



[ro.ranchi-mef@gov.in](mailto:ro.ranchi-mef@gov.in)

Ref. No. 2369

REGISTERED A. D.

Date: 14-12-2023

To,  
The Additional Director,  
Ministry of Environment & Forest and Climate Change,  
Regional Office,  
2<sup>nd</sup> Floor Headquarter,  
Jharkhand State Housing Board,  
Harmu Chowk, Ranchi Jharkhand-834002

Sub: Compliance of MOEF Letter Clearance No. J.11011/51/2006-IA II(I) Dated 01-06-2006 & F. No. IA-11011/463/2017-IA II (I) Dated 26-11-2018

Sir,

With reference to the above, we would like to inform you that we are herewith submitting six monthly compliance report of MOEF from April 23 to September 2023. The stipulated information details are enclosed with ANNEXURE wise for your ready reference along with soft copy and compliance report is uploaded on website also.

We hope that the enclosed information will be helpful for your record please.

Thanking you,

Yours faithfully,  
For Harinagar Sugar Mills Ltd.,



G. M. (Distillery)

Acting C. G. M.

Encl.: ANNEXURE Details

Harinagar Sugar Mills Ltd.

## ENCLOSURE DETAIL

<b>ANNEXURE-I</b>	<b>Statement of Month wise details of Alcohol Production, Spent Wash Generation, Consumption, Press mud Production &amp; Utilization, Bio-Compost Production &amp; Sale from April, 2023 to September, 2023</b>
<b>ANNEXURE-II</b>	<b>Compliance of MOEF Consent</b>
<b>ANNEXURE-III</b>	<b>Compliance of NOC of Bihar State Pollution Control Board</b>
<b>ANNEXURE-IV</b>	<b>Monthly Analysis report of Air Ambient Stack Emission Ground water Spent wash and Treated Spent wash Noise level &amp; Piezometer from April, 2023 to September, 2023 analyzed by Shiva Test House, Patna.</b>
<b>ANNEXURE-V</b>	<b>Environmental Cell</b>
<b>ANNEXURE-VI</b>	<b>Statement of Bio-compost Analysis report from April, 2023 to September, 2023 Analyzed by Shiva Test House, Patna.</b>
<b>ANNEXURE-VII</b>	<b>Medical Surveillance Certificate April, April, 2023 to September, 2023</b>
<b>ANNEXURE-VIII</b>	<b>Air &amp; Water consent 28<sup>th</sup> October 2022 to 28 October 2027</b>
<b>ANNEXURE-IX</b>	<b>Month-wise Alcohol Production April, April, 2023 to September, 2023</b>
<b>ANNEXURE-X</b>	<b>CCA (Consolidated Consent and Authorization) CCA Renewal no. 1579 date 11-08-2023 valid upto 17-05-2028</b>



# HARINAGAR

Empowering Generations

Since 1933



Ref. No. 1732

REGISTERED A.D.

Date: 10-10-2023

To,  
The Chairman,  
Central Pollution Control Board,  
Ministry of Environment, Forest & Climate Change,  
Govt. of India,  
Parivesh Bhawan, East Arjun Nagar,  
Delhi - 110032

Ref.: (A) Letter no. B-190198/NGRBA(RG)/CPCB/Distillery/37/2016-17/2279 dated 24-05-2017  
(B) Letter no. B-190198/NGRBA(RG)/CPCB/Distillery/20/2016-17/12075 dated 23/30-10-2018

Sir,

With reference to the above Ref. No A & B we are hereby submitting the compliance report of direction of CPCB which are given as under:-

(A). Compliance of Letter no. B-190198/NGRBA(RG)/CPCB/Distillery/37/2016-17/2279 dated 24-05-2017			
SL. No.	Condition	Status	Remark
1	The Adequacy Assessment Report for Manufacturing Technology & Effluent Discharge System (ZLD) & Revalidation of ETP Adequacy Report prepared by National Sugar Institute, Kanpur	Condition Complied	Submitted vide our letter No. 7094 dated 18-09-2017 & 4239 dated 14-08-2018.
2	Mass Flow Meter for Spent Wash Generation at Distillery plant & MEE Feed Point (Weak Spent Wash) & at Outlet (Strong Spent Wash)	Condition Complied	All Mass Flow Meters are connected with CPCB Server
3	Analysis report of U/s & D/s by the industry	Condition Complied.	Submitting Monthly Analysis report of U/s & D/s Own analysis report month of September 2023 & by M/s Shiva Test House, Patna month of September 2023 (Copy enclosed).
4	The availability of Press-mud, Bio-compost Production and Sale & Bio-compost Analysis report	Condition Complied	Submitting Monthly Data availability of Press-mud, Bio-compost Production and Sale of September 2023, & Bio-compost Analysis report Month of September 2023 analyzed by M/s Shiva Test House, Patna (copy enclosed)
(B). Compliance of Letter no. B-190198/NGRBA(RG)/CPCB/Distillery/20/2016-17/12075 dated 23/30-10-2018			
2	The production capacity / production will be as per Environmental Clearance & CTO	Complying	As per EC/CTO
3	The unit shall submit ZLD System Performance Audit Report with 60 days from Government Institute	Complied	Submitted through letter No 9035 dated 30-01-19


All the data of the above points are being submitted by duly filled in your prescribed format provided by you from the month of September 2023.

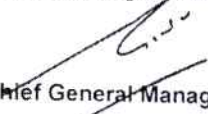
**Note: Distillery has been started on dated 16<sup>th</sup> September 2023 as per norms of CPCB & BSPCB.**

Submitted for your kind information please.

With regards,

Yours faithfully,  
For Harinagar Sugar Mills Ltd.,

  
G. M. (Distillery)

  
✓ Chief General Manager

Encl.: As above

Cc: Regional Office, Central Pollution Control Board, Kolkata.

## Central Pollution Control Board Format for evaluation of Distillery ETP performance

Name of the Distillery: M/s Harinagar Sugar Mills Ltd. Distillery Division

Date: 09-10-2023

Address: Harinagar, West Champaran, Bihar

Capacity of the Distillery: A. A. 120 KLPD on C-Hy / 200 KLPD B-Hy / Cane Syrup ; 3,24,00,000 / 5,40,00,000 Lit/Annum  
(Vide EC Letter No.IA-J-11011/463/2017-IA-II(I) Date 26-11-2018) & CTO for 200 KLPD of Ethanol  
Production on using B-Hy / Cane Syrup Molasses by BSPCB, Patna on dated 28-10-2022.

Distillery ETP Configuration: Fermentation & Distillation followed by Bio-methanation followed by BMSW MEE  
cum Degasification & Condensate Stripping System followed by Bio-composting

SPENT WASH CONCENTRATION SECTION									
Month	Total Alcohol Production	Raw Spent Wash generation as per online mass flow meter	Spent wash generation per liter of Alcohol produced	Raw Spent wash Total Solids	Cumulative Raw Spent wash generation as per online mass flow meter totaliser	Conc. Spent wash generation as per online mass flow meter	Conc. Spent wash Total Solids	Cumulative Conc. Spent wash generation as per online mass flow meter totaliser	Condensate quantity generated
	Liters	MT	Liter/Liter	%	MT	MT	%	MT	MT
April-23	4125023.53	18140	4.39	5.40	18140	10415	32.0	10415	21160
May-23	4334005.53	19370	4.46	5.21	62153	10460	32.0	20875	20755
June-23	2175200.18	9388	4.31	5.25	62153	6660	32.0	27535	12575
July-23	0.00	0	0	0.00	46898	0	0.0	27535	0
August-23	0.00	0	0	0.00	46898	0	0.0	27535	0
September-23	2100009.67	15255	7.2	6.50	62153	4520	31.0	32055	10895
<b>Total</b>	<b>12734238.91</b>	<b>62153.00</b>	<b>7.20</b>	<b>6.50</b>	<b>62153.00</b>	<b>32055.00</b>	<b>31.0</b>	<b>32055.00</b>	<b>65385.00</b>

Note. Distillery has been started on dated 16-09-2023 as per BSPCB and CPCB Norms.

*Rambhadr*  
Sr. Dy Chief Chemist (ETP/ Bio-Fertilizer)

*pd*  
G. M. (Distillery)



**Central Pollution Control Board Format for evaluation of Distillery ETP performance**

Name of the Distillery: M/s Harinagar Sugar Mills Ltd. Distillery Division

Date: 09-10-2023

Address: Harinagar, West Champaran, Bihar

Capacity of the Distillery: A. A. 120 KLPD on C-Hy / 200 KLPD B-Hy & Cane Syrup ; 3,24,00,000 / 5,40,00,000 Lit/Annum (Vide EC Letter No.IA-J-11011/463/2017-IA-II(I) Date 26-11-2018) & CTO for 200 KLPD of Ethanol Production on using B-Hy / Cane Syrup Molasses by BSPCB, Patna on dated 28-10-2022.

Distillery ETP Configuration: Fermentation & Distillation followed by Bio-methanation followed by BMSW MEE cum Degasification & Condensate Stripping System followed by Bio-composting

BIOCOMPOSTING																			
Month	Press Mud Cake Procured	Press Mud Cake (PMC) consumption 16400 MT (In Process)			Concentrated Spent Wash Consumption			Concentrated spent wash to PMC ratio achieved	Distance travelled by aerotiller machine					Bio-compost Produced OB=24288.11	Quality of Bio-compost				Bio-compost Sold
		MT	MT/ Windrow	MT/Month	Totalizer Reading	MT/ Windrow	MT/Month		M-1 Km	M-2 Km	M-3 Km	M-4 Km	M-5 Km		MT	N (%)	P (%)	K (%)	
Apr-23	0.00	0.00	0.00	7200.00	5.00	7200.00	1:0.43	35.00	38.50	29.00	28.00	0.00	0.00	1.12	0.78	0.88	25.00	2660.23	
May-23	0.00	0.00	0.00	7750.00	5.00	7750.00	1:0.99	31.00	30.00	45.50	0.00	0.00	0.00	1.12	0.78	0.88	25.00	3621.60	
Jun-23	0.00	0.00	0.00	6800.00	5.00	6800.00	1:1.32	33.50	29.50	30.50	0.00	0.00	0.00	1.01	0.74	0.84	26.00	4176.30	
Jul-23	0.00	0.00	0.00	1350.00	5.00	1350.00	1:1.40	37.50	0.00	0.00	0.00	0.00	4920.00	1.30	0.79	0.83	24.00	430.73	
Aug-23	0.00	0.00	0.00	0.00	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00	0.00	1.80	0.81	0.85	26.00	1023.47	
Sep-23	0.00	14000.00	14000.00	3520.00	5.00	3520.00	1:0.88	9.00	34.50	13.50	0.00	0.00	0.00	1.10	0.84	0.89	24.00	2056.69	
<b>Total</b>	<b>0.00</b>	<b>14000.00</b>	<b>14000.00</b>	<b>26620.00</b>	<b>5.00</b>	<b>26620.00</b>	<b>1:0.88</b>	<b>146.00</b>	<b>132.50</b>	<b>118.50</b>	<b>28.00</b>	<b>0.00</b>	<b>4920.00</b>	<b>1.10</b>	<b>0.84</b>	<b>0.89</b>	<b>24.00</b>	<b>13969.02</b>	

*Ramkaveel*  
Sr. Dy. Chief Chemist (ETP/ Bio-Fertilizer)

*[Signature]*  
G. M. (Distillery)

M/s HARINAGAR SUGAR MILLS LTD. (DISTILLERY DIVISION), HARINAGAR (WEST CHAMPARAN), BIHAR

Monthwise statement showing details of Alcohol Production, Spent Wash Generation / MEE Feed & Consumption of Strong Spent Wash, Press-mud Available, Production, Utilized, Bio-compost Production & Sold and Bio-Gas Production for the F. Y. 2022-23

DATE: 09-10-2023

Month	Alcohol Production	Spent Wash Details							Press-mud Details					Bio-compost Details			Bio Gas Generation	
		Generation of Spent Wash from Distillation Plant R.S.W. + Misc.	Weak Spent Wash Feed in MEE Plant		Strong Spent Wash after MEE Plant		Closing Balance of Weak Spent Wash (a + d - b)	Consumption of Strong Spent Wash on Bio-compost	Closing Balance of Strong Spent Wash	Available	Production		Utilized	Closing Balance	Production	Sold		Closing Balance
			Own	Purchased														
Unit	B.L.	M <sup>3</sup>	M <sup>3</sup> /Month	MT/Month	M <sup>3</sup> /Month	MT/Month	M <sup>3</sup>	M <sup>3</sup>	M <sup>3</sup>	Tons	Tons	Tons	Tons	Tons	Tons	Tons	Tons	M <sup>3</sup>
O.B. on 01-04-2023		4764.00			0.00				3867.00	17312.24			In Process 16400		24288.11	2660.23	21627.88	449300
April, 2023	4125023 53	17598+9935+1575	30595.00	31675.00	9435.00	10415.00	3277.00	7200.00	6102.00	0.00	0.00	0.00	16400.00	17312.24	24288.11	2660.23	21627.88	449300
May, 2023	4334005 53	19111+11710+1755	30530.00	31065.00	9775.00	10460.00	5323.00	7750.00	8127.00	0.00	0.00	0.00	16400.00	17312.24	0.00	3621.60	18006.28	294500
June.23	2175200 18	9388+5175+520	18505.00	19200.00	5930.00	6680.00	3901.00	6800+2000(recycle)	5259.00	0.00	0.00	0.00	0.00	17312.24	0.00	4176.30	13829.98	134010
July.23	0.00	0	0.00	0.00	0.00	0.00	3901.00	1350.00	3909.00	0.00	0.00	0.00	0.00	17312.24	0.00	430.73	13399.25	0
Aug.23	0.00	0	0.00	0.00	0.00	0.00	3901.00	0.00	0.00	0.00	0.00	0.00	0.00	17312.24	4920.00	1023.47	17295.78	0
Sep.23	2100009 67	14320+2800	15415.00	16050.00	4520.00	5050.00	5606.00	3520.00	4909.00	0.00	0.00	0.00	14000.00	3312.24	0.00	2056.69	15239.09	0
<b>Total</b>	<b>12734238.91</b>	<b>93887.00</b>	<b>95045.00</b>	<b>97990.00</b>	<b>29660.00</b>	<b>32585.00</b>	<b>5606.00</b>	<b>26620.00</b>	<b>4909.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>30400.00</b>	<b>3312.24</b>	<b>29208.11</b>	<b>13969.02</b>	<b>15239.09</b>	<b>877810</b>

Note: 1. All Upstream/Downstream parameters are analyzed by own laboratory for the month of Sep, 2023 Analysis report is enclosed.

