



RAJASTHAN LIQUORS LTD.

Ref. No.

RLL/IA/MOEF/2025-26/03

Date: 17-11-2025

To

The Director (IA Division)

Ministry of Environment, Forest & Climate Change (MoEFCC)

Govt. of India, Indira Paryavaran Bhawan

Jor Bagh Road, New Delhi - 110003

Sub: Submission of Half-Yearly EC Compliance Report (April 2025- September 2025) for Distillery Plant (Grained based, 120 KLD) with Cogeneration Power Plant (3.0 MW) at Industrial FEZ, Village Haripur, Hinduan & Saidupura, Tehsil: Derabassi and District: Mohali, Punjab by M/s Rajasthan Liquors Ltd.

Ref.: EC Letter no. J-11011/263/2010-IA II(I) dated 26th September, 2012

EC Letter no. J-11011/263/2010-IA II(I) dated 21st February, 2020

Sir

With reference to the aforesaid subject and above cited reference matter, this is to apprise you that company has obtained Environmental Clearance vide letter No J-11011/263/2010-IA II(I) dated 26th September, 2012 for Distillery Plant (Grained based, 120 KLD) with Cogeneration Power Plant (3.0 MW) at Industrial FEZ, Village Haripur, Hinduan & Saidupura, Tehsil : Derabassi and District: Mohali, Punjab by M/s Rajasthan Liquors Ltd.

The company further applied for the expansion of Grain based distillery from 120 KLPD to 145.2 KLPD by modernization and efficiency improvement at industrial FEZ, Village Haripur Hinduan & Saidpura, Tehsil Derabassi, District SAS Nagar (Mohali), Punjab in MoEF&CC, New Delhi and acquired Environmental Clearance vide letter no. J-11011/263/2010-IA II(I) dated 21st February, 2020. No work has been started with respect to new EC obtained.

Presently, the company is running on the basis of earlier Environmental Clearance letter. We are hereby submitting the Half Yearly Compliance Report (April 2025- September 2025) of the conditions stipulated in our Environment Clearance letter issued by Ministry of Environment Forest and Climate Change, New Delhi.

This is for your kind consideration and records.

Thanking you and with regards,

Yours faithfully,

M/s Rajasthan Liquors Ltd.

For Rajasthan Liquors Ltd.

(Authorized Signatory)

Enclosed:

Half Yearly Compliance Report (April 2025- September 2025) in soft copy

REGISTERED &
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Tel.: 0512-2563700

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Sirsi Road, Jaipur,
Rajasthan: 302 021

UNIT I:
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Kaladera (Chomu)
Jaipur,
Rajasthan: 303 801

UNIT II:
Village Haripur Hindua,
Barlwalla Road, Derabassi,
SAS Nagar (Mohali),
Punjab: 140 507

CIN: U15531UP1998PLC028079
E: rilho@ril.co.in
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TIE-UP UNITS:

RAJWADA BREWERIES AND BOTTLING PRIVATE LIMITED
F-9-16A, 35-42, RIICO Industrial Area, Silora, Kishangarh,
Ajmer-305802 Rajasthan

ALWAR MALT AND AGRO FOODS MANUFACTURERS COMPANY LIMITED
6th K.M. Stone, Jaipur Road, Village Bhankhera,
Alwar-301001 Rajasthan.

SIX MONTHLY ENVIRONMENTAL COMPLIANCE REPORT

AS PER THE CONDITIONS STIPULATED
IN THE ENVIRONMENTAL CLEARANCE

EC Letter no.: J-1101/263/2010-IA-II(I) dated 26th September, 2012

Half -Yearly EC Compliance Report

(April 2025 to September 2025)

Distillery Plant (Grained based, 120 KLD) with Cogeneration Power Plant (3.0 MW)

At

**Industrial FEZ, Village Haripur Hinduan & Saidpura,
Tehsil Derabassi and District Mohali, Punjab**

SUBMITTED BY

M/s. Rajasthan Liquors Ltd.

Village Haripur Hindua

Barwala Road Derabassi,

District S.A.S. Nagar, Punjab-140507

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F. No. J-11011/263/2010- IA II (I)
Government of India
Ministry of Environment and Forests
(I.A. Division)

ParyavaranBhawan
CGO Complex, Lodhi Road
New Delhi – 110 003

E-mail : aditya.narayan@nic.in

Telefax : 011: 2436 549

Dated 26th September, 2012

To,

Shri Rakesh Chhabra, Director
M/s Rajasthan Liquors (P) Ltd.
Village HaripurHinduan, Barwala Road
Derabassi, District S.A.S. Nagar, Punjab

E-mail: Chhabra_rakesh@yahoo.co.in ;

Subject: Distillery Plant (Grained based, 120 KLD) with Cogeneration Power Plant (3.0 MW) at Industrial FEZ, Village HaripurHinduan&Saidupura, Tehsil Derabassi and District Mohali, Punjab by M/s Rajasthan Liquors (P) Ltd. – Environmental Clearance reg.

Ref. : Your letter no. nil dated 30th June, 2011.

Sir,

Kindly refer your letter dated 30th June, 2011 alongwith project documents including Form I, Terms of References, Pre-feasibility Report, EIA/EMP Report, Public Hearing Report and subsequent submission of additional information vide letter dated 24th September, 2011, 23rd September, 2011 and 29th September, 2011 regarding above mentioned project.

2.0 The Ministry of Environment and Forests has examined the application. It is noted that proposal is for setting up of Distillery Plant (Grained based, 120 KLD) with Cogeneration Power Plant (3.0 MW) at Industrial FEZ, Village Haripur Hinduan & Saidupura, Tehsil Derabassi and District Mohali, Punjab by M/s Rajasthan Liquors (P) Ltd. Total plot area is 10.5 acres. Ghaghar River is located at 3.8 Km east. No national park/wildlife sanctuary/ biosphere reserve within 10 km. Kholhat Raitan Reserve Forest (10.07 Km). Total project cost is Rs. 80.00 Crores. Distillery will run for 330 days.

3.0 Multicyclone followed by bag filters alongwith stack of adequate height will be provided to rice husk/coal fired boiler. Total fresh water requirement from ground water source will be 1200 m³/day. Spent wash will be passed through decanter and concentrated in Multi-effect evaporator (MEE). Thick syrup and wet cake will be mixed together to form Distiller's Wet Grains with Soluble (DWGS) to achieve zero discharge. Spent lees, MEE condensate and Utilities wastewater will be treated in the effluent treatment plant (ETP) and treated effluent will be recycled/reused within the factory premises. No effluent will be discharged outside the factory premises and zero discharge concept will be maintained. Storage capacity for spent wash lagoon will be 5 days. DWGS will be dried to form Distiller's Dry Grains with Soluble (DDGS) and sold as cattle feed. Fly ash will be sold to the brick/cement manufacturers or used for land application. Spent oil will be sold to authorized recyclers/re-processors.

4.0 Public hearing/public consultation meeting was conducted on 18th April, 2011.

5.0 All cane juice/non-molasses based distillery (>30 KLD) are listed at S.N. 5(g) (ii) under category A and appraised at Central level.

6.0 The proposal was considered by the Expert Appraisal Committee (Industry-2) in its 14th, 28th and 32nd meetings held during 16th-17th September, 2010, 20th, 21st October, 2011 and 16th, 17th February, 2012 respectively. The Committee recommended the proposal for environmental clearance.

7.0 Based on the information submitted by the project proponent, the Ministry of Environment and Forests hereby accords environmental clearance to above project under the provisions of EIA Notification dated 14th September 2006, subject to the compliance of the following Specific and General Conditions:

A. SPECIFIC CONDITIONS:

- i) Environment clearance accorded is for grain based distillery unit (120 KLPD) only and no molasses based distillery unit shall be operated without prior permission from the Ministry.
- ii) Efforts shall be made to reduce PM₁₀ levels in the ambient air and a time bound action plan shall be submitted. As proposed, Multicyclone followed by bag filters alongwith stack of adequate height shall be provided to rice husk/coal fired boiler to control particulate emissions within 50 mg/Nm³. At no time, the emission levels shall go beyond the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency.
- iii) The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be followed.
- iv) In plant, control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Fugitive emissions shall be controlled by providing closed storage, closed handling & conveyance of chemicals/materials, multi-cyclone separator and water sprinkling system. Dust suppression system including water sprinkling system shall be provided at loading and unloading areas to control dust emissions. Fugitive emissions in the work zone environment, product, raw materials storage area etc. shall be regularly monitored and records should be maintained. The emissions shall conform to the limits imposed by Punjab Pollution Control Board (PPCB).
- v) The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB guidelines. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution.
- vi) The company shall upload the status of compliance of the stipulated environmental clearance conditions, including results of monitored data on its website and shall update the same periodically. It shall simultaneously be sent to the Regional office of MOEF, the respective Zonal office of CPCB and the PPCB. The levels of PM₁₀, SO₂, NO_x, CO and HC (Methane) in ambient air shall be monitored and displayed at a convenient location near the main gate of the company and at important public places.
- vii) Total fresh water requirement for distillery including CPP shall not exceed 10 KL/KL of the alcohol production(i.e. 1200 m³/day). Prior permission for the drawl of 1200 m³/day shall be obtained from the Central Ground Water Authority/State Ground Water Board. A copy of water permission from concerned Authority shall be submitted to the Ministry & Regional Office at Chandigarh.
- viii) Efforts shall be made to reduce the fresh water requirement from ground water source by adopting 3 R's (Reduce, Reuse and Recycle) concept.
- ix) Spent wash generation shall not exceed 6 Kl/Kl of alcohol production (i.e. 720 KLPD). As proposed spent wash shall be passed through decanter and concentrated in Multi-effect evaporator. Thick syrup and wet cake shall be mixed together to form DWGS to achieve zero discharge. Spentlees, MEE condensate and Utilities wastewater shall be treated in ETP and water quality of treated

effluent shall meet the norms prescribed by CPCB/SPCB and treated effluent shall be recycled/ reused within the factory premises.

- x) No effluent from distillery and co-generation power plant shall be discharged outside the factory premises and Zero effluent discharge concept shall be adopted.
- xi) Distillery Wet Grains with Soluble (DWGS) shall be fed to the dryer to form Distillery Dry Grains with Soluble (DDGS).
- xii) Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.
- xiii) No storage of wet cake should be done at site to avoid odour problem.
- xiv) Spent wash shall be stored in impervious lagoon with HDPE lining as per CPCB guidelines and shall be kept in proper condition to prevent ground water pollution. Storage capacity of spent wash lagoon shall be for 5 days.
- xv) Adequate numbers of ground water quality monitoring stations by providing piezometers around the project area shall be set up. Sampling and trend analysis monitoring must be made on monthly basis and report submitted to SPCB and this Ministry. The ground water quality monitoring for pH, BOD, COD, Chloride, Sulphate and Total Dissolve Solids shall be monitored and report submitted to the Ministry Regional Office at Chandigarh and PPCB.
- xvi) Rice husk storage shall be done in such a way that it does not get air borne or fly around due to wind. For this, it shall be kept in wet form.
- xvii) Boiler ash shall be stored separately as per CPCB guidelines so that it shall not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing alongwith the storm water. Direct exposure of workers to fly ash & dust shall be avoided.
- xviii) Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 1999 as amendment in 2003. Fly ash shall be provided to cement and brick manufacturers for further utilization.
- xix) Detailed plan for disposal of boiler ash shall be submitted to the Ministry regional office at Chandigarh within 1 month from dated of issue of letter.
- xx) Fire fighting system shall be as per the OISD 117 norms and cover all areas where alcohol is produced, handled and stored. Provision of foam system for fire fighting shall be made to control fire from the alcohol storage tank.
- xxi) Risk Assessment shall be carried to assess the fire and explosion risk due to storage of alcohol and report submitted to the Ministry and its Regional Office at Chandigarh within six months.
- xxii) Occupational health surveillance programme shall be undertaken as regular exercise for all the employees. The first aid facilities in the occupational health centre shall be strengthened and the regular medical test records of each employee shall be maintained separately.
- xxiii) Dedicated parking facility for loading and unloading of material shall be provided in the factory premises. Unit shall develop and implement good traffic management system for their incoming and outgoing vehicles to avoid congestion on the public road.

- xxiv) Green belt shall be in 33 % area to mitigate the effects of fugitive emissions all around the plant as per CPCB guidelines in consultation with the local DFO. Thick greenbelt with suitable plant species shall be developed around the proposed distillery to mitigate the odour problem.
- xxv) All the commitments made during the Public Hearing/Public Consultation meeting held on 18th April, 2011 shall be satisfactorily implemented and adequate budget provision shall be made accordingly.
- xxvi) Provision shall be made for the housing for the construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile sewage treatment plant, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structure to be removed after the completion of the project. All the construction wastes shall be managed so that there is no impact on the surrounding environment.

B. GENERAL CONDITIONS:

- i. The project authorities shall strictly adhere to the stipulations made by the Punjab Pollution Control Board.
- ii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.
- iii. The locations of ambient air quality monitoring stations shall be decided in consultation with the Punjab Pollution Control Board (PPCB) and it shall be ensured that at least one station is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.
- iv. The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).
- v. The Company shall harvest rainwater from the roof-tops of the buildings and storm water drains to recharge the ground water and use the same water for the process activities of the project to conserve fresh water.
- vi. The Company shall obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2008 and its amendment time to time and prior permission from PPCB shall be obtained for disposal of solid / hazardous waste including boiler ash.
- vii. During transfer of materials, spillages shall be avoided and gullies drains be constructed to avoid mixing of accidental spillages with domestic wastewater and storm water drains.
- viii. Usage of Personnel Protection Equipments by all employees/workers shall be ensured.
- ix. Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.

- x. The company shall also comply with all the environmental protection measures and safeguards proposed in the project report submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, risk mitigation measures and public hearing relating to the project shall be implemented.
- xi. The company shall undertake CSR activities and all relevant measures for improving the socio-economic conditions of the surrounding area.
- xii. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.
- xiii. A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.
- xiv. As proposed, the company shall earmark Rs. 10crores and Rs. 1.0crore towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.
- xv. A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zila Parisad/Municipal Corporation, Urban local Body and the local NGO, if any, from who suggestions/ representations, if any, were received while processing the proposal.
- xvi. The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the Punjab Pollution Control Board. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.
- xvii. The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the Punjab Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the Chandigarh Regional Offices of MoEF by e-mail.
- xviii. The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry at <http://envfor.nic.in>. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.
- xix. The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.

8.0 The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

9.0 The Ministry reserves the right to stipulate additional conditions, if found necessary. The company in a time bound manner will implement these conditions.

10.0 The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Water Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2008 and the Public Liability Insurance Act, 1991 along with their amendments and rules.

(A N Singh)
Dy. Director

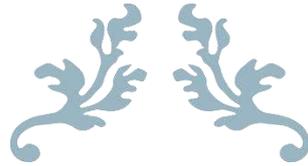
Copy to :-

1. The Principal Secretary, Environment Department, Government of Punjab, Chandigarh.
2. The Chief Conservator of Forests, Regional Office (Northern Zone), Bay No.24-25, Sector 31-A, Dakshim Marg, Chandigarh-160030.
3. The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, New Delhi - 110 032.
4. The Chairman, Punjab Pollution Control Board, Vatavaran Bhawan, Nabha Road, Patiala, 147001, Punjab.
5. Joint Secretary, IA II(I), Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
6. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi.
7. Guard File/Monitoring File/Record File.

(A N Singh)
Dy. Director

Half -Yearly EC Compliance Report

(April 2025 to September 2025)



PROJECT NAME: DISTILLERY PLANT (GRAINED
BASED, 120 KLD) WITH COGENERATION POWER
PLANT (3.0 MW)

Location: Village Haripur Hinduan & Saidpura, Tehsil Derabassi and District
Mohali, Punjab.

Proponent: M/s. Rajasthan Liquors Ltd.

EC Letter no.: J-1101/263/2010-IA-II(I)

Dated: 26th September, 2012



BY

M/s. Rajasthan Liquors Ltd.

Distillery Plant (Grained based, 120 KLD) with Cogeneration Power Plant (3.0 MW) at Industrial FEZ, Village Haripur Hinduan & Saidpura, Tehsil Derabassi and District Mohali, Punjab	EC Compliance Report (April 2025- September 2025)
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Name of Project: Distillery Plant (Grained based, 120 KLD) with Cogeneration Power Plant (3.0 MW) at Industrial FEZ, Village Haripur Hinduan & Saidpura, Tehsil Derabassi and District Mohali, Punjab.

Project Proponent: M/s. Rajasthan Liquors Ltd.

EC Letter No: J-1101/263/2010-IA-II(I)

Date of EC letter issued: 26th September, 2012

Period of Compliance: April 2025 to September 2025

S. No.	EC CONDITIONS	COMPLIANCE STATUS
	SPECIFIC CONDITIONS	
i.	Environment clearance accorded is for grain-based distillery unit (120 KLPD) only and no molasses-based distillery unit shall be operated without prior permission from the Ministry.	<p>The distillery unit is operating strictly as a grain-based distillery of 120 KLPD capacity, in accordance with the Environmental Clearance (EC) granted vide letter no. J-11011/263/2010-IA-II(I) dated 26th September 2012.</p> <p>No molasses-based distillery operations have been initiated or carried out. The project proponent confirms that any future proposal for a molasses-based unit will be taken up only after obtaining prior approval from the Ministry of Environment, Forest and Climate Change (MoEF & CC).</p>
ii	Efforts shall be made to reduce PM10 levels in the ambient air and a time-bound action plan shall be submitted. As proposed, Multicyclone followed by bag filters along with stack of adequate height shall be provided to rice husk/coal fired boiler to control particulate emissions within 50 mg/Nm ³ . At no time, the emission levels shall go beyond the prescribed standards. In the event of failure of any pollution control system	<p>To control and reduce PM₁₀ levels in ambient air, the unit has implemented the following measures:</p> <ol style="list-style-type: none"> 1. ESP and bag filters installed for all stacks, supported by a multi-cyclone system, maintaining emissions below 50 mg/Nm³. 2. Water sprinkling carried out on roads and at loading/unloading points. 3. Extensive greenbelt development around the plant.

Distillery Plant (Grained based, 120 KLD) with Cogeneration Power Plant (3.0 MW) at Industrial FEZ, Village Haripur Hinduan & Saidpura, Tehsil Derabassi and District Mohali, Punjab	EC Compliance Report (April 2025- September 2025)
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	<p>adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency.</p>	<ol style="list-style-type: none"> 4. Online Continuous Emission Monitoring System (OCEMS) installed for real-time tracking, with regular validation. 5. Interlocking system ensures automatic process shutdown in case of any pollution control failure. <p>Photographic evidence and emission test reports are enclosed as Annexure-1 and Annexure-2 respectively.</p>
iii	<p>The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be followed.</p>	<p>National Ambient Air Quality Standards (NAAQS) issued by the Ministry vide G.S.R. 826(E) dated 16th November 2009 is being followed.</p> <p>Monitoring results for September 2025 are enclosed as Annexure-3 for reference and record.</p>
iv	<p>In plant, control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Fugitive emissions shall be controlled by providing closed storage, closed handling & conveyance of chemicals/materials, multicyclone separator and water sprinkling system. Dust suppression system including water sprinkling system shall be provided at loading and unloading areas to control dust emissions. Fugitive emissions in the work zone environment, product, raw materials storage area etc. shall be regularly monitored and records should be maintained. The emissions shall conform to the limits imposed by Punjab Pollution Control Board (PPCB).</p>	<p>Effective fugitive emission control measures have been implemented across all potential sources to ensure compliance with CPCB norms.</p> <p>Key measures include:</p> <ol style="list-style-type: none"> 1. Covered storage for raw material and covered conveyor belts for handling and transport of raw materials. 2. Regular sweeping and water sprinkling on internal roads and material handling areas. 3. Asphalted roads within the premises to minimize dust generation. 4. Well-developed and maintained greenbelt all along the plant boundary and inside the premises. 5. Periodic monitoring of fugitive emissions with proper record-keeping to ensure emissions remain within prescribed limits.

Distillery Plant (Grained based, 120 KLD) with Cogeneration Power Plant (3.0 MW) at Industrial FEZ, Village Haripur Hinduan & Saidpura, Tehsil Derabassi and District Mohali, Punjab	EC Compliance Report (April 2025- September 2025)
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		Photographic evidence of the control measures (asphalted roads and covered conveyors) is enclosed as Annexure-4 .
v	The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB guidelines. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution.	The industry operates DG sets only as a backup power source during emergencies. Each DG set is provided with an acoustic enclosure to control noise levels and a stack height of 10.5 meters (from ground level) to ensure proper dispersion of emissions. Regular emission and noise monitoring is carried out to confirm compliance with the prescribed environmental standards and guidelines. Annexure is attached, Annexure no-2
vi	The company shall upload the status of compliance of the stipulated environmental clearance conditions, including results of monitored data on its website and shall update the same periodically. It shall simultaneously be sent to the regional office of MOEF, the respective Zonal office of CPCB and the PPCB. The levels of PM10, SO2, NOx, CO and HC (Methane) in ambient air shall be monitored and displayed at a convenient location near the main gate of the company and at important public places.	The project proponent ensures full compliance with the Environmental Clearance (EC) conditions by regularly updating and publishing monitoring data on its official website and the Parivesh 2.0 portal, promoting transparency and accountability. The compliance reports are also submitted to the MoEF&CC Regional Office, Central Pollution Control Board (CPCB) Zonal Office, and the Punjab Pollution Control Board (PPCB) on the regular basis. Ambient air quality parameters — PM ₁₀ , SO ₂ , NO _x , CO, and HC (Methane) — are being monitored regularly, and the results are displayed at the main gate of the plant premises for public awareness. Emission display board picture is attached in Annexure No-5
vii	Total fresh water requirement for distillery including CPP shall not exceed 10 KL/KL of the alcohol production (i.e., 1200 m ³ /day). Prior permission for the drawl of 1200 m ³ /day shall be obtained from the Central Ground Water	The total fresh water consumption for the distillery and captive Power Plant (CPP) remains within 10 KL per KL of alcohol produced, as stipulated. A logbook recording fresh water usage for the last six months is maintained, and a scanned copy is enclosed as Annexure-6A .

Distillery Plant (Grained based, 120 KLD) with Cogeneration Power Plant (3.0 MW) at Industrial FEZ, Village Haripur Hinduan & Saidpura, Tehsil Derabassi and District Mohali, Punjab	EC Compliance Report (April 2025- September 2025)
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	Authority/State Ground Water Board. A copy of water permission from concerned Authority shall be submitted to the Ministry's Regional Office at Chandigarh.	The unit has obtained NOC for groundwater withdrawal from the Central Ground Water Authority (CGWA) vide Letter No. 21-4(413)/NWR/CGWA/2011-400 dated 13th April 2011, attached as Annexure-6B . Additionally, permission from the Punjab Water Regulation and Development Authority (PWRDA) for groundwater extraction has been secured and is attached as Annexure-6C . A copy of this permission has also been submitted to the Regional Office, MoEF&CC, Chandigarh.
viii	Efforts shall be made to reduce the fresh water requirement from ground water source by adopting 3 R's (Reduce, Reuse and Recycle) concept.	The company has adopted following measures to reduce fresh water requirement from ground water source by adopting 3 R's using following measures: (A) Reuse: 1. Ash is being given to bricks manufactures. (B) Recycle: The liquid waste goes to MEE (Multi effect Evaporator), the MEE condensate goes to the treatment plant, and after treatment the clean water is reused for cooling towers, dust control, and gardening. (C) Recovery: The DDGS recovered from decantation and evaporation process is being sold for cattle feeding. The process being used to make efforts to reduce the fresh water requirement from ground water is shown in Annexure 7 .
ix	Spent wash generation shall not exceed 6 Kl/Kl of alcohol production (i.e., 720 KLPD). As proposed spent wash shall be passed through decanter and concentrated in multi-effect evaporator.	Spent wash generation is not exceeding 6 Kl/Kl of alcohol production. To achieve 'Zero' discharge, company has adopted following measures: Key initiatives include: 1. Spent Wash Management:

<p>Thick syrup and wet cake shall be mixed together to form DWGS to achieve ‘zero’ discharge. Spent lees, MEE condensate and Utilities wastewater shall be treated in ETP and water quality of treated effluent shall meet the norms prescribed by CPCB/SPCB and treated effluent shall be recycled/ reused within the factory premises.</p>	<p>Thick slops (spent wash) are processed through a decanter centrifuge to separate solids as <i>wet cake</i>. The thin slops are partly recycled back to the process and partly sent to the Multi-Effect Evaporator (MEE) for concentration into syrup. This syrup is mixed with the wet cake to produce Distillers Wet Grain Soluble (DWGS), which is dried using steam to form Distillers Dried Grain Soluble (DDGS) — a valuable by-product used as cattle feed.</p> <ol style="list-style-type: none"> 2. Spent Lees Utilization: The spent lees from the primary distillation (pre-rectifier) column are recycled into the liquefaction process and utilized as dilution water for slurry preparation, reducing freshwater dependency. 3. Condensate Recycling: Process condensate from MEE is cooled, neutralized, filtered, and recycled back into the process after treatment in the Condensate Polishing Unit (CPU). 4. Effluent Treatment and Reuse: A 3+1 stage MEE system with dryer is operational for efficient recovery and reuse of water. Treated wastewater from the Effluent Treatment Plant (ETP) is completely reused within the plant, ensuring zero liquid discharge. 5. Boiler and Cooling Tower Blowdown: Boiler blowdown water is recycled into cooling towers and used for ash quenching,
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		<p>while cooling tower blowdown is fully utilized for internal purposes.</p> <p>6. Regular Monitoring: The unit conducts routine wastewater analysis to ensure compliance with the Environmental (Protection) Rules, 1986.</p> <p>Treated effluent monitoring results for April 2025 to September 2025, tested by both NABL-accredited laboratory and Punjab Pollution Control Board (PPCB), are enclosed as Annexure-8.</p>
x	No effluent from distillery and cogeneration power plant shall be discharged outside the factory premises and 'Zero' effluent discharge concept shall be adopted.	The industry is completely based on Zero Liquid Discharge process. The Effluent generated from process is treated in Effluent Treatment Plant and treated water is recycled back to the plant.
xi	Distiller's Wet Grains with Soluble (DWGS) shall be fed to the dryer to form Distiller's Dry Grains with Soluble (DDGS).	Distillers dried grains with soluble (DDGS) is a widely used for cattle feed which is formed by drying Distillers Wet Grains with Soluble (DWGS).
xii	Process effluent/any wastewater shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.	There are different drains for process effluent/waste water and storm water to pass. Therefore, the two does not mix in any case. Photograph showing garland drain has been attached as Annexure 9 .
xiii	No storage of wet cake should be done at site to avoid odour problem	The wet cake is not being stored at the site and immediately processed in dryer to form DDGS.
xiv	Spent wash shall be stored in impervious lagoon with HDPE lining as per CPCB guidelines and shall be kept in proper condition to prevent ground water pollution. Storage capacity of spent wash lagoon shall be for 5 days.	During any emergency or hurdles condition, the spent wash is to be stored in an impervious pucca lagoon (holding tank) lined with HDPE, ensuring zero seepage and preventing any risk of groundwater contamination. The storage facility has been designed and is maintained as per CPCB guidelines and

		recommendations. Photographic evidence of the spent wash lagoon is enclosed. Annexure-9A.
xv	Adequate numbers of ground water quality monitoring stations by providing piezometers around the project area shall be set up. Sampling and trend analysis monitoring must be made on monthly a basis and report submitted to SPCB and this Ministry. The ground water quality monitoring for pH, BOD, COD, Chloride, Sulphate and Total Dissolve Solids shall be monitored and report submitted to the Ministry's Regional Office at Chandigarh and PPCB.	The company has installed piezometers around the project area to monitor groundwater quality. The latest groundwater quality monitoring results, are attached as Annexure 10. These results are submitted to the respective authorities, including the Ministry's Regional Office in Chandigarh and the Punjab Pollution Control Board (PPCB), along with the six-monthly compliance reports.
xvi	Rice husk storage shall be done in such a way that it does not get air borne or fly around due to wind. For this, it shall be kept in wet form.	Raw materials are stored in covered yards, so that it does not get air borne or fly around due to wind. Photograph is attached as annexure 11
xvii	Boiler ash shall be stored separately as per CPCB guidelines so that it shall not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing along with the storm water. Direct exposure of workers to fly ash & dust shall be avoided.	The industry ensures proper handling and storage of boiler ash to prevent it from becoming air borne. Fly ash is stored in dedicated silos and transported through covered trucks, effectively minimizing dust dispersion and protecting ambient air quality. Adequate safety measures are in place to prevent worker exposure, and precautions are taken to ensure that ash is not carried by wind or stormwater, in strict compliance with CPCB guidelines. Photograph of ash silo and covered setup for dust control is attached as Annexure 12
xviii	Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 1999 as amendment in 2003. Fly ash	Fly ash from the boilers is being given to brick manufacturers. MoU signed with brick manufacturers has been attached as Annexure 13.

	shall be provided to cement and brick manufacturers for further utilization.	
xix	Detailed plan for disposal of boiler ash shall be submitted to the Ministry's regional office at Chandigarh within 1 month from dated of issue of letter.	A detailed plan for the disposal of boiler ash has been submitted to the Ministry's Regional Office at Chandigarh within one month from the date of issue of the letter.
xx	Firefighting system shall be as per the OISD 117 norms and cover all areas where alcohol is produced, handled and stored. Provision of foam system for firefighting shall be made to control fire from the alcohol storage tank.	<p>The company has implemented comprehensive fire protection and emergency preparedness measures across the plant premises, which include:</p> <ol style="list-style-type: none"> 1. Accessible firefighting infrastructure such as fire water pumps, hydrants, and alarm stations at strategic locations. 2. Availability of first-aid and medical facilities within the factory premises. 3. Clearly marked emergency escape routes leading to designated assembly points. 4. Adequate firefighting systems installed in the alcohol storage area. <p>Photographs showing firefighting arrangements within the plant premises are enclosed as Annexure-14.</p>
xxi	Risk Assessment shall be carried to assess the fire and explosion risk due to storage of alcohol and report submitted to the Ministry and its Regional Office at Chandigarh within six months.	<p>The industry regularly undertakes Risk assessment to assess the fire and explosion risk due to storage of alcohol impact assessment study.</p> <p>Risk Assessment report prepared by the industry to assess the fire and explosion risk due to storage of alcohol is attached as Annexure 15.</p>
xxii	Occupational health surveillance program shall be undertaken as regular exercise for all the employees. The first aid facilities in the occupational health centre shall be strengthened and the	<ol style="list-style-type: none"> 1. The company is vigilant about the occupational health and safety of its workers. 1. Proper display boards/ safety signs have been provided at various locations within the plant

	regular medical test records of each employee shall be maintained separately.	<p>premises to generate awareness amongst the workers regarding work safety.</p> <p>The company is conducting medical examination of the workers by a medical practitioner on timely basis to keep a check on the health status of the people employed in the company. The company undertakes occupational health surveillance program on regular basis and records maintained as per the Factories Act for future reference. Last Medical Health reports of the workers have been attached as Annexure 16.</p> <p>Photographs showing safety signs installed in the plant premises are attached as Annexure 17.</p>
xxiii	Dedicated parking facility for loading and unloading of material shall be provided in the factory premises. Unit shall develop and implement good traffic management system for their incoming and outgoing vehicles to avoid congestion on the public road.	<p>Proper parking facility is being provided in the plant premises for loading and unloading of material. Unit has developed a good traffic management to avoid congestion on public road system in the plant premises.</p> <p>Photographs showing parking facilities to vehicles for loading and unloading of material are attached as Annexure 18.</p>
xxiv	Green belt shall be in 33 % area to mitigate the effects of fugitive emissions all around the plant as per CPCB guidelines in consultation with the local DFO. Thick greenbelt with suitable plant species shall be developed around the proposed distillery to mitigate the odour problem	<p>The industry has developed a greenbelt and plantation area, which will be maintained in the future.</p> <p>Photographs of the developed greenbelt and plantation are attached as Annexure 19.</p>
xxv.	All the commitments made during the Public Hearing/Public Consultation meeting held on 18th April, 2011 shall be satisfactorily implemented and adequate	All the commitments made during the Public Consultant are being implemented with adequate budget provision decided.

Distillery Plant (Grained based, 120 KLD) with Cogeneration Power Plant (3.0 MW) at Industrial FEZ, Village Haripur Hinduan & Saidpura, Tehsil Derabassi and District Mohali, Punjab	EC Compliance Report (April 2025- September 2025)
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	budget provision shall be made accordingly.	
xxvi.	Provision shall be made for the housing for the construction labor within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile sewage treatment plant, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structure to be removed after the completion of the project. All the construction wastes shall be managed so that there is no impact on the surrounding environment.	All provisions were made for the housing of the construction labour with all necessary facilities during construction phase of the project and this is the operation phase of the plant.
S. No	GENERAL CONDITION	COMPLIANCE STATUS
i.	The project authorities shall strictly adhere to the stipulations made by the Punjab Pollution Control Board.	The industry strictly adheres to the stipulations made by the State Government, Central Pollution Control Board, State Pollution Control Board and any other statutory authority. Renewed Copy of consent to operate for air and water with Certificate No. CTOA/Renewal/SAS/2024/25190889 dated 25/04/2024 & CTOW/Renewal/SAS/2023/25190999 dated 25/04/2024 is attached as Annexure 20 & Annexure 21.
ii.	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess	Rajasthan Liquors Ltd. ensures that no further expansion or modification in the plant will be done without prior approval of the Ministry, Forest & Climate Change (MoEFCC). Prior approval will be taken from the concerned authority if required. The company further applied for the expansion of Grain based distillery from 120 KLPD to 145.2 KLPD by modernization and efficiency improvement at

Distillery Plant (Grained based, 120 KLD) with Cogeneration Power Plant (3.0 MW) at Industrial FEZ, Village Haripur Hinduan & Saidpura, Tehsil Derabassi and District Mohali, Punjab	EC Compliance Report (April 2025- September 2025)
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	the adequacy of conditions imposed and to add additional environmental protection measures required, if any.	industrial FEZ, Village Haripur Hinduan & Saidpura, Tehsil Derabassi, District SAS Nagar (Mohali), Punjab in MoEF&CC, New Delhi and acquired Environmental Clearance vide letter no. J11011/263/2010-IA II(I) dated 21st February, 2020 (Copy is attached as Annexure 22). No work has been started with respect to new EC obtained.
iii.	The locations of ambient air quality monitoring stations shall be decided in consultation with the Punjab Pollution Control Board (PPCB) and it shall be ensured that at least one station is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.	The locations of the ambient air quality monitoring stations were determined in consultation with the Punjab Pollution Control Board (PPCB). One station has been installed in both the upwind and downwind directions, in accordance with the NAAQMS guidelines, and at locations where maximum ground-level concentrations are anticipated.
iv.	The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).	The overall noise levels in and around the plant area is being kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz 75 dBA (day time) and 70 dBA (night time). Last Noise Level Monitoring results is attached as Annexure-23
v.	The Company shall harvest rainwater from the roof-tops of the buildings and storm water drains to recharge the ground water and use the same water for	As per PPCB Notification No. SEE(HQ-2)/F.No.313/2025/33908-26 dated 01.10.2025, trade effluent-generating industries are not permitted to carry out groundwater recharge through rainwater harvesting structures. Accordingly, no recharge-type

	the process activities of the project to conserve fresh water.	rainwater harvesting pits have been provided in the plant. Rooftop rainwater, if collected, is used only for internal storage and reuse, not for recharge. Notification is attached as Annexure- 24 and photograph showing the rainwater collection setup from the roof to is attached as Annexure 24A .
vi.	The Company shall obtain Authorization for collection, storage and disposal of hazardous waste under the Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2008 and its amendment time to time and prior permission from PPCB shall be obtained for disposal of solid / hazardous waste including boiler ash.	The hazardous waste generated from the plant are used oil and boiler ash. Used oil & grease generated from plant machinery/gear boxes as hazardous waste are being / will be sold out to the CPCB authorized recyclers. Regular manifest is submitted for hazardous waste. Manifest is attached as Annexure 25 . Agreement has been done for hazardous waste disposal, the copy of the same is attached as Annexure 26 . Boiler ash from the boilers is given to brick manufacturers, agreement with Brick manufacturer has been attached as Annexure 13 .
vii.	During transfer of materials, spillages shall be avoided and garland drains be constructed to avoid mixing of accidental spillages with domestic wastewater and storm water drains.	Proper garland drains are constructed inside the plant premises to avoid mixing of accidental spillages with domestic wastewater and storm water drains. Photograph of Garland drain has been shown in Annexure 8 .
viii.	Usage of Personnel Protection Equipment by all employees/ workers shall be ensured.	Personnel Protection Equipment such as goggles, rubber gumboots, face shield helmet etc keeping in mind the safety.
ix.	Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to	Training is being imparted to all employees pertaining to their health and safety. It is always ensured to conduct pre-employment and routine medical examination of the employees on regular basis.

