The industry has installed 01 No. incinerator boiler having steam generation capacity of 22 TPH. The stack of the boiler is monitored periodically by the laboratory of the Punjab Pollution Control Board. All the times, the concentration of SPM level remains within the limits prescribed by PPCB. As per the latest analysis conducted by the Board on dated 02.02.2023 during financial year 2022-23, the various parameters are within the limits prescribed by PPCB. (Analysis Report Attached)



ਜੇਨਲ ਪ੍ਰਯੋਗਸ਼ਾਲਾ, ਫੋਕਲ ਪ੍ਰਯੋਗਸ਼ਾਲਾ, ਪੀ.ਐਸ.ਆਈ.ਈ.ਸੀ ਵਾਟਰ ਟੈਕ, ਜਲੰਧਰ
ਫੋਨ ਨੰਬਰ : 0181-2600301 www.ppcb.gov.in ਈ ਮੇਲ : zolabjalandhar@gmail.com

ਨੰਬਰ ਮਿਤੀ

AIR/WATER SAMPLE ANALYSIS REPORT

1.	Laboratory Sample No	Lab/Water / 249 /2023
2.	Name of Industry	M/s A.B Sugar Ltd, Village Randhawa Tehsil, Dasuya, Distt. Hoshiarpur.
3.	Name of Sample Collecting Officer	Er. Shiv Kumar (EE) Er. Jatinder Kumar (AEE)
4.	Type of Sample	Grab Monitoring
5.	Date of Sample Collection	02.02.2023
6.	Date of Sample Receipt in Lab	03.02.2023
7.	Point of sample collection	As per data sheet

RESULTS

S. No	PARAMETERS	RESULTS	Maximum Limit (mg/l except pH)
1.	pH	7.9	5.5-9.0
2.	COD (mg/l)	80	-
3.	BOD (mg/l)	15	100
4.	TSS (mg/l)	12	100
5.	TDS (mg/l)	804	-
6.	O & G (mg/l)	BDL	10
7.	MLSS (mg/l)	4350	-

Note: - If any, other limits/specific standards have been prescribed time to time by MoEF & CC, CPCB and PPCB, then the other limits/specific standards would prevail subject to clarification from the concerned Regional office.

Analyzed by *[Signature]* Scientific Officer
Zonal Lab, Jalandhar

Endst.No. 411-3 Dated: 17 FEB 2023

A copy of the above is forwarded to the following for information & necessary action along with data sheet:-

1. The Chief Environmental Engineer (Water), Punjab Pollution Control Board, Ludhiana.
2. The Senior Environmental Engineer, Punjab Pollution Control Board, Zonal Office, Jalandhar.
3. The Environmental Engineer, Regional Office, Hoshiarpur along with extra copy of analysis report and data sheet for further transmission to the industry as per rules.

[Signature] Asstt Scientific Officer
Zonal Lab, Jalandhar



ਸਹਾਇਕ ਪ੍ਰਯੋਗਸ਼ਾਲਾ, ਫਾਕਲ ਪੁਆਇੰਟ, ਪੀ.ਐਸ.ਆਈ.ਈ.ਸੀ ਵਾਟਰ ਟੈਕ, ਜਲੰਧਰ
ਫੋਨ ਨੰਬਰ : 01812600301
ਈਮੇਲ : zolabjalandhar@gmail.com

ਨੰਬਰ..... ਮਿਤੀ

AIR/WATER SAMPLE ANALYSIS REPORT

1. Laboratory Sample No	Lab/Air / 132 / 2023
2. Name of Industry	M/s A.B Sugar Ltd. (Distillery Div.) VIII. Randhawa Teh. Dasuya, Distt.Hoshiarpur.
3. Name of Sample Collecting Officer	Er. Shiv Kumar (EE) Er. Jatinder Kumar (AEE) Ms. Gurjot Kaur (SA)
4. Type of Sample	Stack Monitoring
5. Date of Sample Collection	02.02.2023
6. Date of Sample Receipt in Lab	03.02.2023
7. Point of sample collection	As per data sheet

Sr. No	PARAMETERS	RESULT	Maximum Limit
1.	Particulate Matter (Boiler 22 TPH) mg/Nm ³	109	150

Note:- If any, stringent limits/specific standards have been prescribed time to time by MoEF & CC, CPCB and PCB, then the stringent limits/specific standards would prevail subject to clarification from the concerned Regional office.

