Environment Audit Report
&
Environmental Statement
for
F.Y. 2025-26

A.B. SUGARS LTD.
(Distillery Division)

Vill. Randhawa, P.O. Panwan, Dasuya,
Distt. Hoshiarpur-144205 (Pb.)

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I wish to express my sincere thanks to Sh. Alok Gupta, Unit Head for his constant support & encouragement.

I place on record, my sincere gratitude to Sh. Desh Raj Thakur, Assistant General Manager & and Sh. Sunil Kumar, Sr. Executive ETP for providing necessary documents and technical support for coordinating and support.

I take this opportunity to record my sincere thanks to all the team members of R4 Enviro Pvt. Ltd., Environmental Consultants for helping me for analysing the data, typing and preparation of the report with their best efforts.

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Authn.Sign.
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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. Central agencies, however, differ from the private sector in how they must comply with those regulations. Thus, Central 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 U.S. Environmental Protection Agency (EPA) recognizes that environmental auditing -- and sound environmental management generally -- can provide potentially powerful tools toward protection of public health and the environment. In encouraging the use of these tools, EPA has announced the "Environmental Auditing Policy Statement" on July 9, 1986 (51 FR 25004) (1986 audit policy) and the "Incentives for Self-Policing: Discovery, Disclosure,

Correction and Prevention of Violations" on December 22, 1995 (60 FR 66706) (1995 or final audit or self-policing 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 central 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

There is increasing need for companies to demonstrate good environmental management practice to a wide range of interested parties. ISO 14001 and the EU's voluntary Eco-Management and Audit Scheme [EMAS] require that participating organisations have their environmental performance measured and verified.

Environmental auditing is not a legal requirement under any specific law or regulation. Rather, it is a proactive management tool that is used to consciously identify environmental problems before they occur in order to take preventative measures. 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).

Legal

- To measure and improve an organization's or activity's compliance with environmental legislation and regulations such as operating permits, air emission standards, effluent standards, waste management standards, transport regulations, etc., thus avoiding legal sanctions against an organization or activity or its management under prevailing laws and regulations.
- Provision of evidence of the implementation of environmental management in court if requested.

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 Managing Director of M/s R4 Enviro Pvt. Ltd., Environmental Consultants who has engaged by the industry for preparing the Environmental Statement of the industry for the financial year 2025-26. 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 production of the industry during the F.Y. 2025-26 was Nil. The main raw material of the industry is Molasses. Since the production of the industry during the F.Y. 2025-26 was nil, hence, no raw material i.e. molasses were used.

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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 is 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 is 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 is 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 has 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, whereas 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.