Distillery Plant (Grained based, 120 KLD) with Cogeneration Power Plant (3.0 MW) at Industrial FEZ, Village Haripur Hinduan & Saidpura, Tehsil Derabassi and District Mohali, Punjab	EC Compliance Report (April 2025- September 2025)
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	all employees on handling of chemicals shall be imparted.	
x.	The company shall also comply with all the environmental protection measures and safeguards proposed in the project report submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, risk mitigation measures and public hearing relating to the project shall be implemented.	The company complies with environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All recommendations made in EIA/EMP report in respect of environmental management and risk mitigation measures relating to the project are being/will be implemented efficiently.
xi.	The company shall undertake CSR activities and all relevant measures for improving the socio-economic conditions of the surrounding area.	The company has already taken various measures to improve the socio-economic conditions of the area. The company ensures to work efficiently in future as well. The details related to the CSR activities is attached as Annexure 27 .
xii.	The company shall undertake Eco developmental measures including community welfare measures in the project area for the overall improvement of the environment.	The company has already undertaken eco-developmental measures, including community welfare measures like farmers' training for advanced agriculture techniques and awareness training programs for the overall improvement of the environment. Document showing training conducted is attached as annexure 28
xiii.	A separate Environmental Management Cell equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.	A separate environmental management cell equipped with full-fledged laboratory facilities has been set up to carry out the environmental management and monitoring functions. Photograph of lab is attached as annexure 29
xiv.	As proposed, the company shall earmark Rs. 10crores and Rs. 1.0crore towards capital cost and recurring cost per annum	The Project Proponent confirms continuous compliance with the Environment Management Plan. During April–September 2025, an expenditure of ₹92

Distillery Plant (Grained based, 120 KLD) with Cogeneration Power Plant (3.0 MW) at Industrial FEZ, Village Haripur Hinduan & Saidpura, Tehsil Derabassi and District Mohali, Punjab	EC Compliance Report (April 2025- September 2025)
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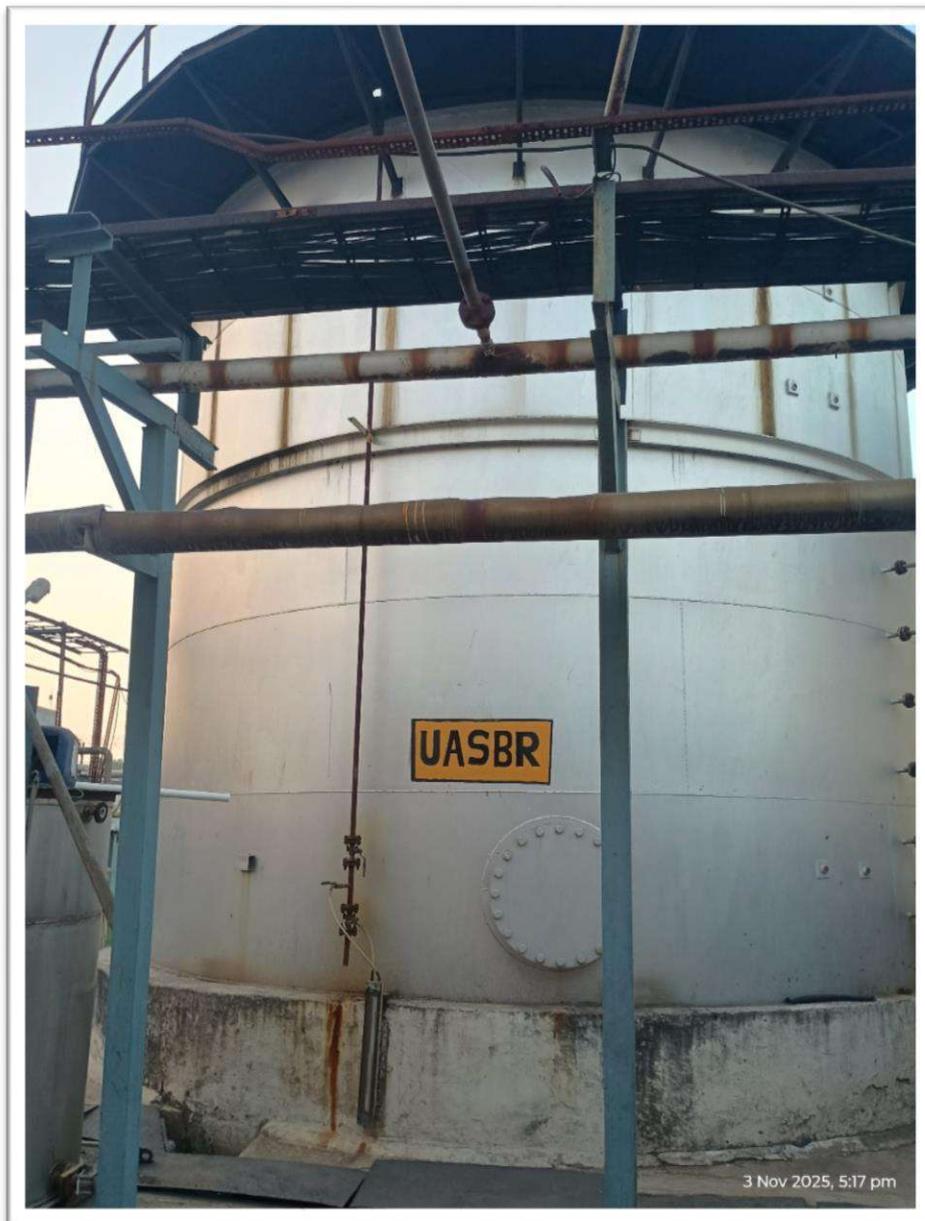
	to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.	lakh has been incurred exclusively for EMP and pollution-control activities. The detailed break-up is enclosed as Annexure-30 .
xv.	A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zila Parishad/Municipal Corporation, Urban local Body and the local NGO, if any, from who suggestions/ representations, if any, were received while processing the proposal.	A copy of the clearance letter was sent to concerned authorities. No suggestions were received while processing the proposal.
xvi.	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the Punjab Pollution Control Board. A copy of the Environmental Clearance and six-monthly compliance status report shall be posted on the website of the company.	The company is submitting six monthly compliance reports on timely basis including results of monitored data (both in hard copies as well as by email) to the respective Regional Office of MoEFCC, the respective Zonal office of CPCB and SPCB. The submission Receipt of the last compliance report (Oct 2024- March 2025) is attached as Annexure 31 .
xvii.	The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be	Environmental Statement Report (Form V) is regularly been submitted to the Punjab Pollution Control Board.

Distillery Plant (Grained based, 120 KLD) with Cogeneration Power Plant (3.0 MW) at Industrial FEZ, Village Haripur Hinduan & Saidpura, Tehsil Derabassi and District Mohali, Punjab	EC Compliance Report (April 2025- September 2025)
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	submitted to the Punjab Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the Chandigarh Regional Offices of MoEF by e-mail.	The last ESR for the financial year 2024-2025 was sent to the board and copy of mail sent to Chandigarh Regional Office, MoEFCC is attached as Annexure 32 .
xviii.	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry at http://envfor.nic.in . This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.	The project proponent has already informed the public that the project has been granted environmental clearance by the MoEFCC and public notice was advertised in the local newspaper after obtaining the Environmental Clearance letter. The advertisement given in both newspapers is attached as Annexure 33 .
xix.	The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.	Agreed to the condition stated and complied.

END OF THE REPORT

Annexure 1 Photographs showing Pollution Control equipment



Electrostatic precipitator



Bag Filter feeding Point



Bag Filter Feeding Point



OCEMS PICS





CHANDIGARH POLLUTION TESTING LABORATORY

(Environmental Monitoring, EIA, NOC, ETP, STP)

H.O. : #372, Sector 15-A, Chandigarh-160 015
 Phone : 0172-4669295
 Lab : E-126, Phase-VII, Indl. Area, Mohali - 160055
 Phone : 0172-5090312
 E-mail : cplle126@gmail.com ; lab@cptl.co.in
 Website : www.cptl.co.in



TEST CERTIFICATE

Format No. CPTLF7.8-I(S.A)

REPORT No. CPTL/2025/09/08(A)

REPORTING DATE: 18-09-2025

NAME OF INDUSTRY:

M/s. RAJASTHAN LIQUOR LTD. (DISTILLERY),
 VILL.- HARIPUR HINDUAN, BARWALA ROAD,
 DERA BASSI, DISTT.- SAS NAGAR, MOHALI (P.B).

SAMPLE PARTICULARS

Sampling Plan Ref No.:	CPTLF 7.3-I	Type of Sample:	Stack Air Emission
Sampling Method:	CPTL/SM/01	Point of Sample:	From Port Hole On Stack
Date of Sample Collection:	16-09-2025	Environmental Conditions:	Normal
Date of Sample Received in Lab.:	16-09-2025	Analysis Duration:	16-09-2025 to 18-09-2025
Sample Identification No.:	CPTL/2025/09/08(A)	Sample Collected By:	Daljeet Singh & Team
Nature of Sample:	Air Sample		

TECHNICAL DATA

1.	Name of Plant/Section	DG Set-II (500.0 KVA) (S No. FTJ00778)
2.	Source of Emission	Burning of Fuel
3.	*Type Of Fuel/Quantity	Diesel @ 45.0 Ltr/Hr
4.	Location of Sampling Point	As per Standard
5.	*Diameter of Stack	8.0" (Top) ; 10.0" (Bottom)
6.	*Height of Stack	7.0 meter from Ground Level
7.	Sampling Time	35.0 minutes
8.	Ambient Air Temperature	36.8°C
9.	Stack Air Temperature	183°C
10.	Velocity of Flue Gases	21.7 m/sec
11.	*APCD	NA

PARAMETERS	RESULTS	PRESCRIBED STANDARD	TEST METHOD
Particulate Matter (PM), mg/Nm ³	31.4	75	IS:11255: (P-1): 1985
Nitrogen Dioxide (NO ₂), mg/Nm ³	308	1458	IS:11255: (P-7): 1988
Carbon Monoxide (CO), mg/Nm ³	41.2	150	IS:13720: 1992

NA-Not Applicable

*represent the information provided by the customer

Chemist In-Charge

Date: 18/9/2025

Mr. Sital Singh (CEO)

(Authorized Signatory)
 Date: 18/9/2025

- The results are related to test items only.
- This certificate is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without approval of laboratory.
- Sample will be destroyed after retention time unless otherwise specified

END OF REPORT



CHANDIGARH POLLUTION TESTING LABORATORY

(Environmental Monitoring, EIA, NOC, ETP, STP)

H.O. : #372, Sector 15-A, Chandigarh-160 015
 Phone : 0172-4669295
 Lab : E-126, Phase-VII, Indl. Area, Mohali - 160055
 Phone : 0172-5090312
 E-mail : cptle126@gmail.com ; lab@cptl.co.in
 Website : www.cptl.co.in



TEST CERTIFICATE

Format No. CPTLF7.8-I(S.A)

REPORT No. CPTL/2025/09/07(A)
 REPORTING DATE: 18-09-2025

NAME OF INDUSTRY: M/s. RAJASTHAN LIQUOR LTD. (DISTILLERY),
 VILL.- HARIPUR HINDUAN, BARWALA ROAD,
 DERA BASSI, DISTT.- SAS NAGAR, MOHALI (P.B).

SAMPLE PARTICULARS

Sampling Plan Ref No.:	CPTLF 7.3-I	Type of Sample:	Stack Air Emission
Sampling Method:	CPTL/SM/01	Point of Sample:	From Port Hole On Stack
Date of Sample Collection:	16-09-2025	Environmental Conditions:	Normal
Date of Sample Received in Lab.:	16-09-2025	Analysis Duration:	16-09-2025 to 18-09-2025
Sample Identification No.:	CPTL/2025/09/07(A)	Sample Collected By:	Daljeet Singh & Team
Nature of Sample:	Air Sample		

TECHNICAL DATA

1.	Name of Plant/Section	DG Set-I (1010.0 KVA) (S No. SYCO5963)
2.	Source of Emission	Burning of Fuel
3.	*Type Of Fuel/Quantity	Diesel @ 85-90 Ltr/Hr
4.	Location of Sampling Point	As per Standard
5.	*Diameter of Stack	10.0" (Top) ; 10.0" (Bottom)
6.	*Height of Stack	7.0 meter from Ground Level
7.	Sampling Time	35.0 minutes
8.	Ambient Air Temperature	36.2°C
9.	Stack Air Temperature	192°C
10.	Velocity of Flue Gases	22.3 m/sec
11.	*APCD	NA

PARAMETERS	RESULTS	PRESCRIBED STANDARD	TEST METHOD
Particulate Matter (PM), mg/Nm ³	31.8	75	IS:11255: (P-1): 1985
Nitrogen Dioxide (NO ₂), mg/Nm ³	311	1458	IS:11255: (P-7): 1988
Carbon Monoxide (CO), mg/Nm ³	40.8	150	IS:13720: 1992

NA-Not Applicable

*represent the information provided by the customer

Chemist in Charge
 Date: 18/09/2025

Mr. Sital Singh (CEO)
 (Authorized Signatory)
 Date: 18/09/2025

- The results are related to test items only.
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 Website : www.cptl.co.in



TEST CERTIFICATE

Format No. CPTLF7.8-I(A.A)

REPORT No. CPTL/2025/09/10(A)
 REPORTING DATE: 18-09-2025

NAME OF INDUSTRY: M/s. RAJASTHAN LIQUOR LTD. (DISTILLERY),
 VILL.- HARIPUR HINDUAN, BARWALA ROAD,
 DERA BASSI, DISTT.- SAS NAGAR, MOHALI (P.B).

SAMPLE PARTICULARS

Sampling Plan Ref No.:	CPTLF 7.3-1	Type of Sample:	Air Quality
Sampling Method:	CPTL/SM/01	Location of Sampling Station:	Near Main Gate
Date of Sample Collection.	16-09-2025	Environmental Conditions:	Normal
Date of Sample Received in Lab.:	16-09-2025	Analysis Duration:	16-09-2025 To 18-09-2025
Sample Identification No.:	CPTL/2025/09/10(A)	Sample Collected By:	Daljeet Singh & Team
Nature of Sample:	Ambient Air		

TECHNICAL DATA

1.	Location of sampling station	Near Main Gate
2.	Instrument used for sampling	RDS, FPS, Benzene Sampler, Gaseous attachment & CO analyser
3.	Time period for sampling	480.0 minutes

PARAMETERS	RESULTS	PRESCRIBED STANDARD AS PER NAAQS NOTIFICATION, 18 TH NOVEMBER, 2009	TEST METHOD
Particulate Matter (PM ₁₀), µg/m ³	78.8	100	IS 5182 (P-23) : 2006
Particulate Matter (PM _{2.5}), µg/m ³	40.0	60	IS: 5182:(P-24):2019
Sulphur dioxide (SO ₂), µg/m ³	6.8	80	IS: 5182 (P-2): (Part 2/Sec 1) : 2023
Nitrogen Dioxide (NO ₂), µg/m ³	16.8	80	IS 5182 (P-6): 2006
Ammonia (NH ₃), µg/m ³	BDL (DL-20)	400	IS 5182 (P-25): 2018
Ozone (O ₃), µg/m ³	20.4	100	IS 5182 (P-9) : 1974
Benzene (C ₆ H ₆), µg/m ³	BDL (DL-0.5)	05	IS: 5182 (P-11): 2006
Benzo (a) Pyrene (BaP), ng/m ³	BDL (DL-0.9)	01	IS: 5182 (P-12): 2004
Carbon monoxide (CO), mg/m ³	0.72	4	IS: 5182 (P-10): 1999
Lead (Pb), µg/m ³	BDL (DL-0.1)	1.0	IS: 5182 (P-22): 2004
Nickel (Ni), ng/m ³	BDL (DL-5.0)	20	IS:5182 (P-26): 2020
Arsenic (As), ng/m ³	BDL (DL-0.7)	06	CPCB Guideline, Volume-1: Page No.-47:2011

BDL-Below Detection Limit
 DL-Detection Limit

Chemist In-Charge
 Date: 18/9/2025

Mr. Sital Singh (CEO)
 (Authorized Signatory)
 Date: 18/09/2025

- The results are related to test items only.
- This certificate is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without approval of laboratory.
- Sample will be destroyed after retention time unless otherwise specified.

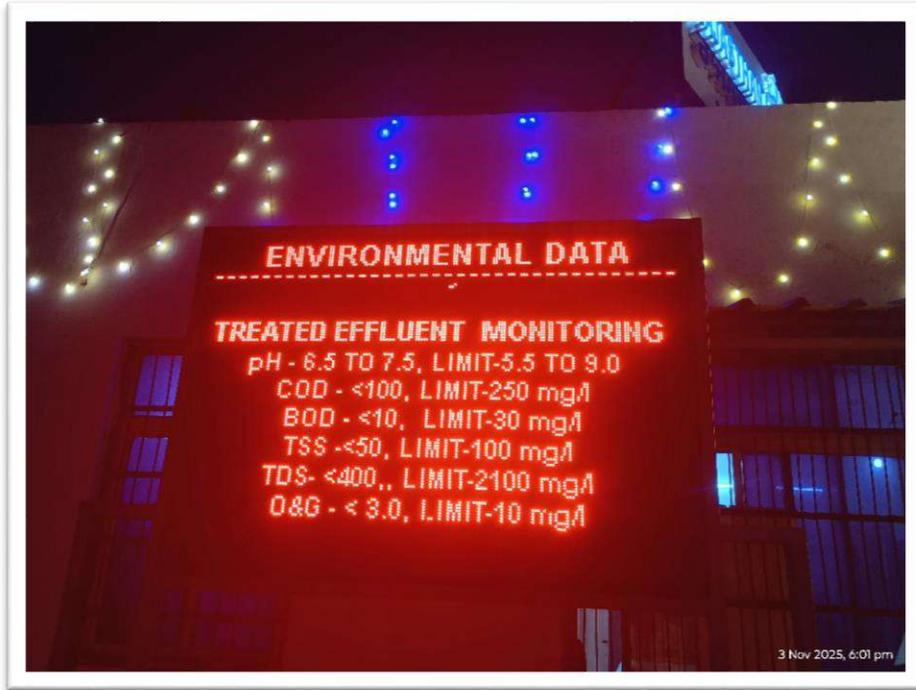
Annexure 4: Photographs showing Asphalted Roads and Conveyor Belt







Annexure 5 : Photographs Showing display board on the main gate, showing monitoring results



RAJASTHAN LIQUORS LTD. (Distillery Division)

RAW WATER CONSUMPTION - MONTH : April-2025

Date	Borewell (1) Water Consumption			Borewell (2) Water Consumption			Borewell (3) Water Consumption			Remarks
	Initial Reading	Final Reading	Consumption (KI)	Initial Reading	Final Reading	Consumption (KI)	Initial Reading	Final Reading	Consumption (KI)	
01.04.2025	401779	401986	207	471695	471866	171	200170	200377	207	✓
02.04.2025	401986	402197	211	471866	472042	176	200377	200604	227	✓
03.04.2025	402197	402471	274	472042	472233	191	200816	200816	212	✓
04.04.2025	402471	402706	235	472233	472414	181	200816	201039	223	✓
05.04.2025	402706	402950	244	472414	472630	216	201039	201261	222	✓
06.04.2025	402950	403220	270	472630	472816	186	201261	201484	223	✓
07.04.2025	403220	403482	262	472816	472940	124	201484	201655	171	✓
08.04.2025	403482	403755	273	472940	473140	200	201655	201880	225	✓
09.04.2025	403755	404036	281	473140	473331	191	201880	202048	168	✓
10.04.2025	404036	404328	292	473331	473558	227	202048	202207	159	✓
11.04.2025	404328	404550	222	473558	473783	225	202207	202381	174	✓
12.04.2025	404550	404791	241	473783	474001	218	202381	202554	173	✓
13.04.2025	404791	405059	268	474001	474201	200	202554	202714	160	✓
14.04.2025	405059	405296	237	474201	474410	209	202714	202879	165	✓
15.04.2025	405296	405540	244	474410	474549	139	202879	203064	185	✓
16.04.2025	405540	405780	240	474549	474804	255	203064	203244	180	✓
17.04.2025	405780	406045	265	474804	475000	196	203244	203455	211	✓
18.04.2025	406045	406250	205	475000	475199	199	203455	203616	211	✓
19.04.2025	406250	406478	228	475199	475402	203	203616	203867	201	✓
20.04.2025	406478	406765	287	475402	475651	249	203867	204070	203	✓
21.04.2025	406765	407035	270	475651	475890	239	204070	204251	181	✓
22.04.2025	407035	407286	251	475890	476121	231	204251	204481	230	✓
23.04.2025	407286	407599	313	476121	476356	235	204481	204680	199	✓
24.04.2025	407599	407858	259	476356	476656	300	204680	204910	230	✓
25.04.2025	407858	408154	296	476656	476934	278	204910	205132	222	✓
26.04.2025	408154	408500	346	476934	477233	299	205132	205364	232	✓
27.04.2025	408500	408828	328	477233	477436	203	205364	205614	250	✓
28.04.2025	408828	409144	316	477436	477735	299	205614	205838	224	✓
29.04.2025	409144	409501	357	477735	478055	320	205838	206028	190	✓
30.04.2025	409501	409847	346	478055	478311	256	206028	206222	194	✓

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RAJASTHAN LIQUORS LTD. (Distillery Division)

RAW WATER CONSUMPTION - MONTH: May. 2025

Date	Borewell (1) Water Consumption			Borewell (2) Water Consumption			Borewell (3) Water Consumption			Remarks
	Initial Reading	Final Reading	Consumption (KI)	Initial Reading	Final Reading	Consumption (KI)	Initial Reading	Final Reading	Consumption (KI)	
01.05.2025	409847	410155	308	478311	478561	250	206222	206447	225	B
02.05.2025	410155	410401	246	478561	478771	210	206447	206634	187	B
03.05.2025	410401	410711	310	478771	478985	214	206634	206859	225	B
04.05.2025	410711	410930	219	478985	479210	225	206859	206981	122	B
05.05.2025	410930	411204	274	479210	479413	203	206981	207155	174	B
06.05.2025	411204	411461	257	479413	479611	198	207155	207340	185	B
07.05.2025	411461	411730	269	479611	479822	211	207340	207563	223	B
08.05.2025	411730	412004	274	479822	480017	195	207563	207733	170	B
09.05.2025	412004	412247	243	480017	480217	200	207733	207934	201	B
10.05.2025	412247	412571	324	480217	480423	206	207934	208150	216	B
11.05.2025	412571	412893	322	480423	480621	198	208150	208399	249	B
12.05.2025	412893	413182	289	480621	480834	213	208399	208634	235	B
13.05.2025	413182	413508	326	480834	481078	244	208634	208886	252	B
14.05.2025	413508	413821	313	481078	481309	231	208886	209104	218	B
15.05.2025	413821	414139	318	481309	481599	290	209104	209340	236	B
16.05.2025	414139	414419	280	481599	481881	282	209340	209584	244	B
17.05.2025	414419	414760	341	481881	482155	274	209584	209783	199	B
18.05.2025	414760	415100	340	482155	482429	274	209783	209997	214	B
19.05.2025	415100	415348	248	482429	482683	254	209997	210053	56	B
20.05.2025	415348	415613	265	482683	482940	257	210053	210274	221	B
21.05.2025	415613	415895	282	482940	483190	250	210274	210501	227	B
22.05.2025	415895	416168	273	483190	483437	247	210501	210746	245	B
23.05.2025	416168	416440	272	483437	483685	248	210746	210989	243	B
24.05.2025	416440	416705	265	483685	483941	256	210989	211195	206	B
25.05.2025	416705	416974	269	483941	484178	237	211195	211412	217	B
26.05.2025	416974	417270	296	484178	484344	166	211412	211685	273	B
27.05.2025	417270	417544	274	484344	484534	190	211685	211920	235	B
28.05.2025	417544	417811	267	484534	484780	246	211920	212179	259	B
29.05.2025	417811	418074	263	484780	484970	190	212179	212448	269	B
30.05.2025	418074	418335	261	484970	485205	235	212448	212657	209	B
31.05.2025	418335	418607	272	485205	485346	141	212657	212820	163	B

RAJASTHAN LIQUORS LTD. (Distillery Division)

RAW WATER CONSUMPTION - MONTH : June - 2025

Date	Borewell (1) Water Consumption			Borewell (2) Water Consumption			Borewell (3) Water Consumption			Remarks
	Initial Reading	Final Reading	Consumption (KI)	Initial Reading	Final Reading	Consumption (KI)	Initial Reading	Final Reading	Consumption (KI)	
01.06.2025	418607	418916	309	485346	485639	293	212820	213060	240	B
02.06.2025	418916	419381	465	485639	485800	161	213060	213321	261	B
03.06.2025	419381	419638	257	485800	486088	288	213321	213588	267	B
04.06.2025	419638	419876	238	486088	486306	218	213588	213808	220	B
05.06.2025	419876	420169	293	486306	486527	221	213808	214067	259	B
06.06.2025	420169	420387	218	486527	486760	233	214067	214313	246	B
07.06.2025	420387	420603	216	486760	486982	222	214313	214566	253	ADITYA
08.06.2025	420603	420837	234	486982	487210	228	214566	214797	231	ADITYA
09.06.2025	420837	421133	296	487210	487456	246	214797	215024	227	B
10.06.2025	421133	421375	242	487456	487691	235	215024	215258	234	B
11.06.2025	421375	421657	282	487691	487919	228	215258	215485	227	B
12.06.2025	421657	421935	278	487919	488168	249	215485	215708	223	B
13.06.2025	421935	422167	232	488168	488427	259	215708	215925	217	B
14.06.2025	422167	422427	260	488427	488681	254	215925	216122	197	B
15.06.2025	422427	422691	264	488681	488870	189	216122	216299	177	B
16.06.2025	422691	422907	216	488870	489125	255	216299	216466	167	B
17.06.2025	422907	423212	305	489125	489354	229	216466	216648	182	B
18.06.2025	423212	423441	229	489354	489551	197	216648	216827	179	B
19.06.2025	423441	423654	213	489551	489724	173	216827	217016	189	B
20.06.2025	423654	423903	249	489724	489874	150	217016	217217	201	B
21.06.2025	423903	424143	240	489874	490082	208	217217	217393	176	B
22.06.2025	424143	424403	260	490082	490313	231	217393	217565	172	B
23.06.2025	424403	424620	217	490313	490546	233	217565	217749	184	B
24.06.2025	424620	424841	221	490546	490688	142	217749	217979	230	B
25.06.2025	424841	425079	238	490688	490886	198	217979	218122	143	B
26.06.2025	425079	425282	203	490886	491078	192	218122	218307	185	B
27.06.2025	425282	425533	251	491078	491286	208	218307	218450	143	B
28.06.2025	425533	425686	153	491286	491349	63	218450	218566	116	B Boiler Shut at 11:15
29.06.2025	425686	425935	249	491349	491562	213	218566	218743	177	B Boiler Start
30.06.2025	425935	426135	200	491562	491677	115	218743	218895	152	B

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RAJASTHAN LIQUORS LTD. (Distillery Division)

RAW WATER CONSUMPTION - MONTH : July - 2025

Date	Borewell (1) Water Consumption			Borewell (2) Water Consumption			Borewell (3) Water Consumption			Remarks
	Initial Reading	Final Reading	Consumption (KI)	Initial Reading	Final Reading	Consumption (KI)	Initial Reading	Final Reading	Consumption (KI)	
01.07.2025	426185	426360	225	491677	491746	69	218895	219014	119	0
02.07.2025	426360	426412	52	491746	491815	69	219014	219172	158	0
03.07.2025	426412	426577	165	491815	491934	119	219172	219299	127	0
04.07.2025	426577	426863	286	491934	491990	56	219299	219394	95	0
05.07.2025	426863	427087	224	491990	492200	210	219394	219569	175	0
06.07.2025	427087	427304	217	492200	492411	211	219569	219745	176	0
07.07.2025	427304	427576	272	492411	492630	219	219745	219939	194	0
08.07.2025	427576	427841	265	492630	492878	248	219939	220116	177	0
09.07.2025	427841	428064	223	492878	493073	195	220116	220337	221	0
10.07.2025	428064	428155	91	493073	493146	73	220337	220524	187	0
11.07.2025	428155	428310	155	493146	493269	123	220524	220704	180	0
12.07.2025	428310	428512	202	493269	493466	197	220704	220895	191	0
13.07.2025	428512	428738	226	493466	493650	184	220895	221135	240	0
14.07.2025	428738	428948	210	493650	493773	123	221135	221363	228	0
15.07.2025	428948	429203	255	493773	493964	191	221363	221580	217	0
16.07.2025	429203	429451	248	493964	494201	237	221580	221861	281	0
17.07.2025	429451	429630	179	494201	494347	146	221801	222015	214	0
18.07.2025	429630	429850	220	494347	494540	193	222015	222203	188	0
19.07.2025	429850	430069	219	494540	494775	235	222203	222407	204	0
20.07.2025	430069	430340	271	494775	494938	163	222407	222583	176	0
21.07.2025	430340	430548	208	494938	495106	168	222583	222740	157	0
22.07.2025	430548	430706	158	495106	495298	192	222740	222908	168	0
23.07.2025	430706	430913	207	495298	495429	131	222908	223092	184	0
24.07.2025	430913	431152	239	495429	495606	177	223092	223292	200	0
25.07.2025	431152	431433	281	495606	495801	195	223292	223502	210	0
26.07.2025	431433	431688	255	495801	496023	222	223502	223717	215	0
27.07.2025	431688	431977	289	496023	496231	208	223717	223925	208	0
28.07.2025	431977	432236	259	496231	496453	222	223925	224136	211	0
29.07.2025	432236	432459	223	496453	496627	174	224136	224330	194	0
30.07.2025	432459	432684	225	496627	496884	257	224330	224511	181	0
31.07.2025	432684	432888	204	496884	497022	138	224511	224680	169	0

RAJASTHAN LIQUORS LTD. (Distillery Division)

RAW WATER CONSUMPTION - MONTH : August - 2025

Date	Borewell (1) Water Consumption			Borewell (2) Water Consumption			Borewell (3) Water Consumption			Remarks
	Initial Reading	Final Reading	Consumption (KI)	Initial Reading	Final Reading	Consumption (KI)	Initial Reading	Final Reading	Consumption (KI)	
01.08.2025	432888	433088	200	497022	497094	72	224680	224800	121	B
02.08.2025	433089	433295	206	497094	497272	178	224800	224977	177	A
03.08.2025	433295	433513	218	497272	497462	190	224977	225185	208	A
04.08.2025	433513	433778	265	497462	497550	88	225185	225260	75	A
05.08.2025	433778	434010	232	497550	497619	69	225260	225350	90	A
06.08.2025	434010	434257	247	497619	497692	73	225350	225456	106	A
07.08.2025	434257	434521	264	497692	497777	85	225456	225555	99	A
08.08.2025	434521	434774	253	497777	497896	119	225555	225671	116	B
09.08.2025	434774	434986	212	497896	498061	165	225671	225852	181	B
10.08.2025	434986	435347	361	498061	498221	160	225852	226051	199	B
11.08.2025	435347	435617	270	498221	498418	197	226051	226262	212	B
12.08.2025	435617	435817	200	498418	498571	153	226263	226473	210	B
13.08.2025	435817	436032	215	498571	498753	182	226473	226643	170	B
14.08.2025	436032	436302	270	498753	498838	85	226643	226807	164	B
15.08.2025	436302	436574	272	498838	498979	141	226807	226943	136	B
16.08.2025	436574	436823	249	498979	499067	88	226943	227046	103	A
17.08.2025	436823	437079	256	499067	499159	92	227046	227173	127	A
18.08.2025	437079	437321	242	499159	499324	165	227173	227425	252	A
19.08.2025	437321	437581	260	499324	499518	194	227425	227586	161	A
20.08.2025	437581	437915	334	499518	499593	75	227586	227751	165	A
21.08.2025	437915	438120	205	499593	499801	208	227751	227954	203	A
22.08.2025	438120	438347	227	499801	499956	155	227954	228148	194	B
23.08.2025	438347	438557	210	499956	500135	179	228148	228269	121	AD/VA
24.08.2025	438557	438804	247	500135	500327	192	228269	228418	149	B
25.08.2025	438804	439079	275	500327	500540	213	228418	228557	139	B
26.08.2025	439079	439347	268	500540	500755	215	228557	228669	112	B
27.08.2025	439347	439624	277	500755	500785	30	228669	228946	277	B
28.08.2025	439624	439883	259	500785	501044	259	228946	229113	167	B
29.08.2025	439883	440164	281	501044	501089	45	229113	229123	10	B
30.08.2025	440164	440407	243	501089	501465	376	229123	229123	-	B
31.08.2025	440407	440692	285	501465	501839	374	229123	229123	-	B

Borewell - 3. In
Borewell - 3. In

RAJASTHAN LIQUORS LTD. (Distillery Division)

RAW WATER CONSUMPTION - MONTH: SEPTEMBER 2025

Date	Borewell (1) Water Consumption			Borewell (2) Water Consumption			Borewell (3) Water Consumption			Remarks
	Initial Reading	Final Reading	Consumption (KI)	Initial Reading	Final Reading	Consumption (KI)	Initial Reading	Final Reading	Consumption (KI)	
01.09.2025	440692	440880	188	501839	501924	85	229123	229123	-	Bore-3, 1st in Undermain
02.09.2025	440880	441207	327	501924	502015	91	229123	229123	-	Bore-3, 1st in Undermain
03.09.2025	441207	441522	315	502015	502103	88	229123	229123	-	Bore-3, 1st in Undermain
04.09.2025	441522	441801	279	502103	502244	141	229123	229123	-	Bore-3, 1st in Undermain
05.09.2025	441801	442070	269	502244	502505	261	229123	229123	-	Bore-3 in Undermain
06.09.2025	442070	442407	337	502505	502780	275	229123	229123	-	Bore-3 in Undermain
07.09.2025	442407	442740	333	502780	503041	261	229123	229123	-	Bore-3 in Undermain
08.09.2025	442740	443068	328	503041	503259	216	229123	229123	-	Bore-3 in Undermain
09.09.2025	443068	443487	419	503259	503492	235	229123	229123	-	Bore-3 in Undermain
10.09.2025	443487	443807	320	503492	503756	264	229123	229123	-	Bore-3 in Undermain
11.09.2025	443807	444113	306	503756	504016	260	229123	229123	-	Bore-3 in Undermain
12.09.2025	444113	444420	307	504016	504212	196	229123	229123	-	Bore-3, 1st in Undermain
13.09.2025	444420	444701	281	504212	504351	139	229123	229123	-	Bore-3 in Undermain
14.09.2025	444701	445065	364	504351	504482	131	229123	229123	-	Bore-3 in Undermain
15.09.2025	445065	445310	245	504482	504671	189	229123	229123	-	Bore-3, 1st in Undermain
16.09.2025	445310	445674	364	504671	504828	157	229123	229123	-	Bore-3 in Undermain
17.09.2025	445674	445879	205	504828	504948	120	229123	229329	206	B
18.09.2025	445879	446065	186	504948	505116	168	229329	229493	164	B
19.09.2025	446065	446319	254	505116	505274	158	229493	229622	129	B
20.09.2025	446319	446544	225	505274	505430	156	229622	229703	81	B
21.09.2025	446544	446823	279	505430	505604	174	229703	229826	123	B
22.09.2025	446823	447112	289	505604	505788	184	229826	229912	86	B
23.09.2025	447112	447379	265	505788	506118	330	229912	230057	145	B
24.09.2025	447379	447620	243	506118	506220	102	230057	230309	252	B
25.09.2025	447620	447921	301	506220	506412	192	230309	230475	166	B
26.09.2025	447921	448216	295	506412	506554	142	230475	230668	193	B
27.09.2025	448216	448403	187	506554	506686	132	230668	230842	174	B
28.09.2025	448403	448629	226	506686	506774	88	230842	231019	177	B
29.09.2025	448629	448823	194	506774	506928	154	231019	231165	146	B
30.09.2025	448823	449033	210	506928	507074	146	231165	231315	150	B

8341

2938

2192



भारत सरकार
केन्द्रीय भूमि जल प्राधिकरण
जल संसाधन मंत्रालय

Regional Director

Government of India
Central Ground Water Authority
Ministry of Water Resources

CGWA/IND/Proj/2011- 1017

No.21-4(413)/NWR/CGWA/2011- 400

Dated:-

3 APR 2011

To,

M/s Rajasthan Liquors Ltd.,
C - 364, Vaishali Nagar
Jaipur- 302021
Rajasthan

Sub:- NOC for ground water withdrawal by M/s Rajasthan Liquors Ltd., in respect of their proposed 120 klpd alcohol production and 5 MW power generation unit at village Haripur Hindua, Block & Tehsil Derra Bassi, District SAS Nagar (Mohali), Punjab- reg.

Sir,

Kindly refer to your application dated Nil on the above cited subject. Based on recommendations of Regional Director, Central Ground Water Board, North Western Region, Chandigarh vide their office letter no. 4(172)A-PB/RL/ NWR/ S&I/2010 dated 31.01.11 and further deliberations on the subject, the NOC of Central Ground Water Authority is hereby accorded to M/s Rajasthan Liquors Ltd., in respect of their proposed 120 klpd alcohol production and 5 MW power generation unit at village Haripur Hindua, Block & Tehsil Derra Bassi, District SAS Nagar (Mohali), Punjab. The NOC is, however subject to the following conditions:-

1. The firm may abstract 1783 m³/day (and not exceeding 5,89,090 m³/year) of ground water, through proposed two (2) tubewells only, tapping deeper aquifers below 150 m depth. No additional ground water abstraction structures to be constructed for this purpose without prior approval of the CGWA.
2. The wells to be fitted with water meter by the firm at its own cost and monitoring of ground water abstraction to be undertaken accordingly on regular basis, at least once in a month. The ground water quality to be monitored twice in a year during pre monsoon and post monsoon periods.
3. M/s Rajasthan Liquors Ltd., shall, in consultation with the Regional Director, Central Ground Water Board, North Western Region,

18/11, Jamnagar House, Mansingh Road, New Delhi-110011

Ph.: (011) 23073950, 23381089 Fax: 23398310

Website: www.cgwb.gov.in, www.mowr.gov.in

स्वच्छ सुरक्षित जल - सुन्दर सुरक्षित कल

CONSERVE WATER - SAVE LIFE

Chandigarh implement ground water recharge measures to the tune of 4,91,985 m³/year, for augmenting the ground water resources of the area.