2. Upstream /Downstream, Distillery borewell and bio-compost borewell Analysis report of third party by Shiva Test House, Patna for the month of Sep, 2023 is enclosed.

*Ram Koresi*  
Sr. Dy. Chief Chemist (ETP/ Bio-Fertilizer)

*G.M.*  
G. M. (Distillery)



## HARINAGAR SUGAR MILLS LTD. (DISTILLERY DIVISION)

Analysis report of Upstream and Downstream Ramrekha river by own ETP Lab.

Up Stream (U/s) Near Railway Bridge between Harinagar Railway Bahuari Crossing				Down Stream (D/s) Near Bridge of Cane Entrance Gate near Bio-compost Yard		
<del>Sep-23</del> Date	ph	T.D.S. (ppm)	D.O. (ppm)	ph	T.D.S. (ppm)	D.O. (ppm)
02-Sep-23	7.35	265	6.2	7.36	285	6.0
10-Sep-23	7.38	270	6.1	7.39	280	6.0
16-Sep-23	7.33	268	6.3	7.36	282	6.2
23-Sep-23	7.35	265	6.2	7.38	285	6.0
30-Sep-23	7.36	264	6.1	7.38	290	6.0

*Ramkavesh*  
Sr.Dy. Chief Chemist ( ETP/Bio-Fertilizer )

*rd*  
G. M. (Distillery)

**HARINAGAR SUGAR MILLS LTD. (DISTILLERY DIVISION)**

**Compliance of Condition as per Environmental Clearance No. J.11011/51/2006-IA II(I) Dated 01-06-2006  
& IA-J-11011/463/2017-IA-II(I) Dated 26-11-2018 for the period April 2023 to Sept 2023**

SL. No.	Terms & Conditions as per E. C. Dated 26 <sup>th</sup> November 2018	Compliance of Condition of EC
10 (i)	<p><b><u>SPECIFIC CONDITION</u></b></p> <p>Consent to Establish / Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.</p>	<p>(a) We have obtained new Consent To Establish (CTE) for (120 KLPD to 200 KLPD Ethanol Production on B-Hy Molasses / cane syrup), by Bihar State Pollution Control Board vide Ref No. M/T-3/2021/233 dated 20-01-2022 and Consent to operate (CTO) no. 3090 (Discharge Consent Order) Date- 28-10-2022 &amp; Ref no. 3289 (Emission Consent Order) Date- 28-10-22 granted for five years from the date of issue &amp; we have also obtained CCA (Consolidated Consent to Operate and Authorization) vide CCA renewal no. 1579 date 11-08-2023 valid upto 17-05-2028.</p> <p>(b) We have obtained existing Consent to Establish (CTE) by Member Secretary, BSPCB vide letter no. M/T-3/2018/299/2844 dated 03-07-2018 &amp; also obtained Consent to Operate vide letter no. M/T-3/2018/299 (Part-II)/4402 &amp; M/T-3/2018/299 (Part-II)/4403 dated 13-12-2018.i.e valid up to 12-12-2023</p> <p>(c) We have also obtained new Consent To Establish (CTE) for (120 KLPD to 140 KLPD Ethanol Production on C-Hy Molasses by Bihar State Pollution Control Board Patna vide Memo. No. 716 dated 02-05-23 &amp; we have also obtained CCA (Consolidated Consent to Operate and Authorization) vide CCA renewal no. 1579 date 11-08-2023 valid upto 17-05-2028.</p>
(ii)	<p>As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.</p>	<p>We follow the following procedure with suitable effluent treatment facility to achieve Zero Liquid Discharge</p> <p><b>A.</b> To achieve high alcohol concentration (10.5 – 11.0% v/v in C-heavy and 12.5-13.50% v/v in B-heavy Molasses) due to high Brix fermentation and higher sugar in B - heavy Molasses to reduce spent wash generation.</p> <p><b>B.</b> The generated spent wash is passed through Decanter and decanted spent wash is fed into Bio-digester.</p> <p><b>C.</b> The generated Bio-gas is fed into Boiler to save fuel.</p> <p><b>D.</b> The treated effluent is fed into BMSW Degasification Evaporator along with condensate stripping system i.e. suitable for effluent generation.</p> <p><b>E.</b> The process condensate is being treated by CPU 1800 m<sup>3</sup> / day / R.O. 1150 m<sup>3</sup> / day &amp; Re-Use &amp; Recycle in the process as well as Cooling tower makeup water.</p> <p><b>F.</b> The concentrated effluent after BMSW multi</p>



		<p>effect column is sprayed on press-mud to produce bio-compost. We have sufficient developed land and equipment for the processing of Bio-compost.</p> <p><b>G.</b> Thus, we are maintaining zero liquid discharge.</p>
<b>(iii)</b>	Necessary authorization required under the Hazardous & Other Wastage (Management & Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained & the provisions contained in the Rules shall be strictly adhered to.	<b>A.</b> We have already obtained renewal authorization of Hazardous Waste by Bihar State Pollution Control Board Patna vide letter no.B-3150 dated 16.10.23 i.e. valid up to 21.05.23 to 28.05.28 (copy enclosed) <b>Annexure- (iii)</b>
<b>(iv)</b>	To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.	We have installed 35 TPH Boiler with suitable capacity of ESP to control stack emission & adequate stack height 65 meter & dia 3 meter as per CPCB / SPCB guidelines and also installed online stack monitoring device & same is working properly
<b>(v)</b>	Total fresh water requirements shall not exceed 960 cum/day proposed to be met from ground water source. Prior permissions shall be obtained from the concerned regulatory authority /CGWA in this regard.	<ol style="list-style-type: none"> <li>1. Our requirement of fresh water for process is less than 960 M<sup>3</sup>/Day.</li> <li>2. We have applied 2<sup>nd</sup> renewal Application to CGWA for permission against NOC no-CGWA/NOC/IND/REN/1/2021/6340 on 03/10/2023. (copy enclosed) <b>Annexure- (v)</b></li> </ol>
<b>(vi)</b>	The spent wash after evaporation shall be taken for bio-methanization and composted using press-mud. The spent lees and evaporator condensate shall be provided physico-chemical treatment for the treated water to be reused for dilution of molasses or in cooling tower as make up water.	<ol style="list-style-type: none"> <li>1. We have adopted the treatment facility of spent wash through decantation of sludge from decanters and it is fed into Bio-digester for Bio-Gas generation.</li> <li>2. After that the effluent is fed into BMSW Degasification cum Multi Effect Evaporator along with Condensate Stripping System to utilize process condensate for the dilution of the molasses &amp; in cooling tower as makeup water.</li> <li>3. The concentrated effluent is sprayed on Press-mud to produce Bio-compost.</li> <li>4. Thus, we have complied the condition of 3R (Reduce, Re-Use &amp; Recycle) to achieve Zero Liquid Discharge.</li> </ol>
<b>(vii)</b>	Number of working/operating days for the distillery shall be 270 days as proposed. However, the same may be increased to 330 days/round the year submitted to compliance of the Standard Operating Procedure for the bio-composting yard issued by the CPCB vide letter dated 9 <sup>th</sup> August, 2018 and the same is ensured by the State Pollution Control Board while considering consent to operate.	Presently we are operating the distillery 270 days as per existing mode of effluent treatment facility to achieve zero liquid discharge.
<b>(viii)</b>	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.	We have complied the condition. The Ethanol is being stored in covered tank with condenser and protective device flame arresters.
<b>(ix)</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



(x)	The company shall strictly comply with the rules and guidelines under Manufacture, Storage & 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.	We have complied the condition, Hazardous chemical (Turbine oil) do not import under MSIHC Rules1989. It is used for lubrication of pumps and maintenance of motors.
(xi)	<p>The company shall undertake waste minimization measures as below:-</p> <p>(a) Metering and control of quantities of active ingredients to minimize waste.</p> <p>(b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.</p> <p>(c) Use of automated filling to minimize spillage.</p> <p>(d) Use of Close Feed system into batch reactors.</p> <p>(e) Venting equipment through vapour recovery system.</p> <p>(f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.</p>	<p>We have strictly complied the condition for waste minimization measures.</p> <p>Online mass flow meters are installed to control and minimize the waste.</p> <p>We have recycled the concentrated spent wash &amp; sludge to manufacture the Bio-compost (Organic Manure) as Raw material.</p> <p>All filling system is automated to minimize the spillage.</p> <p>Yes, There are close feed system into batch reactors</p> <p>Yes, There are vapour recovery system.</p> <p>Yes, It is being used.</p>
(xii)	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. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.	<p>We have developed the greenbelt of 5-10 meter width of plantation around 33% of the total project area &amp; are in also process to further develop the greenbelt around plant periphery &amp; along with road side as per CPCB guidelines. 270 Nos. of plantation with survival rate of 75% has been planted during the current year April 23 to March 23. The last three Financial Year plantations details are as under:-</p> <p>F.Y. 2018-19 : 995 Plants</p> <p>F.Y. 2019-20 : 1793 Plants</p> <p>F.Y.2020-21 : 5225 Plants</p> <p>F.Y.2022-23 : 637 Plants</p> <p>F.Y.2023-24 : 270 Plants ( April-23 to sept-23)</p> <p>The different types of plants are being planted along with road side and Bio-compost yard. enclosed as <b>Annexure-xii</b></p>
(xiii)	All the commitment made regarding issued raised during the public hearing consultation meeting shall be satisfactorily implemented.	Details of implementaion of issues raised during public hearing is attached herewith as <b>Annexure-xiii</b>
(xiv)	At least 1% of total project cost shall be allocated for Corporate Environment Responsibility (CER) and item wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.	The total project cost is as 51.34 Crore and 1% of that is 0.5134 Crore. We have allocated 381.69 lack on Corporate Environment Responsibility (CER) activities. Statement enclosed as <b>Annexure- (xiii)</b>



(xv)	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.	No any D.G. Set in Distillery Division.
(xvi)	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.	We have installed fire fighting arrangement as per norms around the distillery campus for protection of possible fire hazards during manufacturing process & material handling.
(xvii)	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	We have fully equipped hospital in the campus along with Doctor & qualified staff & also have made a provision for occupational health surveillance of the workers as per the factory act. Health check up report April 2023 to September 2023 enclosed as <b>ANNEXURE-VII</b> .
(xviii)	There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw material and finished products, and no parking to be allowed outside on public places.	We have adequate space at the entry gate of the distillery for parking of vehicles of raw material & finish products.
(xix)	Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.	<ol style="list-style-type: none"> <li>1. We have made covered mild steel tank for storage of Raw materials as well as finished goods (Ethanol).</li> <li>2. We have provided covered area for storage of bagasse and fly ash.</li> </ol>
(xx)	Continuous online (24*7) monitoring system for stack emission shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB Server. For online continuous monitoring of effluent, the unit shall installed web camera with night vision capability and flow meters in the channel /drain carrying effluent within the premises.	<p>We have already installed continuous online 24x7 monitoring system for stack emission for measurement of the flue gas discharge &amp; the pollutants concentration &amp; web cameras with night vision capability at MEE Feed, Lagoon/Bio-compost Yard &amp; Mass Flow Meter at Spent Wash Generation, MEE Feed, Process Condensate &amp; Product/Concentrated Effluent &amp; the data is being transmitted to CPCB/SPCB Server.</p> <p>User ID and Password for connectivity:  IP = 202.91.70.42 http://: Port 82 to 85  User ID = <b>admin</b>  Password = <b>harinagar1234</b></p>
(xxi)	CO <sub>2</sub> generation from the process shall be bottled /made solid ice and sold to authorized vendors.	We have installed CO <sub>2</sub> Scrubber System in our Fermentation Section, Presently the CO <sub>2</sub> generated from process is late out above fermentation building height, after CO <sub>2</sub> Scrubber & as such this is useful in greenbelt development around the plant periphery. As we aware that Bihar Government has banned for manufacturing of beverages bottlers & breweries, which is more requirement of CO <sub>2</sub> & there are no large consumers of CO <sub>2</sub> around Harinagar Sugar Mill in Bihar. But we shall try to search consumers of CO <sub>2</sub> in Bihar & accordingly shall made CO <sub>2</sub> bottling unit in our premises.