MANUFACTURING PROCESS FLOW DIAGRAM

Raw Material used – Molasses

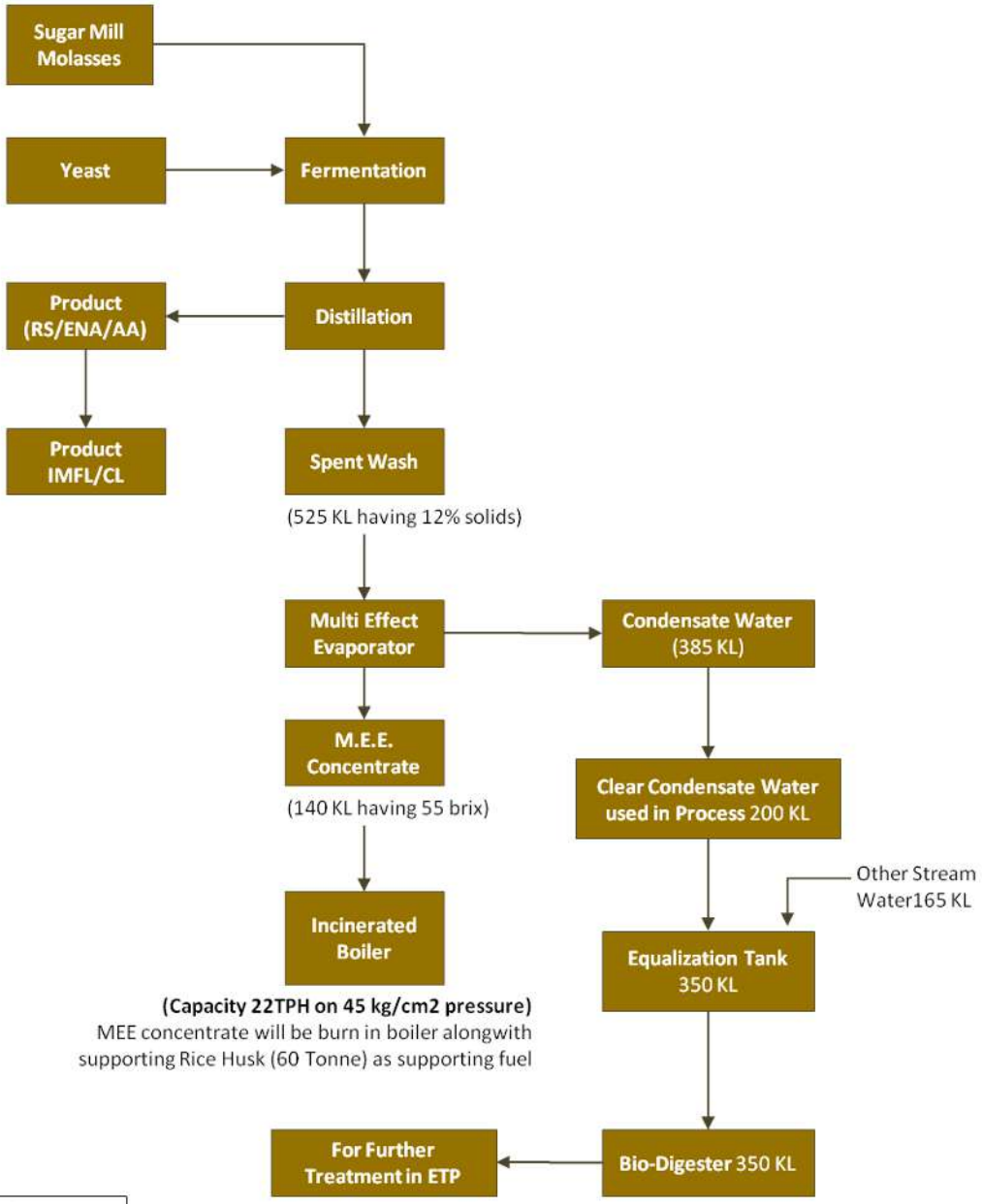

Fig: - 3.1

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 7,992 KL during the financial year 2025-26, which was used for domestic purpose only.
- 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 obtained Ad interim permission for extraction of ground water from Punjab Water Regulation & Development Authority (PWRDA) vide no. GW/PWRDA/10/2025/L3/425 on dated 13.10.2025 valid upto 12.10.2028. The permission was granted for abstraction of 900 KLD of ground water. The copy of the NOC granted to the industry is enclosed herewith as per **Annexure – 4.1.**

Annexure – 4.1

PUNJAB WATER REGULATION AND DEVELOPMENT AUTHORITY
SCO 149-152, SECTOR 17, CHANDIGARH – 160017

PERMISSION FOR EXTRACTION OF GROUNDWATER

(Under The Punjab Groundwater Extraction And Conservation Directions, 2023)

Unit ID	Permission Number	Date of Grant of Permission	Valid up to
20230100233	GW/PWRDA/10/2025/L3/425	13-Oct-2025	12-Oct-2028

1	**Name of Unit**	M/s A.B.Sugars Ltd.(Distillery Division)		
2	**Activity of Unit**	Industrial		
3	**Address/Location of Unit**	Village Randhawa, P.O. Panwan, Dasuya, Distt. Hoshiarpur-144205, Punjab,		
		Randhawa (96)	PIN: 144205	
4	**Assessment Area(Block)**	DASUYA	Status: YELLOW	
5	**District**	HOSHIARPUR		
6	**Head Office Address**	Village Randhawa, P.O. Panwan, Dasuya, Distt. Hoshiarpur-144205, Punjab		
		HOSHIARPUR, PUNJAB	PIN: 144205	
	Email	deshraj.absl@wave1group.in		
	Phone/Mobile No.	8872049333		
7	**Project Status**	Existing : 24-06-2004		
8	**No. of Existing Tube-Wells**	**No. of Proposed Tube-Wells**	**Total Number of Tube-Wells Permitted**	
	3	0	3	
9	**Volume of Ground Water Permitted to be Extracted (m3/month)**	**Fresh**	**Brackish/Saline**	**De-watering**
		27000	0	0