4. The photographs of the recharge structures after completion of the same are to be furnished immediately to the Regional Director, Central Ground Water Board, North Western Region, Chandigarh for verification and under intimation to this office.
5. The firm at its own cost shall install piezometers at suitable locations and execute ground water regime monitoring programme in and around the project area on regular basis in consultation with the Central Ground Water Board, North Western Region, Chandigarh.
6. The ground water monitoring data in respect of S. No. 2 & 5 to be submitted to Central Ground Water Board, North Western Region, Chandigarh on regular basis at least once in a year.
7. The firm shall ensure proper recycling and reuse of waste water after adequate treatment.
8. Action taken report in respect of S. No. 1 to 7 may be submitted to CGWA within one year period.
9. The permission is liable to be cancelled in case of non-compliance of any of the conditions as mentioned in S. No. 1 to 8.

Yours faithfully


Regional Director
13/4

Copy for information to:

1. The Scientist-F, (I.A. Division), Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, Lodhi Road, New Delhi 110003. This has reference to your letter no. J-11011/263/2010- IA II (I) dated 26.10.2010.
2. The Regional Director, Central Ground Water Board, North Western Region, Chandigarh. This has reference to your letter no. 4(172)A-PB/RLL/NWR/S&I/2010 dated 31.01.11.
3. TS to Chairman, Central Ground Water Board, Bhujal Bhawan, Faridabad.

/
Regional Director



PUNJAB WATER REGULATION AND DEVELOPMENT AUTHORITY
sco 149-152, Sector 17 c, 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
1350101150	PWRDA/I/10/2023/L3/151	05.10.2023	04.10.2026

1	Name of Unit:	M/s Rajasthan Liquors Ltd. (Distillery Divison)	
2	Activity of Unit:	Industrial	
3	Address/Location of Unit:	M/s Rajasthan Liquor Limited (Distillery Division), Village Haripur Hinduan, Barwala Road, Derabassi, SAS Nagar, Punjab	
		District SAS Nagar	PIN: 140507
4	Assessment Area (Block):	Derabassi	Status: Yellow
5	District	SAS Nagar	
6	Head Office Address:	M/s Rajasthan Liquor Limited (Distillery Division), Village Haripur Hinduan, Barwala Road, Derabassi, SAS Nagar, Punjab	
			PIN: 140507
	Email	vijaytiwarill@gmail.com	
	Phone/Mobile No.	9779247324	9815876359
7	Project Status:	Existing : 31-03-2014	
8	No. of Existing Tube-Wells	No. of Proposed Tube-Wells	Total Number of Tube-Wells Permitted
		03	00
9	Volume of Ground Water Permitted to be Extracted(m ³ /month)	Fresh	Brackish/Saline
		33810	-

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.

Dated: 05.10.2023

Place: Chandigarh




 05.10.2023
 Senior Manager (A.O. & Coord.)
 Punjab Water Regulation and
 Development Authority
 Simran Kaur
 05/10/2023

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, within three months of issue of this Permission. The water meter shall conform to the technical specifications, performance parameters and connectivity standards, etc. as required by the Authority.
 - 3) The User (if required to install piezometer as per Directions) shall install the piezometer of the required specifications within three months of issue of this permission. (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) This Permission does not absolve the Unit of its obligations to obtain other required statutory and administrative clearances from appropriate Authorities.
 - 7) 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.
 - 8) 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.
 - 9) 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.
 - 10) 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.
 - 11) 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.
 - 12) A user shall apply for renewal of permission in the required format three months prior to the expiry of permission.
-

Annexure 7 : Photographs Showing Different Processes



UASBR & MBBR AT ETP/CPU



Ultra Filtration & RO



CHANDIGARH POLLUTION TESTING LABORATORY

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E-mail : cptle126@gmail.com ; lab@cptl.co.in

Website : www.cptl.co.in



TEST CERTIFICATE

Format No. CPTLF7.8-I(W)

URL No.- TC672825100000206F

REPORT No. CPTL/2025/04/03(W)

REPORTING DATE: 21.04.2025

NAME OF INDUSTRY:

M/s. RAJASTHAN LIQUOR LTD. (DISTILLARY),
VILL. HARIPUR HINDUAN, BARWALA ROAD,
DERABASSI, DIST. SAS NAGAR, MOHALI (PB).

SAMPLE PARTICULARS

Date of Sample Collection	16.04.2025
Sample Received in Lab	16.04.2025
Type of Sample	Treated Effluent (Grab)
Sampling Plan Ref. No.	CPTLF7.3-I
Sampling Method	CPTL/SM/01
Environmental conditions	Normal
Point of Sample Collection	Outlet of STP
Quantity & Packaging	2.0 liters in plastic bottle+ 1.0 Liter in glass bottle
Sample Identification No.	CPTL/2025/04/03(W)
Analysis Duration	16.04.2025 To 21.04.2025
Sample Collected By	Amrit Singh & Team
Visual Observation	Treated Effluent with suspended & settleable matter

S. No.	Parameters	Results	Limits	Test Method
1.	pH	8.31	5.5 to 9.0	IS: 3025 (P-11): 2022
2.	Total Dissolved Solids, mg/l	928	2100	IS: 3025 (P-16): 2023
3.	Total Suspended Solids, mg/l	32.8	100	IS: 3025 (P-17): 2023
4.	Chemical Oxygen Demand, mg/l	40.0	250	IS: 3025 (P-58): 2023
5.	BOD (at 27°C for 3 Days), mg/l	12.4	100	IS: 3025 (P-44): 2023
6.	Oil & Grease, mg/l	1.9	10	IS: 3025 (P-39): 2021

(Chemist In-Charge)

Date: 21/4/2025

Sital Singh (CEO)

(Authorized Signatory)

Date: 21/04/2025

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TEST CERTIFICATE

Format No. CPTLF7.8-I(W)

URL No.- TC672825100000208F

REPORT No. CPTL/2025/04/05(W)
REPORTING DATE: 21.04.2025

NAME OF INDUSTRY:

M/s. RAJASTHAN LIQUOR LTD. (DISTILLERY),
VILL. HARIPUR HINDUAN, BARWALA ROAD,
DERABASSI, DIST. SAS NAGAR, MOHALI (PB).

SAMPLE PARTICULARS

Date of Sample Collection	16.04.2025
Sample Received in Lab	16.04.2025
Type of Sample	Treated Effluent (Grab)
Sampling Plan Ref. No.	CPTLF7.3-I
Sampling Method	CPTL/SM/01
Environmental conditions	Normal
Point of Sample Collection	Inlet of ETP
Quantity & Packaging	2.0 liters in plastic bottle+ 1.0 Liter in glass bottle
Sample Identification No.	CPTL/2025/04/05(W)
Analysis Duration	16.04.2025 To 21.04.2025
Sample Collected By	Amrit Singh & Team
Visual Observation	Treated Effluent with suspended & settleable matter

S. No.	Parameters	Results	Test Method
1.	pH	3.53	IS: 3025 (P-11): 2022
2.	Total Dissolved Solids, mg/l	165	IS: 3025 (P-16): 2023
3.	Total Suspended Solids, mg/l	38.8	IS: 3025 (P-17): 2023
4.	Chemical Oxygen Demand, mg/l	780	IS: 3025 (P-58): 2023
5.	BOD (at 27°C for 3 Days), mg/l	185	IS: 3025 (P-44): 2023
6.	Oil & Grease, mg/l	4.2	IS: 3025 (P-39): 2021

(Signature)
(Chemist In-Charge)
Date: 21/04/2025

(Signature)
Sital Singh (CEO)
(Authorized Signatory)
Date: 21/04/2025

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END OF REPORT

Page 1 of 1



TEST CERTIFICATE

Format No. CPTLF7.8-I(W)

URL No.- TC672825100000207F

REPORT No. CPTL/2025/04/04(W)
REPORTING DATE: 21.04.2025

NAME OF INDUSTRY: M/s. RAJASTHAN LIQUOR LTD. (DISTILLERY),
VILL. HARIPUR HINDUAN, BARWALA ROAD,
DERABASSI, DIST. SAS NAGAR, MOHALI (PB).

SAMPLE PARTICULARS

Date of Sample Collection	16.04.2025
Sample Received in Lab	16.04.2025
Type of Sample	Treated Effluent (Grab)
Sampling Plan Ref. No.	CPTLF7.3-I
Sampling Method	CPTL/SM/01
Environmental conditions	Normal
Point of Sample Collection	Outlet of ETP
Quantity & Packaging	2.0 liters in plastic bottle+ 1.0 Liter in glass bottle
Sample Identification No.	CPTL/2025/04/04(W)
Analysis Duration	16.04.2025 To 21.04.2025
Sample Collected By	Amrit Singh & Team
Visual Observation	Treated Effluent with suspended & settleable matter

S. No.	Parameters	Results	Test Method
1.	pH	7.10	IS: 3025 (P-11): 2022
2.	Total Dissolved Solids, mg/l	120	IS: 3025 (P-16): 2023
3.	Total Suspended Solids, mg/l	26.6	IS: 3025 (P-17): 2023
4.	Chemical Oxygen Demand, mg/l	120	IS: 3025 (P-58): 2023
5.	BOD (at 27°C for 3 Days), mg/l	28.2	IS: 3025 (P-44): 2023
6.	Oil & Grease, mg/l	3.4	IS: 3025 (P-39): 2021

(Signature)
(Chemist In-Charge)
Date: 21/4/2025

(Signature)
Sital Singh (CEO)
(Authorized Signatory)
Date: 21/4/2025

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Format No. CPTLF7.8-I(W)

TEST CERTIFICATE

REPORT No. CPTL/2025/05/17(W)
REPORTING DATE: 24.05.2025

NAME OF INDUSTRY: M/s. RAJASTHAN LIQUOR LTD. (DISTILLERY),
VILL. HARIPUR HINDUAN, BARWALA ROAD,
DERABASSI, DIST. SAS NAGAR, MOHALI (PB).

SAMPLE PARTICULARS

Date of Sample Collection	20.05.2025
Sample Received in Lab	20.05.2025
Type of Sample	Treated Effluent (Grab)
Sampling Plan Ref. No.	CPTLF7.3-I
Sampling Method	CPTL/SM/01
Environmental conditions	Normal
Point of Sample Collection	Outlet Of STP
Quantity & Packaging	2.0 liters in plastic bottle+ 1.0 Liter in glass bottle
Sample Identification No.	CPTL/2025/05/17(W)
Analysis Duration	20.05.2025 To 24.05.2025
Sample Collected By	Amrit Singh & Team
Visual Observation	Treated Effluent with suspended & settleable matter

S. No.	Parameters	Results	Limits	Test Method
1.	pH	7.16	5.5 to 9.0	IS: 3025 (P-11): 2022
2.	Total Dissolved Solids, mg/l	993	2100	IS: 3025 (P-16): 2023
3.	Total Suspended Solids, mg/l	18.4	100	IS: 3025 (P-17): 2023
4.	Chemical Oxygen Demand, mg/l	80.0	250	IS: 3025 (P-58): 2023
5.	BOD (at 27°C for 3 Days), mg/l	20.7	100	IS: 3025 (P-44): 2023
6.	Oil & Grease, mg/l	2.6	10	IS: 3025 (P-39): 2021

Amrit Singh
(Chemist In-Charge)
Date: 24/05/2025

Sital Singh
Mr. Sital Singh (CEO)
(Authorized Signatory)
Date: 24/05/2025

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Format No. CPTLF7.8-I(W)

TEST CERTIFICATE

REPORT No. CPTL/2025/05/16(W)
REPORTING DATE: 24.05.2025

NAME OF INDUSTRY: M/s. RAJASTHAN LIQUOR LTD. (DISTILLERY),
VILL. HARIPUR HINDUAN, BARWALA ROAD,
DERABASSI, DIST. SAS NAGAR, MOHALI (PB).

SAMPLE PARTICULARS

Date of Sample Collection	20.05.2025
Sample Received in Lab	20.05.2025
Type of Sample	Treated Effluent (Grab)
Sampling Plan Ref. No.	CPTLF7.3-I
Sampling Method	CPTL/SM/01
Environmental conditions	Normal
Point of Sample Collection	Outlet Of ETP
Quantity & Packaging	2.0 liters in plastic bottle+ 1.0 Liter in glass bottle
Sample Identification No.	CPTL/2025/05/16(W)
Analysis Duration	20.05.2025 To 24.05.2025
Sample Collected By	Amrit Singh & Team
Visual Observation	Treated Effluent with suspended & settleable matter

S. No.	Parameters	Results	Test Method
1.	pH	7.18	IS: 3025 (P-11): 2022
2.	Total Dissolved Solids, mg/l	162	IS: 3025 (P-16): 2023
3.	Total Suspended Solids, mg/l	22.2	IS: 3025 (P-17): 2023
4.	Chemical Oxygen Demand, mg/l	20.0	IS: 3025 (P-58): 2023
5.	BOD (at 27°C for 3 Days), mg/l	3.6	IS: 3025 (P-44): 2023
6.	Oil & Grease, mg/l	2.2	IS: 3025 (P-39): 2021

(Signature)
(Chemist in Charge)
Date: 24/05/2025

(Signature)
Mr. Sital Singh (CEO)
(Authorized Signatory)
Date: 24/05/2025

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Format No. CPTLF7.8-I(W)

TEST CERTIFICATE

REPORT No. CPTL/2025/05/15(W)
 REPORTING DATE: 24.05.2025

NAME OF INDUSTRY: M/s. RAJASTHAN LIQUOR LTD. (DISTILLERY),
 VILL. HARIPUR HINDUAN, BARWALA ROAD,
 DERABASSI, DIST. SAS NAGAR, MOHALI (PB).

SAMPLE PARTICULARS

Date of Sample Collection	20.05.2025
Sample Received in Lab	20.05.2025
Type of Sample	Untreated Effluent (Grab)
Sampling Plan Ref. No.	CPTLF7.3-I
Sampling Method	CPTL/SM/01
Environmental conditions	Normal
Point of Sample Collection	Inlet Of ETP
Quantity & Packaging	2.0 liters in plastic bottle+ 1.0 Liter in glass bottle
Sample Identification No.	CPTL/2025/05/15(W)
Analysis Duration	20.05.2025 To 24.05.2025
Sample Collected By	Amrit Singh & Team
Visual Observation	Untreated Effluent with suspended & settleable matter

S. No.	Parameters	Results	Test Method
1.	pH	3.77	IS: 3025 (P-11): 2022
2.	Total Dissolved Solids, mg/l	95.7	IS: 3025 (P-16): 2023
3.	Total Suspended Solids, mg/l	28.6	IS: 3025 (P-17): 2023
4.	Chemical Oxygen Demand, mg/l	860	IS: 3025 (P-58): 2023
5.	BOD (at 27°C for 3 Days), mg/l	233.3	IS: 3025 (P-44): 2023
6.	Oil & Grease, mg/l	3.8	IS: 3025 (P-39): 2021

(Signature)
 (Chemist In-Charge)
 Date: 24/05/2025

(Signature)
 Mr. Sital Singh (CEO)
 (Authorized Signatory)
 Date: 24/05/2025

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 Website : www.cptl.co.in



Format No. CPTLF7.8-I(W)

TEST CERTIFICATE

REPORT No. CPTL/2025/06/46(W)
 REPORTING DATE: 23.06.2025

NAME OF INDUSTRY: M/s. RAJASTHAN LIQUOR LTD. (DISTILLERY),
 VILL. HARIPUR HINDUAN, BARWALA ROAD,
 DERABASSI, DIST. SAS NAGAR, MOHALI (PB).

SAMPLE PARTICULARS

Date of Sample Collection	19.06.2025
Sample Received in Lab	19.06.2025
Type of Sample	Untreated Effluent (Grab)
Sampling Plan Ref. No.	CPTLF7.3-I
Sampling Method	CPTL/SM/01
Environmental conditions	Normal
Point of Sample Collection	Inlet Of ETP
Quantity & Packaging	2.0 liters in plastic bottle+ 1.0 Liter in glass bottle
Sample Identification No.	CPTL/2025/06/46(W)
Analysis Duration	19.06.2025 To 23.06.2025
Sample Collected By	Amrit Singh & Team
Visual Observation	Untreated Effluent with suspended & settleable matter

S. No.	Parameters	Results	Test Method
1.	pH	4.36	IS: 3025 (P-11): 2022
2.	Total Dissolved Solids, mg/l	225	IS: 3025 (P-16): 2023
3.	Total Suspended Solids, mg/l	18.4	IS: 3025 (P-17): 2023
4.	Chemical Oxygen Demand, mg/l	900	IS: 3025 (P-58): 2023
5.	BOD (at 27°C for 3 Days), mg/l	281.8	IS: 3025 (P-44): 2023
6.	Oil & Grease, mg/l	3.6	IS: 3025 (P-39): 2021

Amrit Singh
 (Chemist In-Charge)
 Date: 23/06/2025

Sital Singh
 Mr. Sital Singh (CEO)
 (Authorized Signatory)
 Date: 23/06/2025

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 Website : www.cptl.co.in



Format No. CPTLF7.8-I(W)

TEST CERTIFICATE

REPORT No. CPTL/2025/06/45(W)
 REPORTING DATE: 23.06.2025

NAME OF INDUSTRY: M/s. RAJASTHAN LIQUOR LTD. (DISTILLERY),
 VILL. HARIPUR HINDUAN, BARWALA ROAD,
 DERABASSI, DIST. SAS NAGAR, MOHALI (PB).

SAMPLE PARTICULARS

Date of Sample Collection	19.06.2025
Sample Received in Lab	19.06.2025
Type of Sample	Treated Effluent (Grab)
Sampling Plan Ref. No.	CPTLF7.3-I
Sampling Method	CPTL/SM/01
Environmental conditions	Normal
Point of Sample Collection	Outlet Of STP
Quantity & Packaging	2.0 liters in plastic bottle+ 1.0 Liter in glass bottle
Sample Identification No.	CPTL/2025/06/45(W)
Analysis Duration	19.06.2025 To 23.06.2025
Sample Collected By	Amrit Singh & Team
Visual Observation	Treated Effluent with suspended & settleable matter

S. No.	Parameters	Results	Limits	Test Method
1.	pH	7.99	5.5 to 9.0	IS: 3025 (P-11): 2022
2.	Total Dissolved Solids, mg/l	615	2100	IS: 3025 (P-16): 2023
3.	Total Suspended Solids, mg/l	14.8	100	IS: 3025 (P-17): 2023
4.	Chemical Oxygen Demand, mg/l	50.0	250	IS: 3025 (P-58): 2023
5.	BOD (at 27°C for 3 Days), mg/l	11.6	100	IS: 3025 (P-44): 2023
6.	Oil & Grease, mg/l	1.9	10	IS: 3025 (P-39): 2021

Amrit Singh
 (Chemist In-Charge)
 Date: 23/06/2025

Sital Singh
 Mr. Sital Singh (CEO)
 (Authorized Signatory)
 Date: 23/06/2025

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END OF REPORT

Page 1 of 1



CHANDIGARH POLLUTION TESTING LABORATORY

(Environmental Monitoring, EIA, NOC, ETP, STP)

H.O. : #372, Sector 15-A, Chandigarh-160 015
 Phone : 0172-4669295
 Lab : E-126, Phase-VII, Indl. Area, Mohali - 160055
 Phone : 0172-5090312
 E-mail : cptle126@gmail.com ; lab@cptl.co.in
 Website : www.cptl.co.in



Format No. CPTLF7.8-I(W)

TEST CERTIFICATE

REPORT No. CPTL/2025/06/47(W)
 REPORTING DATE: 23.06.2025

NAME OF INDUSTRY: M/s. RAJASTHAN LIQUOR LTD. (DISTILLERY),
 VILL. HARIPUR HINDUAN, BARWALA ROAD,
 DERABASSI, DIST. SAS NAGAR, MOHALI (PB).

SAMPLE PARTICULARS

Date of Sample Collection	19.06.2025
Sample Received in Lab	19.06.2025
Type of Sample	Treated Effluent (Grab)
Sampling Plan Ref. No.	CPTLF7.3-I
Sampling Method	CPTL/SM/01
Environmental conditions	Normal
Point of Sample Collection	Outlet Of ETP
Quantity & Packaging	2.0 liters in plastic bottle+ 1.0 Liter in glass bottle
Sample Identification No.	CPTL/2025/06/47(W)
Analysis Duration	19.06.2025 To 23.06.2025
Sample Collected By	Amrit Singh & Team
Visual Observation	Treated Effluent with suspended & settleable matter

S. No.	Parameters	Results	Test Method
1.	pH	7.09	IS: 3025 (P-11): 2022
2.	Total Dissolved Solids, mg/l	91.2	IS: 3025 (P-16): 2023
3.	Total Suspended Solids, mg/l	16.8	IS: 3025 (P-17): 2023
4.	Chemical Oxygen Demand, mg/l	20.0	IS: 3025 (P-58): 2023
5.	BOD (at 27°C for 3 Days), mg/l	BDL (DL-2.0)	IS: 3025 (P-44): 2023
6.	Oil & Grease, mg/l	2.2	IS: 3025 (P-39): 2021

BDL-Below Detection Limit
 DL-Detection Limit

(Chemist In-Charge)

Date: 23/06/2025

Mr. Sital Singh (CEO)
 (Authorized Signatory)

Date: 23/06/2025

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Page 1 of 1

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 Website : www.cptl.co.in



Format No. CPTLF7.8-1(W)

TEST CERTIFICATE

REPORT No. CPTL/2025/07/23(W)
 REPORTING DATE: 22.07.2025

NAME OF INDUSTRY: M/s. RAJASTHAN LIQUOR LTD. (DISTILLERY),
 VILL. HARIPUR HINDUAN, BARWALA ROAD,
 DERABASSI, DIST. SAS NAGAR, MOHALI (PB).

SAMPLE PARTICULARS

Date of Sample Collection	18.07.2025
Sample Received in Lab	18.07.2025
Type of Sample	Treated Effluent (Grab)
Sampling Plan Ref. No.	CPTLF7.3-1
Sampling Method	CPTL/SM/01
Environmental conditions	Normal
Point of Sample Collection	Outlet Of STP
Quantity & Packaging	2.0 liters in plastic bottle+ 1.0 Liter in glass bottle
Sample Identification No.	CPTL/2025/07/23(W)
Analysis Duration	18.07.2025 To 22.07.2025
Sample Collected By	Amrit Singh & Team
Visual Observation	Treated Effluent with suspended & settleable matter

S. No.	Parameters	Results	Limits	Test Method
1.	pH	7.20	5.5 to 9.0	IS: 3025 (P-11): 2022
2.	Total Dissolved Solids, mg/l	504	2100	IS: 3025 (P-16): 2023
3.	Total Suspended Solids, mg/l	12.4	100	IS: 3025 (P-17): 2023
4.	Chemical Oxygen Demand, mg/l	40.0	250	IS: 3025 (P-58): 2023
5.	BOD (at 27°C for 3 Days), mg/l	9.3	100	IS: 3025 (P-44): 2023
6.	Oil & Grease, mg/l	1.5	10	IS: 3025 (P-39): 2021

(Signature)
 (Chemist In-Charge)
 Date: 22/07/2025

(Signature)
 Mr. Sital Singh (CEO)
 (Authorized Signatory)
 Date: 22/07/2025

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Format No. CPTLF7.8-I(W)

TEST CERTIFICATE

REPORT No. CPTL/2025/07/22(W)
 REPORTING DATE: 22.07.2025

NAME OF INDUSTRY: M/s. RAJASTHAN LIQUOR LTD. (DISTILLERY),
 VILL. HARIPUR HINDUAN, BARWALA ROAD,
 DERABASSI, DIST. SAS NAGAR, MOHALI (PB).

SAMPLE PARTICULARS

Date of Sample Collection	18.07.2025
Sample Received in Lab	18.07.2025
Type of Sample	Treated Effluent (Grab)
Sampling Plan Ref. No.	CPTLF7.3-I
Sampling Method	CPTL/SM/01
Environmental conditions	Normal
Point of Sample Collection	Outlet Of ETP
Quantity & Packaging	2.0 liters in plastic bottle+ 1.0 Liter in glass bottle
Sample Identification No.	CPTL/2025/07/22(W)
Analysis Duration	18.07.2025 To 22.07.2025
Sample Collected By	Amrit Singh & Team
Visual Observation	Treated Effluent with suspended & settleable matter

S. No.	Parameters	Results	Test Method
1.	pH	6.92	IS: 3025 (P-11): 2022
2.	Total Dissolved Solids, mg/l	104	IS: 3025 (P-16): 2023
3.	Total Suspended Solids, mg/l	10.2	IS: 3025 (P-17): 2023
4.	Chemical Oxygen Demand, mg/l	20.0	IS: 3025 (P-58): 2023
5.	BOD (at 27°C for 3 Days), mg/l	BDL (DL-2.0)	IS: 3025 (P-44): 2023
6.	Oil & Grease, mg/l	1.4	IS: 3025 (P-39): 2021

BDL-Below Detection Limit
 DL-Detection Limit

(Chemist In-Charge)
 Date: 22/07/2025

Mr. Sital Singh (CEO)
 (Authorized Signatory)
 Date: 22/07/2025

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Format No. CPTLF7.8-I(W)

TEST CERTIFICATE

REPORT No. CPTL/2025/07/21(W)
 REPORTING DATE: 22.07.2025

NAME OF INDUSTRY: M/s. RAJASTHAN LIQUOR LTD. (DISTILLERY),
 VILL. HARIPUR HINDUAN, BARWALA ROAD,
 DERABASSI, DIST. SAS NAGAR, MOHALI (PB).

SAMPLE PARTICULARS

Date of Sample Collection	18.07.2025
Sample Received in Lab	18.07.2025
Type of Sample	Untreated Effluent (Grab)
Sampling Plan Ref. No.	CPTLF7.3-I
Sampling Method	CPTL/SM/01
Environmental conditions	Normal
Point of Sample Collection	Inlet Of ETP
Quantity & Packaging	2.0 liters in plastic bottle+ 1.0 Liter in glass bottle
Sample Identification No.	CPTL/2025/07/21(W)
Analysis Duration	18.07.2025 To 22.07.2025
Sample Collected By	Amrit Singh & Team
Visual Observation	Untreated Effluent with suspended & settleable matter

S. No.	Parameters	Results	Test Method
1.	pH	4.64	IS: 3025 (P-11): 2022
2.	Total Dissolved Solids, mg/l	200	IS: 3025 (P-16): 2023
3.	Total Suspended Solids, mg/l	22.9	IS: 3025 (P-17): 2023
4.	Chemical Oxygen Demand, mg/l	870	IS: 3025 (P-58): 2023
5.	BOD (at 27°C for 3 Days), mg/l	225	IS: 3025 (P-44): 2023
6.	Oil & Grease, mg/l	3.2	IS: 3025 (P-39): 2021

(Signature)
 (Chemist In-Charge)
 Date: 22/07/2025

(Signature)
 Mr. Sital Singh (CEO)
 (Authorized Signatory)
 Date: 22/07/2025

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END OF REPORT



CHANDIGARH POLLUTION TESTING LABORATORY

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Format No. CPTLF7.8-1(W)

TEST CERTIFICATE

REPORT No. CPTL/2025/08/17(W)
 REPORTING DATE: 29.08.2025

NAME OF INDUSTRY: M/s. RAJASTHAN LIQUOR LTD. (DISTILLERY),
 VILL. HARIPUR HINDUAN, BARWALA ROAD,
 DERABASSI, DIST. SAS NAGAR, MOHALI (PB).

SAMPLE PARTICULARS

Date of Sample Collection	25.08.2025
Sample Received in Lab	25.08.2025
Type of Sample	Untreated Effluent (Grab)
Sampling Plan Ref. No.	CPTLF7.3-1
Sampling Method	CPTL/SM/01
Environmental conditions	Normal
Point of Sample Collection	Inlet Of ETP
Quantity & Packaging	2.0 liters in plastic bottle+ 1.0 Liter in glass bottle
Sample Identification No.	CPTL/2025/08/17(W)
Analysis Duration	25.08.2025 To 29.08.2025
Sample Collected By	Amrit Singh & Team
Visual Observation	Untreated Effluent with suspended & settleable matter

S. No.	Parameters	Results	Test Method
1.	pH	3.49	IS: 3025 (P-11): 2022
2.	Total Dissolved Solids, mg/l	82.9	IS: 3025 (P-16): 2023
3.	Total Suspended Solids, mg/l	34.6	IS: 3025 (P-17): 2023
4.	Chemical Oxygen Demand, mg/l	690	IS: 3025 (P-58): 2023
5.	BOD (at 27°C for 3 Days), mg/l	190	IS: 3025 (P-44): 2023
6.	Oil & Grease, mg/l	3.9	IS: 3025 (P-39): 2021

(Signature)
 (Chemist In-Charge)
 Date: 29/08/2025

(Signature)
 Mr. Sital Singh (CEO)
 (Authorized Signatory)
 Date: 29/08/2025

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Format No. CPTLF7.8-I(W)

TEST CERTIFICATE

REPORT No. CPTL/2025/08/19(W)
 REPORTING DATE: 29.08.2025

NAME OF INDUSTRY:

M/s. RAJASTHAN LIQUOR LTD. (DISTILLERY),
 VILL. HARIPUR HINDUAN, BARWALA ROAD,
 DERABASSI, DIST. SAS NAGAR, MOHALI (PB).

SAMPLE PARTICULARS

Date of Sample Collection	25.08.2025
Sample Received in Lab	25.08.2025
Type of Sample	Treated Effluent (Grab)
Sampling Plan Ref. No.	CPTLF7.3-I
Sampling Method	CPTL/SM/01
Environmental conditions	Normal
Point of Sample Collection	Outlet Of STP
Quantity & Packaging	2.0 liters in plastic bottle+ 1.0 Liter in glass bottle
Sample Identification No.	CPTL/2025/08/19(W)
Analysis Duration	25.08.2025 To 29.08.2025
Sample Collected By	Amrit Singh & Team
Visual Observation	Treated Effluent with suspended & settleable matter

S. No.	Parameters	Results	Limits	Test Method
1.	pH	8.30	5.5 to 9.0	IS: 3025 (P-11): 2022
2.	Total Dissolved Solids, mg/l	688	2100	IS: 3025 (P-16): 2023
3.	Total Suspended Solids, mg/l	16.8	100	IS: 3025 (P-17): 2023
4.	Chemical Oxygen Demand, mg/l	50.0	250	IS: 3025 (P-58): 2023
5.	BOD (at 27°C for 3 Days), mg/l	12.4	100	IS: 3025 (P-44): 2023
6.	Oil & Grease, mg/l	1.8	10	IS: 3025 (P-39): 2021

(Chemist In-Charge)
 Date: 29/08/2025

Mr. Sital Singh (CEO)
 (Authorized Signatory)
 Date: 29/08/2025

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CHANDIGARH POLLUTION TESTING LABORATORY

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 Phone : 0172-5090312
 E-mail : cpl1e126@gmail.com ; lab@cpl.co.in
 Website : www.cpl.co.in



Format No. CPTLF7.8-I(W)

TEST CERTIFICATE

REPORT No. CPTL/2025/08/18(W)
 REPORTING DATE: 29.08.2025

NAME OF INDUSTRY: M/s. RAJASTHAN LIQUOR LTD. (DISTILLERY),
 VILL. HARIPUR HINDUAN, BARWALA ROAD,
 DERABASSI, DIST. SAS NAGAR, MOHALI (PB).

SAMPLE PARTICULARS

Date of Sample Collection	25.08.2025
Sample Received in Lab	25.08.2025
Type of Sample	Treated Effluent (Grab)
Sampling Plan Ref. No.	CPTLF7.3-I
Sampling Method	CPTL/SM/01
Environmental conditions	Normal
Point of Sample Collection	Outlet Of ETP
Quantity & Packaging	2.0 liters in plastic bottle+ 1.0 Liter in glass bottle
Sample Identification No.	CPTL/2025/08/18(W)
Analysis Duration	25.08.2025 To 29.08.2025
Sample Collected By	Amrit Singh & Team
Visual Observation	Treated Effluent with suspended & settleable matter

S. No.	Parameters	Results	Test Method
1.	pH	8.01	IS: 3025 (P-11): 2022
2.	Total Dissolved Solids, mg/l	95.5	IS: 3025 (P-16): 2023
3.	Total Suspended Solids, mg/l	12.6	IS: 3025 (P-17): 2023
4.	Chemical Oxygen Demand, mg/l	30.0	IS: 3025 (P-58): 2023
5.	BOD (at 27°C for 3 Days), mg/l	BDL (DL-2.0)	IS: 3025 (P-44): 2023
6.	Oil & Grease, mg/l	1.8	IS: 3025 (P-39): 2021

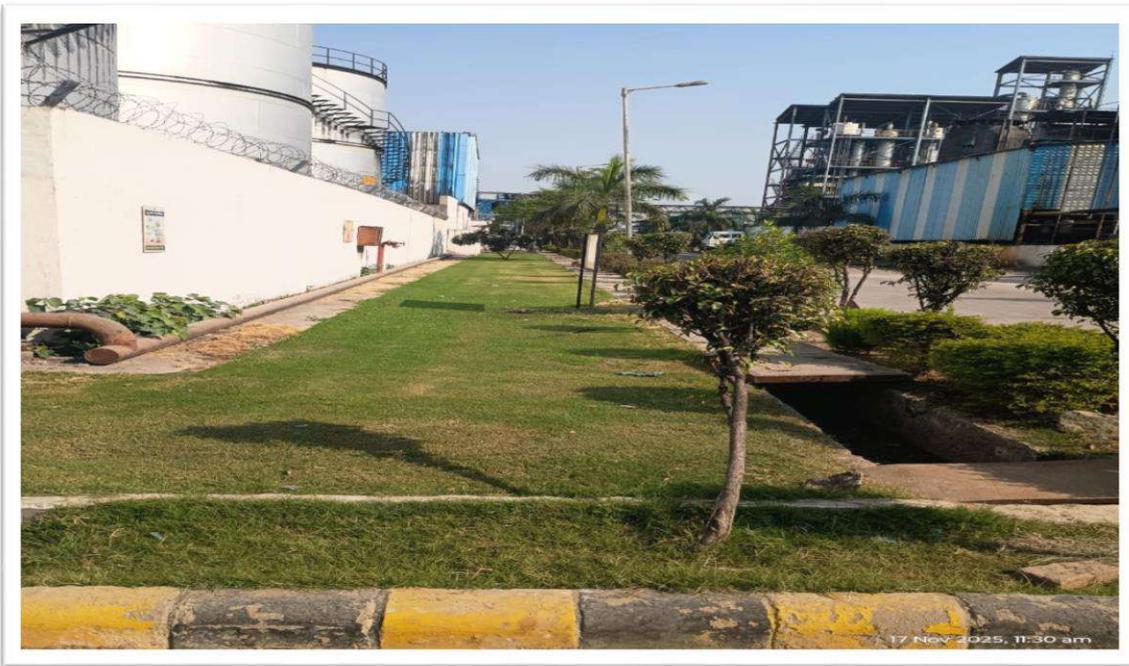
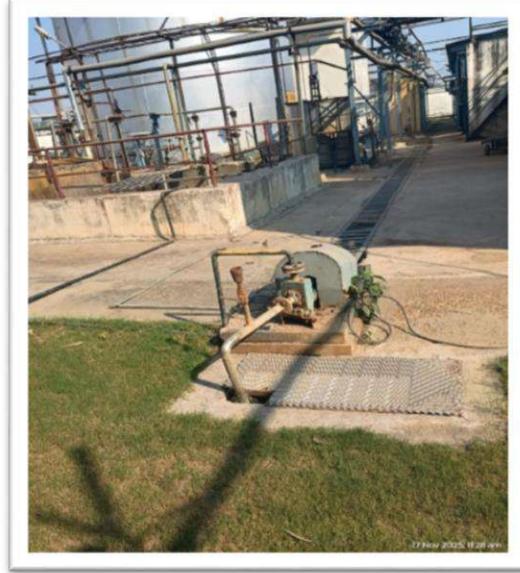
BDL-Below Detection Limit
 DL-Detection Limit

(Signature)
 (Chemist In-Charge)
 Date: 29/08/2025

(Signature)
 Mr. Sital Singh (CEO)
 (Authorized Signatory)
 Date: 29/08/2025

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Annexure 9: Photographs of Garland drains and pits



Annexure 9A: Photographs showing Pucca Lagoon





CHANDIGARH POLLUTION TESTING LABORATORY

(Environmental Monitoring, EIA, NOC, ETP, STP)

Annexure 10

H.O. : #372, Sector 15-A, Chandigarh-160 015

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Website : www.cptl.co.in



Format No. CPTLF7.8-I(W)

TEST CERTIFICATE

REPORT No. CPTL/2025/06/48(W)

REPORTING DATE: 23.06.2025

NAME OF INDUSTRY:

M/s. RAJASTHAN LIQUOR LTD. (DISTILLERY),
VILL. HARIPUR HINDUAN, BARWALA ROAD,
DERABASSI, DIST. SAS NAGAR, MOHALI (PB).

