

**COMPLIANCE REPORT OF ENVIRONMENT CLEARANCE  
(FOR PERIOD OCT.'2022 – MARCH.'2023)**

OF

**HARINAGAR SUGAR MILLS LTD., HARINAGAR**

**(GRANTED BY STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY, BIHAR  
VIDE F. No. SIA/5(J)/1276/2021 DT: 02.04.2021)**

**I. STATUTORY COMPLIANCE:-**

S. No.	PARTICULARS	COMPLIANCE
a	The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose is involved in the project.	No Forest land was diverted for non-forest purpose.
b	The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.	Not applicable
c	The project proponent shall prepare a Site-specific plan & Wildlife Management Plan and approval by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of Schedule-I species in the study area.	Not applicable
d	The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.	We have already obtained Consent to Operate (CTO) for both Emission and Discharge vide Ref. No. 3287 dated 28-10-2022 & Ref. No.3288 dated 28-10-2022 respectively for a period of 5 years. i.e. up to 28-10-2027 for expanded crushing capacity from 11500 TCD to 13000. <b>Enclosed as Annexure-I.</b>
e	The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.	We have already obtained Authorization under the Hazardous and other Waste Management Rules, 2016 vide Ref. No. HW/ B-2263 dated 10-12-2018. <b>Enclosed as Annexure-II</b>
f	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.	Not applicable.

**II. Air quality monitoring and preservation**

S. No.	PARTICULARS	COMPLIANCE
a	The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R. No. -546(E) dated 30 <sup>th</sup> August 2008 as amended from time to time and S.O. 3305 (E) dated 7 <sup>th</sup> December 2015 (Thermal Power Plants) as amended from time to time and connected to SPCB and CPCB online servers and	OCEMS has been Installed in existing boiler stacks.

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	the systems be calibrated according to equipment supplier's specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.	
<b>b</b>	The project proponent shall install system carryout Continuous Ambient Air Quality monitoring for common / criterion parameters relevant to the main pollutants released (e.g. PM <sub>10</sub> and PM <sub>2.5</sub> in reference to PM emission, and SO <sub>2</sub> and NO <sub>x</sub> in reference to SO <sub>2</sub> and NO <sub>x</sub> emission) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions. (case to case basis small plants: Manual; Large plants: continuous).	Ambient Air Quality Monitoring is being done through MoEFCC Recognized Environmental Laboratory. Conc'n. of air quality is within the norms of NAAQS 2009. (Test Reports <b>enclosed as Annex – III</b> )
<b>c</b>	The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality / fugitive emission to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six monthly monitoring reports.	Ambient Air Quality Monitoring & Stack Emission Monitoring is being done through MoEFCC Recognized Environmental Laboratory during season. We are submitting copy of Ambient Air & Emission Monitoring report to the BSPC Board, Patna.
<b>d.</b>	Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.	Wet Scrubber type fly ash arrestor has been installed in 74 TPH Boiler & 'ESP' system in 78 TPH Boiler and these are working satisfactory. Emission from boiler stack are complying the standard prescribed under E(P) Rules, (Stack Emission Monitoring Report attached as <b>Annex.- IV.</b> ) To minimize and control fugitive emissions regular water spraying is being at vulnerable sources of fugitive dust. Fugitive emissions are within the standard of E (P) Rules.
<b>e</b>	The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16 <sup>th</sup> . November, 2009 shall be complied with.	Ambient Air Quality is within the National Ambient Air Quality Standards 2009.
<b>f</b>	Sulphur content should not exceed 0.5 % in the coal for use in coal fired boilers to control particulate emissions within permissible limits (as applicable). The gaseous emissions shall be dispersed through stack of adequate height as per CPCB / SPCB guidelines.	We are not using coal as fuel in our boilers.
<b>g</b>	The DG. sets shall be equipped with suitable pollution control devices and the adequate stack height so that the emissions are in conformity with the extent regulations and the guidelines in this regard.	We are not using DG sets.
<b>h</b>	Storage of raw materials, coal etc shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.	Coal is not being used in our project. Sugarcane is Raw material for our project which is being used instantly, without storing, for production of sugar. However, covered sheds are provided for temporary storage of sugarcane. Other required raw materials are stored in covered area.