(xxii)	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 place.	We have adequate space at the entry gate of the distillery for parking of vehicles of raw material & finish products.
10.1 (i)	<p><b>GENERAL CONDITION</b></p> <p>The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board, Central Pollution Control Board, State Government and any other statutory authority.</p>	We have strictly complied the conditions as per Consent to Establish (CTE) by Member Secretary, BSPCB vide letter no. M/T-3/2021/233 dated 20-01-2022 & Consent to Operate (CTO), Discharge Consent Order vide Ref no. 3090 dated 28-10-2022 and Emission Consent Order Ref no.3289 dated 28-10-2022, respectively& we have also obtained CCA (Consolidated Consent to Operate and Authorization) vide CCA renewal no. 1579 date 11-08-2023 valid upto 17-05-2028.
(ii)	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change. In case of deviations of alterations in the project proposal for 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.	We have not done any expansion or modification in the plant (Distillery Division) without prior approval of Ministry of Environment Forest and Climate Change. (MoEF and CC).
(iii)	<p>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</p> <p>Direction as well as where maximum ground level concentrations are anticipated.</p>	<p>We have complied the conditions; Following stations have been located for Air Ambient Air Quality Monitoring to Analyzed by third party M/s Shiva Test House, Patna. the report enclosed. as <b>ANNEXURE-IV</b></p> <ol style="list-style-type: none"> <li>1.Near Main Gate of Distillery</li> <li>2.Near ETP Lab</li> <li>3.Near South Gate of Distillery</li> </ol>
(iv)	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 followed.	Ambient air quality monitoring is being done for all 12 parameters as per NAAQS since last six months. AAQ data attached here with Analyzed by third party M/s Shiva Test House, Patna. April 2023 to September 2023 <b>ANNEXURE-IV</b>
(v)	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).	We have complied the condition & analyzed the Noise Level by M/s Shiva Test House, Patna & analysis report is submitting on monthly basis April, 2023 to September, 2023. copy of the report enclosed. as <b>ANNEXURE-IV</b>
(vi)	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.	Our project area falls under Safe Category as per CGWA/GWRA and receives average annual rainfall of 38.5 inches or 977.9 mm. During April 2023 to September 2023. Post monsoon ground water level is less than 5.0 m.bgl and storage of



		rain water is not feasible. As per CGWA guidelines we are recharging the ground water aquifer through Roof top Rain Water Harvesting technique.
(vii)	Training shall be imparted to all employees on safety and health aspects of chemical 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.	We have employed a Safety Officer & Medical Officer and trained to all employees for the handling of the chemicals & also make a provision for routine medical examination of all the employees. Safety training held on dated 05-06-2023 in the Distillery campus by the safety officer in the presence of Distillery HOD (copy enclosed) <b>Annexure- (vii)</b>
(viii)	The company shall also comply with all the environmental protection measures safeguards proposed in the document 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.	Covered shed has been provided at feeding point of bagasse at Boiler. Stored bagasse fully covered by Polythene sheets & covered conveyor for bagasse feeding has been provided. Arrangement for collection of ash from ESP through covered mechanical system has been done. We have developed proper greenbelt 33% of the total project area as per CPCB norms.
(ix)	The company shall under take all relevant measures for improving the socio-economic conditions of the surrounding area. ESC activities shall be undertaken by involving local villages and administration.	We are taking all relevant measures to improving the socio-economic activities in the surrounding area by involving local villages and administration. Details in <b>Annexure-(xiii)</b>
(x)	The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.	Our company have committed adequate fund in CSR activity for different social activity like Flood Relief Camp in our district & entire Bihar, support to different societies like Cancer Institute, Educational Trust, Human Welfare Awareness etc. Now this year we have propose to allocate approx Rs. 50,00,000.00 for hospitals (medicine, ambulance & other medical facilities) & others like schools in nearby area of Harinagar. The details of expenditure is attached as <b>Annexure-(x)</b>
(xi)	The company shall earmark sufficient funds towards capital cost and recurring cot 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 / pollution measures shall not be diverted for any other purpose.	Our total expansion cost of project was Rs. 4612.50 Lakh out of this Rs. 200.00 Lakh allowed for Pollution control measure. Now we have annually taken sufficient recurring fund to implement the pollution control measures. We assure that these funds will never divert to any other purpose.

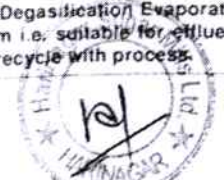


(xii)	A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zila Parishad / Municipal Corporation, Urban Local Body and the local NGO, if any, from whom suggestions /representations, if any, were received while processing the proposal.	We have already submitted a copy of Environmental Clearance to the Chief Executive Officer, District Board, West Champaran, Bettiah for their information & records.
(xiii)	The project proponent shall also submit six monthly on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copy 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 shall be posted on the web site of the company.	We complied the condition & submit Yearly / six monthly data on the status of compliance of the Environmental Clearance Condition including results of monitoring data to the concerning department and as server & website <a href="http://www.harinagarsugar.com">www.harinagarsugar.com</a> . We are submitting reports from April 2023 to September 2023. Copy enclosed as <b>ANNEXURE-I</b> .
(xiv)	The environmental statement for each financial year ending 31 <sup>st</sup> 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 comply along with status of compliance of environmental clearance conditions and shall also be sent to the respective Regional Offices of MoEF & CC by e-mail.	Copy of Environmental Statement Report for the period 2022 - 2023 has submitted to Integrated Regional Office, Ranchi. Vide letter no 1483 on dated 11-09-2023 and same uploaded on website.
(xv)	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 SPCB/Committee and may also be seen at Website of the Ministry at <a href="http://moef.nic.in">http://moef.nic.in</a> 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 vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional Office of the Ministry.	We have already informed to the public regarding Environmental Clearance by the ministry & published in the news paper "Dainik Jagran" dated 01-12-2018 & "Times of India" dated 01-12-2018.
(xvi)	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.	We have obtained the following clearances for 120 KLPD TO 200 KLPD Ethanol Production.on B-Hy Molasses / Cane Syrup ; <ol style="list-style-type: none"> <li>1. CTE on dated 20-01-2022</li> <li>2. EC on dated 26-11-2018</li> <li>3. CTO on dated 28-10-2022</li> <li>4. Approval Drawing for 120 to 200 KLPD Ethanol Production by Excise Department, Patna on dated, 23-07-2022.</li> <li>5. CTE for 120 KLPD to 140 KLPD Ethanol Production on C-Hy Molasses by Bihar State Pollution Control Board Patna vide Memo. No. 716 dated 02-05-23 and CTO for 120 to 140 KLPD Ethanol production on C-Hy Molasses by BSPCB vide CCA renewal No. 1579 dated 11-08-2023 (copy enclosed).</li> </ol>



**HARINAGAR SUGAR MILL LTD., (DISTILLERY DIVISION) HARINAGAR****Compliance of Consent Condition for N.O.C. of Bihar State Pollution Control Board****Ref No. M/T-3/2021/233 dated 20-01-2022, Memo No. 137 dated 20-01-2022**

Consent No.	Condition of Consent	NOC by Bihar State Pollution Control Board
SL. No.	Capacity Operation days	200 KLPD or 54000 KL/Annum Operating Days = 270 Days
(i)	That, the proponent shall obtain Consent to operate under section 25 & 26 of Water Act, 1974 and section 21 of Air Act, 1981, prior to commissioning of industrial plant (expansion project) from Bihar State Pollution Control Board;	1. We have obtained Consent To Operate (CTO) by Bihar State Pollution Control Board vide Ref no. 3090 (Discharge Consent Order) Date- 28-10-2022 & Ref no. 3289 (Emission Consent Order) Date- 28-10-22 granted for five years from the date of issue.  2. Existing CTO for 120KLPD is as under.
(ii)	That, they shall comply with provisions (whichever applicable of the water Act, 1974, The air Act 1981, The Environment (Production) Act, 1986, Rules and notifications issued there under;	Condition Complied
(iii)	That, The effluent (Domestic or Trade) and emission shall conform to the standard prescribed under The Rules;	Installed suitable capacity of the plant for effluent treatment i.e. Bio-digester followed by BMSW MEE followed by Bio-composting to maintain Zero Liquid Discharge & also installed ESP & Multi Cyclone Dust Collector for Stack Emission to achieve prescribed norms as per rules
(iv)	All other mandatory approvals and permissions from competent authority shall be obtained	We have obtained approval from State excise (copy enclosed).
(v)	That, they shall restrict its ethanol production to 120 KLPD, if they use C-Hy molasses:	We shall strictly comply and have to produce ethanol production using C-hy molasses.
(vi)	That, they shall restrict its ethanol production to 200 KLPD, if they use enriched B-Hy molasses or cane syrup :	We shall strictly comply and have to produce ethanol production using B-hy & Cane Syrup molasses.
(vii)	That, they shall restrict spent wash generation to the tune of 8 KL/KL of ethanol produced on using C-hy molasses and 4.5KL/KL of ethanol produced on using B-hy molasses / cane syrup / cane sugar	We shall maintain spent wash generation 8 KL/KL of ethanol produced on using C-hy molasses and 4.5KL/KL of ethanol produced on using B-hy molasses / cane syrup / cane sugar.
(viii)	That, they shall restrict ground water extraction to 1475 KLD as per NOC issued by CGWA is not more than 1475 KLD.	We shall not extract/ withdrawal ground water more than 1475 KLD Permission granted by CGWA vide order no. CGWA/NOC/IND/REN/1/2021/6340 application no. 21-4/257/BR/IND/2017 Valid from 04/10/2021 to 03/10/2023. CGWA (copy enclosed Annexure-vi)
(ix)	That, they shall maintain particulates matter emission (50 mg/Nm <sup>3</sup> ) from the existing stack attached with boiler of 35 TPH steam generation capacity along with ESP as air pollution control device	We have installed 35 TPH boiler with suitable capacity of ESP to control stack emission & adequate stack height 65 meter & dia 3 meter as per CPCB/SPCB guidelines. M.s. Shiva Test House, Patna & analysis report is submitting on monthly basis. Analysis report enclosed. We shall comply the conditions.
(x)	That, they shall maintain ZLD system by ETP such as Bio - Methanation, MEE and Bio-Composting facility with concentrated spent wash	By adopting of latest technology for recycle of spent wash in fermentation process to reduce the effluent volume on as per BSPCB norms & following by the below method technique used shall comply all conditions & maintain ZLD.  A. The generated spent wash is passed through Decanter and decanted spent wash is fed into Bio-digester. B. The generated Bio-gas is fed into Boiler to save fuel. C. The treated effluent is fed into BMSW Degasification Evaporator along with condensate stripping system i.e. suitable for effluent generation i.e. 70 to 75 % condensate recycle with process.





		<p>D. The process condensate is being treated &amp; Re-Use &amp; Recycle in the process as well as makeup water.</p> <p>E. The concentrated (25 to 30 %) effluent after BMSW multi effect column is being sprayed on press-mud to produce bio-compost. We have sufficient developed land and equipment for the processing of Bio-compost</p> <p>Thus, we shall maintaining zero liquid discharge.</p>																		
(xi)	That, they shall maintain impervious lagoon for storage of concentrated spent wash equivalent of its 30 days generation.	Storage lagoon is lined with HDPE sheeting and Brick Soling for suitable capacity equivalent to 30 days generation concentrated spent wash.																		
(xii)	That, they shall ensure regular connectivity of OCEMS (24x7) installed with stack attached with boiler.	We have already installed continuous online OCEMS (24x7) monitoring system for stack emission for measurement of the flue gas discharge & the pollutants concentration																		
(xiii)	That, they shall maintenance surveillance system like web camera at bio-compost yard, spent wash storage lagoon, mass flow meter at MEE feed, MEE concentrate and ensure linking with CPCB and BSPCB servers.	We have already installed web cameras with night vision capability at MEE Feed, Lagoon/Bio-compost Yard & Mass Flow Meter at Spent Wash Generation, MEE Feed, Process Condensate & Product/Concentrated Effluent & the data is being transmitted to CPCB/SPCB Server. User ID and Password for connectivity: IP = 202.91.70.42 HTTP Port 82 to 85 User ID = admin Password = harinagar1234																		
(xiv)	That, they shall explore development of more plantation, if it is not in accordance with EC conditions.	Condition Complied, plantation is also being done around the campus of distillery and around the area of bio-compost.																		
(xv)	That, they shall obtained valid registration certificate for production and bio-enriched organic manure (bio-compost) as per gazette notification S.O. 2776 (E) dated 10-10-2015 under the fertilizer control fourth amendment order, 2015 issued by Ministry of agriculture and farmer welfare (Department of Agriculture, Cooperation and farmers welfare) for the ministry of Agriculture concerned agency.	We have obtained valid registration certificate for production and bio-enriched organic manure (bio-compost) from Director of Agriculture-cum-Notified Authority (Fertilizer) Bihar Patna, Memo No. 490 dated 15-07-2019. & valid up to granted for five years from the date of issue. copy enclosed as (Annexure-xv)																		
(xvi)	That, they shall install additional infrastructure facilities as proposed for modernization and enabling increase in production capacity as hereunder:-																			
	<table border="1"> <thead> <tr> <th>Section</th> <th>Additional Facility proposed for 200 KLPD</th> <th>Compliance for 200 KLPD</th> </tr> </thead> <tbody> <tr> <td>Fermentation</td> <td>Culture Vessels (CV-1 : 100 Lt, CV-2 : 500 Lt, CV-3 : 6000 Lt) : Pre-Fermenter-1 no. (55 m<sup>3</sup> each): Air Blower -1 no. (75 NM<sup>3</sup>/hr): and Fermentor - 6 nos. (320 M<sup>3</sup> each).</td> <td>We have installed all related equipments &amp; machinery in fermentation section for the fermentation process to improve efficiency and also to reduce effluent volume as per BSPCB norms.</td> </tr> <tr> <td>Distillation &amp; MSDH Section</td> <td>Analyzer Column &amp; Rectifier Column with Re-boiler-1 no. and Evaporation / MSDH column -1 no.</td> <td>We have installed &amp; modified necessary equipment &amp; machinery for suitable capacity to produce B-Heavy &amp; Syrup.</td> </tr> <tr> <td>Cooling Tower</td> <td>Replacement with New RCC Cooling Tower</td> <td>We have installed suitable capacity of RCC cooling for Fermentation section &amp; Distillation section.</td> </tr> <tr> <td>BMSW &amp; MEE Plant.</td> <td>Modification in existing B.M.S.W &amp; M.E.E Plant Condensate Stripping System.</td> <td>We have suitable capacity 1440 M<sup>3</sup> BMSW MEE plant &amp; stripping system which reduce the spent wash effluent up to the norms for condensate treatment &amp; this process condensate is passed through CPU &amp; recycle in the process.</td> </tr> <tr> <td>CPU Section</td> <td>Addition and modification of CPU of 1150 M<sup>3</sup>/ day capacity suitable for 200 KLPD.</td> <td>We have CPU / RO having capacity 1800. 1150 M<sup>3</sup> per day.</td> </tr> </tbody> </table>	Section	Additional Facility proposed for 200 KLPD	Compliance for 200 KLPD	Fermentation	Culture Vessels (CV-1 : 100 Lt, CV-2 : 500 Lt, CV-3 : 6000 Lt) : Pre-Fermenter-1 no. (55 m <sup>3</sup> each): Air Blower -1 no. (75 NM <sup>3</sup> /hr): and Fermentor - 6 nos. (320 M <sup>3</sup> each).	We have installed all related equipments & machinery in fermentation section for the fermentation process to improve efficiency and also to reduce effluent volume as per BSPCB norms.	Distillation & MSDH Section	Analyzer Column & Rectifier Column with Re-boiler-1 no. and Evaporation / MSDH column -1 no.	We have installed & modified necessary equipment & machinery for suitable capacity to produce B-Heavy & Syrup.	Cooling Tower	Replacement with New RCC Cooling Tower	We have installed suitable capacity of RCC cooling for Fermentation section & Distillation section.	BMSW & MEE Plant.	Modification in existing B.M.S.W & M.E.E Plant Condensate Stripping System.	We have suitable capacity 1440 M <sup>3</sup> BMSW MEE plant & stripping system which reduce the spent wash effluent up to the norms for condensate treatment & this process condensate is passed through CPU & recycle in the process.	CPU Section	Addition and modification of CPU of 1150 M <sup>3</sup> / day capacity suitable for 200 KLPD.	We have CPU / RO having capacity 1800. 1150 M <sup>3</sup> per day.	
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(xvii)	That ,boiler ash from ethanol/ distillery plant shall be stored properly so that it shall not adversely affect the air quality water bodied during rainy season by flowing along with the storm water ,proper ash management plan shall be submitted to the Board for its end use.	We have made a proper arrangement for storage of Spent wash Sludge and Boiler ash & also its utilization for manufacturing of Bio-compost (Organic Manure) to enrich the Potash content.
(xviii)	That, bagasse storage shall be done in such a way that it does not get air borne of fly around due to wind.	Covered shed has been provided at feeding point of bagasse at Boiler. Stored bagasse fully covered by Polythene sheets & covered conveyor for bagasse feeding has been provided. Arrangement for collection of ash from ESP through covered mechanical system has been done. We have developed proper greenbelt 33% of the total project area as per CPCB norms..
(xix)	That, proponent shall take all possible measures to control water & air pollution, so that nearby habitation/ school not be affected directly or indirectly.	We have taken all possible measures to control Water & Air Pollution nearby Distillery premises and Bio-compost Yard to avoid any issues.
(xx)	That ,proponent shall ensure no increase in pollution load as committed/proposed in the application for increasing its production capacity by change of raw material matrix and installation of additional infrastructure facilities;	We ensure you that there is no increase pollution load by using raw material as B-Hy / syrup to increase the production capacity 120 to 200 KLPD.
(xxi)	That in compliance of direction of the hon'ble supreme court and vide Board's HQ ref no. 2638, dated 09-07-2019, they shall make provisions for display of data outside main factory gate about quality of water discharge and air emission along with solid waste generated within the factory premises:	Condition Complied & water quality is analyzed by M/s. Shiva Test House, Patna on monthly basis.
(xxii)	That, not with stand anything stated above, the applicant unit shall abide by all the provisions of the environment laws including policles and guidelines made there under: and	Condition will be complied as per guidelines.
(xxiii)	This NOC is granted subject to the condition that in the event of any information/documents submitted by the proponent are found false or misleading at any stage, the NOC granted shall be revoked and legal action shall be initiated.	All information furnish is true & best of my knowledge.