SAMPLE PARTICULARS

Date of Sample Collection	19.06.2025
Sample Received in Lab	19.06.2025
Type of Sample	Ground Water (Grab)
Sampling Plan Ref. No.	CPTLF7.3-I
Sampling Method	CPTL/SM/01
Environmental conditions	Normal
Point of Sample Collection	Borewell- Near Parking
Quantity & Packaging	2.0 liters in Plastic bottle
Sample Identification No.	CPTL/2025/06/48(W)
Analysis Duration	19.06.2025 to 23.06.2025
Sample Collected By	Amrit Singh & team
Visual Observation	Clear and colorless.

TEST RESULTS

S. No.	Parameters	Results	Acceptable Limit	Permissible Limit	Test Method
1.	pH	7.97	6.5-8.5	No relaxation	IS: 3025 (P-11): 2022
2.	Color, HU	<5	5	15	IS: 3025 (P-4): 2021
3.	Odour	Agreeable	Agreeable	Agreeable	IS: 3025 (P-5): 2018
4.	Turbidity, NTU	<1	1	5	IS: 3025 (P-10): 2023
5.	Total Dissolved Solids, mg/l	259	500	2000	IS: 3025 (P-16): 2023
6.	Total Hardness (as CaCO ₃), mg/l	100	200	600	IS: 3025 (P-21): 2009
7.	Calcium (as Ca ⁺⁺), mg/l	20.0	75	200	IS: 3025 (P-40): 2004
8.	Magnesium (as Mg ⁺⁺), mg/l	13.2	30	100	IS: 3025 (P-46): 2023
9.	Total Alkalinity (as CaCO ₃), mg/l	230	200	600	IS: 3025 (P-23): 2023
10.	Chloride (as Cl), mg/l	7.49	250	1000	IS: 3025 (P-32): 1998
11.	Sulphate (as SO ₄), mg/l	48.6	200	400	IS: 3025 (P-24) Sec.-1: 2022
12.	Iron (as Fe), mg/l	BDL (DL-0.02)	0.3	No relaxation	IS:3025 (P-53): 2024
13.	Zinc (as Zn), mg/l	BDL (DL-0.5)	5	15	IS: 3025 (P-49): 1994
14.	Nitrate (as NO ₃), mg/l	BDL (DL-1.0)	45	No relaxation	IS: 3025 (P-34): 2022
15.	Total Chromium (as Cr), mg/l	BDL (DL-0.04)	0.05	No relaxation	IS: 3025 (P-52): 2021
16.	Manganese (as Mn), mg/l	BDL (DL-0.09)	0.1	0.3	IS: 3025 (P-59): 2023
17.	Lead (as Pb), mg/l	BDL (DL-0.01)	0.01	No relaxation	IS: 3025 (P-47): 2024
18.	Aluminium (as Al), mg/l	BDL (DL-.002)	0.03	0.2	IS: 3025 (P-55): 2003

Page 1 of 2



CHANDIGARH POLLUTION TESTING LABORATORY

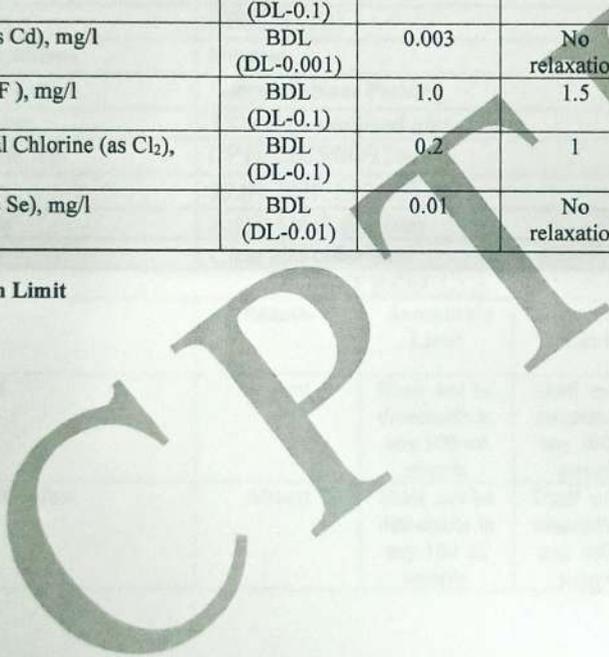
(Environmental Monitoring, EIA, NOC, ETP, STP)

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 E-mail : cptle126@gmail.com ; lab@cptl.co.in
 Website : www.cptl.co.in

Sample Received in Lab	19.06.2025
Type of Sample	Ground Water
Sample Identification No.	CPTL/2025/06/48(W)

S. No.	Parameters	Results	Acceptable Limit	Permissible Limit	Test Method
19.	Arsenic (as As), mg/l	BDL (DL-0.01)	0.01	0.05	IS: 3025 (P-37): 2022
20.	Mercury (as Hg), mg/l	BDL (DL-0.001)	0.001	No relaxation	IS: 3025:P-48:1994
21.	Copper (as Cu), mg/l	BDL (DL-0.04)	0.05	1.5	IS: 3025 (P-42): 1992
22.	Boron (as B), mg/l	BDL (DL-0.1)	0.5	1.0	IS: 3025 (P-57): 2021
23.	Cadmium (as Cd), mg/l	BDL (DL-0.001)	0.003	No relaxation	IS: 3025 (P-41): 2023
24	Fluoride (as F), mg/l	BDL (DL-0.1)	1.0	1.5	IS: 3025 (P-60) Sec.-1: 2023
25.	Free Residual Chlorine (as Cl ₂), mg/l	BDL (DL-0.1)	0.2	1	IS: 3025 (P-26): 2021
26.	Selenium (as Se), mg/l	BDL (DL-0.01)	0.01	No relaxation	IS: 3025 (P-56): 2003

BDL- Below Detection Limit
 DL-Detection Limit



(Signature)
 (Chemist In-Charge)
 Date: 28/06/2025

(Signature)
 Mr. Sital Singh (CEO)
 (Authorized Signatory)
 Date: 27/06/2025

- The results are related to test items only.
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END OF REPORT

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(Environmental Monitoring, EIA, NOC, ETP, STP)

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Website : www.cptl.co.in

Format No. CPTLF7.8-I(M)

TEST CERTIFICATE



REPORT No. CPTL/2025/06/27m(W)
REPORTING DATE: 20.06.2025

NAME OF INDUSTRY: M/s. RAJASTHAN LIQUOR LTD. (DISTILLERY),
VILL. HARIPUR HINDUAN, BARWALA ROAD,
DERABASSI, DIST. SAS NAGAR, MOHALI (PB).

SAMPLE PARTICULARS

Date of Sample Collection	19.06.2025
Sample Received in Lab	19.06.2025
Type of Sample	Ground Water
Sampling Plan Ref. No.	CPTLF7.3-I
Sampling Method	CPTL/SM/01
Environmental Conditions	Normal
Point of Sample Collection	Borewell-Near Parking
Quantity & Packaging	250 ml in sterilized glass bottle
Sample Identification No.	CPTL/2025/06/27m(W)
Analysis Duration	19.06.2025 To 20.06.2025
Sample Collected By	Amrit Singh & Team
Visual Observation	Clear and colorless.

TEST RESULTS

S. No.	Parameters	Results	Acceptable Limit	Permissible Limit	Test Method
1.	E. Coli/100ml	Absent	Shall not be detectable in any 100 ml sample	Shall not be detectable in any 100 ml sample	IS 15185: 2016
2.	Total Coliform/100ml	Absent	Shall not be detectable in any 100 ml sample	Shall not be detectable in any 100 ml sample	IS 15185: 2016

Nidhi
Analyzed By
Date: 20/06/2025

Mr. Sital Singh (CEO)
(Authorized Signatory)
Date: 20/06/2025

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Page 1 of 1

END OF REPORT



CHANDIGARH POLLUTION TESTING LABORATORY

(Environmental Monitoring, EIA, NOC, ETP, STP)

H.O. : #372, Sector 15-A, Chandigarh-160 015
 Phone : 0172-4669295
 Lab : E-126, Phase-VII, Indl. Area, Mohali - 160055
 Phone : 0172-5090312
 E-mail : cptlf126@gmail.com ; lab@cptlf.co.in
 Website : www.cptlf.co.in



Format No. CPTLF7.8-1(W)

TEST CERTIFICATE

REPORT No. CPTLF/2025/06/49(W)
 REPORTING DATE: 23.06.2025

NAME OF INDUSTRY:

M/s. RAJASTHAN LIQUOR LTD. (DISTILLERY),
 VILL. HARIPUR HINDUAN, BARWALA ROAD,
 DERABASSI, DIST. SAS NAGAR, MOHALI (PB).

SAMPLE PARTICULARS

Date of Sample Collection	19.06.2025
Sample Received in Lab	19.06.2025
Type of Sample	Ground Water (Grab)
Sampling Plan Ref. No.	CPTLF7.3-I
Sampling Method	CPTLF/SM/01
Environmental conditions	Normal
Point of Sample Collection	Borewell- Near Ware House
Quantity & Packaging	2.0 liters in Plastic bottle
Sample Identification No.	CPTLF/2025/06/49(W)
Analysis Duration	19.06.2025 to 23.06.2025
Sample Collected By	Amrit Singh & team
Visual Observation	Clear and colorless.

TEST RESULTS

S. No.	Parameters	Results	Acceptable Limit	Permissible Limit	Test Method
1.	pH	7.77	6.5-8.5	No relaxation	IS: 3025 (P-11): 2022
2.	Color, HU	<5	5	15	IS: 3025 (P-4): 2021
3.	Odour	Agreeable	Agreeable	Agreeable	IS: 3025 (P-5): 2018
4.	Turbidity, NTU	<1	1	5	IS: 3025 (P-10): 2023
5.	Total Dissolved Solids, mg/l	348	500	2000	IS: 3025 (P-16): 2023
6.	Total Hardness (as CaCO ₃), mg/l	200	200	600	IS: 3025 (P-21): 2009
7.	Calcium (as Ca ⁺⁺), mg/l	50.0	75	200	IS: 3025 (P-40): 2004
8.	Magnesium (as Mg ⁺⁺), mg/l	32.4	30	100	IS: 3025 (P-46): 2023
9.	Total Alkalinity (as CaCO ₃), mg/l	295	200	600	IS: 3025 (P-23): 2023
10.	Chloride (as Cl), mg/l	34.9	250	1000	IS: 3025 (P-32): 1998
11.	Sulphate (as SO ₄), mg/l	50.1	200	400	IS: 3025 (P-24) Sec.-1: 2022
12.	Iron (as Fe), mg/l	BDL (DL-0.02)	0.3	No relaxation	IS:3025 (P-53): 2024
13.	Zinc (as Zn), mg/l	BDL (DL-0.5)	5	15	IS: 3025 (P-49): 1994
14.	Nitrate (as NO ₃), mg/l	BDL (DL-1.0)	45	No relaxation	IS: 3025 (P-34): 2022
15.	Total Chromium (as Cr), mg/l	BDL (DL-0.04)	0.05	No relaxation	IS: 3025 (P-52): 2021
16.	Manganese (as Mn), mg/l	BDL (DL-0.09)	0.1	0.3	IS: 3025 (P-59): 2023
17.	Lead (as Pb), mg/l	BDL (DL-0.01)	0.01	No relaxation	IS: 3025 (P-47): 2024
18.	Aluminium (as Al), mg/l	BDL (DL-.002)	0.03	0.2	IS: 3025 (P-55): 2003



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 Phone : 0172-5090312
 E-mail : cptl126@gmail.com ; lab@cptl.co.in
 Website : www.cptl.co.in

Sample Received in Lab	19.06.2025
Type of Sample	Ground Water
Sample Identification No.	CPTL/2025/06/49(W)

S. No.	Parameters	Results	Acceptable Limit	Permissible Limit	Test Method
19.	Arsenic (as As), mg/l	BDL (DL-0.01)	0.01	0.05	IS: 3025 (P-37): 2022
20.	Mercury (as Hg), mg/l	BDL (DL-0.001)	0.001	No relaxation	IS: 3025:P-48:1994
21.	Copper (as Cu), mg/l	BDL (DL-0.04)	0.05	1.5	IS: 3025 (P-42): 1992
22.	Boron (as B), mg/l	BDL (DL-0.1)	0.5	1.0	IS: 3025 (P-57): 2021
23.	Cadmium (as Cd), mg/l	BDL (DL-0.001)	0.003	No relaxation	IS: 3025 (P-41): 2023
24.	Fluoride (as F), mg/l	BDL (DL-0.1)	1.0	1.5	IS: 3025 (P-60) Sec.-I: 2023
25.	Free Residual Chlorine (as Cl ₂), mg/l	BDL (DL-0.1)	0.2	1	IS: 3025 (P-26): 2021
26.	Selenium (as Se), mg/l	BDL (DL-0.01)	0.01	No relaxation	IS: 3025 (P-56): 2003

BDL- Below Detection Limit
 DL-Detection Limit

D Singh
 (Chemist In-Charge)
 Date: 23/06/2025

S Singh
 Mr. Sital Singh (CEO)
 (Authorized Signatory)
 Date: 23/06/2025

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 Phone : 0172-5090312
 E-mail : cptle126@gmail.com ; lab@cptl.co.in
 Website : www.cptl.co.in



Format No. CPTLF7.8-I(M)

TEST CERTIFICATE

REPORT No. CPTL/2025/06/28m(W)
 REPORTING DATE: 20.06.2025

NAME OF INDUSTRY: M/s. RAJASTHAN LIQUOR LTD. (DISTILLERY),
 VILL. HARIPUR HINDUAN, BARWALA ROAD,
 DERABASSI, DIST. SAS NAGAR, MOHALI (PB).

SAMPLE PARTICULARS

Date of Sample Collection	19.06.2025
Sample Received in Lab	19.06.2025
Type of Sample	Ground Water
Sampling Plan Ref. No.	CPTLF7.3-I
Sampling Method	CPTL/SM/01
Environmental Conditions	Normal
Point of Sample Collection	Borewell-Near Ware House
Quantity & Packaging	250 ml in sterilized glass bottle
Sample Identification No.	CPTL/2025/06/28m(W)
Analysis Duration	19.06.2025 To 20.06.2025
Sample Collected By	Amrit Singh & Team
Visual Observation	Clear and colorless.

TEST RESULTS

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Qishi
 Analyzed By
 Date: 20/06/2025

Sital Singh
 Mr. Sital Singh (CEO)
 (Authorized Signatory)
 Date: 20/06/2025

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Annexure11: Photographs showing stored raw material in yards



Annexure12: Photographs showing ash silo and covered loading setup



GSTIN: 03AYRPM6888R2Z3
LIC No. SASNAGAR/BKO/109

M : +91-97794-00025

JAI GANESH B.K.O.

Vill. Jaula Kalan, The. Dera Bassi, Distt. SAS Nagar (Mohali)

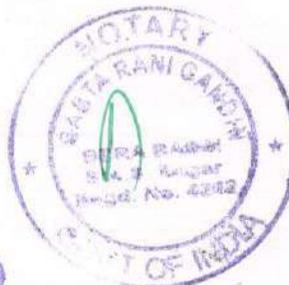
Ref. No. _____

Dated 01/04/2025

TO WHOM IT MAY CONCERN

This is to certify we are using fly ash bringing from M/S Rajasthan Liquors Ltd, through B.S Contractor on daily basis. This fly ash is used for manufacturing of bricks

certified that the Affidavit (P.A.C.F.)
Agreement/ Instrument has been read
over & Explained to the Dependent/
Declarant/ Executor in his/ her
Language who Signs Perfectly to
me at the time



ATTESTED

Deena
Notary Dera Bassi
S.A.S. Nagar (Pb.)

For JAI GANESH B.K.O.
Pranay Kumar
Proprietor

23 APR 2025



9872422896
9729282682

Saraswati Bricks Industries

DEALS IN : HIGH CLASS BRICKS

VILL. JOLAN KALAN, DISTT. MOHALI (PB.)



REF. NO.

DATED 01/04/2025

TO WHOM IT MAY CONCERN

This is to certify we are using fly ash bringing from M/S Rajasthan Liquors Ltd, through B.S Contractor on daily basis. This fly ash is used for manufacturing of bricks

Verified that the Affidavit / Agreement/ Instrument has been read over & explained to the Deponent/ Declarant / Executant in his/ her Language well known perfectly to understand the Same



ATTESTED

Notary Praveen Prasi
S.A.S. Nagar (PB.)

23 APR 2025



(Signature)

Kuldeep Singh & Bros.
BRICK KILN OWNER & GOVT. CONTRACTOR
Vill. Mubarikpur, Teh. Dera Bassi, Distt. S.A.S. Nagar (Mohali) Pb.

Ref. No.....

Date...01-04-2025

TO WHOM IT MAY CONCERN

This is to certify we are using fly ash bringing from M/S Rajasthan Liquors Ltd, through B.S Contractor on daily basis. This fly ash is used for manufacturing of bricks

Certified that the Affidavit (copy of Agreement) Instrument has been read over & Explained to the Deponent/Declarant/ Examinant in his/ her Language who seems perfectly to understand the same



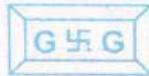
ATTESTED

Notary Dera Bassi
S.A.S. Nagar (Pb.)

23 APR 2025

Lal Bahadur
For KULDEEP SINGH & BROS

Authorised Signatory



BACHHAL BRICKS

Mfrs. & Suppliers : Hand Moulded Quality Bricks & Tiles
Vill. Khedi Jattan, Teh. Dera Bassi, Distt. Mohali (Pb.)

Ref. No.

Dated : 01-04-2025

TO WHOM IT MAY CONCERN

This is to certify we are using fly ash bringing from M/S Rajasthan Liquors Ltd, through B.S Contractor on daily basis. This fly ash is used for manufacturing of bricks

Certified that the ~~Agreement~~ ~~has been read~~ ~~over & Explored~~ ~~by the component/~~ ~~Declarant~~ ~~in his/ her~~ ~~Language~~ ~~and~~ ~~correctly~~ ~~understands the same~~



ATTESTED

[Signature]
Notary Dera Bassi
S.A.S. Nagar (Pb.)

23 APR 2025

For **BACHHAL BRICKS**

[Signature]
Rajeshwar Kumar
Prop.



SINGLA BRICK TRADERS

Village Rampur Bahal, Sub-Tehsil Dera Bassi, Distt. Mohali (Punjab)

BKO/MOH./

Ref. No.....

Dated 01/04/2025

TO WHOM IT MAY CONCERN

This is to certify we are using fly ash bringing from M/S Rajasthan Liquors Ltd, through B.S Contractor on daily basis. This fly ash is used for manufacturing of bricks

Verified that the [unclear] Agreement/Instrument has been read over & Explained to the Deponent/ Declarant/ Executant in his/ her Language which he/she properly understands the Same

ATTESTED

[Signature]
Notary Dera Bassi
S.A.S. Nagar (Pb.)



23 APR 2025

[Signature]

Annexure 14: Photographs showing Firefighting Measures





Hazard Identification and Risk Assessment

Rajasthan Liquors Limited

Industrial Land Zone, Saidpura, Haripur Hinduan, Punjab 140507

By

Central Institute of Fire & Safety Management

Unit of Ayushman Shakshik & Samajik Sansthan, Registered Under Public Trust Act,
Government Registered No. 5240, Affiliated to MSME (Micro, Small & Medium Enterprises, Govt. of
India) & Quality Council of India,

“An ISO 9001:2015 Certified”

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Head Office: 128, Lakhapur, Vikas Nagar, Kanpur – 208024

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info@cifsafety.com, cifsafety@gmail.com, admin@cifsafety.com

+91 9924913905, +91 708081390

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3.	Location and Site	5
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ACKNOWLEDGEMENT

We express our sincere thanks to Management and Employees of **M/s. Rajasthan Liquors Limited (RLL)**, for their Co-operation and unstinted help without which the **Hazard & Risk Assessment (HIRA)** report could not have been possible. The courtesy and Cordiality extended to the team is highly appreciated.

We do appreciate the best planning and constant co-operation from **Mr. Uday Veer Singh** and their team and all other department head of respective plant for speedy completion of this **Hazard & Risk Assessment (HIRA)** report.

Place: Derabassi, Punjab

Date: 22-05-2025

Central Institute of Fire & Safety Management

1. Introduction

Rajasthan Liquors Limited (RLL) stands as a state-of-the-art, grain-based distillery unit, strategically located in Derabassi, Punjab. The facility specializes in the production of high-purity 96% ethanol derived from rice, serving as a critical supplier to fuel-grade ethanol programs, as well as the pharmaceutical and beverage sectors. As part of India's evolving bio-economy and ethanol blending initiatives, RLL contributes significantly to the nation's energy independence and sustainable industrial practices.

The design and layout of the plant reflect a strong emphasis on streamlined process flows and robust safety management systems. Distinct operational zones are designated for each critical stage: raw material handling and storage, controlled fermentation under hygienic conditions, multi-stage distillation and dehydration, and systematic dispatch of the final product. These zones are equipped with advanced control systems, interlocks, and instrumentation to ensure efficiency, traceability, and risk mitigation at every stage of production.

RLL operates under a framework of stringent environmental and occupational health protocols. The facility is equipped with a comprehensive Effluent Treatment Plant (ETP) to manage and treat process wastewater, in alignment with Punjab Pollution Control Board (PPCB) norms and Central Pollution Control Board (CPCB) guidelines. Air quality management, waste minimization, water conservation, and resource recovery practices are seamlessly integrated into day-to-day operations, demonstrating RLL's commitment to sustainable manufacturing and compliance.

From an organizational perspective, RLL maintains strict statutory compliance with the Factories Act, 1948, the Explosives Act, the Environment Protection Act, and other applicable Indian Standards (IS) and National Building Code (NBC) provisions. Periodic safety audits, hazard analysis, employee training, and emergency preparedness drills are conducted to enhance workplace safety and resilience. This disciplined operational approach ensures RLL not only delivers high-quality ethanol but does so with a strong emphasis on safety, sustainability, and regulatory excellence.

RLL's production infrastructure is supported by a well-integrated utility network that includes steam generation systems, water treatment units, air compressors, and power backup mechanisms, ensuring uninterrupted and efficient plant operations. Energy optimization is a key focus, with the distillery implementing waste heat recovery systems, efficient boiler operations, and automated process control to minimize energy consumption. Additionally, the facility adopts best practices in process automation and instrumentation, which not only enhances product quality but also reduces human error and operational risks.

Workforce safety and skill development are integral components of RLL's operational ethos. The plant management prioritizes continuous training and capacity building for workers, covering areas such as safe handling of chemicals, confined space entry, fire safety, and emergency response. Regular health check-ups, provision of personal protective equipment (PPE), and strict adherence to standard operating procedures (SOPs) further ensure the well-being of all employees. RLL's proactive safety culture, coupled with its commitment to environmental stewardship and regulatory compliance, positions it as a responsible and forward-looking player in India's ethanol manufacturing sector.

2. Location and Site

The distillery is situated within the industrial hub of Derabassi, approximately 25 km from Chandigarh, with accessibility to major highways, ensuring ease of transportation and logistics. The site is spread over a considerable area and comprises:

- ❖ Raw Material Silos and Storage Yards (for rice and auxiliary chemicals)
- ❖ Milling and Liquefaction Zones
- ❖ Batch/continuous Fermentation Units
- ❖ Distillation and Dehydration Columns
- ❖ Ethanol Storage Tanks (above ground)
- ❖ Utility Infrastructure (Boilers, DG sets, Water Treatment)
- ❖ Effluent Treatment Plant (ETP)
- ❖ Fire Hydrant Network and Emergency Exits
- ❖ Admin and Control Building
- ❖ Laboratories and Quality Assurance Rooms

The facility is designed with designated fire zones, Safety Signage, and Escape Routes as per NBC and Factories Act norms. The plant is enclosed by a compound wall with a security-controlled entry/exit gate and CCTV surveillance.

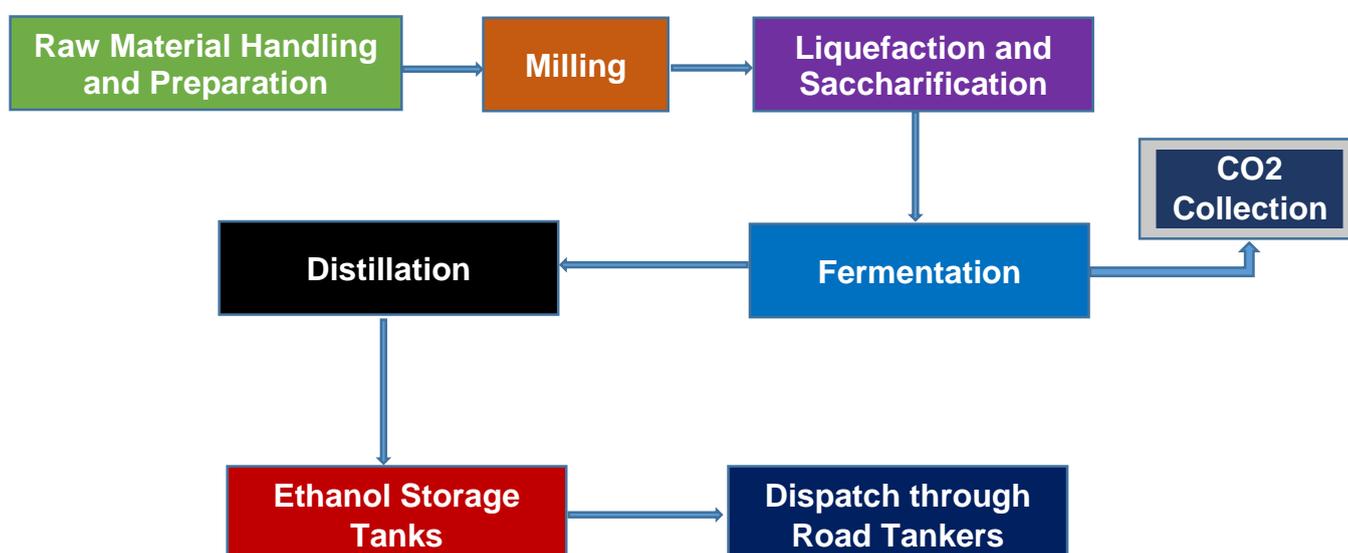
3. Process Description

Overview of Manufacturing Process:

Rajasthan Liquors Limited (RLL) utilizes a grain-based fermentation and distillation process to manufacture 96% ethanol. The raw material used is rice, which undergoes milling, liquefaction, saccharification, fermentation, and distillation. The final product is ethanol, which is either used as a fuel-grade blending agent or as a feedstock for chemical and pharmaceutical industries.

The entire process is continuous and integrated with high levels of automation and control. The operations are supported by utility systems and governed by strict environmental, health, and safety protocols.

Process Flow Diagram:



Detailed Process Flow

Raw Material Handling and Preparation

- **Rice Procurement & Storage:** Cleaned and dried rice is procured and stored in silos or godowns.
- **Screening & Cleaning:** Rice is cleaned to remove foreign matter, stones, and metal contaminants using vibratory screeners and magnetic separators.
- **Milling:** The cleaned rice is milled into coarse flour using hammer mills or roller mills.
- **Slurry Preparation:** The flour is mixed with water to form a slurry which is fed into the liquefaction tank.

Liquefaction and Saccharification

- **Liquefaction:** The rice slurry is heated and treated with α -amylase enzymes in the presence of steam. This breaks down starch into dextrins.

- **Saccharification:** The dextrin-rich slurry is further treated with glucoamylase enzymes at controlled temperatures, converting it into fermentable sugars (mainly glucose).

Fermentation

- The glucose solution is cooled and transferred to fermenters.
- Yeast culture (*Saccharomyces cerevisiae*) is introduced to initiate fermentation.
- The sugar is converted into ethanol and CO₂ over a 48–72 hour period.
- Continuous or batch fermentation is used, depending on the process design.

Fermentation and CO₂ Recovery

- The cooled glucose solution from saccharification is transferred to fermentation tanks.
- Yeast culture (*Saccharomyces cerevisiae*) is inoculated to ferment sugars into ethanol and carbon dioxide (CO₂).
- The fermentation process typically lasts 48 to 72 hours, depending on operational parameters, yielding a wash with 8–10% alcohol concentration.

CO₂ Recovery and Purification

- The CO₂ evolved during fermentation is captured through dedicated gas collection hoods installed on fermenters.
- The gas is routed to a CO₂ scrubbing unit, where it is:
 - Washed to remove impurities
 - Compressed and dried
 - Passed through activated carbon filters for odor and hydrocarbon removal
 - Liquefied under high pressure

Dry Ice Manufacturing

- A portion of the liquefied CO₂ is depressurized and expanded into a snow-like solid using dry ice pelletizers or slab machines.
- This solidified CO₂ is compressed into:
 - Dry Ice Pellets, Dry Ice Blocks or Slabs.
- Dry ice is stored in insulated bins and used for commercial sale or internal cooling purposes.

Distillation and Dehydration

- The fermented wash (containing ~8–10% ethanol) is pumped to a distillation column.
- Using steam and heat, ethanol is separated from the wash in a series of distillation columns:
- Analyzer Column
- Rectifier Column
- Hydro Extractive Column
- Dehydration (via molecular sieves or azeotropic distillation) removes remaining water to produce anhydrous ethanol (96% purity).

Ethanol Storage and Dispatch

The anhydrous ethanol is cooled and stored in above-ground storage tanks equipped with:

- Level indicators
- Flame arrestors
- Breather valves
- Ethanol is dispatched via road tankers following PESO guidelines.

Utility Systems

Steam and Boiler Section: Steam for process heating is generated using agro-waste or coal-fired boilers.

Boilers are equipped with:-

- Water softening units,
- Blow-down tanks,
- Stack emission monitoring systems &
- Safety valves and pressure gauges

Power Generation (DG Sets)

- Diesel Generator (DG) sets provide backup power.
- Acoustic enclosures and stack chimneys ensure noise and emission control.

Water Treatment Plant (WTP)

- Raw water is treated for process and cooling needs using:

Central Institute of Fire & Safety Management

- Pressure sand filters.
- Activated carbon filters.
- Reverse Osmosis (RO) units.

Effluent Treatment Plant (ETP)

- Process effluents are treated in a multi-stage ETP comprising:
- Equalization tanks.
- Anaerobic digesters (biogas recovery).
- Aeration tanks.
- Clarifiers and sludge drying beds.
- Treated water is reused for greenbelt or utilities, ensuring zero liquid discharge (ZLD).

Process Automation and Control

- The plant is equipped with PLC/SCADA-based control systems to monitor and regulate:
- Fermentation parameters (pH, temperature, sugar content).
- Distillation column pressures and flow rates.
- Utility system efficiencies.
- Alarms and interlocks are embedded to handle deviations and ensure fail-safe operation.

4. **Regulatory and Standard References**

The hazard identification and risk assessment (HIRA) process at Rajasthan Liquors Limited (RLL) is grounded in a robust framework of national legislation, codes, and standards. These references ensure that all activities are carried out with the highest levels of safety, environmental care, and legal compliance. The following are the key standards and regulations that guide the methodology:

The Factories Act, 1948 and Associated State Rules

The Factories Act, 1948 is India's primary legislation for regulating occupational health, safety, and welfare of workers in factories. It mandates provisions for:

- Fencing of machinery and safety of workspaces.
- Safe storage and handling of hazardous substances.
- Health and hygiene provisions (ventilation, lighting, sanitation).
- Emergency preparedness, safety officers, and regular health checkups.
- Punjab-specific State Factory Rules supplement the Act with localized requirements for record-keeping, inspections, accident reporting, and licensing.

National Building Code (NBC) of India – Part 4: Fire and Life Safety

NBC Part 4 provides comprehensive guidelines on fire prevention, life safety, and fire protection in industrial and commercial buildings. Key aspects include:

- Classification of occupancy based on fire risk.
- Design of fire exits, fire zones, and compartmentalization.
- Requirements for fire detection, suppression, and evacuation.
- Siting of storage tanks and hazardous processes to prevent escalation.

IS 14489:1998 – Code of Practice for Occupational Safety and Health Audit

This BIS standard provides a structured framework for conducting OSH audits, including:

- Identifying unsafe conditions and practices.
- Evaluation of safety policies, training programs, and emergency plans.
- Recommendations for continuous safety performance improvement.

IS 18001 (OHSAS) / ISO 45001 – Occupational Health and Safety Management Systems

These international standards define requirements for effective occupational health and safety management systems. ISO 45001, in particular:

- Encourages a proactive approach to risk control.
- Emphasizes leadership and worker participation.
- Aligns safety objectives with corporate governance.
- Integrates risk-based thinking into all operational levels.

Relevant BIS Standards

Various BIS codes support HIRA in specific domains such as:

- **IS 1646:** Code of practice for fire safety of buildings (general).
- **IS 3034:** Code for fire protection of electrical installations.
- **IS 2190:** Fire extinguishers – selection and installation.
- **IS 5216:** Recommendations on safety procedures during electrical work.

These standards ensure that the design, installation, and maintenance of systems comply with national norms.

Guidelines from PESO, CPCB, and SPCB

PESO (Petroleum and Explosives Safety Organisation) provides regulations on the safe storage, handling, and transport of flammable and explosive substances like ethanol.

CPCB (Central Pollution Control Board) and **SPCB (State Pollution Control Board)** issue directives related to waste management, air/water pollution control, effluent treatment, and environmental monitoring. These guidelines ensure RLL adheres to both environmental sustainability and process safety.

5. Hazard Identification Methodology

Purpose of Hazard Identification:

Hazard identification serves as the cornerstone of any effective risk management system within industrial operations. At Rajasthan Liquors Limited (RLL), the aim is to systematically identify all foreseeable hazards associated with various processes, materials, equipment, and human activities involved in the distillation and ethanol production cycle. Recognizing these hazards early allows for the implementation of targeted control measures to either eliminate the risks or reduce them to acceptable levels.

The primary objective is to ensure the health and safety of employees by preventing occupational injuries and illnesses. Hazard identification supports the creation of a safe working environment by flagging both routine and non-routine activities that may pose threats, such as chemical exposure, equipment failure, fire, explosion, or ergonomic risks. This is particularly important in a distillery environment where flammable substances, pressurized systems, and heavy machinery are commonplace.

From an operational perspective, identifying hazards early contributes to asset protection and process reliability. Uncontrolled hazards can lead to breakdowns, downtime, or catastrophic events that disrupt production and lead to significant financial loss. By integrating hazard identification into the design, planning, and execution stages of operations, RLL enhances process safety and sustains long-term productivity.

Furthermore, hazard identification is essential for compliance with national legislation such as the Factories Act, 1948, and applicable Indian standards including those from BIS and NBC. Regulatory bodies require periodic risk assessments, and proactive hazard identification plays a vital role in demonstrating organizational diligence. It also aligns with international safety best practices, fosters a safety culture, and improves stakeholder confidence by demonstrating that RLL is committed to protecting its people, environment, and operations.

An effective hazard identification process also enables better preparedness for emergency situations. By understanding the nature, location, and potential impact of hazards, RLL can design robust emergency response and mitigation plans that are both realistic and actionable. For example, identifying the risk of ethanol vapor leakage during storage or transfer helps ensure that gas detection systems, ventilation, and fire suppression mechanisms are appropriately placed and regularly maintained. This foresight significantly reduces the likelihood of high-consequence incidents and supports timely evacuation and containment in the event of an emergency.

Moreover, hazard identification contributes to fostering a culture of continuous improvement. When employees at all levels are involved in recognizing hazards and suggesting controls, it promotes engagement and ownership of safety. This participative approach not only helps in capturing near-misses and latent hazards that may otherwise go unnoticed but also enhances overall morale. At RLL, embedding hazard identification into daily operations ensures that safety is not treated as a one-time compliance task but as a continuous, dynamic process integral to operational excellence and sustainability.

Methodology Adopted

During the conduct of Hazard Identification and Risk Assessment a structured approach has adopted based on the following steps:

Step 1: Process and Activity Mapping

- Each unit operation, utility, and supporting activity within the plant is mapped in detail (e.g., Raw Material Handling, Fermentation, CO₂ Recovery, Distillation, Storage, ETP, Dry Ice Manufacturing, etc.).
- A Process Flow Diagram (PFD) and Plant Layout Plan serve as baseline tools for understanding workflows and identifying points of risk.

Step 2: Workplace Inspection and Data Collection

- Site inspections, walkthroughs, and interactions with employees are conducted.
- Inputs from incident records, safety audits, and maintenance logs are analyzed.
- Job Safety Analysis (JSA) is carried out for critical operations.

Step 3: Hazard Identification Techniques

The following techniques are used for identifying hazards during the conduct of this HIRA:

Technique	Application
What-If Analysis	For utilities and operational deviation checks
Checklist Method	Based on IS and NBC codes
Job Safety Analysis (JSA)	Worker-level risk evaluation
HAZOP Study	For continuous processes and control deviations
FMEA (Failure Mode and Effects Analysis)	For equipment and instrument-level risk
Past Incident Review	Learning from historical accidents and near misses

Step 4: Classification of Hazards

Identified hazards are classified into the following categories:

(a) Physical Hazards

Heat, noise, vibration, confined spaces, height, radiation

(b) Chemical Hazards

Exposure to ethanol vapors, acids/alkalis, CO₂, enzyme dust

(c) Biological Hazards

Mold or bacterial contamination in grain storage or effluent treatment

(d) **Mechanical Hazards**

Rotating equipment, conveyors, compressors, agitators

(e) **Electrical Hazards**

Faulty wiring, overloaded circuits, static charge buildup

(f) **Fire and Explosion Hazards**

Ethanol storage, CO₂ storage, flammable gases, hot work

(g) **Ergonomic Hazards**

Repetitive strain, manual material handling, awkward postures

(h) **Environmental Hazards**

Air emissions, effluent leaks, noise, and odorous emissions

6. Hazardous Area Classification

Hazardous area classification is a critical component in ensuring safety at Rajasthan Liquors Limited (RLL), where flammable substances such as ethanol vapors and combustible dust may be present. This classification identifies and zones areas based on the likelihood and duration of the presence of explosive gas atmospheres, enabling the implementation of appropriate electrical and mechanical equipment standards to prevent ignition sources and catastrophic incidents.