### III. Water quality monitoring and preservation

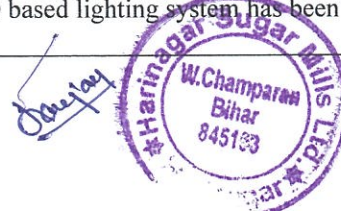
S. No.	PARTICULARS	COMPLIANCE
a	For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel / drain carrying effluent within the premises (applicable in case of the project achieving ZLD) and connected to SPCB and CPCB online servers	OCEMS for monitoring of effluent has been installed and same is connected to SPCB and CPCB servers.
b	Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises (applicable in case of the projects achieving the ZLD)	We are sending our excess treated effluent to our own Farms to use as irrigation water.
c	Process effluent / any waste water shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.	We are maintaining this system.
d	The effluent discharge shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, or as specified by the State Pollution Control Board while granting Consent under Air/water Act, whichever is more stringent.	2400 KLD capacity ETP based on Activated Sludge process is being operated for treatment of effluent generated from sugar mill. Treated Effluent characteristics are within the standard prescribed under E (P) Rules. We are sending our excess treated effluent to our own Farm to use as irrigation water. <b>(Treated Effluent Test Report is attached herewith as Annex-V)</b>
e	Total fresh water requirement shall not exceed the proposed quantity or as specified by the committee. Prior permission shall be obtained from the concerned regulatory authority / CGWA in this regard.	We have granted 'NOC' for abstraction of fresh water from CGWA for 2500 KL/Day for 30.07.2023 and we are following the same strictly. <b>(Enclosed as Annex-VI).</b>
f	Industrial / trade effluent shall be segregated into High COD/TDS and Low COD/TDS effluent streams. High TDS/COD shall be passed through stripper followed by MEE and ATFD (agitated thin film drier). Low TDS effluent stream shall be treated in ETP and then passed through RO System.	Low TDS effluent is being generated by sugar mill which is being treated in ETP within premises. <b>(Untreated Effluent Test Report is attached herewith as Annex-VII)</b> We have already installed Sulphate Removal System (SRS) for the purpose to reduce COD/TDS from the Cooling tower overflow water. <b>(Test Report is attached herewith as Annex-VIII)</b>
g	The company shall harvest rainwater from the rooftops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial operations within the plant.	We had made 8 nos. recharge pits and rooftop rainwater harvesting system has been installed.

### IV. Noise monitoring and prevention

S. No.	PARTICULARS	COMPLIANCE
a	Acoustic enclosure shall be provided to DG set for controlling the noise pollution.	Not applicable
b	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.	Equipments for controlling noise pollution in and around the plant have been provided. Ambient Noise Level report is enclosed herewith which shows noise pollution level in and around the area is within the limit. <b>(ANL report enclosed herewith as Annex-IX).</b>
c.	The ambient noise levels should conform to the standards prescribed under E(P) A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.	The ambient noise levels conforms to the standards prescribed under E(P) A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

### V. Energy Conservation measures

S. No.	PARTICULARS	COMPLIANCE
a	The energy sources for lighting purposes shall preferably be LED based.	LED based lighting system has been implemented.





## VI. Waste Management

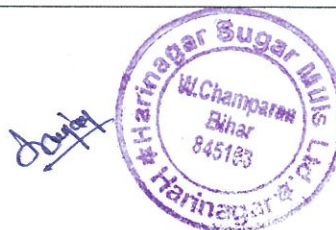
S. No.	PARTICULARS	COMPLIANCE
a	Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arrestors shall be provided on tank farm and the solvent transfer through pumps.	Hazard chemical is being stored in Hazards Tank / drum. Fire protection measures including flame arrestor are provided at storage areas.
b	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	Not applicable
c	The company shall undertake waste minimization measures as below:-	
i.	Metering and control of equipments of active ingredients to minimize waste.	Metering of equipments of active ingredients to minimize waste is being implemented.
ii.	Reuse of by-products from the process as raw materials or raw material substitutes in other processes.	Our by products are as under:- Molasses: Used in Distillery as its raw material. Bagasse: Used in Boilers for steam generation Press Mud: Used in Bio-fertilizer division to mix in Bio fertilizer. Boiler Ash: Used in Bio-fertilizer division to mix in Bio fertilizer.
iii.	Use of automated filling to minimize spillage.	We have installed a lot of instrumentation and automation equipments in this regard.
iv.	Use of close feed system into batch reactors.	Not applicable.
v.	Venting equipment through vapour recovery system.	Not applicable.
vi.	Use of high pressure hoses for equipments clearing to reduce waste water generation.	We are using high pressure mechanical hoses for clearing of equipments and waste water generated is stored in a pit for further use.

## VII. Green Belt

S. No.	PARTICULARS	COMPLIANCE
a	Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The green belt shall inter alia cover the entire periphery of the plant.	Green belt has been developed in more than 33 % of the project area. We have planted native tree species in the factory command area. Our entire periphery is covered with tree plantation. We regularly planting new trees within premises and saplings are procured from Forest Deptt. (Govt. of Bihar). Photocopy of tree plantation is attached herewith as <b>Annex-X</b> .