Note: This permission is granted in terms of the Punjab Groundwater Extraction and Conservation Directions, 2023 notified on 27th January, 2023 under section 15 of the Punjab Water Resources (Management and Regulation) Act, 2020 and is subject to the conditions given overleaf.

Digitally signed by RAJESH VASHISHT
Reason: Approval
Location:Chandigarh
Date:13-10-2025 14:06:10 PM

Designation : A.O.L-3

Terms and Conditions

1. User shall comply with the provisions of the Punjab Water Resources (Management and Regulation) Act, 2020, The Punjab Groundwater Extraction and Conservation Directions, 2023 and other Regulations, Directions and instructions issued by the Authority from time to time.
2. The User shall install a water meter of required Specifications at each extraction structure and inform PWRDA along with a Calibration Certificate. The water meter shall conform to the technical specifications, performance parameters and connectivity standards, etc. as required by the Authority. The timeline for installation of water meters of required specifications shall be:
   The unit having existing extraction structure/(s), shall install required water meter on each existing extraction structure within six months of the date of permission.
   The unit proposing to construct extraction structure/(s), shall install required water meter on each of the proposed extraction structure within six months from the date of installation of the extraction structure/(s).
3. The User (if required to install piezometer as per Directions) shall install the piezometer of the required specifications within six months of the date of permission or the date of commencement of groundwater extraction, whichever is later. (refer para 5.2 of the Directions).
4. Payment Cycle and Schedule shall be as per para 4.8 of the Directions.
5. In case of proposed water extraction structure which is yet to be commissioned, the user will intimate the Authority regarding all the details of the structure within 15 days of energizing of structure.
6. In case a Unit comprises or contains a stadium/cricket ground or other sports ground/sports court or golf course etc. then the User shall ensure an appropriate mechanism for rainwater harvesting i.e. storage and reuse (without artificial recharge), within three months of the date of permission.
7. This Permission does not absolve the Unit of its obligations to obtain other required statutory and administrative clearances from appropriate Authorities.
8. 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.
9. This Permission is being issued without any prejudice to the orders of any court of law in cases related to groundwater or any other related matters.
10. The Authority may inspect the Unit and original documents at any time. In case it is found that any material facts have been concealed or misreported or 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 cancel or alter the permission after giving a notice to the Unit. This will be without prejudice to any other action that may be taken under the law for supply of wrong information.
11. The User is advised to keep on checking the website of the Authority for updates on Directions and instructions on matters related to extraction of groundwater.
12. The User shall obtain revised/varied/fresh permission as the case may be, in case there is any change in ground water extraction structure, volume etc, before the aforesaid change is affected or within the time permitted under the Directions.
13. In case of dewatering, the disposal of de-watered volume (into a drain, sewer, nearby land, water body etc.) will be as per PPCB consent wherever applicable.
14. A user shall apply for renewal of permission in the required format three months prior to the expiry of permission.

CHAPTER – 5

WATER POLLUTION GENERATION & ITS MANAGEMENT

There was no production during the F.Y. 2025-26, hence, there was no generation of any type of trade effluent. 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 m^3/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 m^3/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.