**HARINAGAR SUGAR MILLS LTD. (DISTILLERY DIVISION)**

**Expanded Fund in Recurring and Non recurring implementation for the proper functioning of the plant more**

SL.NO	PARTICULARS	F.Y. 2023-24 (upto Sept 23) (Expenses in Rs.)
1	Bio - Digester operational	35010.00
2	Bio-Compost processing & press mud shifting	9637901.46
3	Green belt development	421445.09
4	Press mud purchase from other factories	0.00
5	Repair and maintenance Bio-compost Yard, Leachate pit, sludge drying bed and ETP	1248821.72
	<b>Equipment Purchase</b>	0.00
6	Bull make loader	0.00
7	New Holland tractor	0.00
8	John Deere tractor	0.00
9	Eicher terra tippler truck, Trailer	0.00
10	Aerotiller	0.00
11	Decanter for solid separation from spent wash / Repair & Maintenance	0.00
	<b>Arrangement of waste water recycle</b>	0.00
12	New Pump for MEE Plant	0.00
13	Waste water recirculation arrangement of neutralization pit	0.00
14	Stack monitoring by third party (shiva Test House patna)	265500.00
15	Online connectivity of camera and data on CPCB server by Axis nano	236000.00
16	Coriolus mass flow meter BMSW plant	0.00
17	Technocrat studio annual maintenance	0.00
18	Installation of I.P.Camera 04 No.with Video Recorder & Media Converter	0.00
19	Kent make water in line flow meater	0.00
20	Degassification-cum Evaporation(BMSW) Repairing & Maintenance	2117378.79
21	Hindustan Jet Chem for cleaning of MEE Calandria Tube	220000.00
22	C.P.U( Waste Water Treatment Plant) Distillery Division	90003018.53
23	Water Audit 2022-23 by National Productivity Council, Patna	0.00
24	Water Tubewell Repairing	0.00
25	Piezometer recorder and maintenance	0.00
26	Repair and maintenance ETP Bio-Digester / Agitator (Plenty Mixer)	107461.23
27	Decanter repairing and annual maintenance	354000.00
28	Repair of Lamella & Degassyfying vessel	0.00
29	Waste water treatment plant	0.00
30	Boundary wall pathway around Bio-Compost area	0.00
	<b>TOTAL</b>	<b>104646536.82</b>

  
Sr. Dy. C. C. (ETP)

  
Tech. Mgr. (Distillery)



# BIHAR STATE POLLUTION CONTROL BOARD

Parivesh Bhawan, Patliputra Industrial Area, Patna-800 010

EPABX: 0612-2261250/2262265, Fax: 0612-2261050; E-mail: msbspcb-bih@gov.in, Website: <http://bspcb.bihar.gov.in>

## FORM 2

[See rule 6(2)]

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

1. Number of authorization and date of issue : HW/B- Patna, dated-
2. Reference of application (No. and date) : **7590113, dated-02.05.2023.**
3. **M/s Harinagar Sugar Mills Ltd. (Distillery Division)**, is hereby granted an authorization based on the enclosed signed inspection report for generation, collection, reception, storage, transport, reuse, recycling, recovery, pre-processing, co-processing, utilization, treatment, disposal or any other use of hazardous or other wastes or both on the premises situated at **P.O+P.S-Harinagar, Mill Bahuarl, Dist.-West Champaran (Bihar).**

#### Details of Authorization

Sl. No.	Category of Hazardous Waste as per the Schedules I, II and III of these rules	Authorized mode of disposal or recycling or utilization or co processing, etc.	Quantity (Ton/Annum)
1.	Used or spent oil (HW cat. no. 5.1) as per Schedule I.	Generation, collection, storage, transportation and offering for sale of used or spent oil (HW cat. no. 5.1) for the purpose of its reused in plant machineries for lubricating or recycling to the authorized recycler.	Used or spent oil: <b>0.5 KLA (0.425 MTA).</b>

- 1) The authorization shall be valid for a period of **five years i.e. (21.05.2023 to 20.05.2028).**
- 2) The authorization is subject to the following general and specific conditions (Please specify any conditions that need to be imposed over and above general conditions, if any):

#### A. General conditions of authorization:

1. The authorized person shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under.
2. The authorization or its renewal shall be produced for inspection at the request of an officer authorized by the State Pollution Control Board.
3. The person authorized shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorization.
4. Any unauthorized change in personnel, equipment or working conditions as mentioned in the application by the person authorized shall constitute a breach of his authorization.
5. The person authorized shall implement Emergency Response Procedure (ERP) for which this authorization is being granted considering all site specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time;
6. The person authorized shall comply with the provisions outlined in the Central Pollution Control Board guidelines on "Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty".
7. It is the duty of the authorized person to take prior permission of the State Pollution Control Board to close down the facility.
8. The imported hazardous and other wastes shall be fully insured for transit as well as for any accidental occurrence and its clean-up operation.
9. The record of consumption and fate of the imported hazardous and other wastes shall be maintained.



10. The hazardous and other waste which gets generated during recycling or reuse or recovery or pre-processing or utilization of Imported hazardous or other wastes shall be treated and disposed of as per specific conditions of authorization.
11. The Importer or exporter shall bear the cost of import or export and mitigation of damages if any.
12. An application for the renewal of an authorization shall be made as laid down under these Rules.
13. Any other conditions for compliance as per the Guidelines Issued by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time.
14. Annual return shall be filed by June 30<sup>th</sup> for the period ensuring 31<sup>st</sup> March of the year.

**B. Specific conditions:**

- a) The unit shall display details of hazardous waste at the main gate on board of 6'x 4' size.
- b) The unit shall maintain a record of hazardous and other wastes handled in Form-3 and shall submit annual return in Form-4 to this Board on or before 30th June of every year.
- c) The unit shall not store the hazardous waste in the premises for a period of more than 90 days provided the board has extended the said period.
- d) The unit shall store its hazardous & other wastes used or spent oil (HW cat. no. 5.1) for the temporary period in MS drums under covered shed for the purpose of its reuse in plant machineries for lubricating or sale to the authorized recycler.
- e) The unit shall ensure that no damage is caused to environment during collection, storage & transportation of its HW.
- f) The unit shall ensure that HW are packaged in a suitable manner for safe handling, storage, transport and labelled as per Form-8 of the rule.
- g) The unit shall provide relevant information regarding hazardous nature of waste and measures to be taken in case of an emergency in Form-9 to the transporter.
- h) The unit shall maintain the manifest system (movement document) for the movement of HW within the country in Form-10 of the rule.
- i) In case of transportation of hazardous waste for recycling or utilization including co-processing, the unit (sender) shall intimate the State Board of the destination & transit State Board in compliance with rule-18(4&5) in addition with this Board.
- j) The unit shall sale the hazardous and other wastes to the authorized recycler/actual user after making the entry into their passbook.
- k) The unit shall made an application for renewal of authorization three months before the expiry of such authorization.

Place: Patna.  
Date:

Sd/-  
(S. Chandrasekar)  
Member Secretary.

Memo No. B-3150  
Copy to the Regional Officer, Muzaffarpur, Bihar State Pollution Control Board, Muzaffarpur  
for information and necessary action.

Patna, dated- 16.10.2023

  
(S. Chandrasekar)  
Member Secretary.





सत्यमेव जयते

Government of India  
Ministry of Jal Shakti  
Department of Water Resources, River Development and Ganga Rejuvenation  
Central Ground Water Authority (CGWA)



### Application for Issue of NOC to Abstract Ground Water (NOCAP)

Welcome : pinkamit

Previous Login Date Time: 03/10/2023 14:23:06 PM , IP Address: 115.242.247.174

Applicant Home	Apply	Feedback	Change Password	Profile	Grievance	Submitted Application Payment
Revival Request	Application Pass Book	Upload Attachment	Payment for Associate			

Location Details

RENEW - INDUSTRIAL USE: SUCCESSFUL SUBMISSION

Communication Address

Print Application

Land Use Details

Your Application Submitted Successfully.Your Application Detail are :

Water Requirement Details

**Application Number : 21-4/257/BR/IND/2017**

Recycled Water Usage

Groundwater Abstraction  
Structure- Existing**Details of Existing CGWA/NOC/IND/REN/1/2021/6340****NOC :** (04/10/2020 - 03/10/2023)Groundwater Abstraction  
Structure- Proposed**Applied For Renewal : 2nd**

Other Details

**Name of Industry : HARINAGAR SUGAR MILLS LTD. (DISTILLERY DIVISION)**

Attachment

**Submitted Date: 03/10/2023**

Ready To Submit

**Net Ground Water Requirement: 1475.00**

Final Submit

Please note your application number for future reference.

Your application has been submitted to office:

**Regional Director****Central Ground Water Board Mid Eastern Region****6th & 7th Floor****Lok Nayak Jai Prakash Bhawan****Frazer Road Dak Banglow****PATNA****BIHAR****PinCode : 800011**

**Government of India**  
**Ministry of Jal Shakti**  
**Department of Water Resources, River Development and Ganga Rejuvenation**  
**Central Ground Water Authority (CGWA)**  
**Application for Issue of NOC to Abstract Ground Water (NOCAP)**

**Application for Renew of NOC Issued to Existing Industrial Projects Abstracting GroundWater**  
**(Application For Renewal of NOC)**

**Application Number : 21-4/257/BR/IND/2017**

**Applied For Renewal : 2nd**

**1. General Information:**

<b>Water Quality:</b>	Fresh Water
<b>Application Type Category/ Type of Application:</b>	Distilleries
<b>(i) Name of Industry:</b>	HARINAGAR SUGAR MILLS LTD. (DISTILLERY DIVISION)
<b>(ii) Location Details of the Industrial Unit- (Attach Site Plan and Certified Revenue Sketch) (\$)</b>	
<b>Address Line 1 :</b>	VILL : HARINAGAR, BLOCK : RAMNAGAR, TEHSIL : RAMNAGAR
<b>Address Line 2 :</b>	
<b>Address Line 3 :</b>	
<b>State:</b>	BIHAR
<b>District:</b>	PASHCHIM CHAMPARAN
<b>Sub-District:</b>	RAMNAGAR
<b>Village/Town:</b>	Ramnagar (NP)
<b>Latitude:</b>	
<b>Logitude:</b>	
<b>Area Type :</b>	Non-Notified
<b>Area Type Category :</b>	Safe
<b>Whether industry is MSME:</b>	No
<b>(iii) Communication Address</b>	
<b>Address Line 1:</b>	HARINAGAR, RAMNAGAR, WEST CHAMPARAN
<b>Address Line 2:</b>	
<b>Address Line 3:</b>	
<b>State:</b>	BIHAR
<b>District:</b>	PASHCHIM CHAMPARAN
<b>Sub-District:</b>	RAMNAGAR
<b>Pincode:</b>	845103
<b>Phone Number with Area Code:</b>	
<b>Mobile Number:</b>	91-9955996282
<b>(v) Details of Existing NOC issued by CGWA (enclose copy)</b>	
<b>File Number:</b>	harinagar.sugar@gmail.com
<b>NOC Letter No:</b>	CGWA/NOC/BR/REN/17/2021/6340
<b>Date of Issuance:</b>	20/10/2021
<b>Vailidity (Start):</b>	04/10/2020
<b>Validity (End):</b>	03/10/2023