Definition and Purpose

Hazardous area classification involves dividing the plant premises into zones based on the presence of flammable gases, vapors, or dust that could ignite and cause fires or explosions. It provides a systematic approach to managing the risks associated with volatile substances by controlling ignition sources in designated areas. The objective is to protect personnel, property, and the environment by minimizing the chances of fire and explosion hazards.

Classification Scheme

RLL follows the classification system as per **National Electrical Code (NEC)** guidelines and **Indian Standards IS 5572** and **IS 5571**, which categorize hazardous areas as:

Zone 0: An area in which an explosive gas atmosphere is present continuously or for long periods. For example, inside ethanol storage tanks or fermenters.

Zone 1: An area where an explosive gas atmosphere is likely to occur in normal operation. This includes areas around ethanol transfer pumps, unloading points, and vent stacks.

Zone 2: An area where an explosive atmosphere is not likely to occur in normal operation but, if it does, will persist for a short period only. Examples include surrounding areas near ethanol storage where vapor leakage is unlikely but possible.

Non-hazardous Area: Areas where flammable materials or vapors are not expected to be present in dangerous concentrations.

Application at Rajasthan Liquors Limited

At RLL, the hazardous area classification is performed based on a detailed analysis of the plant's process flow, storage, and handling of flammable materials, considering:

- Locations of ethanol storage tanks, transfer lines, and loading/unloading areas.
- Points of possible vapor release such as vents, pumps, and seals.
- Environmental factors such as ventilation, temperature, and humidity.
- Historical data on incidents and near misses.

Electrical installations and equipment in these zones are selected and installed as per the applicable standards for explosion protection, such as intrinsically safe, flameproof, or increased safety equipment.

Control and Compliance

Hazardous area classification at RLL is periodically reviewed and updated to accommodate any changes in process layout or technology. Compliance with regulatory bodies including **PESO** and adherence to standards such as **IS 5571 (Code of Practice for Classification of Hazardous Areas)** and **IEC 60079 series** for electrical apparatus in explosive atmospheres is strictly maintained.

Proper signage, training of personnel on hazardous zones, and rigorous inspection and maintenance of equipment are key controls implemented to manage risks associated with hazardous areas, ensuring safety, operational reliability, and regulatory compliance.

7. Risk Assessment Criteria & Matrix

Objective: The primary objective of the risk assessment at Rajasthan Liquors Limited (RLL) is to systematically identify potential hazards associated with various operations, processes, equipment, and working conditions within the distillery. This structured approach is essential for recognizing unsafe acts and conditions that may lead to accidents, injuries, health issues, property damage, or environmental harm. By evaluating these hazards in terms of their likelihood and potential consequences, the risk assessment provides a basis for implementing targeted control measures.

The assessment aims to support RLL's commitment to proactive safety management by prioritizing risks and allocating resources effectively to mitigate or eliminate high-risk scenarios. It also seeks to ensure compliance with applicable statutory provisions, including the Factories Act, 1948; Environment Protection Act, 1986; and relevant Indian Standards and NBC guidelines. In doing so, the assessment contributes to building a safe and legally compliant workplace that fosters employee confidence and operational stability.

Another key objective is to integrate risk management into RLL's decision-making processes, especially in areas like process design, equipment selection, layout planning, and emergency preparedness. By identifying risk at the design and planning stages, the company can take preventive actions before incidents occur. The assessment also supports continuous improvement through regular monitoring, periodic reviews, and feedback loops, allowing RLL to adapt to changes in technology, raw materials, or operating conditions.

Furthermore, the risk assessment enhances awareness and safety culture across the organization by involving employees at all levels in hazard identification and risk evaluation. Engaging the workforce not only helps in accurate identification of operational hazards but also promotes ownership of safety responsibilities. Ultimately, this proactive approach fosters a safer, healthier, and more efficient workplace, aligned with RLL's long-term goals of sustainability, productivity, and regulatory excellence.

Severity Criteria

(a) **Classification of Risk Levels:**

Low / Medium / High / Extreme

(b) **Risk Assessment and Evaluation**

Risk Assessment Using a 5X5 Risk Matrix:

Risk Score = Likelihood × Severity

Likelihood (L) – Probability of occurrence (1 to 5 scale)

Severity (S) – Consequence of exposure (1 to 5 scale)

A Risk Matrix is used to assign a Risk Priority Number (RPN):

Where: **L** = Low Risk, **M** = Medium Risk, **H** = High Risk, **E** = Extreme Risk

(c) Control Measures and Hierarchy

For each risk identified, control measures are applied using the hierarchy of controls:

Elimination – Removing the hazard completely

Substitution – Replacing with a safer alternative

Engineering Controls – Physical modifications (e.g., guards, interlocks, ventilation)

Administrative Controls – SOPs, permits, signage, training

Personal Protective Equipment (PPE) – Safety gear as the last line of defense

<u>Rating</u>	<u>Descriptor</u>	<u>Impact</u>
1	Negligible	No injury, no property/environmental damage, trivial operational impact
2	Minor	First aid level injury; minimal environmental impact or equipment damage
3	Moderate	Medical treatment required; moderate property/environmental damage
4	Major	Lost time injury; significant asset or environmental damage
5	Catastrophic	Fatality, permanent disability, major environmental or plant-wide damage

(d) Risk Matrix

The risk matrix below guides the determination of risk levels based on the combination of severity and likelihood:

<u>Severity ↓ / Likelihood →</u>	<u>Rare (1)</u>	<u>Unlikely (2)</u>	<u>Possible (3)</u>	<u>Likely (4)</u>	<u>Very Likely (5)</u>
Catastrophic (5)	M	H	H	E	E
Major (4)	M	H	H	H	E
Moderate (3)	L	M	H	H	H
Minor (2)	L	M	M	H	H
Negligible (1)	L	L	M	M	H

Legend:

L – Low Risk (1-5) (Acceptable, Monitor)

M – Medium Risk (6-10) (Control Measures Required)

H – High Risk (11-20) (Immediate Action Required)

E – Extreme Risk (20-25) (Cease Activity, Implement Controls before Proceeding)

(e) **Risk Evaluation and Action Plan**

<u>Risk Level</u>	<u>Recommended Action</u>
Low (L)	Acceptable risk, maintain existing controls and monitor
Medium (M)	Develop control measures and implement within a reasonable time frame
High (H)	Requires prompt attention; implement risk mitigation before continuation
Extreme (E)	Unacceptable risk; activity must stop until effective controls are in place

(f) **Documentation and Review**

Risk assessment results to be documented and reviewed periodically.

Reassessment is mandatory:

- Annually
- After near misses/incidents
- Upon significant process or layout changes
- When new equipment or chemicals are introduced

8. Emergency Scenarios Identified

Emergency scenarios refer to unexpected, potentially dangerous events that require immediate response to protect life, property, and the environment. At Rajasthan Liquors Limited (RLL), the identification of plausible emergency situations is an integral part of the hazard and risk management process. Given the nature of operations involving ethanol production, storage, and transfer, the facility is exposed to various types of emergencies that could disrupt operations and pose serious safety threats.

Key Emergency Scenarios at RLL

➤ **Fire and Explosion**

Cause: Leakage or spillage of ethanol, electrical faults, hot work in hazardous zones.

Impact: Potential for mass casualty, major property loss, environmental damage.

Control Measures: Fire detection and suppression systems, flameproof equipment, emergency evacuation plans, and regular mock drills.

➤ **Chemical Spill or Leak**

Cause: Accidental release during transfer, packaging, or handling of ethanol or cleaning agents.

Impact: Health hazards to personnel, environmental contamination.

Control Measures: Spill containment kits, ventilation systems, PPE, SOP for spill response.

➤ **Boiler or Pressure Vessel Explosion**

Cause: Equipment failure, overpressure, improper maintenance.

Impact: Severe injury or fatality, plant shutdown.

Control Measures: Preventive maintenance, safety valves, automatic shutdown systems, training.

➤ **Tanker Incident (Loading/Unloading)**

Cause: Static discharge, driver error, overfilling.

Impact: Fire, explosion, roadway contamination.

Control Measures: Grounding and bonding, trained operators, emergency response coordination.

➤ **Electrical Fire or Short Circuit**

Cause: Overloaded circuits, faulty wiring and equipment malfunction.

Impact: Injury, fire spread.

Control Measures: Regular inspection, proper rating of equipment, circuit breakers, ELCBs.

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➤ **Natural Calamities**

Cause: Earthquakes, floods, or lightning.

Impact: Structural damage, disruption of utilities.

Control Measures: Structural audits, flood barriers, lightning arrestors, emergency utility backup.

➤ **Confined Space Emergency**

Cause: Entry into fermentation tanks, ETP chambers, or ethanol storage without precautions.

Impact: Asphyxiation, toxic exposure.

Control Measures: Permit to work, gas detectors, rescue plans, trained standby personnel.

➤ **Security Breach or Sabotage**

Cause: Unauthorized entry, tampering with equipment or substances.

Impact: Theft, contamination, or deliberate damage.

Control Measures: CCTV surveillance, access control, ID checks, emergency lockdown procedures.

➤ **Medical Emergency**

Cause: Heatstroke, chemical exposure, slips/falls.

Impact: Injury or illness requiring immediate medical attention.

Control Measures: First aid stations, trained first responders, ambulance tie-up, health surveillance.

9. **Hazard Identification And Risk Assessment** (Process-Wise)

The following section presents the identification of key hazards, risk evaluation, and control measures as per the process areas of the distillery. Each subsection includes:

Process Description

Identified Hazards

Risk Assessment (with RPN)

Recommended Control Measures (as per hierarchy of controls)

(a) **Raw Material Handling (Grain Storage, Weighbridge, Unloading)**

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
Dust Explosion	Fine grain dust is highly combustible and can ignite from heat, sparks, or static discharge, particularly in enclosed areas.	3	2	M	<p>Dust Explosion Prevention:</p> <p>Install enclosed dust extraction and collection systems with proper filtration (e.g., bag filters, cyclone separators) in grain unloading and transfer areas.</p> <p>Use intrinsically safe electrical fittings, flameproof lighting, and explosion-proof motors in dust-prone zones.</p> <p>Implement a strict no-smoking policy and eliminate ignition sources (including static discharge) by grounding and bonding all equipment.</p>	Plant Head/ Mechanical/ EHS	
Grain Spillage	Can lead to slips, trips, and fall incidents, contamination, and potential pest infestations	3	3	M	<p>Grain Management: Spillage</p> <p>Design sealed conveyance systems (like bucket elevators or screw conveyors) to minimize spillage.</p>	Plant Head/ Mechanical/ EHS	

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
					<p>Establish routine cleaning schedules and install grain collection trays beneath loading/unloading points.</p> <p>Conduct regular pest control and hygiene inspections in storage areas to prevent spoilage and contamination</p>		
Manual Handling Injuries	Improper lifting or repetitive tasks can cause musculoskeletal injuries.	3	3		<p>Safe Manual Handling:</p> <p>Deploy mechanized handling equipment such as conveyors, grain elevators, or pneumatic transport systems to reduce manual lifting.</p> <p>Train workers in ergonomic lifting techniques, including use of the legs and maintaining a straight back.</p> <p>Rotate tasks to reduce repetitive strain and provide manual handling aids (e.g., trolleys, pallet jacks).</p>	Plant Head/ Mechanical/ EHS	
Slips and Falls	Caused by spilled grains, uneven surfaces, or wet floors.	4	4	H	Slip and Fall Prevention:	Civil/ EHS	

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
					<p>Use anti-skid epoxy flooring or anti-slip mats in unloading zones and weighbridge areas.</p> <p>Ensure all walkways and working platforms are kept clean and dry through good housekeeping practices.</p> <p>Mark slippery or hazardous zones with visible warning signage and restrict access during spill cleanup.</p>		
Entrapment in Silos or Hoppers	Entry into grain silos without precautions can lead to engulfment and suffocation.	2	3	M	<p>Silo and Hopper Safety:</p> <p>Install guardrails, toe boards, and fall arrest systems around silo tops and access ladders.</p> <p>Enforce permit-to-work systems for any silo entry; include gas monitoring, lifeline harnessing, and standby rescue personnel.</p> <p>Use mechanical vibrators or sweep augers for grain movement instead of manual entry into silos.</p>	Mechanical/ EHS	

(b) Milling and Slurry Preparation

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
Mechanical Entrapment	Risk of entanglement or injury from moving parts such as rollers, conveyors, and agitators used in milling and slurry tanks.	3	4	H	<p>Mechanical Entrapment Prevention:</p> <p>Ensure all rotating and moving parts (mills, screw conveyors, agitators) are fitted with fixed or interlocked guards.</p> <p>Implement a lockout-tagout (LOTO) system during maintenance or cleaning to isolate power sources.</p> <p>Train workers to never bypass or remove machine guards, and conduct regular safety audits of machinery guards.</p>	Plant Head Mechanical/ EHS	
Noise Exposure	High decibel levels from milling machinery can cause hearing damage with prolonged exposure	2	4	M	<p>Noise Control:</p> <p>Conduct a noise survey to measure decibel levels and determine areas requiring control.</p> <p>Provide hearing protection (earplugs/muffs) to operators and enforce their</p>	Mechanical/ EHS	

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
					usage in designated high-noise zones. Post noise hazard signage and restrict unnecessary personnel entry into milling areas.		
Hot Surfaces	Slurry preparation often involves preheating water or steam lines, leading to potential burn injuries.	3	4	H	Hot Surface Management: Insulate all exposed steam lines, slurry tanks, and heating jackets using suitable lagging material. Display thermal hazard warning labels on hot surfaces and provide thermal gloves where contact is possible. Install temperature indicators and alarms to monitor and control the slurry preparation temperatures.	Operations/ Mechanical/ EHS	
Enzyme Contact	Enzymes (e.g., alpha-amylase) used in the liquefaction process may cause allergic reactions or skin/eye irritation upon contact	2	4	M	Enzyme Handling and Chemical Safety: Store enzymes in well-ventilated, clearly labeled containers as per MSDS guidelines.	Operations/ Lab/ EHS	

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
					<p>Ensure operators use appropriate PPE (chemical-resistant gloves, safety goggles, aprons, and masks) while handling enzymes.</p> <p>Train workers on safe handling practices, spillage response, and first aid measures related to enzyme exposure.</p> <p>Provide emergency eyewash stations and showers in the enzyme handling zone.</p>		

General Controls:

Maintain SOPs for milling and slurry preparation, including start-up, shutdown, and cleaning procedures.

Schedule preventive maintenance of milling and slurry equipment to avoid malfunction or unexpected breakdowns.

Conduct Job Safety Analysis (JSA) periodically to update control measures based on any process or equipment changes.

(c) **Fermentation**

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
CO ₂ Accumulation	Fermentation generates significant amounts of carbon dioxide, which can displace oxygen, leading to asphyxiation risks, especially in low-lying or enclosed areas.	4	5	E	<p>CO₂ Monitoring and Ventilation:</p> <p>Install fixed and portable CO₂ gas detectors in and around fermentation tanks and adjacent workspaces, with alarm thresholds set as per TLV (Threshold Limit Value) limits.</p> <p>Ensure adequate natural or forced ventilation systems are in place to dilute and remove accumulated CO₂ from the area.</p> <p>Train personnel to recognize signs of CO₂ exposure (headache, dizziness, confusion) and respond appropriately.</p> <p>Mark low-lying areas as high-risk CO₂ zones and restrict entry during active fermentation cycles unless cleared.</p>	Operations/ Mechanical/ EHS	
Biological Contamination	Uncontrolled microbial growth can affect	2	4	M	<p>Biological Contamination Control:</p>	Operations/ Lab/ EHS	

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
	product quality, cause spoilage, and potentially result in health hazards.				<p>Implement strict SOPs for cleaning-in-place (CIP) and sterilization-in-place (SIP) for fermenters and pipelines.</p> <p>Conduct periodic microbiological testing to ensure contamination-free batches.</p> <p>Ensure strict hygiene practices, including the use of dedicated PPE, sanitized tools, and cleanroom attire for fermentation operators.</p> <p>Maintain controlled environmental conditions (temperature, pH, etc.) to prevent the proliferation of unwanted organisms.</p>		
Confined Space Hazards	Fermentation tanks are classified as confined spaces, posing risks such as limited oxygen, hazardous gas buildup, or entrapment during inspection, cleaning, or maintenance activities.	3	5	H	<p>Confined Space Entry Safety:</p> <p>Treat fermentation tanks as permit-required confined spaces, and follow confined space entry procedures per Indian Standards (IS 9620).</p>	Operations/ Mechanical/ EHS	

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
					<p>Ensure entry permits, atmospheric testing, and mechanical ventilation before and during any manned entry into the tank.</p> <p>Provide a trained standby person, tripod with retrieval winch, and emergency breathing apparatus for rescue readiness.</p> <p>Conduct confined space rescue drills and ensure the availability of emergency communication systems.</p>		

General Safety Practices:

Provide training to all fermentation area personnel on biological, gas, and confined space risks.

Maintain access control and restrict unauthorized personnel from entering the fermentation zone.

Use warning signage for CO₂ hazard zones and ongoing fermentation processes.

(d) **Distillation and Ethanol Recovery**

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
Fire and Explosion	Ethanol is a Class I flammable liquid with low flash point (~13°C). Vapor release during distillation, leakage, or equipment failure can form explosive vapor-air mixtures, especially near ignition sources.	5	5	E	<p>Flameproof Equipment and Electrical Fittings:</p> <p>Use ATEX/IECEX certified flameproof motors, panels, lights, and instruments in all ethanol handling and vapor zones.</p> <p>Ensure regular inspection and maintenance of electrical enclosures to maintain IP integrity and explosion-proof ratings.</p> <p>Gas Detection and Alarm Systems:</p> <p>Install continuous ethanol vapor detectors with calibrated alarms at strategic points (e.g., column bases, receivers, condensers, transfer lines).</p> <p>Integrate detectors with interlock systems to trigger ventilation, shutoff valves, and evacuation protocols</p>	Plant Head/ Operations/ Mechanical/ EHS	

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
					<p>automatically in case of vapor buildup.</p> <p>Fire Safety Infrastructure:</p> <p>Enclose distillation and ethanol storage units in 2-hour fire-rated walls, with access-limited zones and flame barriers.</p> <p>Provide hydrant points, automatic sprinkler systems, foam monitors, and portable extinguishers (foam, CO₂, DCP) at key risk areas.</p> <p>Install emergency shutoff valves and remote isolation systems to cut off fuel and vapor supply in case of fire.</p>		
High Pressure and Temperature	Distillation columns operate under high thermal and pressure conditions, posing risks of equipment rupture or burns during leaks and process upsets.	3	5	H	<p>Process Pressure and Temperature Safety:</p> <p>Equip distillation columns with pressure relief valves (PRVs), rupture discs, and temperature control interlocks to prevent runaway reactions or equipment failure.</p>	Operations/ Mechanical/ EHS	

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
					Calibrate all pressure gauges, temperature sensors, and safety interlocks as per preventive maintenance schedule.		
Chemical Exposure	Operators may be exposed to ethanol vapors or cleaning agents used during maintenance, risking skin irritation, respiratory effects, or central nervous system depression.	4	3	H	<p>Ventilation and Vapor Handling:</p> <p>Ensure mechanical ventilation and vapor balancing systems are used to minimize ethanol vapor accumulation in enclosed spaces.</p> <p>Implement closed transfer systems and vapor recovery units during ethanol handling and transfer operations.</p> <p>Training, SOPs, and Emergency Preparedness:</p> <p>Conduct regular operator training on flammability hazards, ethanol properties, MSDS awareness, and emergency protocols.</p> <p>Develop and display SOPs for start-up, shutdown, upset</p>	Operations/ Mechanical/ EHS	

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
					<p>conditions, and spill response prominently at the control panels and entry points.</p> <p>Conduct fire and evacuation drills, including simulation of ethanol vapor release and pressure loss scenarios.</p> <p>Personal Protective Equipment (PPE):</p> <p>Mandate use of flame-resistant clothing (FRC), anti-static boots, safety goggles, and full-sleeve gloves for all operational staff.</p> <p>Provide respiratory protection (organic vapor cartridges) during maintenance or ethanol exposure-prone tasks.</p>		

(e) CO₂ Recovery and Dry Ice Manufacturing

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
Pressure Vessel Rupture	CO ₂ is stored and handled at high pressures in recovery and liquefaction units. Any failure of vessels or piping due to overpressure, material fatigue, or corrosion can lead to explosion or sudden release of CO ₂ .	2	4	M	<p>Inspection and Certification of Pressure Equipment:</p> <p>All CO₂ storage tanks, piping, and compressors must undergo periodic inspection and non-destructive testing (NDT) as per the Boiler Inspectorate and PESO norms.</p> <p>Maintain calibration and test records of safety relief valves, rupture discs, and pressure gauges.</p> <p>Pressure Safety Systems:</p> <p>Install automated pressure relief valves, burst discs, and high-pressure cut-off interlocks in critical parts of the CO₂ recovery system.</p> <p>Ensure integration of audible and visual pressure alarms in the control room and at field equipment.</p>	Mechanical/ Operations/ EHS	

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
Cold Burns and Frostbite	Dry ice has a temperature of -78.5°C. Direct contact with skin can cause severe cold burns or frostbite.	2	3	M	<p>PPE for Low-Temperature Exposure:</p> <p>Mandate use of cryogenic gloves, full face shields, and insulated aprons for all workers handling dry ice or exposed piping.</p> <p>Clearly label and segregate dry ice handling zones with "Cold Burn Hazard" warning signage.</p> <p>Safe Operating Procedures (SOPs):</p> <p>Develop and implement SOPs for CO₂ recovery, liquefaction, and dry ice production, with emphasis on start-up, shutdown, and emergency conditions.</p> <p>Include Job-Specific Training on safe handling, emergency first-aid for cold burns, and oxygen deficiency symptoms.</p>	Mechanical/ EHS	
Asphyxiation and Oxygen Displacement	CO ₂ is heavier than air and can accumulate in low-lying or enclosed areas, displacing oxygen and leading to	2	4	M	<p>Ventilation and Oxygen Monitoring:</p> <p>Provide forced ventilation systems in confined or semi-enclosed spaces such as CO₂</p>	Mechanical/ EHS	

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
	<p>suffocation without warning due to its odorless and colorless nature.</p>				<p>bottling rooms or dry ice storage areas.</p> <p>Use fixed oxygen deficiency monitors with alarm thresholds to alert staff of any drop in oxygen concentration below safe levels (<19.5%).</p> <p>Emergency Preparedness:</p> <p>Install Emergency Escape Breathing Devices (EEBDs) in critical areas.</p> <p>Conduct mock drills simulating CO₂ leaks and personnel rescue from oxygen-deficient atmospheres.</p> <p>Housekeeping and Area Zoning:</p> <p>Ensure CO₂ discharge and vent lines are clearly routed and do not pose a risk to occupied zones.</p> <p>Maintain clear access to manual isolation valves and keep dry ice in designated insulated containers.</p>		

(f) **Boiler and Turbine Section**

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
Boiler Explosion	Caused by overpressure, low water levels, fuel-air mixture imbalance, or structural failure, potentially leading to catastrophic damage and injury	4	5	H	<p>Regulatory Compliance and Certification:</p> <p>Conduct annual inspection and certification of the boiler by the Chief Inspector of Boilers as per the Boiler Act and IBR (Indian Boiler Regulations).</p> <p>Maintain logs of hydrostatic tests, safety valve calibrations, and boiler tube thickness checks.</p>	Mechanical/ EHS	
High-Pressure Steam Leaks	May result in severe burns, scalding, or injury due to accidental contact or rupture of lines.	3	4	H	<p>Pressure Monitoring and Alarm Systems:</p> <p>Install and routinely test pressure gauges, water level indicators, and safety interlocks.</p> <p>Integrate audible and visual alarms for high-pressure, low water level, and high-temperature situations in the control panel.</p> <p>Preventive Maintenance Program:</p>	Operations/ Mechanical	

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
					<p>Implement a predictive and preventive maintenance (PPM) schedule for boilers, turbines, feedwater pumps, and steam piping.</p> <p>Regular inspection of gaskets, flanges, and expansion joints for early detection of steam leaks.</p>		
Thermal Burns	Contact with hot surfaces such as steam lines, headers, or boiler casings can cause serious injuries.	2	4	M	<p>Use of Personal Protective Equipment (PPE):</p> <p>Mandate use of boiler suits, heat-resistant gloves, face shields, safety shoes, and earmuffs in the boiler house and turbine areas.</p> <p>Provide arc-rated PPE if electrical hazards are also present (e.g., for motorized turbine auxiliaries).</p>		
Noise Exposure	High noise levels generated by turbines and associated equipment can lead	2	4	M	<p>Environmental and Noise Control:</p> <p>Enclose noisy equipment in acoustic enclosures and</p>		

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
	to hearing damage over prolonged exposure.				provide noise level signage in high-decibel zones. Conduct periodic refresher training and mock drills on boiler emergencies, including steam leak scenarios and fire handling.		
Mechanical Failures	Rotating equipment such as turbines and feed pumps pose mechanical entrapment or flying object risks.	3	4	H	<p>Training and Competency:</p> <p>Ensure that only certified boiler operators with knowledge of IBR regulations are allowed to operate the system.</p> <p>Safe Operating Procedures (SOPs):</p> <p>Develop and implement SOPs for boiler startup, shutdown, blowdown, and emergency response.</p> <p>Display emergency shutdown procedures near operator stations.</p> <p>Emergency Preparedness:</p> <p>Equip boiler and turbine areas with fire extinguishers (Class B</p>		

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
					and C), steam leak alarms, and first-aid kits. Install blowdown tanks with proper venting systems to reduce thermal pollution and ensure safe discharge. Establish clear emergency escape routes and conduct boiler house evacuation drills.		

(g) **Effluent Treatment Plant (ETP)**

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
Chemical Burns	Exposure to strong acids, alkalis, and coagulants used in neutralization and treatment can cause skin and eye injuries.	3	4	H	<p>Chemical Safety and Handling:</p> <p>Use clearly labeled, corrosion-resistant containers for all treatment chemicals (e.g., alum, lime, sodium hypochlorite).</p> <p>Ensure segregated storage for incompatible chemicals.</p> <p>Provide Material Safety Data Sheets (MSDS) for all chemicals and ensure they are accessible at all times.</p>	Mechanical/ EHS	
Toxic Gas Emissions (H ₂ S, CH ₄)	Anaerobic processes may release hydrogen sulfide (H ₂ S), methane (CH ₄), and ammonia, posing inhalation and explosion hazards in enclosed areas.	3	5	H	<p>Gas Detection and Ventilation:</p> <p>Install fixed H₂S and CH₄ detectors with alarm systems in vulnerable areas (e.g., sludge handling, anaerobic tanks).</p> <p>Provide forced ventilation in enclosed or partially enclosed ETP areas.</p>	Plant Head/ Mechanical/ EHS	

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
					<p>Ensure LPG/flammable gas sensors are included in areas with CH₄ risk.</p> <p>Personal Protective Equipment (PPE):</p> <p>Mandate use of chemical-resistant suits, rubber gloves, face shields, and safety goggles during chemical handling.</p> <p>Equip workers with cartridge-based respirators or SCBA in areas prone to H₂S or chlorine gas release.</p> <p>Process and Engineering Controls:</p> <p>Maintain scrubber systems and neutralization tanks to reduce emissions and neutralize pH levels.</p> <p>Ensure automatic dosing systems to minimize manual chemical handling and exposure.</p>		

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
Biological Exposure	Operators may be exposed to pathogenic microorganisms during handling of sludge or wastewater, increasing the risk of infections.	2	4	M	<p>Biological Safety Measures:</p> <p>Immunize workers against hepatitis and tetanus, especially those handling raw effluent or sludge.</p> <p>Provide gloves and disinfectants for post-shift sanitation.</p> <p>Monitor bacterial counts and pathogen levels in sludge and ensure proper disposal as per CPCB/SPCB guidelines.</p>	Operations/ HR/ MO/ EHS	
Slips and Falls	Wet and slippery surfaces around tanks, drains, and pipelines can lead to fall incidents.	3	5	H	Use non-slip flooring and drainage systems to prevent accumulation of effluent or water around work areas.	Civil	
Confined Space Hazards	Holding tanks and equalization basins may pose oxygen deficiency or toxic atmosphere risks during maintenance.	3	5	H	<p>Training and Operational Procedures:</p> <p>Conduct regular training sessions on safe chemical handling, biological hazards, and use of PPE.</p> <p>Display SOPs for chemical addition, gas leak response,</p>	EHS	

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
					<p>and confined space entry at relevant locations.</p> <p>Provide first-aid training, especially for chemical burns and gas inhalation.</p> <p>Emergency Preparedness:</p> <p>Equip ETP area with eyewash stations, safety showers, spill kits, and first-aid kits.</p> <p>Develop and display emergency response plans for chemical spills and gas leak incidents.</p> <p>Conduct periodic mock drills simulating ETP-related emergencies.</p>		

(h) **Final Storage and Dispatch (Ethanol Tanks, Tankers)**

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
Fire and Explosion	Ethanol is a highly flammable liquid (flash point ~13°C); storage and transfer areas are prone to fire or vapor explosions in the presence of ignition sources.	5	5	E	<p>Fire and Explosion Prevention:</p> <p>Install flame arrestors at all ethanol storage tank vents and spark arrestors on tankers and exhausts near the dispatch area.</p> <p>Use ATEX-rated flameproof electrical fittings, motors, and lighting in and around the ethanol storage zone.</p> <p>Maintain safety distances between tanks as per Petroleum Rules and OISD guidelines.</p>	Plant Head/ EHS	
Static Electricity Accumulation	Loading/unloading operations can generate static charges, which may lead to sparks and fire if proper grounding is absent.	5	5	E	<p>Static Control:</p> <p>Ensure earthing and bonding of all road tankers before commencing ethanol transfer operations.</p> <p>Provide static discharge reels with alarms and interlocks to prevent loading if earthing is not confirmed.</p>	Electrical/ Operations/ EHS	

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
					Use anti-static hoses and conductive fittings in all loading arms.		
Tanker Incidents	Spillage, overfilling, hose rupture, or accidental ignition during road tanker loading/unloading.	5	5	E	<p>Operational Controls:</p> <p>Implement a tanker driver safety briefing system that covers no-smoking, phone restrictions, PPE use, and emergency response.</p> <p>Maintain a driver logbook and safety checklist before each loading.</p> <p>Restrict use of mobile phones, lighters, or other ignition sources within a defined radius of the storage and loading area.</p>	Operations/ EHS	
Vapor Release	Leaks from storage tanks, loading arms, or valves can release flammable vapors into the atmosphere.	5	5	E	<p>Ventilation and Vapor Management:</p> <p>Ensure adequate ventilation in enclosed ethanol storage areas and tank truck sheds.</p> <p>Install vapor recovery systems (VRS) where feasible to control fugitive emissions.</p>	Operations/ Mechanical	

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
					<p>Inspection and Maintenance:</p> <p>Carry out daily and monthly inspections of ethanol tanks, floating roofs (if any), loading arms, hoses, valves, and flame arrestors.</p> <p>Ensure automatic tank gauging systems are functional to prevent overfilling.</p> <p>Conduct annual ultrasonic thickness testing (UTT) and hydrostatic testing as per PESO norms.</p>		
Human Error	Inadequate supervision, unsafe work practices, or lack of procedural compliance can result in major incidents.	4	5	H	<p>Strict supervision, conduct adequate trainings for the staff, maintain strict SOPs implementation policies.</p> <p>Implement strict shifts policy and rotation to be done under strict supervision.</p> <p>Conduct training on BBS.</p> <p>Documentation and Compliance:</p>	HR/ EHS	

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
					<p>Maintain updated MSDS for ethanol at storage and loading areas.</p> <p>Keep PESO licenses, calibration records, and training logs readily available for audits.</p> <p>Ensure compliance with Petroleum Rules, 2002, Static and Mobile Pressure Vessels (SMPV) Rules, and relevant BIS/ISO standards.</p> <p>Emergency Preparedness:</p> <p>Install fixed foam systems, fire hydrants, and portable extinguishers (Class B) around storage tanks and dispatch areas.</p> <p>Provide spill kits, ethanol-compatible absorbents, and emergency shutdown systems (ESD) with remote access.</p> <p>Conduct fire mock drills, including ethanol fire response, spill containment, and evacuation protocols.</p>		

(i) **Electrical Panels and LT Rooms**

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
Electric Shock and Electrocutation	Direct or indirect contact with live conductors during maintenance or due to insulation failure.	4	4	H	Design and Engineering Controls: Install dust-proof and fire-rated enclosures for electrical panels, especially in flammable areas. Use HT switchgear and panels compliant with IS/IEC standards (e.g., IS 3427, IS 8623, IS 10118). Ensure adequate ventilation and cooling systems in electrical rooms to prevent overheating. Maintain dedicated cable trenches and raceways to avoid cable congestion and physical damage. Preventive Maintenance: Implement a scheduled preventive maintenance program, including thermographic scanning, insulation resistance testing, and relay calibration.	Plant Head/ Electrical/ EHS	
Arc Flash and Arc Blast	Faults in HT/LT systems can lead to arc flashes, causing severe burns, pressure waves, and flying debris	4	4	H			
Fire and Explosion	Overheating, short circuits, or loose connections may result in electrical fires.	5	5	H			
Equipment Failure	Aging components, inadequate protection systems, or improper earthing may cause faults or failures.	3	3	M			
Confined Space Hazards	Inadequate ventilation in HT/LT rooms can result in heat stress or	3	3	M			

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
	suffocation during prolonged tasks.				Carry out IR thermography quarterly to detect hot spots in panels and busbars.		
Human Error	Inadequate isolation, bypassing interlocks, or failure to follow Lockout-Tagout (LOTO) procedures.	3	4	H	<p>Clean panels regularly and tighten terminal connections to avoid arcing or loosening due to vibration.</p> <p>Safety Devices and Protection:</p> <p>Install earth leakage circuit breakers (ELCBs), miniature circuit breakers (MCBs), and overcurrent/short-circuit relays.</p> <p>Provide arc flash protection relays and flame-retardant cables.</p> <p>Use interlocking systems to prevent unsafe opening of live panels.</p> <p>Access Control and Signage:</p> <p>Restrict access to HT rooms to authorized personnel only through key locks and biometric systems.</p>		

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
					<p>Display high-voltage warning signage, PPE requirements, and emergency contact information clearly.</p> <p>Personal Protective Equipment (PPE):</p> <p>Provide and enforce use of arc-rated PPE, insulated gloves, dielectric shoes, face shields, and flame-retardant suits for maintenance personnel.</p> <p>Ensure Class B insulated tools are used for all live work or testing.</p> <p>Operational Controls:</p> <p>Enforce strict Lockout-Tagout (LOTO) procedures during maintenance and servicing.</p> <p>Train all electrical staff in first aid and CPR, especially for electrical shock incidents.</p> <p>Maintain emergency lighting and exit routes in the HT room in case of power loss.</p>		

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
					<p>Emergency Preparedness: Provide CO₂ or clean agent fire extinguishers suitable for electrical fires.</p> <p>Install smoke detectors, temperature sensors, and alarm systems in HT and LT rooms.</p> <p>Conduct periodic mock drills for electrical fire and electrocution scenarios.</p> <p>Documentation and Compliance:</p> <p>Keep updated single-line diagrams (SLDs), relay settings, and panel layouts at the entrance of each electrical room.</p> <p>Ensure compliance with CEA Regulations, IS 732, IS 3043 (Earthing), IS 1646, and the Indian Electricity Rules.</p>		

(i) **Tanker Loading/Unloading**

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
Fire and Explosion	Ethanol is a highly flammable substance; vapor release during transfer operations can ignite due to static discharge, nearby flames, or sparks.	5	5	E	<p>Engineering Controls:</p> <p>Install closed-loop transfer systems with vapor recovery units to minimize vapor emissions.</p> <p>Use flame arrestors, spark arrestors, and explosion-proof pumps and motors at loading bays.</p> <p>Restrict use of mobile phones or any spark-generating devices in the area.</p> <p>Maintain safety distances and zoning as per PESO and NBC guidelines.</p>	Operations/ EHS	
Static Electricity Buildup	Movement of ethanol during pumping can generate static charges, especially in dry conditions or with plastic hoses.	5	5	H	Ensure proper earthing and bonding of tankers, transfer hoses, and storage tanks before commencing transfer.	Electrical	
Spillage and Leakage	Leaks from hoses, valves, or flanges during loading/unloading	4	3	H	Provide automatic level gauges and overfill protection devices.	Operations/ EHS	

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
	may lead to environmental contamination or fire hazards.				Use anti-static flexible hoses with quick couplings to prevent spillage. Conduct pre-transfer leak checks on valves, pipelines, and hoses. Administrative Controls: Develop and enforce a Standard Operating Procedure (SOP) for tanker loading/unloading operations. Implement a permit-to-work (PTW) system, especially during night shifts, maintenance, or non-routine transfer.		
Overfilling or Tank Rupture	Can cause ethanol overflow, leading to major spill incidents.	4	3	H	Engineering Controls: Install automatic level sensors and high-level alarms to prevent overfilling. Integrate interlock systems that automatically stop the pumping process when high levels are detected. Equip tanks with pressure-relief valves and rupture discs to handle excess pressure safely.	Plant Head/ Operations/ EHS	