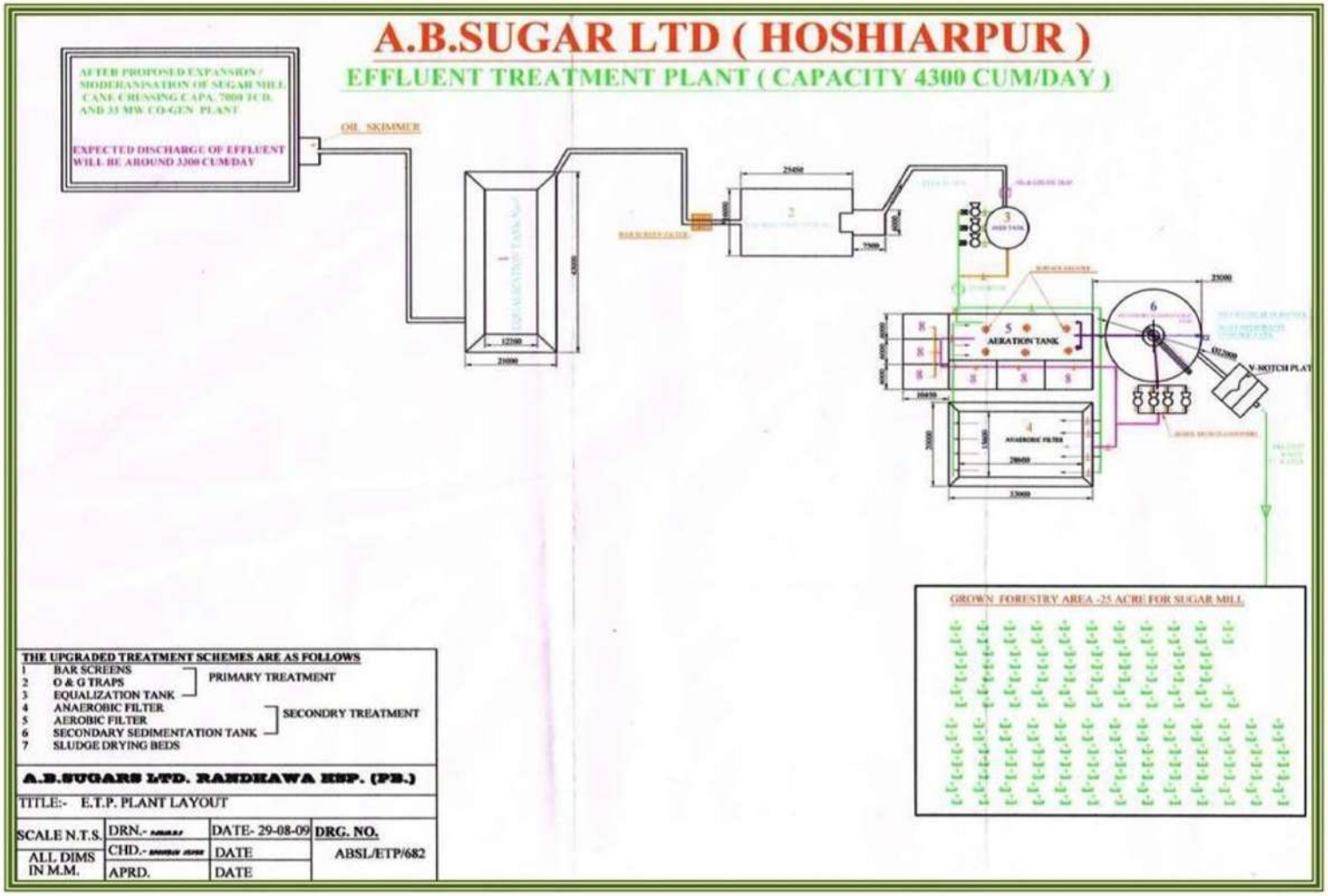

Fig: - 5.1 – ETP Flow Diagram of AB Sugars Ltd. (Sugar Division)

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 were mainly used as fuel in boiler installed by the industry. The quantity of fuel consumption in the boilers is Paddy Husk & Coal which was nil during the financial year 2025-26. 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. 60^0C) 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	:	50^0C
Product Rate (Concentrate) kg/h	:	5600
Product Concentration	:	60%
Product Temperature approx.	:	75^0C -85^0C
Total Water Evaporation kg/h	:	22400

Raw spent wash having 12% solids is concentrate 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 Frat 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 mg/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 ESP 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 as fuel in D.G. set during the financial year 2025-26.

- 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 ash, so, generated is rich in potash which is lifted by the nearby farmers for utilization in their fields as a fertilizer. However, there was no generation of fuel ash during the Financial Year 2025-26 as there was no production during the F.Y. under report.