Sample Analyzed by: -
Scientific Officer
Zonal Lab, Jalandhar

Endst.No. 367-89 Dated: 16/2/23

A copy of the above is forwarded to the following for information & necessary action along with data sheet to:-

1. The Chief Environmental Engineer, Air, Punjab Pollution Control Board, Jalandhar
2. The Senior Environmental Engineer, Punjab Pollution Control Board, Zonal office, Jalandhar
3. The Environmental Engineer, Regional Office, Hoshiarpur along with extra copy of analysis report and data sheet for further transmission to the industry as per rules.

Asstt Scientific Officer
Zonal Lab, Jalandhar

CHAPTER – 10

FORM – V ENVIRONMENTAL STATEMENT

Environmental Statement for the financial year ending the 31st March 2023

PART – A

(i)	Name and address of the owner / occupier of the industry operation or process	:	Sh. Alok Pardhan, Vice President A.B. Sugars Ltd. (Distillery Division) Village Randhawa, P.O. Panwan Tehsil Dasuya, Distt. Hoshiarpur (Punjab)		
(ii)	Industry category	:	Large Scale, Red Category		
	Primary - (STC Code)	:			
	Secondary - (SIC Code)	:	Distillery		
(iii)	Production capacity - Units -----	:	Alcohol (RS/ENA/Ethanol)	:	60 KL/day
		:	Power	:	1.5 MW
(iv)	Year of Establishment	:	2004		
(v)	Date of last environment statement submitted	:	September, 2022		

PART – B

Water and Raw Material Consumption

(i) **Water Consumption m³/day(average 300 Days)
(on an annual average basis)**

Process:

i) Fermentation & Distillation	61.47 KLD
ii) Boiler Use	76.19 KLD
iii) Cooling Towers/ Bottle Washing	183.89 KLD
iv) Blending	1.98 KLD
v) Domestic Use	18.25 KLD

Sr. No.	Name of Products	Water Consumption per unit of product output	
		During the previous financial year (2021-22)	During the current financial year (2022-23)
		(1)	(2)
1.	ENA, Impure Spirit, Absolute Alcohol (AA)	10.482 Litres/litres of Alcohol	10.590 Litres/litres of Alcohol

(ii) Raw Material Consumption

Sr. No.	Name of Raw Materials	Name of Products	Process water consumption	
			During the previous financial year (2021-22)	During the current financial year (2022-23)
			(1)	(2)
1.	Molasses	ENA, Impure Spirit, Absolute Alcohol (AA)	45056.3 MT	41832.3 MT

PART – C

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

	Pollutants (mg/l)	Conc. of Pollutants Discharged (mg/l)	Quantity of Pollutants Discharged (Kg/Day)	Standards Limit (mg/l)*	Percentage of variation from prescribed standard limit with reasons
(a) Waste Water Discharge (ETP)					
1	pH	7.9	--	5.5 – 9.0	Well below the prescribed limits/standards
2	TSS	12	2.82	100	Well below the prescribed limits/standards
3	COD	80	18.8	250	Well below the prescribed limits/standards
4	BOD	15	5.025	100	Well below the prescribed limits/standards
5	O & G	BDL	--	10	Well below the prescribed limits/standards
6	TDS	804	269.34	2100	Well below the prescribed limits/standards



	Pollutants (mg/l)	Conc. of Pollutants Discharged (mg/l)	Quantity of Pollutants Discharged (Kg/Day)	Standards Limit (mg/l)*	Percentage of variation from prescribed standard limit with reasons
(b)	Air (PM) mg/Nm ³				
(i)	Boiler @ 22TPH	109	--	150	Well below the prescribed limits/standards

PART – D

HAZARDOUS WASTES

[As specified under Hazardous & Other Wastes (Management and Transboundary Movement) Rules, 2016]

Hazardous Wastes		Total Quantity	
		During the previous financial year (2021-22)	During the current financial year (2022-23)
a)	From Process	NIL	NIL
b)	From Pollution Control Facility	NIL	NIL
c)	From D.G. Sets	NIL	NIL

PART – E

SOLID WASTES

Solid Waste	Total Quantity during the Financial Year	
	Previous	Current
	2021-22	2022-23
(a) From Process		
NIL	NIL	NIL
(b) From Pollution Control Facility		
NIL	NIL	NIL
(c) Others		
Paddy Husk Ash / Coal Ash / Other Fuel Ash	4140.270 MT	3872 MT

- a) From Process : NIL
- b) From pollution control facilities : NIL
- c) 1) Quantity recycled or re-utilized within the unit : NIL
- 2) Disposal : – Paddy Husk Ash / Coal Ash / Other Fuel Ash is given to the nearby farmers to be utilized in the fields.