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
					<p>Construct secondary containment systems (e.g., bund walls) to capture any spillage in case of a rupture.</p> <p>Use double-walled tanks or install continuous leak detection systems for early warning.</p> <p>Ensure proper venting systems to avoid pressure buildup.</p> <p>Administrative Controls:</p> <p>Develop and enforce standard operating procedures (SOPs) for ethanol tank filling, inspection, and maintenance.</p> <p>Conduct regular inspections, integrity testing (e.g., ultrasonic thickness testing), and preventive maintenance of storage tanks.</p> <p>Clearly mark maximum fill levels on storage tanks and train operators accordingly.</p>		

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
					<p>Maintain accurate filling logs and use a permit-to-fill system for accountability.</p> <p>Train staff in emergency response, spill containment, and safe handling of ethanol.</p> <p>Personal Protective Equipment (PPE):</p> <p>Flame-resistant clothing to protect from fire-related hazards.</p> <p>Chemical-resistant gloves and safety goggles or face shields to protect from ethanol contact.</p> <p>Respirators in areas where ethanol vapors may be concentrated, especially during maintenance or spill response.</p> <p>Anti-static safety footwear to minimize ignition risks due to static charge.</p>		
Inhalation Exposure	Vapors from ethanol are irritants and can cause dizziness, headaches, or asphyxiation in				<p>Engineering Controls:</p> <p>Install forced ventilation or exhaust systems in ethanol storage, transfer, and processing areas to ensure adequate air exchange.</p>	Operations/ Mechanical/ EHS	

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
	confined or low-ventilation zones.				<p>Use gas detectors or continuous ethanol vapor monitoring systems with alarms to identify unsafe vapor concentrations.</p> <p>Design areas with open or semi-open layouts to promote natural air circulation, especially where ethanol is handled in bulk.</p> <p>Employ vapor recovery units (VRUs) to capture and control vapor emissions during ethanol transfer and unloading.</p> <p>Ensure that confined spaces are properly ventilated and tested before entry.</p> <p>Administrative Controls:</p> <p>Develop and implement safe work procedures for handling ethanol and entering confined or poorly ventilated spaces.</p> <p>Schedule routine air quality monitoring in areas where ethanol is stored or used.</p>		

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
					<p>Train workers on recognizing the symptoms of vapor exposure (e.g., dizziness, nausea, headaches) and how to respond. Restrict access to areas with poor ventilation or high vapor potential unless proper safety checks are completed.</p> <p>Enforce the use of work permits and gas tests for confined space entry.</p> <p>Ensure signage and hazard communication (e.g., MSDS availability, hazard symbols) is posted clearly.</p> <p>Personal Protective Equipment (PPE):</p> <p>Provide half-face or full-face respirators with organic vapor cartridges for personnel in areas with ethanol vapor presence.</p> <p>Use chemical splash goggles or face shields in addition to respiratory protection during handling and transfers.</p>		

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
					<p>Ensure all PPE is properly maintained, fitted, and stored, and that users are trained in its correct use.</p> <p>Require anti-static, flame-resistant clothing when working near ethanol to minimize the risk of vapor ignition.</p>		
Road Hazards and Tanker Movement	Accidental movement of tankers during transfer, brake failure, or improper wheel chocking can result in spillage or collisions.	4	4	H	<p><u>Engineering Controls:</u></p> <p>Provide wheel chocks and install wheel-locking systems at designated loading/unloading bays to prevent accidental movement.</p> <p>Design and maintain dedicated tanker bays with adequate barriers or containment curbs to contain potential spills.</p> <p>Use automatic brake interlock systems that engage during loading/unloading operations.</p> <p>Implement speed control devices (e.g., speed bumps, automated gates) in high-risk areas.</p> <p>Ensure road surfaces are well-maintained, non-slippery, and</p>	Plant Head/ EHS/ Security	

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
					<p>clearly marked with directional and hazard signage.</p> <p><u>Administrative Controls:</u></p> <p>Develop and enforce Standard Operating Procedures (SOPs) for tanker parking, wheel chocking, and ethanol transfer operations.</p> <p>Train all drivers and ground personnel on safe driving practices, defensive driving, and loading/unloading protocols.</p> <p>Use a vehicle inspection checklist to verify mechanical integrity before allowing entry, especially focusing on brakes and tires.</p> <p>Appoint a ground guide or spotter for maneuvering tankers within the premises.</p> <p>Enforce entry/exit control and routing plans to avoid cross-traffic or congestion near critical areas.</p>		

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
					<p>Conduct periodic emergency drills simulating tanker-related incidents.</p> <p>Personal Protective Equipment (PPE):</p> <p>Mandate the use of high-visibility vests, helmets, and safety footwear for all personnel in the tanker movement and transfer zone.</p> <p>Ensure drivers and loading staff wear flame-resistant (FR) clothing and chemical-resistant gloves during transfer.</p> <p>Provide access to portable gas detectors for safety checks when tanker movement is combined with ethanol transfer.</p>		
Fall from Height	Climbing tanker ladders for visual inspection can lead to slips, trips, and falls.	4	5	H	<p>Engineering Controls:</p> <p>Install fixed access platforms with guardrails and toe boards at loading/unloading stations to eliminate the need to climb tankers directly.</p>	Plant Head/ EHS	

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
					<p>Provide non-slip ladder rungs and ensure ladders are securely attached and maintained.</p> <p>Use fall arrest systems (full-body harnesses with retractable lifelines or anchor points) where elevated work is necessary.</p> <p>Incorporate caged ladders or telescopic inspection platforms for safer ascent and descent.</p> <p>Equip tanker top walkways with handrails and anti-skid surfaces.</p> <p><u>Administrative Controls:</u></p> <p>Develop a permit-to-work (PTW) system for working at heights, including inspection work on tankers.</p> <p>Restrict access to trained and authorized personnel only.</p> <p>Provide regular training on working at height, use of fall protection equipment, and emergency rescue procedures.</p>		

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
				H	<p>Conduct pre-use inspection checks on ladders and fall protection systems.</p> <p>Schedule routine inspections and maintenance of tanker access equipment and platforms.</p> <p>Personal Protective Equipment (PPE):</p> <p>Mandate use of certified fall arrest harnesses and lanyards for any personnel working at height.</p> <p>Use non-slip safety footwear to minimize slip risk during climbing.</p> <p>Provide helmets with chin straps to protect against head injuries in case of a fall.</p>		
Improper PPE Use or Lack of Training	Increases vulnerability to chemical and fire hazards during operations.	3	4	H	<p>Personal Protective Equipment (PPE):</p> <p>Ensure mandatory use of anti-static coveralls, flame-resistant suits, gloves, safety goggles, and safety shoes.</p>	EHS	

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
					<p>Provide chemical respirators or masks when ethanol vapor levels exceed TLV.</p> <p>Emergency Preparedness: Install foam and dry chemical extinguishers, hydrant points, and fire monitors at strategic points near tanker bays.</p> <p>Provide emergency spill kits with absorbents, neutralizers, and chemical-resistant tools.</p> <p>Clearly display emergency contact numbers, evacuation routes, and alarm activation points.</p> <p>Conduct mock drills and spill containment exercises at least quarterly.</p> <p>Monitoring and Compliance:</p> <p>Regularly inspect and calibrate loading arm instrumentation and vapor recovery systems.</p> <p>Ensure compliance with PESO guidelines, IS 2182 (flammable liquid handling), NBC Part 4, and MoEFCC spill prevention norms.</p>		

(k) **Maintenance & Engineering Workshop**

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
Mechanical Hazards	Injuries from rotating machinery, hand tools, grinding wheels, welding sets, and power tools.	3	4	H	<p>Engineering Controls:</p> <p>Guard all rotating and moving parts on lathes, grinders, and other workshop machinery.</p> <p>Mandatory use of safety goggles or face shields, cut-resistant gloves, aprons, and safety shoes.</p> <p>Provide earplugs or earmuffs for high-noise tasks.</p>	Mechanical/ EHS	
Fire and Explosion	Sparks from welding/grinding can ignite flammable vapors or combustible materials	4	5	H	<p>Designate separate zones for welding, machining, and storage of flammable materials.</p> <p>Issue hot work permits before any welding, cutting, or grinding operations.</p> <p>Fire Safety:</p> <p>Store flammable chemicals and lubricants in approved fire-resistant cabinets with proper labeling.</p>	EHS	

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
					<p>Maintain ABC and CO₂ fire extinguishers at all strategic points.</p> <p>Ensure availability of sand buckets and first-aid boxes in the workshop.</p> <p>Welding personnel to use welding helmets, flame-resistant clothing, and respirators as required.</p> <p>Display Safety Signage (e.g., "Wear PPE," "Hot Work Zone," "No Smoking").</p>		
Electrical Hazards	Risk of shock or arc flash from improperly maintained or exposed electrical systems.	4	5	H	<p>Ensure proper grounding of all electrical tools and use of earth leakage circuit breakers (ELCBs).</p> <p>Implement SOPs and Job Safety Analyses (JSAs) for all maintenance activities.</p> <p>Strict policy on lone working.</p> <p>Maintain equipment inspection and preventive maintenance schedules.</p>	Electrical / EHS	

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
					<p>Provide regular training on safe use of tools, lockout/tagout (LOTO) procedures, and chemical handling.</p> <p>Use IS Standards PPEs, Shock proof safety gloves, non-metallic toe safety shoes</p>		
Slips, Trips, and Falls	Due to oil spills, cluttered walkways, and uneven flooring.	3	4	H	<p>Engineering Controls</p> <p>Ensure all floors are made of non-slip materials or coated with anti-skid coatings.</p> <p>Install proper drainage systems in areas where oil or liquids are used.</p> <p>Fix uneven surfaces and broken floor tiles immediately.</p> <p>Provide proper lighting in all work areas and walkways to enhance visibility.</p> <p>Use ramps with handrails where floor levels differ.</p> <p>Use moisture sensors with alarms in high-risk areas if needed.</p>	Civil/ Electrical/ Operations/ EHS	

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
					<p><u>Administrative Controls</u> Implement a strict housekeeping policy to keep walkways clear of clutter and obstacles.</p> <p>Develop and enforce Standard Operating Procedures (SOPs) for handling and cleaning oil and chemical spills.</p> <p>Display warning signs in wet or slippery areas</p> <p>Conduct regular inspections of walkways and work areas for tripping hazards</p> <p>Personal Protective Equipment (PPE)</p> <p>Provide anti-slip footwear to all employees, especially in wet or oily areas</p> <p><u>Monitoring and Alarms</u></p> <p>Monitor CCTV to ensure housekeeping practices are followed.</p>		

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
					<p><u>Inspection and Maintenance</u></p> <p>Schedule routine floor inspections and repairs.</p> <p>Maintain spill kits and ensure they are easily accessible.</p> <p>Emergency Preparedness</p> <p>Train employees on how to report and clean spills immediately.</p> <p>Conduct emergency response drills for spill management and fall scenarios</p>		
Poor Ventilation	Can lead to accumulation of welding fumes and solvent vapors.	2	3	M	Install local exhaust ventilation (LEV) and general ventilation to remove fumes and vapors.	Mechanical	

(I) **Administrative Building**

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
Electrical Hazards	Overloaded plug points, faulty wiring, and improper use of electrical appliances	3	5	H	<p>Electrical Safety:</p> <p>Ensure all electrical installations comply with IS 732 (Code of Practice for Electrical Wiring Installations).</p> <p>Use MCBs, ELCBs, and surge protectors for electrical safety.</p> <p>Periodic inspection and testing of office wiring and plug points.</p> <p>Prohibit the use of unauthorized extension boards and multiple plug adapters.</p>	Electrical Head	
Fire Hazards	Paper documents, wooden furniture, and electronic equipment contributing to fire load	3	5	H	<p>Fire Safety:</p> <p>Install smoke detectors, fire alarms, and emergency lighting.</p> <p>Keep ABC fire extinguishers on every floor, near electrical panels and exits.</p> <p>Clearly mark emergency evacuation routes and conduct periodic evacuation drills.</p>	Admin Head/ EHS	

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
					Maintain fire load below permissible limits by managing storage of paper and combustibles.		
Ergonomic Issues	Poor workstation setup leading to repetitive strain injuries and musculoskeletal disorders	4	3	H	<p>Ergonomics:</p> <p>Provide ergonomic chairs, adjustable desks, and monitor risers to reduce physical strain.</p> <p>Encourage short breaks and proper posture to prevent repetitive strain injuries.</p> <p>Ensure adequate lighting, particularly at individual workstations.</p>	HR/ EHS	
Slip, Trip, and Fall Hazards	Wet floors, loose carpeting, or obstacles in walkways.	3	5	H	<p>Housekeeping & Slip Prevention:</p> <p>Regularly clean and maintain floors with anti-skid mats in spill-prone areas (e.g., pantry).</p> <p>Eliminate obstructions in walkways and use cable organizers to avoid tripping hazards.</p> <p>Use signage for wet floors and ensure quick cleanup of spills.</p>	EHS	

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
Psychosocial Hazards	Work-related stress, poor lighting, noise distractions, or lack of ventilation.	3	4	H	<p>Environmental and Indoor Air Quality:</p> <p>Maintain HVAC systems to provide fresh air and comfortable indoor temperatures.</p> <p>Place indoor plants or air purifiers to improve air quality and reduce stress.</p>	Mechanical	
Data Security Risks	Unauthorized access to sensitive documents and computers.	2	3	M	<p>Security & Data Protection:</p> <p>Provide access control systems, CCTV surveillance, and ID-based entry for security.</p> <p>Implement data protection policies including restricted access to computers and files.</p> <p>Conduct regular IT and cyber security awareness sessions.</p> <p>Emergency Preparedness:</p> <p>Display emergency contact numbers and first aid kits in visible and accessible areas.</p> <p>Appoint fire wardens and first aiders for each department.</p> <p>Practice mock evacuation drills quarterly.</p>	IT Manager	

(m) **Warehouse**

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
Fire and Explosion Hazards	Storage of flammable chemicals, ethanol, packaging materials (cartons, plastics).	4	5	H	<p>Fire Safety:</p> <p>Install fire hydrant system, sprinklers, and ABC/CO₂ fire extinguishers.</p> <p>Segregate flammable materials from oxidizers and incompatible chemicals.</p> <p>Use flameproof lighting and static grounding for containers storing ethanol or chemicals.</p> <p>Implement “No Smoking” policies and restrict ignition sources.</p>	Plant Head/ EHS	
Material Handling	Manual lifting, shifting of drums and heavy goods, falling objects from height.	3	4	H	<p>Material Handling:</p> <p>Use pallet jacks, forklifts, and conveyors for heavy load movement.</p> <p>Train workers in safe lifting techniques and proper use of handling equipment.</p> <p>Enforce PPE usage: gloves, safety shoes, back support belts.</p> <p>Restrict access to storage areas during forklift operations.</p>	Plant Head/ EHS	

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
Chemical Exposure	Leakage or spillage of stored chemicals leading to inhalation, skin contact, or environmental contamination.	3	4	H	<p>Chemical Safety:</p> <p>Store chemicals in properly labeled and compatible containers.</p> <p>Provide Material Safety Data Sheets (MSDS) and chemical handling training.</p> <p>Install secondary containment and spill kits in case of leakage.</p> <p>Ensure adequate ventilation and gas detectors for hazardous vapors.</p> <p>Enforce PPE usage: gloves, safety shoes, aprons etc.</p>	Operations/ EHS	
Ergonomic Hazards	Repetitive movements, awkward postures, and prolonged standing during sorting and stacking.	3	3	M	<p>Ergonomics:</p> <p>Rotate tasks to avoid repetitive strain injuries.</p> <p>Use height-adjustable workstations for packaging and sorting.</p> <p>Implement stretching exercises and micro-breaks during shifts.</p>	HR/ EHS	
Slip, Trip, and Fall Hazards	Poor housekeeping, spillage, damaged flooring,	3	5	H	<p>Housekeeping and Floor Safety:</p> <p>Maintain clean and dry flooring using anti-slip coatings.</p>	EHS	

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
	unorganized storage.				<p>Clearly mark pathways and emergency exits.</p> <p>Routinely inspect and remove obstructions or damaged pallets.</p> <p>Provide drainage and bunds where applicable.</p>		
Vehicle Movement Hazards	Forklifts and material handling equipment operating in congested areas.	3	4	H	<p>Forklift operators to be authorized and certified.</p> <p>Use speed limiters.</p> <p>Conduct Training on Safe Driving.</p> <p>Provide/ segregation of pathways.</p> <p>Clearly mark pathways and emergency exits.</p>	Plant Head/ EHS	
Stacking and Racking Failures	Unsafe stacking heights, racking collapse risks.	3	4	H	<p>Stacking and Racking:</p> <p>Follow safe stacking height guidelines and weight capacity limits.</p> <p>Conduct routine inspection of racks, pallets, and tie-downs.</p> <p>Use rack guards, safety netting, and warning signage.</p>	Warehouse Incharge / EHS	

(n) **Security Gate and Emergency Access Routes**

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
Unauthorized Entry or Security Breach	Risk of intruders or unauthorized personnel accessing hazardous or restricted areas	2	4	M	<p>Security Protocols:</p> <p>Maintain a 24x7 security guard presence with trained personnel.</p> <p>Use visitor management systems, ID verification, and CCTV surveillance at all entry points.</p> <p>Restrict entry to authorized personnel only, with biometric or RFID-based access control.</p> <p>Log vehicle entries/exits and perform random checks of incoming consignments.</p>	Plant Head/ HR	
Traffic Hazards	Collision risks due to incoming/outgoing vehicles, especially during shift changes and tanker movements.	3	5	H	<p>Traffic Management:</p> <p>Clearly mark separate lanes for incoming and outgoing traffic.</p> <p>Use speed breakers, convex mirrors, and signage to reduce accident risks.</p> <p>Appoint traffic marshals during peak hours or during dispatch operations.</p>	Plant Head/ Security Manger	

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
Obstruction of Emergency Routes	Blockage of emergency exits or access roads due to parked vehicles or storage.				Clearly mark emergency routes. Train drivers to drive on the designated areas.		
Slips, Trips, and Falls	Poor lighting, wet surfaces during rains, or uneven flooring	3	5	H	Lighting and Infrastructure: Install adequate floodlights and solar lights for visibility during night hours. Maintain even, anti-skid flooring with clearly marked pedestrian walkways. Provide canopy/shelter for guards to protect them from heat or rain.	Electrical Department/ EHS	
Delay in Emergency Response	Poor signage or inaccessible emergency gates during crises.	2	3	M	Emergency Access Control: Keep emergency gates unlocked or equipped with break-glass access controls. Ensure emergency vehicle access routes are always clear, free from obstacles or parked vehicles. Display reflective signage and route maps for emergency responders.	EHS	

<u>Hazard Identified</u>	<u>Associated Risk</u>	<u>Likelihood</u>	<u>Severity</u>	<u>Risk Level</u>	<u>Control Measures</u>	<u>Responsibility</u>	<u>Remarks</u>
Exposure to External Threats	Security personnel at risk from external aggression or natural calamities	1	5	L	<p>Communication and Emergency Readiness:</p> <p>Equip security gates with two-way communication systems to coordinate with control rooms.</p> <p>Maintain emergency contact numbers, first aid kits, and fire extinguishers at the gate.</p> <p>Conduct security and emergency response training for gate staff.</p> <p>Periodic Audits and Drills:</p> <p>Conduct regular mock evacuation drills to verify emergency route accessibility.</p> <p>Review and update security protocols based on threat assessments or audits.</p>	Security Department	

Summary Table

Activity	Hazard	Consequence	Likelihood	Severity	Risk Rating	Control Measures
Raw Material Handling & Storage						
Unloading raw rice	Dust generation, spillage	Respiratory issues, slip hazard	Likely	Moderate	High	Use of dust suppression, PPE, designated unloading area
Storage in silos	Silo collapse, grain dust explosion	Fatal injuries, fire	Rare	Catastrophic	High	Silo inspection, explosion vents, grounding, restricted access
Manual handling of bags	Musculoskeletal injuries	Back injuries	Likely	Moderate	Medium	Proper lifting techniques, mechanical aids
Milling, Slurry & Liquefaction						
Milling rice	Noise, dust, entanglement	Hearing loss, respiratory issues, injury	Likely	Major	High	PPE, dust collectors, guards on machines
Slurry tank operation	Spillage, burns	Slips, chemical burns	Possible	Major	High	Bunding, PPE, emergency shower
Fermentation Area						
CO2 generation	Asphyxiation, high concentration	Fatality due to oxygen displacement	Possible	Catastrophic	High	CO2 monitoring, ventilation, alarm systems
Dry ice production	Contact with cryogenic material	Cold burns, frostbite	Possible	Major	High	Cryogenic PPE, warning signage, SOP adherence
Fermenter overflow	Spillage	Slip hazard, contamination	Possible	Moderate	Medium	Level monitoring, overflow prevention
Distillation and Dehydration Units						
Heating of fermented wash	Overpressure, burns	Explosion, injuries	Possible	Major	High	Pressure relief valves, temperature monitoring
Alcohol vapor leakage	Fire, explosion	Fatality, asset loss	Possible	Catastrophic	High	Flameproof fittings, leak detection, ventilation

Activity	Hazard	Consequence	Likelihood	Severity	Risk Rating	Control Measures
Ethanol Storage and Transfer						
Ethanol tank storage	Fire, explosion	Catastrophic loss	Unlikely	Catastrophic	High	Flameproof area classification, fire suppression, ATEX equipment
Pumping ethanol to loading	Leak, fire	Fire spread	Possible	Major	High	Bonding/earthing, spill tray, fire extinguisher
Boiler and Utilities						
Boiler operation	Explosion, scalding	Severe burns, fatality	Rare	Catastrophic	High	Pressure safety valves, trained operators, boiler inspection
Steam line rupture	Burns	Injury	Possible	Major	High	Insulated pipelines, periodic checks
Fuel handling (biomass/coal)	Fire, inhalation of particles	Fire, respiratory illness	Possible	Moderate	Medium	Proper storage, PPE, good housekeeping
Effluent Treatment Plant (ETP)						
Chemical handling	Burns, inhalation	Health hazard	Possible	Major	High	PPE, proper labeling, MSDS training
Sludge handling	Exposure to biohazard	Infections	Possible	Moderate	Medium	Gloves, masks, hygiene facilities
Equipment cleaning	Splash of chemicals	Eye/skin injury	Likely	Moderate	High	Eye wash station, face shields
Electrical Panels and HT Room						
HT panel operation	Arc flash, electric shock	Fatal injury	Possible	Catastrophic	High	Interlocking systems, PPE, access control
Maintenance activity	Contact with live parts	Electric shock, burns	Possible	Major	High	Lockout-tagout, insulated tools, signage
Ingress of moisture	Short circuit	Fire	Possible	Major	High	IP-rated panels, dehumidifiers, insulation testing
Tanker Loading/Unloading						
Loading/unloading ethanol	Spillage, leakage, fire, explosion	Fire, environmental contamination	Likely	Major	High	Use flameproof pumps, bonding/earthing, PPE, spill containment, fire extinguishers

Activity	Hazard	Consequence	Likelihood	Severity	Risk Rating	Control Measures
Tanker movement	Collision with structures/personnel	Injury, property damage	Possible	Moderate	Medium	Designated routes, speed limit, trained drivers, reflective vests
Static charge during transfer	Fire/explosion due to spark	Fatalities, asset loss	Unlikely	Catastrophic	High	Proper grounding and bonding of equipment and vehicles
Inhalation of vapors	Health issues to workers	Respiratory irritation or illness	Possible	Moderate	Medium	Use of vapor recovery system, appropriate PPE
Maintenance & Engineering Workshop						
Welding, cutting operations	Fire, burns, eye injury	Injury, fire in surrounding areas	Likely	Major	High	Fire watch, hot work permit, PPE, fire extinguisher
Use of hand tools/equipment	Cuts, electric shock	Injury	Possible	Moderate	Medium	Insulated tools, regular inspection, lockout-tagout
Oil/grease spillage	Slips and falls	Minor injuries	Possible	Minor	Low	Clean-up protocols, anti-skid flooring
Noise from machines	Hearing damage	Occupational hearing loss	Unlikely	Moderate	Low	Use of earplugs/muffs, signage
Administrative Building						
Electrical short circuit	Fire	Property loss, injury	Possible	Major	High	Regular maintenance, circuit breakers, surge protectors
Use of computers/equipment	Ergonomic issues	Musculoskeletal disorders	Likely	Minor	Medium	Ergonomic furniture, training on posture
Fire from paper records	Fire spread	Document loss, evacuation	Unlikely	Major	Medium	Fire-resistant cabinets, smoke detectors
Panic during emergency	Stampede	Injuries	Rare	Major	Medium	Regular drills, proper signage, emergency response training
Warehouse						
Stacking of goods	Toppling of goods	Injury, material damage	Possible	Moderate	Medium	Safe stacking practices, racking systems
Forklift operation	Collision with people/structures	Serious injury, damage	Possible	Major	High	Trained operators, designated paths, reverse alarms

Activity	Hazard	Consequence	Likelihood	Severity	Risk Rating	Control Measures
Handling chemical packages	Spillage, exposure	Health hazard, contamination	Likely	Major	High	Labeling, PPE, SDS awareness, ventilation
Fire from flammable materials	Fire spread	Major asset loss, injury	Unlikely	Catastrophic	High	Fire detection/suppression, no smoking policy, extinguishers
Security Gate and Emergency Access Routes						
Movement of vehicles	Collision, injury	Injury to personnel, gate damage	Possible	Moderate	Medium	Barricades, speed limit, reflective markings
Emergency vehicle access	Obstruction	Delay in emergency response	Possible	Major	High	Clear signage, access control protocols
Unauthorised entry	Security breach	Theft, sabotage	Rare	Major	Medium	ID checks, surveillance, access logs
Exposure during emergencies	Delay in evacuation	Risk to personnel	Possible	Major	High	Drills, lighting, trained security personnel

10. **Recommendations**

Based on the hazard identification and risk assessment conducted at Rajasthan Liquors Limited, the following recommendations are made to enhance safety performance and minimize risk exposure:

(a) **General Safety Recommendations**

- Develop and implement a comprehensive EHS Management System aligned with ISO 45001 and ISO 14001 standards.
- Conduct periodic HIRA reviews to capture changes in processes, plant expansions, or introduction of new chemicals or equipment.
- Ensure Safety Signage, SOPs, and MSDS are displayed at all relevant locations.
- Maintain an incident reporting and investigation system to identify root causes and prevent recurrence.

(b) **Engineering Controls**

- Install flame arrestors and pressure relief valves on ethanol storage tanks.
- Use explosion-proof electrical fittings in ethanol handling areas.
- Provide mechanical ventilation in confined spaces and ethanol processing rooms.
- Install temperature and pressure monitoring systems for fermenters, distillation columns, and storage tanks.
- Ensure proper earthing and lightning protection for all structures and storage tanks.

(c) **Administrative Controls**

- Implement a Permit to Work (PTW) system for hot work, confined space, and electrical maintenance.
- Develop and maintain Standard Operating Procedures (SOPs) for all critical operations.
- Conduct Job Safety Analysis (JSA) for hazardous activities.
- Maintain a Hazard Communication Program to inform and train workers on chemical risks and controls.
- Enforce strict housekeeping practices, especially around ethanol storage and processing areas.

(d) **Personal Protective Equipment (PPE)**

- Provide appropriate PPE based on hazard exposure (e.g., flame-resistant clothing, chemical splash goggles, gloves, SCBA).

- Ensure PPE training and compliance monitoring for all workers.
- Maintain PPE inventory and replace damaged/expired PPE on priority.

(e) **Emergency Preparedness**

- Update the Onsite Emergency Plan (OEP) and conduct regular reviews.
- Conduct mock drills for fire, chemical spillage, and confined space rescue at least once every quarter.
- Install additional manual call points and fire detection systems in ethanol storage and process areas.
- Ensure round-the-clock availability of firefighting resources and trained personnel.
- Establish and maintain tie-ups with local fire brigade and hospitals for emergency support.

(f) **Training & Capacity Building**

- Conduct periodic training on fire safety, electrical safety, chemical handling, and first aid.
- Train operators on safe start-up and shutdown procedures for all equipment.
- Develop a training calendar and track training completion and effectiveness.
- Include contractors and visitors in safety induction and site-specific training.

(g) **Monitoring and Continuous Improvement**

- Conduct regular internal safety audits and inspections to identify unsafe acts/conditions.
- Establish leading and lagging indicators to monitor safety performance (e.g., near-misses, LTIFR).
- Create a safety committee that meets monthly to review observations, incident reports, and improvement plans.
- Implement a reward and recognition program to promote a proactive safety culture.

ABBREVIATIONS

- RLL - Rajasthan Liquors Limited
- HSE - Health, Safety and Environment
- NFPA - National Fire Protection Association
- HIRA - Hazard Identification and Risk Assessment
- NBC - National Building Code
- ETP - Effluent Treatment Plant
- WTP - Water Treatment Plant
- BIS - Bureau of Indian Standards
- NBC - National Building Code
- ZLD - Zero Liquid Discharge
- OISD - Oil Industry Safety Directorate
- OEP - Onsite Emergency Plan
- NEC - National Electrical Code
- OSHA - Occupational Safety and Health Administration
- MSDS - Material Safety Data Sheet
- SIC - Site Incident Controller
- CPCB - Central Pollution Control Board
- LDO - Light Diesel
- CAPA - Corrective and Preventive Actions
- PPE - Personal Protective Equipment
- ER - Emergency Response
- RCA - Root Cause Analysis
- IS - Indian Standards

TO WHOM IT MAY SO EVER CONCERN

This Is To Inform You That Those Employees Are Examined By Me
InThePremisesOf Rajasthan Liquors Limited On Dated 04-Sep-2025 To 20-Sep-
2025


Dr. KUNAL BEHAL
MBBS, DNB Medicine
CCEBDM, FCCS, PGDG (CMC Vellore)
Consultant Physician & Diabetologist
FDR No. 51846

MD MEDICINE PHYSICIAN

SPECIALITIES & SERVICES

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SI No	Emp No	Name	Father Name	Department
1	10100	Sunil Kumar	Omprakash	General
2	10104	Harjit Singh Anand	Harbans Singh Anand	Electrical & Instrumentation
3	10108	Janardan Tiwari	Krishan Gopal Tiwari	Manufacturing
4	10110	Pavan Kumar Dubey	Daya Shankar Dubey	Production
5	10111	Balendra Ram	Dhanai Ram	Water Treatment Cell (Wtp/Etp)
6	10113	Virendra Kumar Singh	Shankar Baks Singh	Manufacturing
7	10116	Ajay Pal	Surjan Singh	Production
8	10117	Pawan Kumar Verma	Bulli Verma	Manufacturing
9	10118	Amarnath Pandey	Tirth Raj Pandey	Production
10	10125	Digvijay Yadav	Parasnath Yadav	Production
11	10127	Surendar Singh	Sher Singh	Power Plant
12	10128	Naresh Pal	Mewa Ram	Engineering
13	10129	Harpal Singh	Garja Singh	Engineering
14	10130	Vijay Kumar	Lakshman Prasad	Water Treatment Cell (Wtp/Etp)
15	10131	Sanjeev Kumar	Mahendra Singh	Production
16	10134	Mukesh Kumar	Rampal Singh	Water Treatment Cell (Wtp/Etp)
17	10136	Sudhir Pandey	Dinesh Pandey	Production
18	10137	Dinesh Tiwari	Nitya Nand Tiwari	Manufacturing
19	10144	Sunil Rai	Harendra Rai	Manufacturing
20	10145	Gagan Punj	Vinod Punj	Accounts
21	10147	Tota Lal	Gajpal Lal	Manufacturing
22	10148	Satendra Pal Singh	Braham Pal Singh	Engineering
23	10155	Inderjit Singh	Preetam Singh	Electrical & Instrumentation
24	10158	Dalbir Singh	Kripal Singh	Manufacturing
25	10159	Sudheer Kumar	Rahtu Singh	Production
26	10160	Rakesh Kumar	Krishan Lal	Water Treatment Cell (Wtp/Etp)
27	10161	Suresh Singh	Naib Singh	Engineering
28	10164	Balbeer Singh	Chhotu Ram	General
29	10167	Satbir Singh	Raghubeer Singh	Electrical & Instrumentation
30	10171	Sher Singh	Nirmal Singh	Store
31	10173	Anurag Pandey	Anil Kumar	Manufacturing
32	10177	Husn Deen	Rangi Khan	Electrical & Instrumentation
33	10180	Satish Kumar	Mr Bhupinder Singh	Accounts
34	10181	Vinay Kumar Pandey	Kashi Ram Pandey	Production
35	10184	Parveen Kumar	Singh Ram	Electrical & Instrumentation
36	10189	Naresh Mittal	Late. Prem Chand	Commercial
37	10190	Jai Prakash	Basadev	Power Plant
38	10193	Deepak Kumar	Subhash Singh	Engineering
39	10196	Bhim Singh	Dilip Singh	General
40	10197	Varinder Singh	Baldev Singh	Power Plant
41	10198	Sukhvinder Kumar	Mohan Lal	Accounts

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PMC No.- 51846

42	10199	Sanjeev Kumar	Shanti Swaroop	Accounts
43	10200	Ajay Sharma	Satpal Sharma	Store
44	10201	Shishpal	Rajener Pal	Manufacturing
45	10202	Pardeep Rana	Karan Pal	Manufacturing
46	10203	Manoj Kumar Dubey	Om Narayan Dubey	Security
47	10204	Gulfan Muhammad	Latif Mohammad	Manufacturing
48	10209	Sandeep Sharma	Sh Samvat Ram	Manufacturing
49	10210	Lovkesh Sharma	Shiv Kumar Sharma	Manufacturing
50	10212	Rakesh Kumar	Late Sh. Amar Chand	Power Plant
51	10221	Jitendra Singh	Om Prakash Singh	Electrical & Instrumentation
52	10342	Manish Patel	Babulal Patel	Power Plant
53	10368	Virendra Singh	Soudan Singh	Manufacturing
54	10370	Rajesh Kumar Jaiswal	Hari Prasad Jaiswal	Production
55	10371	Manoj Kumar	Ram Prakash	Store
56	10373	Susheel Kumar Sharma	Satyaprakash Sharma	Manufacturing
57	10436	Mintu Rana	Gorakh Ram	Fire & Safety
58	10460	Vijay Kumar	Vinod Kumar	Production
59	10479	Kuldeep Kumar	Gulzar Singh	Electrical & Instrumentation
60	10495	Chinkit Chauhan	Baljeet Singh	Electrical & Instrumentation
61	10524	Sandeep Kumar Sharma	Vijay Kumar Sharma	Manufacturing
62	10525	Jasmeet Singh	Shingara Singh	Power Plant
63	10528	Balvinder Singh	Ravil Singh	Electrical & Instrumentation
64	10539	Harmanpreet Singh	Surinder Singh	Electrical & Instrumentation
65	10542	Mahendra Singh	Maherban Singh	Mechanical
66	10567	Sanjay Kumar	Jai Chand Sharma	Electrical & Instrumentation
67	10600	Pooran Singh	Megh Singh	Water Treatment Cell (Wtp/Etp)
68	10601	Amit Kumar Chauhan	Harcharan Singh	Water Treatment Cell (Wtp/Etp)
69	10607	Harivansh Yadav	Rampati Yadav	Power Plant
70	10788	Jasbir Singh	Banta Singh	Mechanical
71	10812	Aditya Kumar	Upendra Kumar	Water Treatment Cell (Wtp/Etp)
72	10818	Karandeep	Lakshman Das	Electrical & Instrumentation
73	10848	Achhar Singh	Kandhara Singh	Production
74	10849	Maneesh Kumar	Ram Lal	Production
75	10863	Bir Singh	Gujjar Singh	Mechanical
76	10867	Suraj Kumar	Ram Singh	Production
77	10868	Adarsh Rohta	Rajender Singh	Production
78	10892	Ankush Sant	Dhan Raj Sant	Excise