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/2024/25155950** dated 23.05.2024 valid upto 22.05.2025 and then further renewed vide no. **CTOW/Renewal/HSP/2025/28140574** dated 24.03.2025 valid upto 31.03.2027. (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/2024/25155904** dated 24.04.2024 valid upto 31.03.2025 then further renewed vide no. **CTOA/Renewal/HSP/2025/16516979** dated 24.03.2025 valid upto 31.03.2027. (Copies Attached)

PUNJAB POLLUTION CONTROL BOARD

ZONAL OFFICE NEAR PSIEC WATER TANK FOCAL POINT JALANDHAR.

Website:- www.ppcb.gov.in

Office Dispatch No : **Registered/Speed Post** **Date:**

Industry Registration ID: *R12HSP36832* **Application No :** *25155950*

To,

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

Subject: **Extension in validity of consent under the Water (Prevention & Control of Pollution) Act, 1974.**

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

Consent to Operate Certificate No.	*CTOW/Renewal/HSP/2024/25155950*
Date of issue :	*23/05/2024*
Date of expiry :	*22/05/2025*
Certificate Type :	*Renewal*
Previous CTO No. & Validity :	*CTOW/Renewal/HSP/2021/16517009 From:08/11/2021 To:31/03/2024*

2. Particulars of the Industry

Name & Designation of the Applicant	*Alok Gupta, (General Manager)*
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	*8673.214 lakhs*
Category of Industry	*Red*
Type of Industry	*Distilleries*
Scale of the Industry	*Large*
Office District	*Hoshiarpur*

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The validity of consent to operate granted vide no. CTOW/Renewal/HSP/2021/16517009 dated 08.11.2021 valid upto 31.03.2024, under the Water (Prevention & Control of Pollution) Act 1974 is hereby extended upto 22.05.2025, with same terms & conditions and special condition that

1) The industry shall comply with the decisions of hearing before Chairman of the Board on 02.05.2024 for further extension in validity of consent to operate under the Water (Prevention & Control of Pollution) Act, 1974.

This letter may be appended with original consent letter issued vide letter No. CTOW/Renewal/HSP/2021/16517009 dated 08.11.2021.

23/05/2024

(Satyajeet Singh Attri)
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, Punjab Pollution Control Board, Regional Office, Hoshiarpur

23/05/2024

(Satyajeet Singh Attri)
Environmental Engineer
For & on behalf
of
(Punjab Pollution Control Board)

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PUNJAB POLLUTION CONTROL BOARD

ZONAL OFFICE NEAR PSIEC WATER TANK FOCAL POINT JALANDHAR.

Website:- www.ppcb.gov.in

Office Dispatch No : OCMMS/CTO(Water)/2025/002288 **Registered/Speed Post** **Date:**

Industry Registration ID: *R12HSP36832* **Application No :** *28140574*

To,

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

Subject: **Extension in validity of consent under the Water (Prevention & Control of Pollution) Act, 1974.**

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

Consent to Operate Certificate No.	*CTOW/Renewal/HSP/2025/28140574*
Date of issue :	*24/03/2025*
Date of expiry :	*31/03/2027*
Certificate Type :	*Renewal*
Previous CTO No. & Validity :	*CTOW/Renewal/HSP/2024/25155950 From:23/05/2024 To:22/05/2025*

2. Particulars of the Industry

Name & Designation of the Applicant	*Alok Gupta, (General Manager)*
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	*8737.971 lakhs*
Category of Industry	*Red*
Type of Industry	*Distilleries*
Scale of the Industry	*Large*
Office District	*Hoshiarpur*

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The validity of consent to operate granted vide no. CTOW/Renewal/HSP/2024/25155950 dated 23/05/2024 valid upto 22/05/2025 under the Water (Prevention & Control of Pollution) Act 1974 is hereby further extended upto 31.03.2027, with same terms & conditions

This letter may be appended with original consent letter issued vide letter No. CTOW/Renewal/HSP/2024/25155950 dated 23/05/2024.