PART – F

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

Hazardous Waste		Quantity	Collection / Storage	Disposal
(a)	From Process			
	NIL	NIL	NIL	NIL

Solid Waste	Quantity	Disposal
From Process		
NIL	NIL	NIL
From Pollution Control Plant		
NIL	NIL	NIL
Other Sources		
Paddy Husk Ash / Coal Ash / Other Fuel Ash from Boiler Furnace	3872 MT	Paddy Husk Ash / Coal Ash / Other Fuel Ash is given to the nearby farmers to be utilized in the fields.

PART – G

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

➤ **Conservation of Energy: Industry accords high priority to conservation of energy and has taken number of measures in this direction such as:**

- Maximum utilization of natural light where possible, hence saving in energy consumption.
- Utilizing maximum power factor by installing capacitors and saving in maximum demand power.
- Timely maintenance of machines.
- Constant replacement of outdated energy intensive equipments with latest technology energy saving equipments.
- Continuation of installing LED's by replacement of CFL/ conventional system.
- Effective control on utilization of energy.

➤ **Minimizing Water Consumption**

Water consumption has been minimized by a combination of water saving devices and other domestic water conservation measures. To ensure ongoing water conservation, awareness programmes have been conducted for the awareness of all workers of the industry. The following measures are being adopted.

- Use of water efficient plumbing fixtures. Water efficient plumbing fixtures use less water with no marked reduction in quality and service.



- Leak detection and repair techniques.
- Awareness campaign to disseminate knowledge on strategies and technologies that can be used for water conservation.
- Total water coming out from bottle washing is used in cooling towers or making of green gardens inside the industry area after double filter system and treatment plant.
- Rain water harvesting system for rain water collection inside the industry premises is working properly.

PART – H

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

- Large area has been covered with trees & plantation and continuance of plantation of trees in the green belt area.
- Creating awareness regarding environment and safety among employees.
- Tree plantation has good survival rate.
- The industry has planted 2000 plants surroundings the industry premises and 1000 plants has planted near godown of industry.
- The industry is controlling, monitoring & complying with environmental standards and legislations. Several environmental initiatives are taken from time to time such as energy conservation measures and waste management, to ensure cleaner and healthier environment.
- Industry have own 03 nos. noise monitoring stations, 03 nos. ambient air monitoring stations and 01 no. stack emission monitoring kit for the regular monitoring of SPM in ambient air, stack emission & noise pollution control surrounding the industry premises.
- Continuously spraying insecticide by spray machine defogging machine in surrounding villages for removal of flies & mosquitoes.
- The industry has obtained the Public Liability Insurance vide no. 34080136200100000020 dated 31.01.2021 valid upto 30.01.2022.

PART – I

Any other particulars for improving the quality of the environment.

- The industry has installed 01no. D.G Set of capacity 750 KVA which are fitted with canopy and adequate stack height of 6.0 metre above roof level.
- Environment Friendly Atmosphere is maintained in the industry.
- Trainings for development of knowledge of the employees are conducted periodically.
- The industry is getting “Performance Study of Effluent Treatment Plant” (ETP) done periodically from the laboratory of the Board.
- The industry is getting stack monitoring conducted of boiler furnace periodically from the laboratory of the Board.
- Total land use for agro forestry purpose by the industry is 55 acres approximately.
- Total number of 22000 trees already planted inside the industry premises.
- The industry has planted 2000 plants surroundings the industry premises and 1000 plants has planted near godown of industry during the year under report. Besides these, decorative trees, Bushes, Ashoka Trees, Palm Trees, Roses etc. are also planted inside the industry premises.





A B SUGARS LTD.