Government of India  
Ministry of Jal Shakti  
Department of Water Resources, River Development and Ganga Rejuvenation  
Central Ground Water Authority (CGWA)  
Application for Issue of NOC to Abstract Ground Water (NOCAP)

**Application for Renew of NOC Issued to Existing Industrial Projects Abstracting GroundWater  
(Application For Renewal of NOC)**

Application Number : 21-4/257/BR/IND/2017

Applied For Renewal : 2nd

Reason for not applying for renewal before expiry of NOC Validity (Attach Affidavit): Applying for Renewal within Timeline

(vi) Purpose of Renewal Application: Existing Ground Water

2. Details of Water Requirement (Fresh and Recycled Water Usage):  
(Please Enclose Water Flow Chart of Activities and Requirement of Water at each Stage) (\$)

(i) Total Water Requirement (a+b+c+d) (m3/day)

	Existing	Additional	Total
<b>Water Requirement Details (Fresh Water) (m3/day)</b>			
(a) Ground Water Requirement (m3/day):	1475.00	0.00	1475.00
(b) Surface Water Available (Canal, River, Ponds etc.) (m3/day):	0.00	0.00	0.00
(c) Water Supply from Any Agency (m3/day):	0.00	0.00	0.00
<b>Total Fresh Water Requirement (a+b+c)(m3/day):</b>	<b>1475.00</b>	<b>0.00</b>	<b>1475.00</b>
(d) Recycled Water Usage (m3/day):	989.00	0.00	989.00
<b>Total Water Requirement : (a+b+c+d)(m3/day)</b>	<b>2464.00</b>	<b>0.00</b>	<b>2464.00</b>

(ii) Breakup of Water Requirement and Usage:

Activity	Existing Requirement (m3/day)	Additional Requirement (m3/day)	Total Requirement (m3/day)	No. of Operational Days in a Year	Annual Requirement (m3/year)
Industrial Activity	1455.00	0.00	1455.00	270	392850.00
Residential / Domestic	20.00	0.00	20.00	365	7300.00
Greenbelt Development /Environment Maintenance	70.00	0.00	70.00	270	18900.00
Other Use	919.00	0.00	919.00	270	248130.00
<b>Grand Total</b>	<b>2464.00</b>	<b>0.00</b>	<b>2464.00</b>		<b>667180.00</b>

(iii) Details of Water Availability from ETP / STP for Recycle / Resuse usage:

	Existing		Additional		Total	
	(m3/day)	No. Of Days	(m3/year)	(m3/day)	No. Of Days	(m3/year)
Effluent / Sewerage generated and treated in ETP / STP:	1000.00	270	270000.00			1000.00 270000.00
Availability treated Effluent / Sewerage for usage:	989.00	270	267030.00			989.00 267030.00

Government of India  
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Applied For Renewal : 2nd

Effluent / Sewerage discharge after treatment:	0.00	0	0.00	0.00	0.00
--	------	---	------	------	------

(iv) Availability treated effluent usage : Total quantity same as 2 i (d) and 2 ii (b) above

	Existing (m3/day)	Additional availability (m3/day)	Total Use + Availability (m3/day)
Industrial Activity / Commercial Use	919.00	0.00	919.00
Domestic / Residential Use	0.00	0.00	0.00
Greenbelt development / Environment maintenance	20.00	0.00	20.00
Other Use / Flushing Req.	50.00	0.00	50.00
<b>Total</b>	<b>989.00</b>	<b>0.00</b>	<b>989.00</b>

3. (a). Groundwater Abstraction Structure- Existing:

Number of Existing Structures: 1

SNo.	Type of Structure Name / Year of Construction	Depth (Meter) / Diameter (mm)	Depth to Water Level (Meters below Ground Level)	Discharge (m3/Hour)	Operational Hours (Day) / Days (Year)	Mode of Lift Name	Horse Power of Pump	Whether Fitted with Water Meter	Whether Permission Registered with CGWA / If so Details Thereof
1	Borewell / 2008	140.00 / 200	5.00	180.00	8 / 270	Submersible Pump	40.00	Yes	Yes / NOC No.CGWA/NOC/IND/ORIG/2018/4178 Dt: 24.10.2008

(b). Groundwater Abstraction Structure- Additional:

Number of Additional Structures: 0

SNo.	Type of Structure Name / Year of Construction	Depth (Meter) / Diameter (mm)	Depth to Water Level (Meters below Ground Level)	Discharge (m3/Hour)	Operational Hours (Day) / Days (Year)	Mode of Lift Name	Horse Power of Pump	Whether fitted with Water Meter	Whether Permission Registered with CGWA / If so Details Thereof
0									

4. (a). Compliance to the Condition prescribed in the NOC

SNo.	Conditions given in NOC	Compliance Conditions Applicable	Status of Compliance
1	Area Specific Plantation	Not Applicable	
2	Domestic Water School Sanitation	Not Applicable	
3	Groundwater quality monitoring - Pre monsoon and Post monsoon	Yes	Water Quality Report Attached
4	Maintenance of recharge structures	Yes	Photographs attached



**Government of India**  
**Ministry of Jal Shakti**  
**Department of Water Resources, River Development and Ganga Rejuvenation**  
**Central Ground Water Authority (CGWA)**  
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**(Application For Renewal of NOC)**

**Application Number : 21-4/257/BR/IND/2017**

**Applied For Renewal : 2nd**

5	Number of Pizometers as per NOC and Water Level Record	Yes	Photographs and Data Attached
6	Number of Tubewells Borewales as per NOC	Yes	Photographs and Data Attached
7	Pizometer fitted with AWLRs with telemetry as per NOC	Yes	Photographs and Data Attached
8	Quantum of Groundwater as per NOC	Yes	Water Use log book attached
9	Recharge through ponds	Not Applicable	
10	Recycle and reuse of water	Yes	Treated water recycle and reuse within premises
11	RWH and AR structures implemented	Yes	Photographs attached
12	Submission of Compliance report to the Region	Yes	Self compliance submitted
13	Water conservation measures	Yes	
14	Water Security Plan of villages	Not Applicable	
15	Well monitored around the plant premises	Not Applicable	
16	Wells fitted with water meter and its Record	Not Applicable	

**(b). Compliance to the Condition prescribed in the NOC - Other**

SNo.	Conditions given in NOC	Status of Compliance
1	NA	All conditions are complied

5. **Groundwater Availability (Please Enclose a Comprehensive Report / Note on Groundwater Condition / Groundwater Quality in and Around the Area) Applicable to Industries Consuming Greater Than 500 m<sup>3</sup>/day and / or having a Land Area of Greater Than 2 Ha.- (\$)**
6. **Details of Rainwater Harvesting and Artificial Recharge Measures for Groundwater Recharge in the Area. If the Firm has Proposed to take up Rainwater Harvesting and Recharge outside the Industrial Unit Premises, then provide NOC from the Concern Authority / Agency where the Harvesting Measures are Proposed, if Already implemented, details may be furnished. (Attach Report on Comprehensive & Feasible Rainwater Harvesting / Recharge Proposal).- (\$)**

Post monsoon water level in our area lies less than 5 m. bgl. However, we have made 2 nos. rain water recharge structures. (Photographs attached)

**INDUSTRIAL USE- Self Declaration**

Government of India  
Ministry of Jal Shakti  
Department of Water Resources, River Development and Ganga Rejuvenation  
Central Ground Water Authority (CGWA)  
Application for Issue of NOC to Abstract Ground Water (NOCAP)

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**Applied For Renewal : 2nd**

I hereby certify that the data and information furnished above are true to the best of my knowledge and belief and I am aware that if any part of the data / information submitted is found to be false or misleading at any stage, the application will be rejected outright.

I hereby declare that all the mandatory documents prescribed in the application form have been uploaded and no blank /irrelevant documents have been uploaded. I am also aware that any false/ wrong submission /uploading of document will lead to rejection of my application without any notice.

It is to certify that no case related to ground water withdrawal/ contamination is pending against the industry/ project/ unit as on date. Any such case filed against the company/ project/ unit in respect of ground water withdrawal/ contamination during the pendency of this application shall be immediately brought to the notice of CGWA.

I hereby undertake that in case any environmental compensation/ penalty is imposed on the firm by any statutory authority, I shall comply with the decision of such authority.

1. Application proforma is subject to modification from time to time.
2. Application is submitted online on website <http://cgwa-noc.gov.in> to following office.

**Regional Director, Central Ground Water Board Mid Eastern Region, 6th & 7th Floor, Lok Nayak Jai Prakash Bhawan, Frazer Road Dak Banglow, PATNA, BIHAR, 800011**

3. Incomplete application will be summarily rejected.

**Scanned copy of last page of application with signature and seal should be attached at prescribed place before submission of application.**

4. Receipt of Processing Fee of Rs. 5000.00/- (Rupees Five Thousand Only) submitted through NON TAX RECEIPT PORTAL (<https://bharatkosh.gov.in>) should be attached along with hard copy of application.

**Processing Fee:-**

Bharat Kosh Transaction  
Ref. No:-

Bharat Kosh Transaction  
Date:-

**Note:- The Processing Fee is Non-Refundable. Applicant should ensure and Check Eligibility of Submission of Application and Required Documents before Submitting Online Application.**

5. Hard copy of application required: No
6. Ground Water Quality Not Define  
Approved Ground Water Charge Required: Not Define  
Ground Water Charge No  
Recieve: Ground Water Charge Amount:  
Ground Water Area Amount:

**Attached Files:**

- 1). Site Plan : (Refer: 1 (ii))  
No Attachment Found!
- 2). Certified Revenue Sketch : (Refer: 1 (ii))  
No Attachment Found!
- 3). Reason for Not Applying for Renewal before Expiring NOC : (Refer: 1 (v))



**Government of India**  
**Ministry of Jal Shakti**  
**Department of Water Resources, River Development and Ganga Rejuvenation**  
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**Application Number : 21-4/257/BR/IND/2017**

**Applied For Renewal : 2nd**

No Attachment Found!

**4). Existing NOC : (Refer: 1 (vii))**

S.No	Attachment Name	File Name
1	NOC	NOC_Renew_2021.pdf

**5). Enclose Flow Chart of Activity and Requirement of Water: (Refer: 2)**

No Attachment Found!

**6). Groundwater Availability Report : (Refer: 4)**

No Attachment Found!

**7). Details of Rainwater Harvesting / Artificial Recharge Measures : (Refer: 5)**

S.No	Attachment Name	File Name
1	Photographs	GEOTAGGED PHOTOGRAPHS OF RAIN WATER HARVESTING STRUCTURES.pdf

**8). Authorization :**

No Attachment Found!

**9). Extra Attachment :**

S.No	Attachment Name	File Name
1	Affidavit Wetland	Affdvt Wetland.pdf
2	CTO by BSPCB	CertiFicate (30).pdf

**10). Compliance to the Condition prescribed in the NOC**

S.No.	Conditions given in NOC	Attachments		
		S.No.	Attachment Name	File Name
1	Area Specific Plantation	No Attachment Found!		
2	Domestic Water School Sanitation	No Attachment Found!		
3	Groundwater quality monitoring - Pre monsoon and Post monsoon	1	GW Test Report	BOREWELL WATER TEST REPORT.pdf
4	Maintenance of recharge structures	1	Photographs	GEOTAGGED PHOTOGRAPHS OF RAIN WATER HARVESTING STRUCTURES.pdf
5	Number of Pizometers as per NOC and Water Level Record	1	Piezometers Photographs	GEOTAGGED PHOTOGRAPHS OF PIEZOMETERS.pdf
6	Number of Tubewells Borewales as per NOC	1	Borewell Photograph attached	GEOTAGGED PHOTOGRAPHS OF BOREWELLS.pdf
7	Pizometer fitted with AWLRs with telemetry as per NOC	1	Piezometers Photograph	GEOTAGGED PHOTOGRAPHS OF PIEZOMETERS.pdf
8	Quantum of Groundwater as per NOC	1	Borewell Data Attached	LOG DATA OF WATER METER.pdf

**Government of India**  
**Ministry of Jal Shakti**  
**Department of Water Resources, River Development and Ganga Rejuvenation**  
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**Application Number : 21-4/257/BR/IND/2017**

**Applied For Renewal : 2nd**

9	Recharge through ponds	No Attachment Found!		
10	Recycle and reuse of water	1	ETP Photographs	GEOTAGGED PHOTOGRAPHS OF ETP.pdf
11	RWH and AR structures implemented	1	RWH Photographs attached	GEOTAGGED PHOTOGRAPHS OF RAIN WATER HARVESTING STRUCTURES.pdf
12	Submission of Compliance report to the Region	1	Self Compliance Report	Self-Compliance_Submitted.pdf
13	Water conservation measures	1	ETP	GEOTAGGED PHOTOGRAPHS OF ETP.pdf
14	Water Security Plan of villages	No Attachment Found!		
15	Well monitored around the plant premises	No Attachment Found!		
16	Wells fitted with water meter and its Record	No Attachment Found!		

**11). Compliance to the Condition prescribed in the NOC - Other**

S.No.	Conditions given in NOC	Attachments		
		S.No.	Attachment Name	File Name
1	NA	No Attachment Found!		

**12). Bharat Kosh Reciept (Porcessing Fee):**

No Attachment Found!

**13). Application with Signature and Seal:**

S.No	Attachment Name	File Name
1	Signed Application	application CGWA.pdf

**14). MSME certificate in case of MSME:**

No Attachment Found!

Date :

Name & Signature of the applicant

Place :

(With official seal)

**Associated User :** pinkamit

**Submitted By User :** pinkamit

**Submission Date :** 03/10/2023

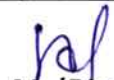
\* In case signed by any authorized signatory, the details of the signatory with the authorization shall be enclosed.