24/03/2025

(Satyajeet Singh Attri)
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, Punjab Pollution Control Board, Regional Office, Hoshiarpur

24/03/2025

(Satyajeet Singh Attri)
Environmental Engineer
For & on behalf
of
(Punjab Pollution Control Board)

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PUNJAB POLLUTION CONTROL BOARD

ZONAL OFFICE NEAR PSIEC WATER TANK FOCAL POINT JALANDHAR.

Website:- www.ppcb.gov.in

Office Dispatch No :	**Registered/Speed Post**	**Date:**	
Industry Registration ID:	*R12HSP36832*	**Application No :**	*25155904*

To,

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

Subject: Extension in validity of consent under the Air (Prevention & Control of Pollution) Act 1981

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

Consent to Operate Certificate No.	*CTOA/Renewal/HSP/2024/25155904*
Date of issue :	*24/04/2024*
Date of expiry :	*31/03/2025*
Certificate Type :	*Renewal*
Previous CTO No. & Validity :	*CTOA/Renewal/HSP/2021/16516964* *From:21/10/2021 To:31/03/2024*

2. Particulars of the Industry

Name & Designation of the Applicant	*Alok Gupta, (General Manager)*
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	*8673.214 lakhs*
Category of Industry	*Red*
Type of Industry	*Distilleries*
Scale of the Industry	*Large*
Office District	*Hoshiarpur*

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(Punjab Pollution Control Board)

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A.b. Sugars Ltd (distillery Division),Vill. Randhawa, P.o. Panwan, Tehsil Dasuya,Dasuya,Hoshiarpur,144205
Page3

The validity of consent to operate granted vide no. CTOA/Renewal/HSP/2021/16516964 dated 21.10.2021 valid upto 31.03.2024 under the Air (Prevention & Control of Pollution) Act 1981 is hereby extended upto 31.3.2025, with same terms & conditions and special conditions that

I. The project proponent shall get its stack emission sample from the Board within 15 days of re-commissioning.
II. The project proponent shall maintain the arrangements for proper disposal of fuel ash in environmentally sound & scientific manner
III. The project proponent shall devise the ways & means to minimize the generation of all kind of wastes through REDUCE, REUSE and RECYCLE activities. The generated waste, if any, shall be properly handled and managed as per the provisions of the Municipal Solid Waste Rules 2016 in an environmentally sound manner.
IV. Project proponent (PP) may also develop the vermi composting/composting to manage the biodegradable solid waste. PP shall not throw, burn or bury any solid wastes in open, outside premises or in drain / water bodies.
V. The project proponent ensure that there are no usages of plastic carry bags and single use plastic / thermocol disposable items such as water bottles / water pouches/water cups, plates, forks, spoons, straw etc. and single use decorating material made of plastic-thermocol or any other non-biodegradable material in the premises.
VI. The project proponent shall perform / promote its Corporate Environment Responsibility (CER) activities as well as use of alternatives of single use plastics (SUP) and awareness to discourage use of plastic (See attached banner/circular).
VII. The project proponent shall carry out awareness and activities for the themes / action points identified under Mission LiFE (Lifestyle for the Environment) by Ministry of Environment, Forests and Climate Change given at the website (http://missionlife-moefcc.nic.in).

This letter may be appended with original consent letter issued vide letter No. CTOA/Renewal/HSP/2021/16516964 dated 21.10.2021.

24/04/2024

(Satyajeet Singh Attri)
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

24/04/2024

(Satyajeet Singh Attri)
Environmental Engineer
For & on behalf
of

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PUNJAB POLLUTION CONTROL BOARD

ZONAL OFFICE NEAR PSIEC WATER TANK FOCAL POINT JALANDHAR.

Website:- www.ppcb.gov.in

Office Dispatch No : **OCMMS/CTO(Air)/2025/002287** | **Registered/Speed Post** | **Date:**

Industry Registration ID: *R12HSP36832* | **Application No :** *16516979*

To,

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

Subject: **Extension in validity of consent under the Air (Prevention & Control of Pollution) Act 1981.**

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

Consent to Operate Certificate No.	*CTOA/Renewal/HSP/2025/16516979*
Date of issue :	*24/03/2025*
Date of expiry :	*31/03/2027*
Certificate Type :	*Renewal*
Previous CTO No. & Validity :	*CTOA/Renewal/HSP/2024/2515590 From:24/04/2024 To:31/03/2025*