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79	10906	Rajneesh Kumar	Sohan Lal	Information Technology
80	10922	Manish Kumar	Gajpal Lal	Production
81	10948	Manish Kumar	Sher Singh	Fire & Safety
82	10955	Shyam Mohan Dixit	Krashan Mohan	Production
83	10956	Gaurav Kumar	Ram Kumar Singh	Water Treatment Cell (Wtp/Etp)
84	10961	Davinder Kumar	Ramesh Kumar	Mechanical
85	10963	Sahil	Karam Singh	General
86	10966	Mahrndra Singh Dhami	Beer Singh Dhami	General
87	10967	Gurmail Singh	Gurdayal Singh	Mechanical
88	10969	Parveen Kumar	Budhi Singh	Electrical & Instrumentation
89	11011	Beer Singh	Pan Singh	General
90	11014	Deep Narain Yadav	Paras Yadav	Electrical & Instrumentation
91	11028	Sachin Jain	Lt. Sh. Surinder Kumar Jain	Human Resources
92	11029	Sandeep Singh	Sr. Mahinder Singh	Electrical & Instrumentation
93	11031	Sangeet	Fateh Singh	Power Plant
94	11032	Sandeep Singh	Achhar Singh	Manufacturing
95	11054	Abhishek	Surendra Singh	Production
96	11059	Dharmendra Singh	Karnel Singh	Mechanical
97	11060	Anurag Singh	Ajvendra Pratap Singh	Production
98	11061	Monu Kumar Sharma	Shambhu Sharma	Production
99	11069	Nirmla Devi	Diwan Chand	Production
100	11072	Chhatis Kumar	Ashok Yadav	Water Treatment Cell (Wtp/Etp)
101	11074	Hari Pal	Gopal Singh	Production
102	11078	Rohit	Ram Bahadur	Production
103	11091	Anmol Kumar	Dharam Ver Singh	Water Treatment Cell (Wtp/Etp)
104	11096	Gagan Sharma	Mohan Lal Sharma	Store
105	11099	Kaushal Kumar Seth	Ashok Seth	Electrical & Instrumentation
106	11101	Ankit Kumar	Shripal	Production
107	11109	Surjit Singh	Lt. Jagga Ram	Mechanical
108	11124	Shivam Jaiswal	Surendr	Production
109	11125	Mohit Mishra	Dev Saran Mishra	Production
110	11133	Akash Kumar	Sunil Kumar	Water Treatment Cell (Wtp/Etp)
111	11143	Jatinder Singh	Mehar Singh	Power Plant
112	11144	Mohsin Khan	Trabudeen Khan	Electrical & Instrumentation
113	11145	Amandeep Singh	Shiv Kumar	Power Plant
114	11156	Sachin Kumar	Lt. Arvind Kumar	Production

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115	11172	Preety Kumari	Manoj Singh	Production
116	11180	Chhotelal Yadav	Ramakant Yadav	Electrical & Instrumentation
117	11184	Manish Kumar Singh	Krishna Singh	Power Plant
118	11223	Akhilesh	Harishankar	Power Plant
119	11225	Prince Kumar	Hemender Kumar	Water Treatment Cell (Wtp/Etp)
120	11231	Dibyashu Pandey	Vinod Pandey	Process
121	11232	Shivcharan	Chhedilal	Electrical & Instrumentation
122	11238	Vikash Singh	Bindu Singh	Water Treatment Cell (Wtp/Etp)
123	11246	Ajay Kumar Gupta	Moti Lal Gupta	Power Plant
124	11261	DHARMINDER KUMAR	ROSHAN LAL	General
125	11268	RAMAN	SANJAY KUMAR	Manufacturing

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PMC No.- 51846

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Annexure 17: Photographs showing Safety Sign boards Displayed in the Premises



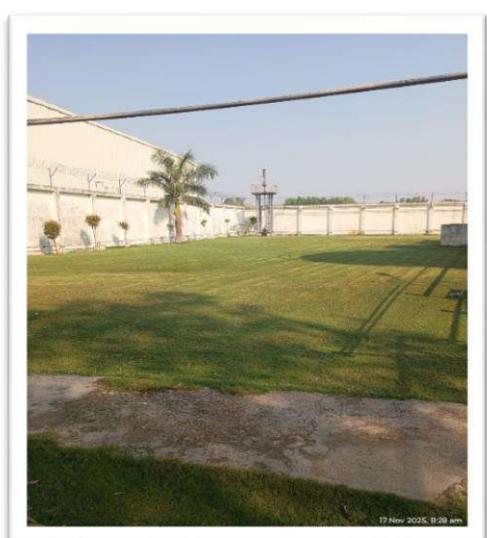
Annexure 18: Photographs showing Parking Facilities of Vehicles





Parking Facilities of Vehicles

Annexure 19: Photographs showing Greenbelt Plantation







PUNJAB POLLUTION CONTROL BOARD

Zonal Office-I, Vatavaran Bhawan, Nabha Road, Patiala

Website:- www.ppcb.gov.in



Office Dispatch No :	Registered/Speed Post	Date:
Industry Registration ID: R12SAS68177		Application No : 23137095

To,
Mr. Chander Mohan
 Village Haripur Hinduan, Barwala Road, dera Bassi, Sas Nagar, Punjab
 Mohali, Sasnagar-140507

Subject: **Renewal of Consent to Operate under section 21 of 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/SAS/2023/23137095
Date of issue :	21/09/2023
Date of expiry :	30/09/2028
Certificate Type :	Renewal
Previous CTO No. & Validity :	CTOA/Varied/SAS/2019/10042265 From:17/07/2019 To:30/09/2023

2. Particulars of the Industry

Name & Designation of the Applicant	Mr. Chander Mohan, (Ceo)
Address of Industrial premises	Rajasthan Liquors Limited (bottling Division), Village Haripur Hinduan, Barwala Road, Dera Bassi, Derabassi, Sas Nagar-140507
Capital Investment of the Industry	6163.0 lakhs
Category of Industry	Orange
Type of Industry	2057-Potable alcohol (IMFL) by blending, bottling of alcohol products
Scale of the Industry	Large
Office District	Sas Nagar

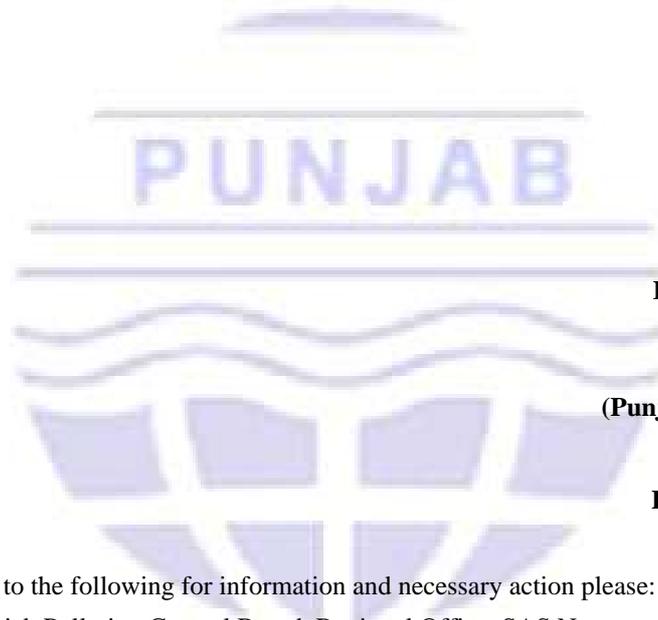
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Rajasthan Liquors Limited (bottling Division), Village Haripur Hinduan, Barwala Road, Dera Bassi, Derabassi, Sas Nagar, 140507

Page 1

All the term and conditions same as mentioned in the original consent no. CTOA/Varied/SAS/2019/10042265 dated 17/7/2019, valid upto 30/9/2023 issued to the industry. This extension letter may be appended with the original consent letter issued to the industry and subsequent extensions letters with an additional condition as under:

1. The project proponent shall not discharge any effluent at any unauthorized place by any unauthorized means i.e. shall not discharge any wastewater in any drain / inland surface waters / drain/choe/nallah/ onto land for stagnation or outside its premises, at any time, under any circumstances.
2. The entire responsibility of treatment and disposal arrangements provided at the site, shall be of the industry
3. The industry shall ensure that the activities of unit does not create any nuisance in the surrounding areas and no public complaints are received
4. The Consent is being issued to the industry based upon the documents/ information submitted by it along with the online application form. The Board would be at liberty to take penal action against the industry and its responsible/ concerned person(s) in case information/document is detected as incorrect/false/misleading at any point of time.
5. In case the industry fails to comply with the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Pollution) Act, 1981, Environment (Protection) Act, 1986 and/or any other environmental law applicable to the project and Rules, Circulars & Directions issued by the Board from time to time, action as deemed fit shall be taken against the industry.



21/09/2023

(Rajeev Gupta)
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:

The Environmental Engineer, Punjab Pollution Control Board, Regional Office, SAS Nagar

21/09/2023

(Rajeev Gupta)
Environmental Engineer

For & on behalf

of

(Punjab Pollution Control Board)

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PUNJAB POLLUTION CONTROL BOARD

Zonal Office-I, Vatavaran Bhawan, Nabha Road, Patiala

Website:- www.ppcb.gov.in



Office Dispatch No :	Registered/Speed Post	Date:
Industry Registration ID: R12SAS68177		Application No : 23137102

To,
Mr Chander Mohan
 Village Haripur Hinduan, Barwala Road, dera Bassi, Sas Nagar, Punjab
 Mohali, Sasnagar-140507

Subject: **Renewal of Consent to Operate under section 25 of 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/SAS/2023/23137102
Date of issue :	21/09/2023
Date of expiry :	30/09/2028
Certificate Type :	Renewal
Previous CTO No. & Validity :	CTOW/Renewal/SAS/2021/14505805 From:05/01/2021 To:31/03/2024

2. Particulars of the Industry

Name & Designation of the Applicant	Mr. Chander Mohan, (Ceo)
Address of Industrial premises	Rajasthan Liquors Limited (bottling Division), Village Haripur Hinduan, Barwala Road, Dera Bassi, Derabassi, Sas Nagar-140507
Capital Investment of the Industry	6163.0 lakhs
Category of Industry	Orange
Type of Industry	2057-Potable alcohol (IMFL) by blending, bottling of alcohol products
Scale of the Industry	Large
Office District	Sas Nagar

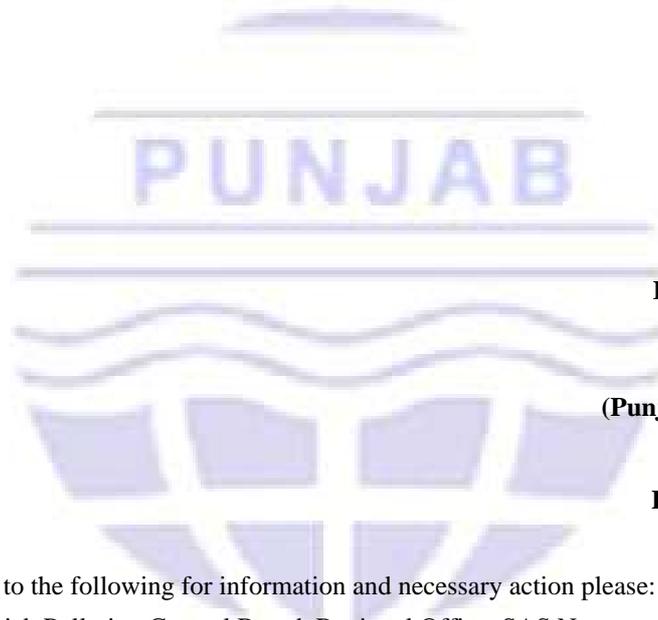
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Rajasthan Liquors Limited (bottling Division), Village Haripur Hinduan, Barwala Road, Dera Bassi, Derabassi, Sas Nagar, 140507

Page1

All the term and conditions same as mentioned in the original consent no. CTOW/Renewal/SAS/2021/14505805 dated 5/1/2021, valid upto 31/03/2024 issued to the industry. This extension letter may be appended with the original consent letter issued to the industry and subsequent extensions letters with an additional condition as under:

1. The project proponent shall not discharge any effluent at any unauthorized place by any unauthorized means i.e. shall not discharge any wastewater in any drain / inland surface waters / drain/choe/nallah/ onto land for stagnation or outside its premises, at any time, under any circumstances.
2. The entire responsibility of treatment and disposal arrangements provided at the site, shall be of the industry
3. The industry shall ensure that the activities of unit does not create any nuisance in the surrounding areas and no public complaints are received
4. The Consent is being issued to the industry based upon the documents/ information submitted by it along with the online application form. The Board would be at liberty to take penal action against the industry and its responsible/ concerned person(s) in case information/document is detected as incorrect/false/misleading at any point of time.
5. In case the industry fails to comply with the provisions of the Water (Prevention & Control of Pollution) Act, 1974, Air (Prevention & Control of Pollution) Act, 1981, Environment (Protection) Act, 1986 and/or any other environmental law applicable to the project and Rules, Circulars & Directions issued by the Board from time to time, action as deemed fit shall be taken against the industry.



21/09/2023

(Rajeev Gupta)
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:

The Environmental Engineer, Punjab Pollution Control Board, Regional Office, SAS Nagar

21/09/2023

(Rajeev Gupta)
Environmental Engineer

For & on behalf

of

(Punjab Pollution Control Board)

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Page2



F.No. J-11011/263/2010- IA II(I)
Government of India
Ministry of Environment, Forest and Climate Change
(IA-II Section)

By Speed Post/Online

Indira Paryavaran Bhawan
 Jorbagh Road, New Delhi - 3

Dated: 21st February, 2020

✓ To

M/s Rajasthan Liquors Limited
 Industrial FEZ, Village Haripur Hinduan
 & Saidupura, Tehsil Derabassi
 District SAS Nagar (Mohali), Punjab

Email: operation.head@rll.co.in

Sub: Expansion of Grain based distillery from 120 KLPD to 145.2 KLPD by modernization and efficiency improvement at Industrial FEZ, Village Haripur Hinduan & Saidupura, Tehsil Derabassi, District SAS Nagar (Mohali), Punjab by M/s Rajasthan Liquors Limited - Environmental Clearance - reg.

Sir,

This has reference to your proposal No. IA/PB/IND2/123702/2019 dated 1st November 2019, for environmental clearance to the above project.

2. The Ministry of Environment, Forest and Climate Change has examined the proposal for environmental clearance to the project for Expansion of Grain based distillery from 120 KLPD to 145.2 KLPD by modernization and efficiency improvement by M/s Rajasthan Liquors Limited in an area of 4.25 ha located at Industrial FEZ, Village Haripur Hinduan & Saidupura, Tehsil Derabassi, District SAS Nagar (Mohali), Punjab.

3. The details of products are as under:

S.No.	Product	Existing	Proposed	Total
1	Grain based Distillery (Extra Neutral Alcohol /Ethanol / Rectified Spirit)	120 KLPD	25.2 KLPD	145.2 KLPD
2	Co-generation Power Plant	3.0 MW	Nil	3.0 MW
3	IMFL/ CL Bottling Plant	12000 cases/day		

4. The existing land area is 4.25 ha (10.5 acres). The proposed expansion will be done within the existing plant premises. Industry has developed greenbelt in an area of 1.4 ha (3.5 acres) covering 33 % of total project area. The estimated project cost is Rs. 25 crores. Total capital cost earmarked towards environmental pollution control measures is Rs. 5 crores and the recurring cost (O&M) will be about Rs. 0.3 crores per annum. The project will provide employment for 120 persons directly & 60 persons indirectly after expansion.

EC for M/s Rajasthan Liquors Limited

Page 1 of 8

5. There are no national parks, wildlife sanctuaries, biosphere reserves, Tiger/ Elephant Reserves, wildlife corridors etc., within 10 km distance from the plant site.

6. Existing fresh water requirement is 1200 cum/day, which will be reduced to 1127 cum/day after expansion, being met from existing ground water source. Effluent (Process condensate) of 541 cum/day will be treated through state of art CPU (Filters & RO) of capacity 700 cum/day. There will be no discharge of treated/untreated waste water from the unit, and thus ensuring Zero Liquid Discharge.

The existing power requirement is 3.0 MW, being met from Co-generation Power Plant, State Electricity Board & DG sets (for emergency), which will cater to the proposed expansion. Existing unit has DG set of 500 KVA & 1010 KVA which is used as standby during power failure. Stack (height-6 m) has been provided as per CPCB norms to the existing DG sets.

Existing unit has 36 TPH (AFBC Type) rice husk/coal fired boiler and no additional boiler is envisaged in the proposed expansion. Electrostatic Precipitators (ESP) with a stack height of 52 m is installed to control the particulate emissions within the statutory limits.

CO₂ generated during the fermentation process will be recovered by scrubbers and shall be sold to beverage & packaging industry. Online Stack Monitoring System has been installed as per CPCB guidelines. Solid waste from the grain based operations generally comprises of fibers and proteins in the form of DDGS, which will be ideally used as cattle feed. ETP sludge will be dewatered in sludge drying beds and will be used as manure. Fly ash generated from the boiler will be supplied to brick/cement manufacturers. Used oil & grease generated from plant machinery/gear boxes as hazardous waste will be sold out to the CPCB authorized recyclers.

7. The project/activity is covered under category B of item 5 (g) 'Distilleries' of the Schedule to the EIA Notification, 2006. Due to applicability of general condition (Interstate boundary of Punjab and Haryana at 2.2 km), the project requires appraisal at central level by the sectoral Expert Appraisal Committee in the Ministry.

8. The proposal is submitted under Section 7(ii) of the EIA Notification, 2006 as amended on 23rd November, 2016, requesting exemption from fresh terms of reference (ToR), EIA/EMP report and public hearing/consultation.

The Ministry has earlier issued environmental clearance vide letter dated 26th September, 2012 to the existing project ' Distillery plant (grain based, 120 KLD) with cogeneration power plant (3MW) in favor of M/s Rajasthan Liquors Limited located at Village Haripur Hinduan, Derabassi, District SAS Nagar, Punjab. The compliance report of the existing EC conditions was forwarded by the Regional Office of the Ministry at Chandigarh, vide letter dated 20th May, 2019 (site visit on 14th February, 2019).

9. The proposal was considered by the Expert Appraisal Committee (Industry-2) in its meeting held on 30-31 December, 2019 & 1st January, 2020 in the Ministry, wherein the project proponent and their accredited consultant M/s JM EnviroNet Pvt Ltd presented the EIA/EMP report as per the ToR. The Committee found the EIA/EMP report complying with the ToR and recommended the project for grant of environmental clearance.

10. Based on the proposal submitted by the project proponent and recommendations of the EAC (Industry-2), Ministry of Environment, Forest and Climate change hereby accords environmental clearance to the project for **Expansion of Grain based distillery from 120 KLPD to 145.2 KLPD by modernization and efficiency improvement by M/s Rajasthan Liquors Limited located at Industrial FEZ, Village Haripur Hinduan & Saidupura, Tehsil Derabassi, District SAS Nagar (Mohali), Punjab**, under the provisions of the EIA Notification, 2006, subject to the compliance of terms and conditions as under:-

- (i) The grant of environmental clearance is subject to decision of Punjab Pollution Control Board/CGWA regarding permission for ground water extraction, and subject to final order of Hon'ble NGT regarding extraction of ground water in the Derabassi area.
- (ii) Grain unfit for human consumption shall only be used for industrial operations.
- (iii) Necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, shall be obtained from the State Pollution Control Board as required.
- (iv) As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.
- (v) Concentrated spent wash shall be incinerated and not to be released in open space.
- (vi) Solid waste from the grain based operations in the form of DDGS, shall be sold/utilized.
- (vii) CO₂ generated from the process shall be bottled/made solid ice and sold to authorized vendors.
- (viii) Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
- (ix) To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- (x) Odour shall be prevented at the source and effective odour management scheme shall be implemented.
- (xi) Total fresh water requirement shall not exceed 1127 cum/day, proposed to meet from ground water. Prior permission shall be obtained from the concerned regulatory authority/CGWA, and renewed from time to time.
- (xii) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.

- (xiii) Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
- (xiv) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.
- (xv) The company shall undertake waste minimization measures as below:-
 - (a) Metering and control of quantities of active ingredients to minimize waste.
 - (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
 - (c) Use of automated filling to minimize spillage.
 - (d) Use of Close Feed system into batch reactors.
 - (e) Venting equipment through vapour recovery system.
 - (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (xvi) The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
 - (i). As proposed Rs.1.25 crores shall be allocated for Corporate Environment Responsibility (CER). As proposed, the CER funds shall be utilized for renovation/infrastructure development of schools, hospitals, skill development of farmers/youths, upgrading & maintenance of the ponds, rainwater harvesting in nearby villages, etc. The CER plan shall be completed within a period of 3 years.
- (xvii) For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- (xviii) The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.
- (xix) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (xx) There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places.
- (xxi) Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (xxii) Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For ZLD, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.

10.1 The grant of environmental clearance is further subject to compliance of other general conditions as under:-

- (i) The Project Proponent shall obtain all other statutory/necessary permissions/recommendations/NOCs prior to start of construction/operation of the project, which *inter alia* include, permission/approvals under the Forest (Conservation) Act, 1980; the Wildlife (Protection) Act, 1972; the Coastal Regulation Zone Notification, 2019, as amended from time to time, and other Office Memoranda/Circular issued by the Ministry of Environment, Forest and Climate Change from time to time, as applicable to the project.
- (ii) The project proponent shall ensure compliance of 'National Emission Standards', as applicable to the project, issued by the Ministry from time to time. The project proponent shall also abide by the rules/regulations issued by the CPCB/SPCB for control/abatement of pollution.
- (iii) The project authorities shall adhere to the stipulations made by the State Pollution Control Board/Committee, Central Pollution Control Board, State Government and any other statutory authority.
- (iv) The project proponent shall prepare a site specific conservation plan and wildlife management plan in case of the presence of Schedule-1 species in the study area, as applicable to the project, and submit to Chief Wildlife Warden for approval. The recommendations shall be implemented in consultation with the State Forest/Wildlife Department in a time bound manner.
- (v) No further expansion or modifications in the plant, other than mentioned in the EIA Notification, 2006 and its amendments, shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.
- (vi) The energy source for lighting purpose shall be preferably LED based, or advance having preference in energy conservation and environment betterment.
- (vii) The locations of ambient air quality monitoring stations shall be decided in consultation with the State Pollution Control Board (SPCB) and it shall be ensured that at least one station each is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.
- (viii) The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be followed.
- (ix) The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).

- (x) The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and to utilize the same for process requirements.
- (xi) Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.
- (xii) The company shall also comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, and risk mitigation measures relating to the project shall be implemented.
- (xiii) The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. CER activities shall be undertaken by involving local villages and administration and shall be implemented.
- (xiv) The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.
- (xv) A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.
- (xvi) The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/ pollution control measures shall not be diverted for any other purpose.
- (xvii) A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.
- (xviii) The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF&CC, the respective Zonal Office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.
- (xix) The environmental statement for each financial year ending 31st March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of MoEF&CC by e-mail.

- (xx) The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry and at <https://parivesh.nic.in/>. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.
- (xxi) The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.
- (xxii) This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.

11. The Ministry reserves the right to stipulate additional conditions, if found necessary at subsequent stages and the project proponent shall implement all the said conditions in a time bound manner. The Ministry may revoke or suspend the environmental clearance, if implementation of any of the above conditions is not found satisfactory.

12. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.

13. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

14. The above conditions shall be enforced, *inter-alia* under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

(Dr. R. B. Lal)
 (डा. आर. बी. लाल)
 (Dr. R. B. Lal)
 वैज्ञानिक 'ई' / Scientist 'E'
 पर्यावरण, वन एवं जलवायु परिवर्तन विभाग
 Min. of Environment, Forest and Climate Change
 भारत सरकार, नई दिल्ली
 Govt. of India, New Delhi

Copy to: -

1. The Deputy DGF (C), Ministry of Environment, Forest and Climate Change, Regional Office(NZ), Bays No. 24-25, Sector 31 A, Dakshin Marg, Chandigarh - 30
2. The Secretary, Department of Science, Technology and Environment, Government of Punjab, Chandigarh

3. The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, Delhi - 32
4. The Member Secretary, Punjab Pollution Control Board, Punjab Pollution Control Board, Vatavaran Bhawan, Nabha Road, Patiala
5. The District Collector, District SAS Nagar (Mohali) (Punjab)
6. Guard File/Monitoring File/Website/Record File

(Dr. R. B. Lal)
Scientist E



CHANDIGARH POLLUTION TESTING LABORATORY

(Environmental Monitoring, EIA, NOC, ETP, STP)

Annexure 23

H.O. : #372, Sector 15-A, Chandigarh-160 015
 Phone : 0172-4669295
 Lab : E-126, Phase-VII, Indl. Area, Mohali - 160055
 Phone : 0172-5090312
 E-mail : cptle126@gmail.com ; lab@cptl.co.in
 Website : www.cptl.co.in



TEST CERTIFICATE

Format No. CPTLF7.8-I(N)

REPORT No. CPTL/2025/09/05(N)
 REPORTING DATE: 18-09-2025

NAME OF INDUSTRY: M/s. RAJASTHAN LIQUOR LTD. (DISTILLERY),
 VILL.- HARIPUR, HINDUAN, BARWALA ROAD,
 DERA BASSI, DISTT.- SAS NAGAR, MOHALI (P.B).

SAMPLE PARTICULARS

Sampling Plan Ref No.:	CPTLF 7.3-I	Type of Sample:	Ambient Noise
Sampling Method:	CPTL/SM/01	Point of Sample:	At different locations
Date of Monitoring.:	16-09-2025	Environmental Conditions:	Normal
Sample Identification No.:	CPTL/2025/09/05(AN)	Sample Collected By:	Daljeet Singh & Team
Nature of Sample:	Noise Level Monitoring		

NOISE LEVEL

S. No.	Location	Value in dB(A) (Average) Day Time	Value in dB(A) (Average) Night Time	Test Method
01.	Turbine Area	74.2	65.4	IS 9989:1981
02.	Work Shop (Machine)	72.2	66.2	IS 9989:1981
03.	Boiler	72.4	64.1	IS 9989:1981
04.	E.T.P	70.6	63.8	IS 9989:1981

Chemist-in-Charge

Date:

Dans
 18/09/2025

Mr. Sital Singh (CEO)
 (Authorized Signatory)

Date:

Sital Singh
 18/09/2025

- The results are related to test items only.
- This certificate is not to be reproduced wholly or in part and cannot be used as evidence in the court of law without approval of laboratory.
- Sample will be destroyed after retention time unless otherwise specified.

END OF REPORT



ਪੰਜਾਬ ਪ੍ਰਦੂਸ਼ਣ ਕੰਟਰੋਲ ਬੋਰਡ
PUNJAB POLLUTION CONTROL BOARD

No. SEE(HQ-2)/F.No.313/2025/33908-26
To

Dated. 02/10/25

The Environmental Engineer,
Punjab Pollution Control Board,
Regional Office, Patiala/ Sangrur/ Jalandhar-1/2/
Ludhiana-1/2/3/4/ Amritsar/ Hoshiarpur/ SAS Nagar/
Roopnagar/ Bathinda/ Faridkot/ Fatehgarh Sahib/
Mukatsar/ Barnala/ Tarn-Taran/ Batala.

Subject: Partial modification of Board's instruction regarding Rain Water Harvesting in trade effluent generating industries.

This has reference to Board's instruction issued vide letter no. PPCB/2018/19049-74 dated 19.06.2018 whereby it was advised to ensure that no red category "Trade Effluent Generating" industry is allowed to provide the rain water harvesting/ recharging system.

Now, after considering the suggestions received from various offices of the Board, the said instructions are hereby amended as under:

1. No trade effluent generating industry, irrespective of category, shall be permitted to carry out groundwater recharge.
2. Industries may, however, construct rooftop rainwater storage tanks for collection and internal reuse within their premises.
3. Existing recharge structures in effluent-generating industries shall not be permitted for recharge. Such structures may be retrofitted into storage-only systems, and the collected rainwater may be internally reused.

Endst. No. 33927-28

Member Secretary
Dated: 02/10/25

action:

1. The Chief Environmental Engineer, Punjab Pollution Control Board, HQ/ WM/ Jalandhar/ Ludhiana/ Bathinda/ Patiala.
2. The Senior Environmental Engineer, Punjab Pollution Control Board, HQ/II/III, Zonal Office, Patiala-I/II, Ludhiana-I/II, Jalandhar, Amritsar and Bathinda.

Member Secretary

MANIFEST FOR HAZARDOUS AND OTHER WASTE

1.	Generator's name and mailing address (including phone no.)	For Rajasthan Liquors Ltd.		
	E-mail ID:-	Authorised Signatory		
	PWMP Membership No.:-	Rajasthan Liquors Ltd. (Distillery Division) Haripur Hindua, Dera Bassi, Mohali Punjab		
2.	Generator's authorisation No.			
3.	Manifest Document No.	55267		
4.	Transporter's name and address: (including phone No. and e-mail)	Re Sustainability Limited Opposite Vardhman Chemtech Ltd. Village Nimbua, P.O. Rampur Sainia, Tehsil Dera Bassi, Distt. Mohali (Punjab.) 140507 E-mail :- services.pwmp@resustainability.com Contact No.: 9781124224		
5.	Types of Vehicle	(Truck/Tanker/Special Vehicle)		
6.	Transporter's registration No.	HMC/TSDF/ 2007-08/ F-4205		
7.	Vehicle registration No.	PB 65 BE 1875		
8.	TSDF Operator's name and mailing address (including phone No. and e-mail)	Re Sustainability Limited Opposite Vardhman Chemtech Ltd. Village Nimbua, P.O. Rampur Sainia, Tehsil Dera Bassi, Distt. Mohali (Punjab.) 140507 E-mail :- operationspwmp@resustainability.com Contact No.: 9815020422		
9.	TSDF Authorisation No.	HMC/TSDF/ 2007-08/ F-4205		
10.	Waste Description	Category-37.3 (Evaporation & Concentration Residue)		
11.	Total Quantity (MT)	500 Kg		
12.	Physical form	(Solid/Semi- Solid/Sludge/Oily/Tarry/Slurry/Liquid)		
13.	Special handling instruction and additional Information	Use Nose Mask, Disposable Mask & Hand Gloves		
14.	Generator's Certificate For Rajasthan Liquors Ltd.	I hereby declare that the content of the consignment are fully and accurately described above the proper shipping name and are categorized, packed, marked and labeled, and are in all respects in proper conditions for transport by road according to applicable national government regulations.		
	Authorised Signatory Rajasthan Liquors Ltd. (Distillery Division) Haripur Hindua, Dera Bassi, Mohali Punjab	Signature:	Month	Day
			04	28
				2015
15.	Transporter acknowledgment of receipt of Hazardous Waste			
	Name and stamp:	Signature:	Month	Day
		Mahaveer Singh	04	28
				2015
16.	TSDF Operator's certification for receipt of hazardous and other Waste			
	Name and stamp:	Signature:	Month	Day
			04	28
				2015

COPY 1 Of 7

NOTE : Please Atach Comprehensive Analysis Report Photocopy

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To Be Forwarded To The PPCB / PCC By The Occupier.

FORM - 10

(See Rule 19 (1))

Rev.No.-002

Dated:-22 April,2016

MANIFEST FOR HAZARDOUS AND OTHER WASTE

1.	Generator's name and mailing address (including phone no.)	For Rajasthan Liquors Ltd.		
	E-mail ID:-	Authorised Signatory		
	PWMP Membership No.:-	Rajasthan Liquors Ltd Distillery Division Hazi Pur Hindua, Dera Bassi, Mohali Punjab.		
2.	Generator's authorisation No.			
3.	Manifest Document No.	55266		
4.	Trasporter's name and address: (including phone No. and e-mail)	Re Sustainability Limited Opposite Vardhman Chemtech Ltd. Village Nimbua, P.O. Rampur Sainia, Tehsil Dera Bassi, Distt. Mohali (Punjab.) 140507 E-mail :- services.pwmp@resustainability.com Contact No.: 9781124224		
5.	Types of Vehicle	(Truck/Tanker/Special Vehicle)		
6.	Transporter's registration No.	HMC/TSDF/ 2007-08/ F-4205		
7.	Vehicle registration No.	PB 65 BE 1875		
8.	TSDF Operator's name and mailing address (including phone No. and e-mail)	Re Sustainability Limited Opposite Vardhman Chemtech Ltd. Village Nimbua, P.O. Rampur Sainia, Tehsil Dera Bassi, Distt. Mohali (Punjab.) 140507 E-mail :- operationspwmp@resustainability.com Contact No.: 9815020422		
9.	TSDF Authorisation No.	HMC/TSDF/ 2007-08/ F-4205		
10.	Waste Description	Category - 35.2 (Spent Resin)		
11.	Total Quantity (MT)	225 Kg		
12.	Physical form	(Solid/Semi- Solid/Sludge/Oily/Tarry/Slurry/Liquid)		
13.	Special handling instruction and additional Information	Use Nose Mask, Disposable Mask & Hand Gloves		
14.	Generator's Certificate For Rajasthan Liquors Ltd.	I hereby declare that the content of the consignment are fully and accurately described above the proper shipping name and are categorized, packed, marked and labeled, and are in all respects in proper conditions for transport by road according to applicable national government regulations.		
	Authorised Signatory Rajasthan Liquors Ltd Distillery Division Hazi Pur Hindua Dera Bassi Mohali Name and stamp: Punjab Signature:			
		Month	Day	Year
		04	28	2025
15.	Transporter acknowledgment of receipt of Hazardous Waste			
	Name and stamp: Signature: Month Day Year	Mahaveer Singh 04 28 2025		
16.	TSDF Operator's certification for receipt of hazardous and other Waste			
	Name and stamp: Signature: Month Day Year	04 28 2025		

COPY 1 OF 7

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To Be Forwarded To The PPCB / PCC By The Occupier.

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FORM - 10

(See Rule 19 (1))

Rev.No.-002

Dated:-22 April,2016

MANIFEST FOR HAZARDOUS AND OTHER WASTE

1.	Generator's name and mailing address (including phone no.)	For Rajasthan Liquors Ltd.		
	E-mail ID:-	Rajasthan Liquors Ltd (Distillery Division) Hazi Pur Hindua, Dera Bassi, Mohali Punjab		
	PWMP Membership No.:-	Authorised Signatory		
2.	Generator's authorisation No.			
3.	Manifest Document No.	55268		
4.	Trasporter's name and address: (including phone No. and e-mail)	Re Sustainability Limited Oppsite Vardhman Chemtech Ltd. Village Nimbua, P.O. Rampur Sainia, Tehsil Dera Bassi, Distt. Mohali (Punjab.) 140507 E-mail :- services.pwmp@resustainability.com Contact No.: 9781124224		
5.	Types of Vehicle	(Truck/Tanker/Special Vehicle)		
6.	Transporter's registration No.	HMC/TSDF/ 2007-08/ F-4205		
7.	Vehicle registration No.	PB 65 BE 1875		
8.	TSDF Operator's name and mailing address (including phone No. and e-mail)	Re Sustainability Limited Oppsite Vardhman Chemtech Ltd. Village Nimbua, P.O. Rampur Sainia, Tehsil Dera Bassi, Distt. Mohali (Punjab.) 140507 E-mail :- operationspwmp@resustainability.com Contact No.: 9815020422		
9.	TSDF Authorisation No.	HMC/TSDF/ 2007-08/ F-4205		
10.	Waste Description	Category - 5.2 (Oil Containing Residue)		
11.	Total Quantity (MT)	15 Kg		
12.	Physical form	(Solid/Semi- Solid/Sludge/Oily/Tarry/Slurry/Liquid)		
	Special handling instruction and additional Information	Use Nose Mask, Disposable Mask & Hand Gloves		
14.	Generator's Certificate	I hereby declare that the content of the consignment are fully and accurately described above the proper shipping name and are categorized, packed, marked and labeled, and are in all respects in proper conditions for transport by road according to applicable national government regulations.		
	For Rajasthan Liquors Ltd. Authorised Signatory Rajasthan Liquors Ltd. (Distillery Division) Hazi Pur Hindua, Dera Bassi, Mohali Punjab	Signature:	Month	Day
			04	28
				2025
15.	Transporter acknowledgment of receipt of Hazardous Waste			
	Name and stamp: Unit PWMP Nimbua Signature: Mahaveer Singh	Month	Day	Year
		04	28	2025
16.	TSDF Operator's certification for receipt of hazardous and other Waste			
	Name and stamp:	Signature:	Month	Day
			04	28
				2025

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COPY 1 of 7

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To Be Forwarded To The PPCB / PCC By The Occupier.

MANIFEST FOR HAZARDOUS AND OTHER WASTE

1.	Sender's name and mailing address (including Phone No. and e-mail)	Rajasthan Liquors Limited Distillery, Deorabassi, Punjab
2.	Sender's authorisation No.	HWM/renew/SAS/2024/25306888
3.	Manifest Document No.	1312
4.	Transporter's name and address: (including Phone No. and e-mail)	J. S. PLASTIC Nichi Mangli, Near Baba Sucha Singh Samadh, Chd. Road, Ludhiana. Contact No. : 98146-55323
5.	Type of vehicle	(Truck/Jeep/Special Vehicle)
6.	Transporter's registration No.	HWM/Renew/LDH1/2021/17135970
7.	Vehicle registration No.	PB10 JE 5858, PB10 JW 5856
8.	Receiver's name and mailing address (including Phone No. and e-mail)	J. S. PLASTIC Nichi Mangli, Near Baba Sucha Singh Samadh, Chd. Road, Ludhiana. Contact No. : 98146-55323 E-mail : js18662@gmail.com
9.	Receiver's authorisation No.	HWM/Renew/LDH1/2021/17135970
10.	Waste description	CAT 33.1
11.	Total quantity No. of Containers	Used waste empty Plastic cans 2260... Kg. only m ³ or MT 2260... Kg. only Nos. Twenty Two hundred Sixty Kg. only
12.	Physical form	(Solid/Semi-Solid/Sludge/Oily/Tarry/Slurry/Liquid) only
13.	Special handling instructions and additional information	
14.	Sender's Certificate	I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are categorised, packed, marked, and labelled, and are in all respects in proper conditions for transport by road according to applicable national government regulations.
Name and stamp: For Rajasthan Liquors		Signature: [Signature] Month Day Year 05 10 2025
15.	Transporter acknowledgement of receipt of Wastes	
Name and stamp: For J.S. PLASTIC		Signature: [Signature] Month Day Year 05 10 2025
16.	Receiver's certification for receipt of hazardous and other waste	
Name and stamp: For J.S. PLASTIC		Signature: [Signature] Month Day Year 05 10 2025

White Copy (1 of 7)

Prop.

To be forwarded to the PPCB/CPCC By the Occupier.