**HARINAGAR SUGAR MILLS LTD. (DISTILLERY DIVISION)**

Adequate funds (at least 2.5% of the project cost) shall be earmarked towards the Enterprise Social Commitment based on public hearing issues and item wise details along with time bound action plan shall be submitted. We are submitting an action plan at least 1% of the total project cost for Corporate Environment Responsibility (CER)

ESC Activities	Projected Cost Rs. in Lakh			Expenses after commissioning of the project Rs. in Lakh					TOTAL Rs. in Lakh
	Upto June 2019	Upto June 2020	Total	Expenses April 2018 to March 2019	Expenses April 2019 to March 2020	Expenses April 2020 to March 2021	Expenses April 2021 to Mar 2022	Expenses April 2022 to Sep 2023	
Provision of Lavatory and Sanitary facilities in nearby School	5.00	0.00	5.00	1.50	0.50	1.50	1.00	0.50	5.00
Provision of Computer training for school students	5.00	2.50	7.50	3.48	0.00	0.00	0.00	4.00	7.48
Green belt development outside project premises	15.00	10.00	25.00	7.50	11.00	19.00	11.00	18.71	67.21
Providing training to local farmers for organic farming activities	25.00	0.00	25.00	7.00	8.00	11.50	8.00	3.50	38.00
Skill development training to local youths for providing employment opportunities in the project training to local farmers for organic farming activities	10.00	5.00	15.00	10.00	0.00	10.00	5.00	4.00	29.00
Development of road infrastructure in the area to minimize traffic congestion	10.00	10.00	20.00	110.00	20.00	35.00	18.00	29.00	212.00
Donated 01 No. Ambulance to Govt. Health Centre and 01 No. our hospital at H.S.M. campus.	15.00	0.00	15.00	0.00	0.00	0.00	23.00	-	23.00
<b>TOTAL</b>	<b>85.00</b>	<b>27.50</b>	<b>112.5</b>	<b>139.48</b>	<b>39.5</b>	<b>77</b>	<b>66</b>	<b>55.5</b>	<b>381.69</b>

  
G. M. (Distillery)

## HARINAGAR SUGAR MILLS LIMITED (DISTILLERY DIVISION), HARINAGAR

## ANALYSIS REPORT APRIL 2023 TO SEPT 2023

E Ground Water Analysis Report from Factory Borewell		All Parameters are analyzed by third party Shiva Test House, Patna					
Sampling date		24.04.23		01.06.23	12.07.23	08.08.23	09.09.23
1	Location						
2	Colour	Hazen	<5.00	0	<5.00	<5.00	<5.00
3	pH		7.73		7.63	7.43	7.68
4	Total Dissolved Solids	mg/l.	232.0		244.0	282.0	302.0
5	Turbidity on NTU	NTU	0.88		0.8	2.4	0.84
6	Total Hardness as CaCo3	mg/l.	166.0		178	170	182
7	Calcium as Ca	mg/l.	36.8		44.9	43.3	60.6
8	Magnesium as Mg	mg/l.	18.0		16.0	15.1	12.1
9	Iron As Fe	mg/l.	0.34		0.32	0.35	0.25
10	Total Alkalinity as CaCo3	mg/l.	184.0		202	284	250
11	Chloride as Cl	mg/l.	15.0		13.0	23.0	20.0
12	Sulphate as So4	mg/l.	22.3		26.3	25.4	26.3
13	Nitrate as No3	mg/l.	1.48		1.62	3.56	2.87
14	Phosphate as Po4	mg/l.	0.009		0.11	-	-
F Ground Water Analysis Report from near Biocomposting							
1	Location						
2	Colour	Hazen	<5.00	<5.00	<5.00	<5.00	<5.00
3	ph		7.76		7.62	7.52	7.63
4	Total Dissolved Solids	mg/l.	232		243	302	282
5	Turbidity on NTU	NTU	0.83		0.8	<1.00	<1.00
6	Total Hardness as CaCo3	mg/l.	162		184.0	240.0	212.0
7	Calcium as Ca	mg/l.	35.2		42.5	76.9	58.4
8	Magnesium as Mg	mg/l.	18		19.0	11.7	16.0
9	Iron As Fe	mg/l.	0.31		0.33	0.32	0.24
10	Total Alkalinity as CaCo3	mg/l.	188		204.0	270.0	232.0
11	Chloride as Cl	mg/l.	17.0		19.0	27.0	19.0
12	Sulphate as So4	mg/l.	20.2		21.8	26.1	23.4
13	Nitrate as No3	mg/l.	1.6		1.64	4.12	1.92
14	Phosphate as Po4	mg/l.	0.11		0.89	-	-
G Effluent Sample Before Digester							
1	pH		4.63		4.62	-	-
2	Total Suspended Solids	mg/l.	17500		17100	-	-
3	B. O. D.	mg/l.	75000		75000	-	-
4	C. O. D.	mg/l.	152000		154000	-	-
H Effluent Sample After Digester							
1	pH		7.51		7.55	-	-
2	Total Suspended Solids	mg/l.	8300		8250	-	-
3	B. O. D.	mg/l.	20000		18000	-	-
4	C. O. D.	mg/l.	50200		48000	-	-
I Boiler Stack Emission							
Sampling date			24.04.23		01.06.23		
1	Particular Matter (P.M.)	Mg/NM <sup>3</sup>	41.3		37.9	-	-
2	Sulphur Dioxide (So2)	Mg/NM <sup>3</sup>	10.5		12.8	-	-
3	Nitrogedioxide as NO2	Mg/NM <sup>3</sup>	51.2		55.7	-	-
J Ambient Noise Level							
Sampling date			23.04.23		31.05.23	11.07.23	07.08.23
1	Near Main Gate	dB(A)	63.4	-	64.2	60.5	60.6
2	Near Boiler House	dB(A)	65.8	-	66.4	61.7	62.8
3	Near ADM Building	dB(A)	53.8	-	54.2	62.7	62.2
4	Near South Gate	dB(A)	64.9	-	65.1	61.9	61.8
5	Near Laboratory	dB(A)	62.1	-	60.5	59.6	61.4

Ramkumar

Sr. Dy. C. C. (ETP / Bio-Fertilizer)

G. M. (Distillery)



# HARINAGAR SUGAR MILLS LIMITED (DISTILLERY DIVISION), HARINAGAR

## Six monthly Analysis Report of Raw Spent Wash, Treated Effluent,

( From April-2023 to Sept 2023)

SL. No.	Particulars	Unit/Limit	Apr-23		May-23		Jun-23		Jul-23		Aug-23		Sep-23	
			14.04.23	21.04.23	08.05.23	25.05.23	01.06.23	10.06.23					17.09.23	29.09.23
A	Raw Spent Wash													
1	Total Feed	M <sup>3</sup>	18435		13940		6580						185	
2	Feed Temp	°C	46	46	43.0	46.0	44.0	43.5	-	-	-	-	46.0	45.0
3	Feed pH		4.6	4.6	4.5	4.6	4.052.0	4.5	-	-	-	-	4.6	5.1
4	Feed COD	PPM	138500	140000	135000	124900	135500	133150	-	-	-	-	195000	205000
5	Feed BOD	PPM	76800	78000	69500	68350	69000	68300	-	-	-	-	91000	89800
6	T.S.S.	PPM	15150	15590	13500	13450	12950	12400	-	-	-	-	13950	15450
7	T.D.S.	PPM	41300	43000	40150	41500	30000	30990	-	-	-	-	38800	43300
B	Digester Sample													
1	Digester pH		7.50	7.56	7.51	7.51	7.50	7.51	-	-	-	-	7.35	7.45
2	COD	PPM	44000	43500	38000	37800	35000	36000	-	-	-	-	37000	30900
3	BOD	PPM	6150	5850	-	-	-	-	-	-	-	-	5250	5800
4	VFA	PPM	5700	5390	5150	5120	5130	5000	-	-	-	-	8500	10550
5	Alkanity	PPM	30190	31000	31700	31400	31000	31500	-	-	-	-	28500	29150
C	Treated Effluent													
1	COD	PPM	30590	31500	32000	31000	31500	32000	-	-	-	-	35000	32000
2	BOD	PPM	4450	-	-	-	-	-	-	-	-	-	-	-
3	pH	PPM	7.52	7.53	7.51	7.52	7.51	7.51	-	-	-	-	7.31	7.48
4	TSS	PPM	4900	5150	4070	4010	5050	5100	-	-	-	-	5000	5700
5	TDS	PPM	26500	26000	30500	30000	31000	32000	-	-	-	-	31000	32000
D	Bio-Gas Production	M <sup>3</sup>	449300		294500									

**Note:** Distillery has been started from 16.09.23  
Bio-gas Digester commissioning started from 17-09-2023

*Ramkesh*  
Sr. Dy. C. C. (ETP / Bio-Fertilizer)

*G.M.*  
G. M. (Distillery)

**M/s Harinagar Sugar Mills Ltd (Distillery Division)**

**Analysis report of all Peizometer from month April, 2023 to Sept, 2023**

**Analyzed by Distillery E.T.P Lab**

<b>Apr - 2023</b>							
Peizometer Location	Near ETP/ BMSW MEE Plant	Near Spent wash storage Lagoon	Near Bagging Machine 1st yard North side	Near 1st yard South side	Near Bio- Fertilizer Lab	Leachate Pit Yard No. 2	Near end of Boundary wall East side Yard no 2
	Piezometer No. 1	Piezometer No. 2	Piezometer No. 3	Piezometer No. 4	Piezometer No. 5	Piezometer No. 6	Piezometer No. 7
Date of Sampling	05.04.23	05.04.23	05.04.23	05.04.23	25.04.23	25.04.23	25.04.23
1. Level in Mtr	4.5	5.8	5.5	5.2	6	5.8	5.5
2. pH	7.32	7.37	7.35	7.34	7.35	7.35	7.35
3. T.D.S	265	267	270	265	370	273	260
4. D.O	6.6	6.7	6.4	6.5	6.5	6.4	6.5
5. Conductivity	395	398	405	397	395	415	400
6. Temp.	29.5	29.7	29.1	28.2	29.5	29.6	29.1
<b>May - 2023</b>							
Peizometer Location	Near ETP/ BMSW MEE Plant	Near Spent wash storage Lagoon	Near Bagging Machine 1st yard North side	Near 1st yard South side	Near Bio- Fertilizer Lab	Leachate Pit Yard No. 2	Near end of Boundary wall East side Yard no 2
	Piezometer No. 1	Piezometer No. 2	Piezometer No. 3	Piezometer No. 4	Piezometer No. 5	Piezometer No. 6	Piezometer No. 7
Date of Sampling	05.05.23	05.05.23	05.05.23	05.05.23	28.05.23	28.05.23	28.05.23
1. Level in Mtr	4.5	5.05	5.6	5.8	5.5	6	5.9
2. pH	7.32	7.34	7.35	7.45	7.38	7.39	7.39
3. T.D.S	270	272	290	295	295	298	295
4. D.O	6.5	6.3	6.2	6.5	6.2	6.3	6.4
5. Conductivity	390	395	398	399	390	290	395
6. Temp.	28	29	29.2	29.1	29	29.5	29.5
<b>JUE - 2023</b>							
Peizometer Location	Near ETP/ BMSW MEE Plant	Near Spent wash storage Lagoon	Near Bagging Machine 1st yard North side	Near 1st yard South side	Near Bio- Fertilizer Lab	Leachate Pit Yard No. 2	Near end of Boundary wall East side Yard no 2
	Piezometer No. 1	Piezometer No. 2	Piezometer No. 3	Piezometer No. 4	Piezometer No. 5	Piezometer No. 6	Piezometer No. 7
Date of Sampling	15.06.23	15.06.23	15.06.23	15.06.23	21.06.23	21.06.23	21.06.23
1. Level in Mtr	5	5.6	5.9	5.5	5.9	5.6	5.6
2. pH	7.32	7.35	7.35	7.42	7.45	7.38	7.38
3. T.D.S	275	275	290	295	210	275	285
4. D.O	6.5	6.4	6.3	6.3	6.3	6.5	6.3
5. Conductivity	345	348	275	382	304	395	390
6. Temp.	29	29.2	29.2	29.1	29.1	28.9	29.2
<b>JUL-2023</b>							
Peizometer Location	Near ETP/ BMSW MEE Plant	Near Spent wash storage Lagoon	Near Bagging Machine 1st yard North side	Near 1st yard South side	Near Bio- Fertilizer Lab	Leachate Pit Yard No. 2	Near end of Boundary wall East side Yard no 2
	Piezometer No. 1	Piezometer No. 2	Piezometer No. 3	Piezometer No. 4	Piezometer No. 5	Piezometer No. 6	Piezometer No. 7
Date of Sampling	07.07.23	07.07.23	07.07.23	07.07.23	26.07.23	26.07.23	26.07.23
1. Level in Mtr	5.2	5.4	5.2	4.9	5	5.3	4.8
2. pH	7.32	7.38	7.38	7.4	7.39	7.38	7.38
3. T.D.S	278	270	236	238	272	265	268
4. D.O	6.5	6.4	6.5	6.5	6.3	6.4	6.3
5. Conductivity	340	335	330	325	325	315	320
6. Temp.	29.2	29	29.1	29.2	29	28.9	28.2



**M/s Harinagar Sugar Mills Ltd (Distillery Division)**

**Analysis report of all Peizometer from month April, 2023 to Sept, 2023**

**Analyzed by Distillery E.T.P Lab**

Aug-2023							
Peizometer Location	Near ETP/ BMSW MEE Plant	Near Spent wash storage Lagoon	Near Bagging Machine 1st yard North side	Near 1st yard South side	Near Bio- Fertilizer Lab	Leachate Pit Yard No. 2	Near end of Boundary wall East side Yard no 2
	Piezometer No. 1	Piezometer No. 2	Piezometer No. 3	Piezometer No. 4	Piezometer No. 5	Piezometer No. 6	Piezometer No. 7
Date of Sampling	10.08.23	10.08.23	10.08.23	10.08.23	22.08.23	22.08.23	22.08.23
1. Level in Mtr	5.3	5.3	5.1	4.95	5.1	5.2	4.9
2. pH	7.32	7.35	7.38	7.38	7.38	7.39	7.35
3. T.D.S	275	278	275	270	278	272	262
4. D.O	6.5	6.5	6.3	6.5	6.2	6	6.6
5. Conductivity	325	320	315	320		315	319
6. Temp.	28.1	28.1	28.2	29.1	29.1	28.1	28.1