2. Particulars of the Industry

Name & Designation of the Applicant	*Alok Gupta, (General Manager)*
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	*8737.971 lakhs*
Category of Industry	*Red*
Type of Industry	*Distilleries*
Scale of the Industry	*Large*
Office District	*Hoshiarpur*

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Page1

The validity of consent to operate granted vide no. CTOA/Renewal/HSP/2024/25155904 dated 24/04/2024 valid upto 31/03/2025 under the Air (Prevention & Control of Pollution) Act 1981 is hereby further extended upto 31.03.2027, with same terms.

This letter may be appended with original consent letter issued vide letter No. CTOA/Renewal/HSP/2024/25155904 dated 24/04/2024.

24/03/2025

(Satyajeet Singh Attri)
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, Punjab Pollution Control Board, Regional Office, Hoshiarpur

24/03/2025

(Satyajeet Singh Attri)
Environmental Engineer
For & on behalf
of
(Punjab Pollution Control Board)

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CHAPTER – 9

COMPLIANCE OF ENVIRONMENTAL STANDARDS

The industry has common Effluent Treatment Plant (ETP) with M/s A.B. Sugars Ltd. (Distillery 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. Since, no production was there during the F.Y. 2025-26, hence, there was no generation of trade effluent.

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. Since, no production was there during the F.Y. 2025-26, hence, there was no generation of stack emissions.

R4 Enviro Auth.Sign. Patiala

CHAPTER – 10

FORM – V
ENVIRONMENTAL STATEMENT

Environmental Statement for the Financial Year Ending the 31st March 2026

PART – A

(i)	Name and address of the owner / occupier of the industry operation or process	:	Sh. Alok Gupta, Unit Head 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	:	August, 2004		
(v)	Date of last environment statement submitted	:	September, 2025		

PART – B

Water and Raw Material Consumption

(i) Water Consumption m^3/day
(on an annual average basis)

i) Process: NIL

ii) Boiler/Cooling NIL

v) Domestic Use 21.9 M^3/day (Domestic Purpose Only on 365 days basis)

Sr. No.	Name of Products	Water Consumption per unit of product output	
		During the previous financial year (2024-25)	During the current financial year (2025-26)
		(2)	(2)
1.	ENA, Impure Spirit, Absolute Alcohol (AA)	6.84 Litres/litres of Alcohol	NIL

(ii) Raw Material Consumption

Sr. No.	Name of Raw Materials	Name of Products	Process water consumption	
			During the previous financial year (2024-25)	During the current financial year (2025-26)
			(1)	(2)
1.	Molasses	ENA, Impure Spirit, Absolute Alcohol (AA)	2501 MT	NIL

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	--	--	--	--
2	COD	--	--	--	--
3	BOD	--	--	--	--
4	TSS	--	--	--	--
5	TDS	--	--	--	--
6	O & G	--	--	--	--

Note: Since, no production was there during the F.Y. 2025-26, hence, there was no generation of trade effluent.

	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	--	--	150	--

Note: Since, no production was there during the F.Y. 2025-26, hence, there was no generation of stack emissions.

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 (2024-25)	During the current financial year (2025-26)
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
		2024-25	2025-26
(a)	**From Process**		
	NIL	NIL	NIL
(b)	**From Pollution Control Facility**		
	NIL	NIL	NIL
(c)	**Others**		
	Paddy Husk Ash / Coal Ash / Other Fuel Ash	38.4 MT	NIL

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. However, no production was there during the F.Y. 2025-26, hence no generation of ash.

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	NIL	Paddy Husk Ash / Coal Ash / Other Fuel Ash is given to the nearby farmers to be utilized in the fields. However, no production was there during the F.Y. 2025-26, hence no generation of ash.

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 are conducted for the awareness of all workers of the industry. There was no production during the F.Y. 2025-26. However, 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.

R4 Enviro Auth.Sign. Patiala

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. However, there was no production during the F.Y. 2025-26.
- The industry is getting stack monitoring conducted of boiler furnace periodically from the laboratory of the Board. However, there was no production during the F.Y. 2025-26.
- 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.