## VIII. Safety, Public hearing and Human health issues

S. No.	PARTICULARS	COMPLIANCE
a	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented	Hazard identification and Risk Assessment (HIRA) including DMP is under preparation and approval stage. <b>Safety officer</b> with his team deputed for the purpose.
b	The PP shall provide Personal Protection Equipment (PPE) as per norms of Factory Act	PPE is being provided as per norms of Factory Act'1948.
c	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 of all employees on handling of chemicals shall be imparted.	Training imparted to employees on safety & safety equipments such as hand gloves, spectacles, Masks and medical facility is provided to the employees. Periodic medical checkup is being done as per requirement of Factory Act'1948.

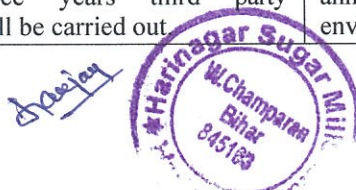




d	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	Not applicable
e	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	A team of five medical assistants are employed under a qualified Doctor for the purpose with well equipped dispensary inside the premises. Occupational health surveillance of the workers are done on regular basis and records are maintained.(Health Check up records and Photographs are attached herewith as <b>Annex-XI</b> )
f	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.	We are having adequate space for Vehicles for raw materials & finished goods in our premises.

### IX. Corporate Environmental Responsibility

S. No.	PARTICULARS	COMPLIANCE
a	The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA-III dated 1 <sup>st</sup> . May 2018, as applicable, regarding Corporate Environment Responsibility.	Agreed, we will comply with the provisions of OM vide F.No. 22-65/2017-IA-III dated 1 <sup>st</sup> . May 2018. An amount of around Rs 1.00 Lacs has been dispensed towards CER Activities.
b	The company shall have a well laid down environmental policy duly approved by the Boards of Directors. The environmental policy should prescribe for standards for standard operating procedures to have proper checks and balances and to bring into focus any infringements / deviation/ violation of the environmental / forest / wildlife norms/ conditions. The company shall have defined system of reporting infringements/ deviation/ violation of the environmental / forest / wildlife norms/ conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six monthly report.	We have a well laid down environmental policy duly approved by the Board of Directors. System has been defined for reporting infringements/ deviation/ violation of the environmental conditions.
c.	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.	A separate Environmental Cell with qualified personnel has been set up under the control of senior Executive, who directly report to the head of the organization. ( <b>Env. Cell Details attached as Annex-XII</b> )
d.	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company will be prepared and will be duly approved by competent authority. The year wise funds earmarked for environmental protection measures are kept in separate account and will not be diverted for any other purpose. Year wise progress of implementation of action plan will be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
e.	Self Environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.	Self Environmental audit has been conducted annually. Every three years third party environmental audit will be carried out.





## IX. Miscellaneous

S. No.	PARTICULARS	COMPLIANCE
a	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.	Public notice has been published in 2 local dailies. (Copy attached herewith as <b>Annex – XIII</b> ).
b	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal bodies in addition to the relevant officers of the Government who in turn has to display the same for 30 days from the date of receipt.	The copies of the environmental clearance has been submitted to the Heads of local bodies, in addition to the relevant officers of the Government.
c	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitoring data on their website and update the same on half-yearly basis.	We are uploading the status of compliance of the stipulated environment clearance conditions, including results of monitoring data on our website <a href="http://www.harinagarsugar.com">http://www.harinagarsugar.com</a> and it is being update on half-yearly basis.
d	The project proponent shall monitor the criteria pollutants level namely: PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>x</sub> (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.	Monitoring the criteria pollutants level namely: PM <sub>10</sub> , SO <sub>2</sub> , NO <sub>2</sub> (ambient levels as well as stack emissions) is being done through MoEF&CC Recognized Environmental Laboratory.
e	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environmental clearance portal.	We are submitting six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at PARIVESH portal.
f	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environmental (Protection) Rules, 1986, as amended subsequently and put on the website of the company.	We are Submitting the same in each Financial Year.
g	The project proponent 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, commencing the land development work and start of production operation by the project.	It will be informed.
h	The project authorities must strictly adhere to the stipulations made by the state pollution control board and the State Government.	We are adhering the stipulations made by state pollution control board.
i	The project proponent shall abide by all the commitments and recommendations made in the EIA / EMP report, commitment made during public hearing and also that during their presentation to the Expert Appraisal committee.	Agreed
j	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change (MoEF&CC).	Any expansion or modifications in the unit will be carried out after prior approval of the SEIAA, Bihar



k	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of environment (protection) Act, 1986.	Agreed
l	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions if not satisfactory.	Agreed
m	The Ministry reserves the right to stipulate additional conditions if found necessary. The company in a time bound manner shall implement these conditions.	Agreed
n	The Regional office of the Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the SEIAA /Regional office by furnishing the requisite data / information / monitoring reports.	Agreed
o	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 Courts of law relating to the subject matter.	Agreed
p	Any appeal against this EC 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.	Agreed

*Chauhan*  
Add. C.C

*Moishm*  
Acting G.M.(T) (P)

For Harinagar Sugar Mills Ltd.

*Spalib*  
CHIEF GENERAL MANAGER