**SEPT.23**

Peizometer Location	Near ETP/ BMSW MEE Plant	Near Spent wash storage Lagoon	Near Bagging Machine 1st yard North side	Near 1st yard South side	Near Bio- Fertilizer Lab	Leachate Pit Yard No. 2	Near end of Boundary wall East side Yard no 2
	Piezometer No. 1	Piezometer No. 2	Piezometer No. 3	Piezometer No. 4	Piezometer No. 5	Piezometer No. 6	Piezometer No. 7
Date of Sampling	15.09.23	15.09.23	15.09.23	15.09.23	29.09.23	29.09.23	29.09.23
1. Level in Mtr	5	5.0	5	5.2	4.8	4.9	5
2. pH	7.32	7.38	7.38	7.38	7.38	7.38	7.38
3. T.D.S	265	273	272	273	226	250	252
4. D.O	6.5	6.2	6.1	6.2	6.3	6.5	6.2
5. Conductivity	310	325	315	322	305	310	318
6. Temp.	28.5	29.1	29.2	29.2	28.1	29.1	28.2

*Ramkand*  
Sr. Dy. C. C. (ETP/Bio-Fertilizer)

*G.M.*  
G. M. (Distillery)

# SHIVA TEST HOUSE

Patliputra Colony ; Patna – 800 013

E.mail : sthpatna1@yahoo.co.in

## HARINAGAR SUGAR MILLS (DISTILLERY PROJECT)

### Summary of Ambient Air Monitoring Data ( For the Period Apr. '2023 – Sep.'2023 )

Ambient Air Quality Monitoring Data																		
Location	Near Main Gate (North Side)						Near ETP (Besides Lab)						Near Gate No. 2 (South Side)					
Parameters / Unit	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>	C <sub>6</sub> H <sub>6</sub>	Pb	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>	C <sub>6</sub> H <sub>6</sub>	Pb	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>	C <sub>6</sub> H <sub>6</sub>	Pb
	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>
Apr.'23	73.6	39.3	14.4	31.2	0.18	BDL*	74.0	39.2	13.8	34.8	0.16	BDL*	76.1	38.8	14.8	35.0	0.14	BDL*
May'23	74.1	40.1	15.7	31.6	0.18	BDL*	75.5	41.3	14.2	35.1	0.16	BDL*	76.7	39.7	15.5	35.5	0.15	BDL*
Jun.'23	59.6	32.8	14.2	33.6	0.17	BDL*	57.5	36.6	13.3	34.7	0.19	BDL*	56.6	35.4	15.4	35.3	0.19	BDL*
Jul.'23	64.8	30.3	13.3	33.1	0.16	BDL*	66.2	29.9	11.9	32.8	0.15	BDL*	66.6	32.8	11.7	32.0	0.13	BDL*
Aug.'23	72.3	36.7	13.6	34.4	0.14	BDL*	69.2	36.1	12.8	33.2	0.13	BDL*	70.5	34.7	12.8	33.2	0.16	BDL*
Sep.'23	70.2	37.6	12.6	33.6	0.15	BDL*	68.9	37.4	13.4	33.0	0.15	BDL*	67.2	36.8	13.9	36.6	0.15	BDL*
<b>NAAQS 2009</b>	<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>5</b>	<b>1</b>	<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>5</b>	<b>1</b>	<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>5</b>	<b>1</b>
<b>N.B.:</b>	BDL* : Below Detectable Limit < 0.05 µg / m <sup>3</sup>																	

Ambient Air Quality Monitoring Data																		
Location	Near Main Gate (North Side)						Near ETP (Besides Lab)						Near Gate No. 2 (South Side)					
Parameters / Unit	CO	NH <sub>3</sub>	O <sub>3</sub>	BaP	As	Ni	CO	NH <sub>3</sub>	O <sub>3</sub>	BaP	As	Ni	CO	NH <sub>3</sub>	O <sub>3</sub>	BaP	As	Ni
	mg / m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	ng/m <sup>3</sup>	ng/m <sup>3</sup>	ng/m <sup>3</sup>	mg / m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	ng/m <sup>3</sup>	ng/m <sup>3</sup>	ng/m <sup>3</sup>	mg / m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	ng/m <sup>3</sup>	ng/m <sup>3</sup>	ng/m <sup>3</sup>
Apr.'23	0.36	30.4	23.0	BDL#	BDL#	BDL#	0.21	25.2	18.0	BDL#	BDL#	BDL#	0.25	22.6	25.2	BDL#	BDL#	BDL#
May'23	0.24	26.2	15.2	BDL#	BDL#	BDL#	0.18	20.8	15.2	BDL#	BDL#	BDL#	0.20	18.3	20.6	BDL#	BDL#	BDL#
Jun.'23	0.18	21.4	11.6	BDL#	BDL#	BDL#	0.15	16.4	13.1	BDL#	BDL#	BDL#	0.16	15.6	22.8	BDL#	BDL#	BDL#
Jul.'23	0.12	18.6	20.2	BDL#	BDL#	BDL#	0.12	14.2	10.4	BDL#	BDL#	BDL#	0.12	10.2	16.2	BDL#	BDL#	BDL#
Aug.'23	0.15	15.2	12.8	BDL#	BDL#	BDL#	0.10	10.8	16.2	BDL#	BDL#	BDL#	0.10	13.8	12.4	BDL#	BDL#	BDL#
Sep.'23	0.10	12.7	10.1	BDL#	BDL#	BDL#	0.10	10.2	12.5	BDL#	BDL#	BDL#	0.11	10.6	11.6	BDL#	BDL#	BDL#
<b>NAAQS 2009</b>	<b>4</b>	<b>400</b>	<b>180</b>	<b>1</b>	<b>6</b>	<b>20</b>	<b>4</b>	<b>400</b>	<b>180</b>	<b>1</b>	<b>6</b>	<b>20</b>	<b>4</b>	<b>400</b>	<b>180</b>	<b>1</b>	<b>6</b>	<b>20</b>
<b>N.B.:</b>	BDL# : Below Detectable Limit < 1 ng / m <sup>3</sup>																	

*Dr. S. Prasad*

Dr. S. Prasad  
(Authorized Signatory)





# SHIVA TEST HOUSE

Patliputra Colony ; Patna – 800 013

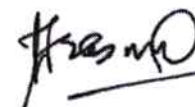
E.mail : sthpatna1@yahoo.co.in

## HARINAGAR SUGAR MILLS (DISTILLERY PROJECT)

Summary of Ambient Air Monitoring Data ( For the Period Apr. '2023 – Sep.'2023 )

Location	Near Biocompost					
	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>	C <sub>6</sub> H <sub>6</sub>	Pb
Parameters / Unit	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>
Apr.'23	75.5	41.6	13.9	32.8	0.13	BDL*
May'23	75.5	42.4	15.0	33.5	0.14	BDL*
Jun.'23	52.9	32.4	14.9	33.7	0.17	BDL*
Jul.'23	63.3	28.2	12.5	32.5	0.16	BDL*
Aug.'23	67.8	36.3	12.0	30.9	0.12	BDL*
Sep.'23	66.1	37.6	13.4	34.7	0.15	BDL*
<b>NAAQS 2009</b>	<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>5</b>	<b>1</b>
<b>N.B.:</b>	BDL* : Below Detectable Limit < 0.05 µg / m <sup>3</sup>					

Location	Near Biocompost					
	CO	NH <sub>3</sub>	O <sub>3</sub>	BaP	As	Ni
Parameters / Unit	mg / m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	ng/m <sup>3</sup>	ng/m <sup>3</sup>	ng/m <sup>3</sup>
Apr.'23	0.16	44.2	15.4	BDL#	BDL#	BDL#
May'23	0.10	38.4	10.2	BDL#	BDL#	BDL#
Jun.'23	0.12	32.1	18.3	BDL#	BDL#	BDL#
Jul.'23	0.10	26.4	10.8	BDL#	BDL#	BDL#
Aug.'23	0.14	20.8	8.4	BDL#	BDL#	BDL#
Sep.'23	0.10	16.2	11.2	BDL#	BDL#	BDL#
<b>NAAQS 2009</b>	<b>4</b>	<b>400</b>	<b>180</b>	<b>1</b>	<b>6</b>	<b>20</b>
<b>N.B.:</b>	BDL# : Below Detectable Limit < 1 ng / m <sup>3</sup>					



Dr. S. Prasad  
(Authorized Signatory)

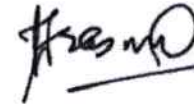


# SHIVA TEST HOUSE

Patliputra Colony ; Patna – 800 013

E.mail : sthpatna1@yahoo.co.in

35 TPH BOILER STACK EMISSION MONITORING DATA							
PARAMETERS	Unit	Apr.'23	May'23	Jun.'23	Jul.'23	Aug.'23	Sep.'23
1. Particulate Matter (M)	mg/NM <sup>3</sup>	41.3	37.9	Plant not in Operation			
2. Sulphur Dioxide (SO <sub>2</sub> )	mg/NM <sup>3</sup>	10.5	12.8				
3. Nitrogen Dioxide (NO <sub>2</sub> )	mg/NM <sup>3</sup>	51.2	55.7				



**Dr. S. Prasad**  
(Authorized Signatory)





# SHIVA TEST HOUSE

(Serving since 1988)



TC-10582

RECOGNISED AS ENVIRONMENTAL LABORATORY BY MoEFCC, GOVT. OF INDIA, UNDER ENVIRONMENT (PROTECTION) ACT 1986, DEPTT. OF INDUSTRY, FORESTS & ENVIRONMENT, GOVT. OF BIHAR AND BIHAR STATE POLLUTION CONTROL BOARD

## TEST REPORT

Ref. No. <i>STH/TR/23-24/2657</i>	Dt: <i>25.07.2023</i>	Your Work Order No. <i>3260</i>	Dt: <i>13.03.2023</i>		
[a] Name and address of the Customer	Chief General Manager M/s Harinagar Sugar Mills (Distillery Division) P.O.: Harinagar ; W. Champaran - 845 103				
[b] Details of Sample	<i>Borewell Water Sample</i>				
[c] Sample Collected by	<i>By Pradeep Kumar (Lab Representative) of Shiva Test House on 11.07.23</i>				
[d] Sampling Location	<i>Collected from Piezometer Near ETP BMSWMEE Plant</i>				
[e] Method of Sampling	IS 3025, APHA				
[f] Sampling Environmental Condition	Temp. (°C)	33	Humidity (%) 67		
[g] Details of Sample Container (No. & Type of Container )	Plastic Bottle (02)				
[h] Sample Quantity	2 Litres				
[i] Sample Code	<i>BW-2657</i>				
[j] Sample Condition on Receipt	Fit for Analysis				
[k] Items required to be tested	As per contract.				
[l] Whether any specific Method of Test has been suggested by the customer	No				
[m] Date of receiving the sample in Laboratory	<i>12.07.23</i>				
[n] Analysis Start Date / Analysis Completion Date	<i>12.07.23 / 13.07.23</i>				
Parameters	Unit	Method of Test	Limit as per IS 10500: 2012		Results
			Limit (mg/l.) Desirable	Permissible Limit in the absence of alternative source	
1. Colour	Hazen	IS 3025 (Part-4)	5.0	15	< 5.0
2. pH at 25 °C	---	IS 3025 (Part-11)	6.5	8.5	7.33
3. Total Dissolved Solids	mg/l	IS 3025 (Part-16)	500.00	2000.00	288.0
4. Turbidity on NTU	NTU	IS 3025 (Part-10)	1.00	5.00	2.8
5. Total Hardness as CaCO <sub>3</sub>	mg/l	IS 3025 (Part-21)	200.00	600.00	220.0
6. Calcium as Ca	mg/l	IS 3025 (Part-40)	75.00	200.00	70.48
7. Magnesium as Mg	mg/l	IS 3025 (Part-46)	30.00	100.0	10.69
8. Iron as Fe	mg/l	IS 3025 (Part-53)	1.00	No relaxation	0.33
9. Total Alkalinity as CaCO <sub>3</sub>	mg/l	IS 3025 (Part-23)	200.00	600.00	252.0
10. Chloride as Cl	mg/l	IS 3025 (Part-32)	250.00	1000.00	25.99
11. Sulphate as SO <sub>4</sub>	mg/l	APHA (4500-E)	200.00	400.00	24.26
12. Nitrate as NO <sub>3</sub>	mg/l	APHA (4500-NO <sub>3</sub> -B)	45.00	No relaxation	3.56

SHIBESHWAR PRASAD

Digitally signed by SHIBESHWAR PRASAD  
Date: 2023.07.25 16:19:44 +05'30'

Verified by :  
Dr. Shibeshwar Prasad  
Technical Manager



Shreyasee Prasad

Digitally signed by Shreyasee Prasad  
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Authorized Signatory  
Dr. (Mrs.) Shreyasee Prasad  
Quality Manager

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## TEST REPORT

Ref. No. <i>STH/TR/23-24/2658</i>	Dt: <i>25.07.2023</i>	Your Work Order No. <i>3260</i>	Dt: <i>13.03.2023</i>
[a] Name and address of the Customer	Chief General Manager M/s Harinagar Sugar Mills (Distillery Division) P.O.: Harinagar ; W. Champaran - 845 103		
[b] Details of Sample	<i>Borewell Water Sample</i>		
[c] Sample Collected by	<i>By Pradeep Kumar (Lab Representative) of Shiva Test House on 11.07.23</i>		
[d] Sampling Location	<i>Collected from Piezometers Near Spent Wash Storage Lagoon</i>		
[e] Method of Sampling	IS 3025, APHA		
[f] Sampling Environmental Condition	Temp. (°C)	<i>33</i>	Humidity (%) <i>67</i>
[g] Details of Sample Container (No. & Type of Container)	Plastic Bottle (02)		
[h] Sample Quantity	2 Litres		
[i] Sample Code	<i>BW-2658</i>		
[j] Sample Condition on Receipt	Fit for Analysis		
[k] Items required to be tested	As per contract.		
[l] Whether any specific Method of Test has been suggested by the customer	No		
[m] Date of receiving the sample in Laboratory	<i>12.07.23</i>		
[n] Analysis Start Date / Analysis Completion Date	<i>12.07.23 / 13.07.23</i>		