FORM 10
[See rule 19(1)]
MANIFEST FOR HAZARDOUS AND OTHER WASTE

1.	Sender's name and mailing address (including Phone No. and e-mail)	
2.	Sender's authorisation No.	
3.	Manifest Document No.	1325
4.	Transporter's name and address: (including Phone No. and e-mail)	J. S. PLASTIC Nichi Mangli, Near Baba Sucha Singh Samadh, Chd. Road, Ludhiana. Contact No. : 98146-55323
5.	Type of vehicle	(Truck/Jeep/Special Vehicle)
6.	Transporter's registration No.	HWM/Renew/LDH1/2021/17135970
7.	Vehicle registration No.	PB10 JE 5858, PB10 JW 5856
8.	Receiver's name and mailing address (including Phone No. and e-mail)	J. S. PLASTIC Nichi Mangli, Near Baba Sucha Singh Samadh, Chd. Road, Ludhiana. Contact No. : 98146-55323 E-mail : js18662@gmail.com
9.	Receiver's authorisation No.	HWM/Renew/LDH1/2021/17135970
10.	Waste description	CAT 33.1
11.	Total quantity No. of Containersm ³ or MTNos. <i>used waste empty plastic & iron scrap</i> <i>2.1.1 Pc</i> <i>two hundred eleven only</i>
12.	Physical form	(Solid/Semi-Solid/Sludge/Oily/Tarry/Slurry/Liquid)
13.	Special handling instructions and additional information	
14.	Sender's Certificate	I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are categorised, packed, marked, and labelled, and are in all respects in proper conditions for transport by road according to applicable national government regulations.
	Name and stamp:  Signature: _____	Month Day Year 05 20 2025
15.	Transporter acknowledgement of receipt of Wastes	
	Name and stamp: For J.S. PLASTIC Signature: _____	Month Day Year 05 20 2025
16.	Receiver's certification for receipt of hazardous and other waste	
	Name and stamp: For J.S. PLASTIC Signature: _____	Month Day Year 05 20 2025

FORM - 10

(See Rule 19 (1))

Rev.No.-002
Dated:-22 April,2016

MANIFEST FOR HAZARDOUS AND OTHER WASTE

1.	Generator's name and mailing address (including phone no.)	For Rajasthan Liquors Ltd.		
	E-mail ID:-	Authorised Signatory Rajasthan Liquors Ltd. (Distillery Division) Hanpur Hindua, Dera Bassi, Mohali, Punjab		
	PWMP Membership No.:-			
2.	Generator's authorisation No.			
3.	Manifest Document No.	55268		
4.	Trasporter's name and address: (including phone No. and e-mail)	Re Sustainability Limited Opposite Vardhman Chemtech Ltd. Village Nimbua, P.O. Rampur Sainia, Tehsil Dera Bassi, Distt. Mohali (Punjab.) 140507 E-mail :- services.pwmp@resustainability.com Contact No.: 9781124224		
5.	Types of Vehicle	(Truck/Tanker/Special Vehicle)		
6.	Trasporter's registration No.	HMC/TSDF/ 2007-08/ F-4205		
7.	Vehicle registration No.	PB 65 BE 1875		
8.	TSDF Operator's name and mailing address (including phone No. and e-mail)	Re Sustainability Limited Opposite Vardhman Chemtech Ltd. Village Nimbua, P.O. Rampur Sainia, Tehsil Dera Bassi, Distt. Mohali (Punjab.) 140507 E-mail :- operationspwmp@resustainability.com Contact No.: 9815020422		
9.	TSDF Authorisation No.	HMC/TSDF/ 2007-08/ F-4205		
10.	Waste Description	Category 5.2 (Oil Containing Residue)		
11.	Total Quantity (MT)	15 Kg		
12.	Physical form	(Solid/Semi- Solid/Sludge/Oily/Tarry/Slurry/Liquid)		
13.	Special handling instruction and additional Information	Use Nose Mask, Disposable Mask & Hand Gloves		
14.	Generator's Certificate	I hereby declare that the content of the consignment are fully and accurately described above the proper shipping name and are categorized, packed, marked and labeled, and are in all respects in proper conditions for transport by road according to applicable national government regulations.		
	For Rajasthan Liquors Ltd. Authorised Signatory Rajasthan Liquors Ltd. (Distillery Division) Hanpur Hindua, Dera Bassi, Mohali, Punjab	Name and stamp:	Signature:	
				Month: 04 Day: 28 Year: 2025
15.	Transporter acknowledgment of receipt of Hazardous Waste			
	Name and stamp:	Signature:	Month:	Day:
		Mahaveer Singh	04	28
16.	TSDF Operator's certification for receipt of hazardous and other Waste			
	Name and stamp:	Signature:	Month:	Day:
			04	28

NOTE : Please Atach Comprehensive Analysis Report Photocopy

COPY 6 Of 7

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To Be Returned to the Occupier by the operator of facility after Disposal.

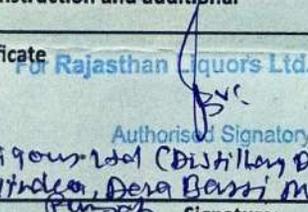
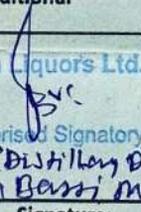
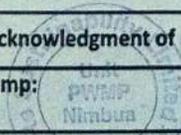
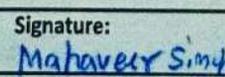
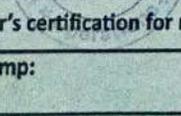
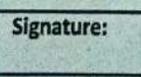
FORM - 10

(See Rule 19 (1))

Rev.No.-002

Dated:-22 April,2016

MANIFEST FOR HAZARDOUS AND OTHER WASTE

1.	Generator's name and mailing address (including phone no.)	For Rajasthan Liquors Ltd.		
	E-mail ID:-	Authorised Signatory		
	PWMP Membership No.:-	Rajasthan Liquors Ltd. Distillery Division Hazi Pur Hindua, Dera Bassi, Mohali Punjab		
2.	Generator's authorisation No.			
3.	Manifest Document No.	55266		
4.	Trasporter's name and address: (including phone No. and e-mail)	Re Sustainability Limited Opposite Vardhman Chemtech Ltd. Village Nimbua, P.O. Rampur Sainia, Tehsil Dera Bassi, Distt. Mohali (Punjab.) 140507 E-mail :- services.pwmp@resustainability.com Contact No.: 9781124224		
5.	Types of Vehicle	(Truck/Tanker/Special Vehicle)		
6.	Transporter's registration No.	HMC/TSDF/ 2007-08/ F-4205		
7.	Vehicle registration No.	PB 65 BE 1875		
8.	TSDF Operator's name and mailing address (including phone No. and e-mail)	Re Sustainability Limited Opposite Vardhman Chemtech Ltd. Village Nimbua, P.O. Rampur Sainia, Tehsil Dera Bassi, Distt. Mohali (Punjab.) 140507 E-mail :- operationspwmp@resustainability.com Contact No.: 9815020422		
9.	TSDF Authorisation No.	HMC/TSDF/ 2007-08/ F-4205		
10.	Waste Description	Category - 35.2 (Spent Resin)		
11.	Total Quantity (MT)	225 Kg		
12.	Physical form	(Solid/Semi- Solid/Sludge/Oily/Tarry/Slurry/Liquid)		
13.	Special handling instruction and additional Information	Use Nose Mask, Disposable Mask & Hand Gloves		
14.	Generator's Certificate	I hereby declare that the content of the consignment are fully and accurately described above the proper shipping name and are categorized, packed, marked and labeled, and are in all respects in proper conditions for transport by road according to applicable national government regulations.		
	Name and stamp:  Signature: 	Month	Day	Year
		04	28	2025
15.	Transporter acknowledgment of receipt of Hazardous Waste			
	Name and stamp:  Signature: 	Month	Day	Year
		04	28	2025
16.	TSDF Operator's certification for receipt of hazardous and other Waste			
	Name and stamp:  Signature: 	Month	Day	Year
		04	28	2025

NOTE : Please Atach Comprehensive Analysis Report Photocopy

COPY 6 Of 7

Blue Copy

To Be Returned to the Occupier by the operator of facility after Disposal.

MANIFEST FOR HAZARDOUS AND OTHER WASTE

1.	Generator's name and mailing address (including phone no.)	Rajasthan Liquors Ltd, Distillery Division Hazi Pur Hindua, Dera Bassi, Mohali Punjab For Rajasthan Liquors Ltd.			
	E-mail ID:-	Authorised Signatory			
	PWMP Membership No.:-				
2.	Generator's authorisation No.	55267			
3.	Manifest Document No.				
4.	Transporter's name and address: (including phone No. and e-mail)	Re Sustainability Limited Opposite Vardhman Chemtech Ltd. Village Nimbua, P.O. Rampur Sainia, Tehsil Dera Bassi, Distt. Mohali (Punjab.) 140507 E-mail :- services.pwmp@resustainability.com Contact No.: 9781124224			
5.	Types of Vehicle	(Truck/Tanker/Special Vehicle)			
6.	Transporter's registration No.	HMC/TSDF/ 2007-08/ F-4205			
7.	Vehicle registration No.	PB 65 BE 1875			
8.	TSDF Operator's name and mailing address (including phone No. and e-mail)	Re Sustainability Limited Opposite Vardhman Chemtech Ltd. Village Nimbua, P.O. Rampur Sainia, Tehsil Dera Bassi, Distt. Mohali (Punjab.) 140507 E-mail :- operationspwmp@resustainability.com Contact No.: 9815020422			
9.	TSDF Authorisation No.	HMC/TSDF/ 2007-08/ F-4205			
10.	Waste Description	Category-37.3 (Evaporator & Concentrator Residue)			
11.	Total Quantity (MT)	500 Kg			
12.	Physical form	(Solid/Semi- Solid/Sludge/Oily/Tarry/Slurry/Liquid)			
13.	Special handling instruction and additional Information	Use Nose Mask, Disposable Mask & Hand Gloves			
14.	Generator's Certificate	I hereby declare that the content of the consignment are fully and accurately described above the proper shipping name and are categorized, packed, marked and labeled, and are in all respects in proper conditions for transport by road according to applicable national government regulations.			
Name and stamp:		Signature:	Month	Day	Year
Rajasthan Liquors Ltd. Distillery Division Hazi Pur Hindua, Dera Bassi, Mohali Punjab		Authorised Signatory	04	28	2025
15.	Transporter acknowledgment of receipt of Hazardous Waste				
Name and stamp:		Signature:	Month	Day	Year
PWMP Nimbua		Mahaveer Singh	04	28	2025
16.	TSDF Operator's certification for receipt of hazardous and other Waste				
Name and stamp:		Signature:	Month	Day	Year
PWMP Nimbua			04	28	2025

COPY 6 Of 7

NOTE : Please Atach Comprehensive Analysis Report Photocopy
To Be Returned to the Occupier by the operator of facility after Disposal.

Blue Copy

FORM 10

[See rule 19 (1)]

MANIFEST FOR HAZARDOUS AND OTHER WASTE

1.	Sender's name and mailing address (including Phone No. and e-mail)	M/S Rajasthan Liquors Ltd. vill- Haripur (Bilhilom Division) Hindua Desa Bansi, PR
2.	Sender's authorisation No.	HWM/Renew/SAS/2024/25306828
3.	Manifest Document No.	17422
4.	Transporter's name and address (including Phone No. and e-mail)	GOLDEN PETRO Plot No. C-45, Industrial Focal Point, CHANALON, Dist. SAS Nagar 140103 Punjab M : 98764 89193 E-mail : goldenpetro@gmail.com
5.	Type of vehicle	(Truck/Tanker/Special Vehicle)
6.	Transporter's registration No.	PB65BD5626
7.	Vehicle registration No.	
8.	Receiver's name and mailing address (including Phone No. and e-mail)	GOLDEN PETRO Plot No. C-45, Industrial Focal Point, CHANALON, Dist. SAS Nagar 140103 Punjab M : 98764 89193 E-mail : goldenpetro@gmail.com
9.	Receiver's authorisation No.	PPCR/2P-I/2020/AVC/R-2
10.	Waste description	Category no- 5.1 (Used oil)
11.	Total quantity No. of Containers 128.0 Litre Nos.
12.	Physical form	(Solid/Semi Solid/Sludge/Oily/Tarry/Slurry/Liquid) <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>
13.	Special handling instructions and additional information	Handle with Care Hazardous Waste
14.	Sender's Certificate	I hereby declare that the contents of the consignment are fully and accurately described above by proper shipping name and are categorised, packed, marked, and labelled, and are in all respects in proper conditions for transport by road according to applicable national government regulations.
	For Rajasthan Liquors Ltd. Authorised Signatory	
	Name and stamp: GOLDEN PETRO Plot No. C-45 Industrial Focal Point Chanalon Dist. SAS Nagar Punjab 140103	Signature: _____ Day Month Year 22 - 09 - 2025
15.	Transporter acknowledgement of receipt of Wastes	
	Name and stamp: GOLDEN PETRO Plot No. C-45 Industrial Focal Point	Signature: _____ Day Month Year 22 - 09 - 2025
16.	Receiver's certification for receipt of hazardous and other waste	
	Name and stamp:	Signature: _____ Day Month Year 22 - 09 - 2025

**PUNJAB POLLUTION CONTROL BOARD**

Zonal Office-1, Vatavaran Bhawan, Nabha Road, Patiala – 147001

Website:- www.ppcb.gov.in

**LIFE**

Lifestyle for Environment

Office Dispatch No :

Registered/Speed Post

Date:

Industry Registration ID : R14SAS1819848

Application No : 25306888

To,

Rupinder Singh Sidhu
Village Haripur Hinduan Barwala Road Dera Bassi SAS Nagar Punjab
Mohali,SAS Nagar-140507

Subject: Renewal of Authorization for operating a facility for Collection, Generation, Storage, Transportation, Reception, Treatment, Disposal, of Hazardous Wastes as per the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 .

1. Particulars of Authorization granted to the Industry

Authorization No	HWM/renew/SAS/2024/25306888
Previous Authorization No	HWM/Auth/PBIP/SAS/2023/2308352466
Date of issue :	25/04/2024
Date of expiry :	31/03/2029
Previous Authorization Date of Issue :	06/10/2023
Previous Authorization Date of Expiry :	31/03/2024
Authorization Type :	renew

2. Particulars of the Industry

Name & Designation of the Applicant	Rupinder Singh Sidhu, (Operation Head)
Address of Industrial premises	Rajasthan liquors limited (distillery division), Vill. haripur hinduan, barwala road, dera bassi, Derabassi,Sas nagar-160073
Capital Investment of the Industry	14519.53 lakhs
Category of Industry	Red
Type of Industry	Distilleries
Scale of the Industry	Large
Office District	Sas nagar

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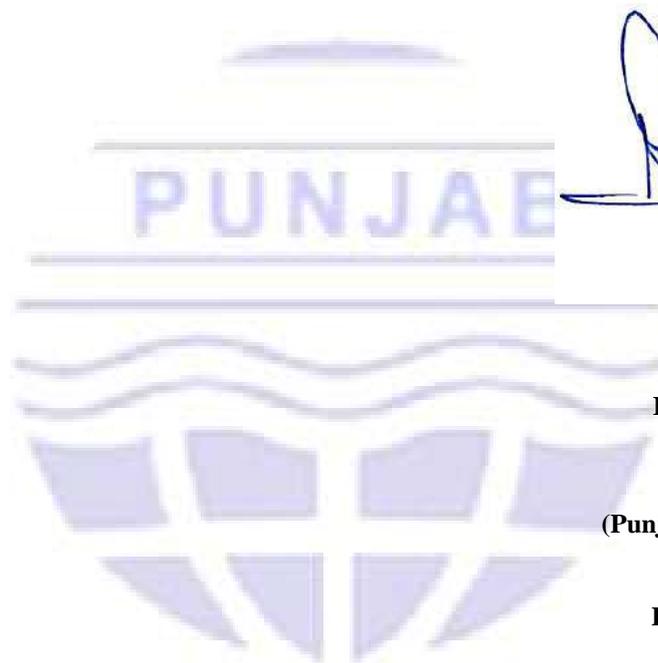
Rajasthan liquors limited (distillery division),Vill. haripur hinduan, barwala road, dera bassi,Derabassi,Sas nagar,160073

Page1

3. Terms and Conditions

All the term and conditions same as mentioned in the authorization no. HWM/auth/PBIP/SAS/2023/2308352466 dated 6/10/2023 (valid upto 31/3/2024), is hereby extended upto 31/3/2029. This extension letter may be appended with the original authorization letter issued to the industry and subsequent extension letter with the following additional conditions that:

- 1) The industry shall comply with the provisions of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, at all times.
- 2) The industry shall not generate any other category of hazardous waste in its premise, except the hazardous wastes mentioned in this authorization.
- 3) The industry shall keep proper record of incineration of hazardous waste of different categories, at all times.
- 4) The industry shall submit record of manifests of lifting of hazardous waste in form 10, as per the provisions of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.
- 5) The industry shall not dispose any of the hazardous waste through any un-authorized/legal mode, at any point of time.



25/04/2024

(Rajeev Gupta)
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:

- 1) Environmental Engineer, Punjab Pollution Control Board, Regional Office, SAS Nagar

25/04/2024

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Rajasthan liquors limited (distillery division), Vill. haripur hinduan, barwala road, dera bassi, Derabassi, Sas nagar, 160073

Page2

**(Rajeev Gupta)
Environmental Engineer**

For & on behalf

of

(Punjab Pollution Control Board)



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Rajasthan liquors limited (distillery division), Vill. haripur hinduan, barwala road, dera bassi, Derabassi, Sas nagar, 160073

Page 3

Expenditure on CSR Activities		
S.no	Activities as per Schedule VII	Actual Expense (April-Sep)
1	Eradicating hunger, poverty and malnutrition, 2[“promoting health care including preventive health care”] and sanitation 4[including contribution to the Swachh Bharat Kosh set-up by the Central Government for the promotion of sanitation] and making available safe drinking water.	1500000.00
2	promoting education, including special education and employment enhancing vocation skills especially among children, women, elderly and the differently abled and livelihood enhancement projects.	1000000.00
3	promoting gender equality, empowering women, setting up homes and hostels for women and orphans; setting up old age homes, day care centres and such other facilities for senior citizens and measures for reducing inequalities faced by socially and economically backward groups.	888000.00
4	ensuring environmental sustainability, ecological balance, protection of flora and fauna, animal welfare, agroforestry, conservation of natural resources and maintaining quality of soil, air and water 4[including contribution to the Clean Ganga Fund set-up by the Central Government for rejuvenation of river Ganga	1367650.00
5	Protection of national heritage, art and culture including restoration of buildings and sites of historical importance and work of art: setting up public libraries, promotion and development of traditional arts and handicrafts.	
6	measures for the benefit of armed forces veterans, war widows and their dependents, 9[Central Armed Police Forces (CAPF) and Central Para Military Forces (CPMF) veterans, and their dependents including widows];	
7	training to promote rural sports, nationally recognised sports, paralympic sports and olympic sports	
8	contribution to the prime minister’s national relief fund 8[or Prime Minister’s Citizen Assistance and Relief in Emergency Situations Fund (PM CARES Fund)] or any other fund set up by the central govt. for socio economic development and relief and welfare of the schedule caste, tribes, other backward classes, minorities and women;	
9	(a) Contribution to incubators or research and development projects in the field of science, technology, engineering and medicine, funded by the Central Government or State Government or Public Sector Undertaking or any agency of the Central Government or State Government; and (b) Contributions to public funded Universities; Indian Institute of Technology (IITs); National Laboratories and autonomous bodies established under Department of Atomic Energy (DAE); Department of Biotechnology (DBT); Department of Science and Technology (DST); Department of Pharmaceuticals; Ministry of Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy (AYUSH); Ministry of Electronics and Information Technology and other bodies, namely Defense Research and Development Organisation (DRDO); Indian Council of Agricultural Research (ICAR); Indian Council of Medical Research (ICMR) and Council of Scientific and Industrial Research (CSIR), engaged in conducting research in science, technology, engineering and medicine aimed at promoting Sustainable Development Goals (SDGs).]	
10	rural development projects	
11	Slum area development	
12	disaster management, including relief, rehabilitation and reconstruction activities.	
	TOTAL Expenditure	4755650

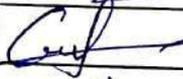
CSR REQUIRED TO BE SPENT
Set off available from last year
CSR Underspent

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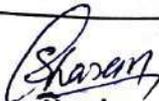
Particulars	
CSR Required to be spent F.Y. 2024-25	
Total Expenditure done	
Set off Available from previous years	
CSR Underspent	

	RAJASTHAN LIQUORS LIMITED (DISITILLERY) VILLAGE- HARIPUR HINDUWA, BARWALA ROAD DERABASSI, DIST-SAS NAGAR MOHALI (PUNJAB)-140507 <u>SAFETY TRAINING</u>
Date:	08-04-2025
Day:	Day - Tuesday
Time:	15:00
Venue:	ETP
Description:	Chemical Handling

Attendance Details:

SR. NO.	NAME	DEPARTMENT	SIGNATURE
1	Anmol Kumar	ETP	
2	Aditya Kumar	ETP	ADITYA
3	Gourav Kumar	ETP	
4	Amit Kumar Chohan	ETP/WTP	
5	Suresh Singh	E.T.P	
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

Safety Training Conducted By Manish
Name: Manish
Signature: 


Fire & Safety Head
Shivcharan



RAJASTHAN LIQUORS LIMITED (DISITLLERY)

VILLAGE- HARIPUR HINDUWA, BARWALA ROAD DERABASSI,
DIST-SAS NAGAR MOHALI (PUNJAB)-140507

SAFETY TRAINING

Date:	14-05-2025
Day:	Wednesday.
Time:	16:00
Venue:	Cog / Warehouse.
Description:	Chemical Handling.

Attendance Details:

SR. NO.	NAME	DEPARTMENT	SIGNATURE
1	Loukeshu	Cog Plant	Loukeshu
2	Sanjeev	Cog plant	Sanjeev
3	Rajiv Kumar	Security	Rajiv
4	Gurjant	Warehouse	Gurjant
5	Rhachur Singh	Driver	Rhachur
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

Safety Training Conducted By

Name:

Signature:

Princy Ramesh
Mah

Fire & Safety Head

Shyam
Shiv Chandra



RAJASTHAN LIQUORS LIMITED (DISITILLERY)

VILLAGE- HARIPUR HINDUWA, BARWALA ROAD DERABASSI,
DIST-SAS NAGAR MOHALI (PUNJAB)-140507

SAFETY TRAINING

Date:	12-06-2025
Day:	Thursday
Time:	12:00
Venue:	Mechanical workshop
Description:	Height, Marks

Attendance Details:

SR. NO.	NAME	DEPARTMENT	SIGNATURE
1	Achar Singh	Mechanical	[Signature]
2	Dharamender S.	Mechanical	[Signature]
3	Anil Kumar	11	[Signature]
4	Devinder	Mechanical	[Signature]
5	Suresh Kumar	Mechanical	[Signature]
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

Safety Training Conducted By

Name: Shyamsharan
Signature: [Signature]

[Signature]
Fire & Safety Head



RAJASTHAN LIQUORS LIMITED (DISITILLERY)

VILLAGE- HARIPUR HINDUWA, BARWALA ROAD DERABASSI,
DIST-SAS NAGAR MOHALI (PUNJAB)-140507

SAFETY TRAINING

Date: 22-07-2025
 Day: Tuesday
 Time: 10:00 AM
 Venue: Mechanical works shop
 Description: Not work

Attendance Details:

SR. NO.	NAME	DEPARTMENT	SIGNATURE
1	Gurmail Singh	Mechanical	Gurmail Singh
2	Rammi	Mechanical	Rammi
3	Gourav	Helper	Gourav
4	Suresh	Mechanical	Suresh
5	Acharya Singh	Mechanical	Acharya Singh
6	Dharmendra Singh	Mechanical	Dharmendra Singh
7	Anil Kumar	Mechanical	Anil Kumar
8			
9			
10			
11			
12			
13			
14			
15			

Safety Training Conducted By
 Name: Manish Kumar
 Signature: *[Signature]*

[Signature]
 Fire & Safety Head
[Signature]



RAJASTHAN LIQUORS LIMITED (DISITILLERY)

VILLAGE- HARIPUR HINDUWA, BARWALA ROAD DERABASSI,
DIST-SAS NAGAR MOHALI (PUNJAB)-140507

SAFETY TRAINING

Date:	20-08-2025
Day:	Sunday.
Time:	11:00 AM.
Venue:	Bailer
Description:	Dust Hazard & Hot works

Attendance Details:

SR. NO.	NAME	DEPARTMENT	SIGNATURE
1	Ajay Gupta	Bailer	Ajay
2	Vikash Kumar	Helper	Vk
3	Chander Kumar	Miscy.	CB
4	संजीव	Fireman	संजीव
5	सदीप	Helper/Bailer	सदीप
6	Rakesh Kumar	Bailer	Rakesh
7			
8			
9			
10			
11			
12			
13			
14			
15			

Safety Training Conducted By

Name: Minky Ram

Signature: Minky

Chand
Fire & Safety Head
Shivcharan

RAJASTHAN LIQUORS LTD.

90 KLPD GRAIN BASED DISTILLERY
VILL- HARIPUR HINDUA DERABASSI

TRAINING ATTENDANCE RECORD

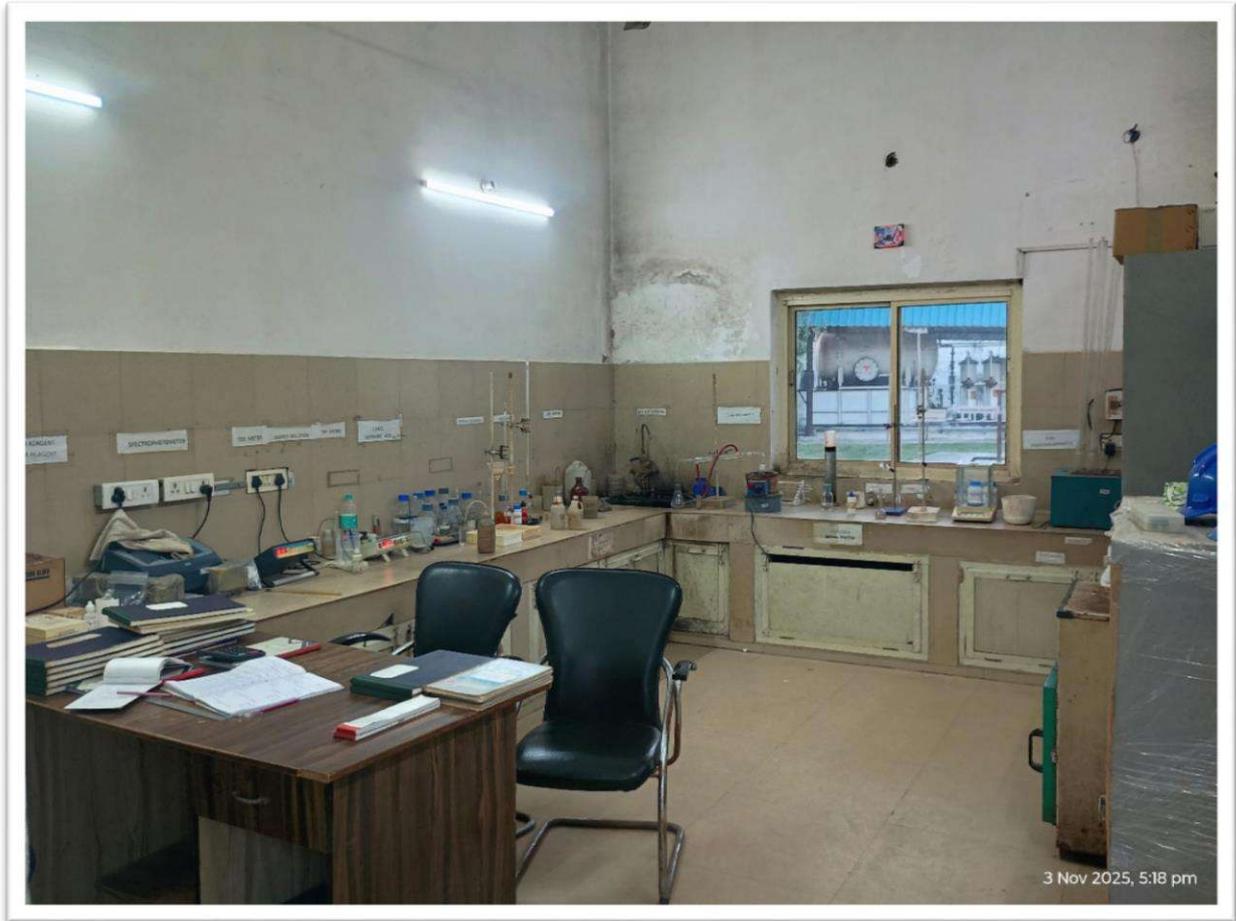
Training Course: fire fighting training cum demonstration
 Trainer: Mr Shiv Chagum Mr Mindy Kana Mr Manish
 Description of Course: type of fire, type of extinguisher, Fire Hext.
fire nozzle, fire Hydrant.
 Date: 31/7/2025 Signature: [Signature]

Attendance Details:

S. No.	Name	Department	Signature
1	DEEPMARAIN YADAV	elect	[Signature]
2	MUKESH KUMAR	Process	[Signature]
3	Kuldeep Kumar	ELECTRICAL	Kuldeep Kumar
4	Sandeep Sharma	CO2 Plant	Sandeep Sharma
5	Shiv Mohan	Dryer	[Signature]
6	Abhishek	Process	[Signature]
7	Anil Chohan	WTR.	[Signature]
8	Ankit Sharma	Process	[Signature]
9	Anmol Kumar	ETP	[Signature]
10	ADITYA KUMAR	ETP	ADITYA
11	Harjit Singh	Instrument	[Signature]
12	Cher Singh	Store	[Signature]
13	Njay Kumar	SCOTTY	[Signature]
14	Mohit Jaisi	mech	Mohit
15	Nehal	mech	Nehal
16	Manish Kumar	milling	[Signature]
17	virendrasingh	process	[Signature]
18	Dharminder Kumar	Refriger	[Signature]
19	SUKHWINDER SINGH	Administration/Hudc	[Signature]
20	Rajiv Kumar	Security	RAJIV
21	Amanj Deep Singh	Banker	[Signature]
22	Akhilesh	Banker	Akhilesh
23	Sudhakar	Electrical	[Signature]
24	Karan	House keeping	[Signature]
25	Dhruv	//	[Signature]
26	Rajay	//	Rajay
27	Chandu	//	Chandu

[Signature]

Annexure 29 : Photographs showing laboratory pictures



Annexure 30- Details of Expanse on Environmental Management during this year

Expanse on Environmental Management		
Sr. No.	Head	Amount Rs./-
1	ESP AMC / R&M	32487.00
2	Maintenance of SPM & water analyser	90270.00
3	Operation Of ETP (Man Power)	4357449.00
4	Operation Of ETP (Chemicals Plant & maintenance)	3954813.00
5	Green Belt maintenance & development	607178.00
6	Occupational Health checkup	157440.00
	Total	9199637.00

Your (**Half Yearly Compliance Report**) has been **Submitted** with following details

Proposal No	IA/PB/IND2/123702/2019.
Compliance ID	128680872
Compliance Number(For Tracking)	EC/M/COMPLIANCE/128680872/2025
Reporting Year	2025
Reporting Period	01 Jun(01 Oct - 31 Mar)
Submission Date	31-05-2025
RO/SRO Name	Satya Prakash Negi
RO/SRO Email	jhk119@ifs.nic.in
State	PUNJAB
RO/SRO Office Address	Integrated Regional Offices, Chandigarh
Note:- SMS and E-Mail has been sent to Satya Prakash Negi, PUNJAB with Notification to Project Proponent.	



RAJASTHAN LIQUORS LTD.

Ref No.: RLL/ESR/09/2025-26

Date: 27th Spet-2025

To:

The Member Secretary
Punjab Pollution Control Board
Vataravan Bhawan
Patiala, Punjab

Sub: Submission of Environmental Statement Report (FY 2024-2025) for Distillery Plant (Grained based, 120 KLD) with Cogeneration Power Plant (3.0 MW) at Industrial FEZ, Village Haripur, Hinduan & Saidupura, Tehsil: Derabassi and District: Mohali, Punjab by M/s Rajasthan Liquors Ltd.

Ref.: EC Letter no. J-11011/263/2010-IA II (I) dated 26th September, 2012

EC Letter no. J-11011/263/2010-IA II (I) dated 21st February, 2020

Dear Sir

With reference to the aforesaid subject and above cited reference matter, this is to apprise you that company has obtained Environmental Clearance vide letter No J-11011/263/2010-IA II(I) dated 26th September, 2012 for Distillery Plant (Grained based, 120 KLD) with Cogeneration Power Plant (3.0 MW) at Industrial FEZ, Village Haripur, Hinduan & Saidupura, Tehsil : Derabassi and District: Mohali, Punjab by M/s Rajasthan Liquors Ltd.

The company further applied for the expansion of Grain based distillery from 120 KLPD to 145.2 KLPD by modernization and efficiency improvement at industrial FEZ, Village Haripur Hinduan & Saidpura, Tehsil Derabassi, District SAS Nagar (Mohali), Punjab in MoEF&CC, New Delhi and acquired Environmental Clearance vide letter no. J-11011/263/2010-IA II(I) dated 21st February, 2020. No work has been started with respect to new EC obtained.

Presently, the company is running on the basis of earlier Environmental Clearance letter. We are hereby submitting the Environmental Statement Report (Form V) of FY 2024-2025 for Distillery Plant (Grained based, 120 KLD) with Cogeneration Power Plant (3.0 MW) at Industrial FEZ, Village Haripur, Hinduan & Saidupura, Tehsil: Derabassi and District: Mohali, Punjab by M/s Rajasthan Liquors Ltd.

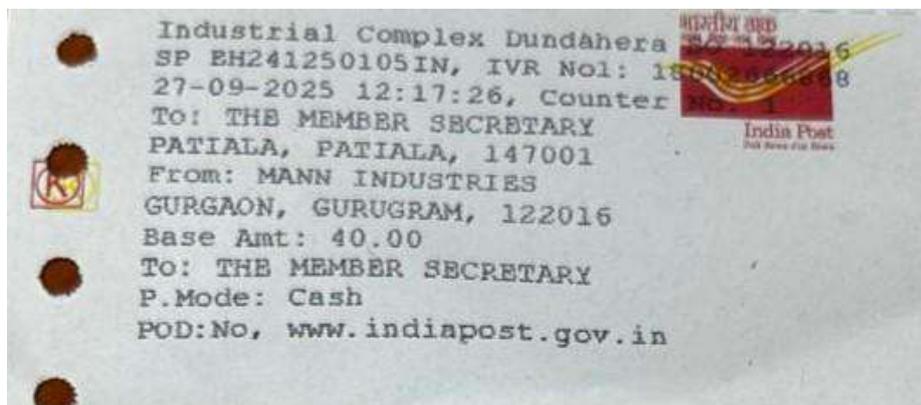
This is for your kind consideration and records.

Thanking you and with regards,

Yours faithfully

M/s Rajasthan Liquors Ltd.

For Rajasthan Liquors Ltd.



DESH BHAGAT UNIVERSITY
 (A Centre of Learning, Research & Entrepreneurship)
 Toll Free: 1800-1802-801

UNIVERSITY INSTITUTE OF AYURVEDA

ADMISSION OPEN 2012-13
M.D. (Ayurveda)
 1. Raschitra (5 seats) 2. Kayachikitsa (5 seats)
 Entrance test on 31-10-12 at 2pm
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registered in Sector 35 police station.
 In another case reported in Sector 44, a minor boy on foot snatched a bag containing Rs 2 lakh during a wedding function near Sood Bhaswan. A case has been registered.
 In last two days, at least five such incidents took place. — TNS

Inspector MK Sharma after he fought an eight-year-long battle.
 Following the orders of Pesti, the Health Department conceded that the chargesheet issued to MK Sharma, a day ahead of his retirement in 2004, was framed on basis of "unwarranted facts".
 Sharma (68) fought for justice for eight years. He finally won the case and proved his credibility for availing complete pension

as he ret of UT 2004.
 Sharma charged charges "bogus c year 19 employ Inspecto Follows Health imposed him wit

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CORRIGENDUM
 Ref. Advt. No. PGU/Recruitment/ Faculty/2012 dated 03.08.2012.
 The last date for receipt of applications is extended to 10.11.12. That Application form available at www.pgu.ac.in and complete in all respect should reach the Deputy Director, PGU University of Technology, Sector-12, Chandigarh on or before 10.11.2012.

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PUBLIC NOTICE
 For the information of all concerned that M/s Rajasthan Liquors Ltd., Village Haripur Hinduan & Saidpura, Barwala Road, Derabassi, Punjab had applied for environmental clearance for their project for 120 KLPD grained-based distillery plant. A public notice, in this context, was published by Punjab Pollution Control Board, in "Indian Express" & "Punjab Tribune" dated 18.03.2011. It is now for the information of all concerned that the Ministry of Environment and Forests, I.A. Division, has accorded clearance to the aforesaid project vide their letter No: J11011/263/2010- IA II (I) dated 26 September, 2012. Copy of said clearance letter is available with the Punjab Pollution Control Board, Mohali and the same can also be seen at the website <http://envfor.nic.in>

M/s Rajasthan Liquors Ltd.,
 Village Haripur Hinduan & Saidpura,
 Barwala Road, Derabassi, Punjab.
 Phone: 01762-265132