Parameters	Unit	Method of Test	Limit as per IS 10500 : 2012		Results
			Limit (mg/l.) Desirable	Permissible Limit in the absence of alternative source	
1. Colour	Hazen	IS 3025 (Part-4)	5.0	15	< 5.0
2. pH at 25 °C	---	IS 3025 (Part-11)	6.5	8.5	7.38
3. Total Dissolved Solids	mg/l	IS 3025 (Part-16)	500.00	2000.00	328.0
4. Turbidity on NTU	NTU	IS 3025 (Part-10)	1.00	5.00	3.2
5. Total Hardness as CaCO <sub>3</sub>	mg/l	IS 3025 (Part-21)	200.00	600.00	248.0
6. Calcium as Ca	mg/l	IS 3025 (Part-40)	75.00	200.00	73.69
7. Magnesium as Mg	mg/l	IS 3025 (Part-46)	30.00	100.0	15.55
8. Iron as Fe	mg/l	IS 3025 (Part-53)	1.00	No relaxation	0.36
9. Total Alkalinity as CaCO <sub>3</sub>	mg/l	IS 3025 (Part-23)	200.00	600.00	270.0
10. Chloride as Cl	mg/l	IS 3025 (Part-32)	250.00	1000.00	26.99
11. Sulphate as SO <sub>4</sub>	mg/l	APHA (4500-E)	200.00	400.00	28.10
12. Nitrate as NO <sub>3</sub>	mg/l	APHA (4500 NO3-B)	45.00	No relaxation	3.58

SHIBESHWAR PRASAD  
Digitally signed by SHIBESHWAR PRASAD  
Date: 2023.07.25  
16:19:56 +05'30'

Verified by :  
Dr. Shibeshwar Prasad  
Technical Manager



Shreyasee Prasad  
Digitally signed by Shreyasee Prasad  
Date: 2023.07.25  
16:27:34 +05'30'

Authorized Signatory  
Dr. (Mrs.) Shreyasee Prasad  
Quality Manager

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## TEST REPORT

Ref. No. <i>STH/TR/23-24/2659</i>	Dt: <i>25.07.2023</i>	Your Work Order No. <i>3260</i>	Dt: <i>13.03.2023</i>
[a] Name and address of the Customer	Chief General Manager M/s Harinagar Sugar Mills (Distillery Division) P.O.: Harinagar ; W. Champaran - 845 103		
[b] Details of Sample	Borewell Water Sample		
[c] Sample Collected by	By Pradeep Kumar (Lab Representative) of Shiva Test House on 11.07.23		
[d] Sampling Location	Collected from Piezometers Near Bagging Machine, first Yard North Side		
[e] Method of Sampling	IS 3025, APHA		
[f] Sampling Environmental Condition	Temp. (°C)	33	Humidity (%) 67
[g] Details of Sample Container (No. & Type of Container)	Plastic Bottle (02)		
[h] Sample Quantity	2 Litres		
[i] Sample Code	BW-2659		
[j] Sample Condition on Receipt	Fit for Analysis		
[k] Items required to be tested	As per contract.		
[l] Whether any specific Method of Test has been suggested by the customer	No		
[m] Date of receiving the sample in Laboratory	12.07.23		
[n] Analysis Start Date / Analysis Completion Date	12.07.23 / 13.07.23		

Parameters	Unit	Method of Test	Limit as per IS 10500 : 2012		Results
			Limit (mg/l.) Desirable	Permissible Limit in the absence of alternative source	
1. Colour	Hazen	IS 3025 (Part-4)	5.0	15	< 5.0
2. pH at 25 °C	---	IS 3025 (Part-11)	6.5	8.5	7.68
3. Total Dissolved Solids	mg/l	IS 3025 (Part-16)	500.00	2000.00	161.0
4. Turbidity on NTU	NTU	IS 3025 (Part-10)	1.00	5.00	1.6
5. Total Hardness as CaCO <sub>3</sub>	mg/l	IS 3025 (Part-21)	200.00	600.00	124.0
6. Calcium as Ca	mg/l	IS 3025 (Part-40)	75.00	200.00	38.4
7. Magnesium as Mg	mg/l	IS 3025 (Part-46)	30.00	100.0	6.8
8. Iron as Fe	mg/l	IS 3025 (Part-53)	1.00	No relaxation	0.38
9. Total Alkalinity as CaCO <sub>3</sub>	mg/l	IS 3025 (Part-23)	200.00	600.00	144.0
10. Chloride as Cl	mg/l	IS 3025 (Part-32)	250.00	1000.00	14.0
11. Sulphate as SO <sub>4</sub>	mg/l	APHA (4500-E)	200.00	400.00	22.4
12. Nitrate as NO <sub>3</sub>	mg/l	APHA (4500-NO <sub>3</sub> -B)	45.00	No relaxation	1.52

SHIBESHWAR PRASAD  
Digitally signed by SHIBESHWAR PRASAD  
Date: 2023.07.25 16:20:07 +05'30'

Verified by :  
Dr. Shibeshwar Prasad  
Technical Manager



Shreyasee Prasad  
Digitally signed by Shreyasee Prasad  
Date: 2023.07.25 16:27:47 +05'30'

Authorized Signatory  
Dr. (Mrs.) Shreyasee Prasad  
Quality Manager

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## TEST REPORT

Ref. No. <i>STH/TR/23-24/2660</i>	Dt: <i>25.07.2023</i>	Your Work Order No. <i>3260</i>	Dt: <i>13.03.2023</i>
[a] Name and address of the Customer	Chief General Manager M/s Harinagar Sugar Mills (Distillery Division) P.O.: Harinagar ; W. Champaran - 845 103		
[b] Details of Sample	<i>Borewell Water Sample</i>		
[c] Sample Collected by	<i>By Pradeep Kumar (Lab Representative) of Shiva Test House on 11.07.23</i>		
[d] Sampling Location	<i>Collected from Piezometers 1st Yard South Side</i>		
[e] Method of Sampling	IS 3025, APHA		
[f] Sampling Environmental Condition	Temp. (°C)	33	Humidity (%) 67
[g] Details of Sample Container (No. & Type of Container )	Plastic Bottle (02)		
[h] Sample Quantity	2 Litres		
[i] Sample Code	<i>BW-2660</i>		
[j] Sample Condition on Receipt	Fit for Analysis		
[k] Items required to be tested	As per contract.		
[l] Whether any specific Method of Test has been suggested by the customer	No		
[m] Date of receiving the sample in Laboratory	<i>12.07.23</i>		
[n] Analysis Start Date / Analysis Completion Date	<i>12.07.23 / 13.07.23</i>		

Parameters	Unit	Method of Test	Limit as per IS 10500 : 2012		Results
			Limit (mg/l.) Desirable	Permissible Limit in the absence of alternative source	
1. Colour	Hazen	IS 3025 (Part-4)	5.0	15	< 5.0
2. pH at 25 °C	---	IS 3025 (Part-11)	6.5	8.5	7.17
3. Total Dissolved Solids	mg/l	IS 3025 (Part-16)	500.00	2000.00	373.0
4. Turbidity on NTU	NTU	IS 3025 (Part-10)	1.00	5.00	1.45
5. Total Hardness as CaCO <sub>3</sub>	mg/l	IS 3025 (Part-21)	200.00	600.00	288.0
6. Calcium as Ca	mg/l	IS 3025 (Part-40)	75.00	200.00	70.48
7. Magnesium as Mg	mg/l	IS 3025 (Part-46)	30.00	100.0	27.21
8. Iron as Fe	mg/l	IS 3025 (Part-53)	1.00	No relaxation	0.48
9. Total Alkalinity as CaCO <sub>3</sub>	mg/l	IS 3025 (Part-23)	200.00	600.00	324.0
10. Chloride as Cl	mg/l	IS 3025 (Part-32)	250.00	1000.00	18.99
11. Sulphate as SO <sub>4</sub>	mg/l	APHA (4500-E )	200.00	400.00	28.40
12. Nitrate as NO <sub>3</sub>	mg/l	APHA (4500 NO <sub>3</sub> -B)	45.00	No relaxation	4.25

SHIBESHW AR PRASAD Digitally signed by SHIBESHWAR PRASAD Date: 2023.07.25 16:20:20 +05'30'

Verified by :  
Dr. Shibeshwar Prasad  
Technical Manager



Shreyasee Prasad Digitally signed by Shreyasee Prasad Date: 2023.07.25 16:28:00 +05'30'  
Authorized Signatory  
Dr. (Mrs.) Shreyasee Prasad  
Quality Manager

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## TEST REPORT

Ref. No. <i>STH/TR/23-24/2661</i>	Dt: <i>25.07.2023</i>	Your Work Order No. <i>3260</i>	Dt: <i>13.03.2023</i>
[a] Name and address of the Customer	Chief General Manager M/s Harinagar Sugar Mills (Distillery Division) P.O.: Harinagar ; W. Champaran - 845 103		
[b] Details of Sample	<i>Borewell Water Sample</i>		
[c] Sample Collected by	<i>By Pradeep Kumar (Lab Representative) of Shiva Test House on 11.07.23</i>		
[d] Sampling Location	<i>Collected from Piezometers Near Bio-Fertilizer Lab</i>		
[e] Method of Sampling	IS 3025, APHA		
[f] Sampling Environmental Condition	Temp. (°C)	33	Humidity (%) 67
[g] Details of Sample Container (No. & Type of Container)	Plastic Bottle (02)		
[h] Sample Quantity	2 Litres		
[i] Sample Code	<i>BW-2661</i>		
[j] Sample Condition on Receipt	Fit for Analysis		
[k] Items required to be tested	As per contract.		
[l] Whether any specific Method of Test has been suggested by the customer	No		
[m] Date of receiving the sample in Laboratory	<i>12.07.23</i>		
[n] Analysis Start Date / Analysis Completion Date	<i>12.07.23 / 13.07.23</i>		

Parameters	Unit	Method of Test	Limit as per IS 10500 : 2012		Results
			Limit (mg/l.) Desirable	Permissible Limit in the absence of alternative source	
1. Colour	Hazen	IS 3025 (Part-4)	5.0	15	< 5.0
2. pH at 25 °C	---	IS 3025 (Part-11)	6.5	8.5	7.25
3. Total Dissolved Solids	mg/l	IS 3025 (Part-16)	500.00	2000.00	310.0
4. Turbidity on NTU	NTU	IS 3025 (Part-10)	1.00	5.00	1.7
5. Total Hardness as CaCO <sub>3</sub>	mg/l	IS 3025 (Part-21)	200.00	600.00	182.0
6. Calcium as Ca	mg/l	IS 3025 (Part-40)	75.00	200.00	47.3
7. Magnesium as Mg	mg/l	IS 3025 (Part-46)	30.00	100.0	15.5
8. Iron as Fe	mg/l	IS 3025 (Part-53)	1.00	No relaxation	0.37
9. Total Alkalinity as CaCO <sub>3</sub>	mg/l	IS 3025 (Part-23)	200.00	600.00	256.0
10. Chloride as Cl	mg/l	IS 3025 (Part-32)	250.00	1000.00	24.0
11. Sulphate as SO <sub>4</sub>	mg/l	APHA (4500-E)	200.00	400.00	25.7
12. Nitrate as NO <sub>3</sub>	mg/l	APHA (4500 NO3-B)	45.00	No relaxation	3.75

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Verified by :  
Dr. Shibeshwar Prasad  
Technical Manager



Shreyasee Prasad  
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Dr. (Mrs.) Shreyasee Prasad  
Quality Manager

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## TEST REPORT

Ref. No. <i>STH/TR/23-24/2662</i>	Dt: <i>25.07.2023</i>	Your Work Order No. <i>3260</i>	Dt: <i>13.03.2023</i>
[a] Name and address of the Customer	Chief General Manager M/s Harinagar Sugar Mills (Distillery Division) P.O.: Harinagar ; W. Champaran - 845 103		
[b] Details of Sample	<i>Borewell Water Sample</i>		
[c] Sample Collected by	<i>By Pradeep Kumar (Lab Representative) of Shiva Test House on 11.07.23</i>		
[d] Sampling Location	<i>Collected from Piezometers Near Leachate Pit Yard no. 2</i>		
[e] Method of Sampling	IS 3025, APHA		
[f] Sampling Environmental Condition	Temp. (°C)	33	Humidity (%) 67
[g] Details of Sample Container (No. & Type of Container )	Plastic Bottle (02)		
[h] Sample Quantity	2 Litres		
[i] Sample Code	<i>BW-2662</i>		
[j] Sample Condition on Receipt	Fit for Analysis		
[k] Items required to be tested	As per contract.		
[l] Whether any specific Method of Test has been suggested by the customer	No		
[m] Date of receiving the sample in Laboratory	<i>12.07.23</i>		
[n] Analysis Start Date / Analysis Completion Date	<i>12.07.23 / 13.07.23</i>		

Parameters	Unit	Method of Test	Limit as per IS 10500 : 2012		Results
			Limit (mg/l.) Desirable	Permissible Limit in the absence of alternative source	
1. Colour	Hazen	IS 3025 (Part-4)	5.0	15	< 5.0
2. pH at 25 °C	---	IS 3025 (Part-11)	6.5	8.5	7.46
3. Total Dissolved Solids	mg/l	IS 3025 (Part-16)	500.00	2000.00	275.0
4. Turbidity on NTU	NTU	IS 3025 (Part-10)	1.00	5.00	2.34
5. Total Hardness as CaCO <sub>3</sub>	mg/l	IS 3025 (Part-21)	200.00	600.00	212.0
6. Calcium as Ca	mg/l	IS 3025 (Part-40)	75.00	200.00	68.08
7. Magnesium as Mg	mg/l	IS 3025 (Part-46)	30.00	100.0	10.20
8. Iron as Fe	mg/l	IS 3025 (Part-53)	1.00	No relaxation	0.34
9. Total Alkalinity as CaCO <sub>3</sub>	mg/l	IS 3025 (Part-23)	200.00	600.00	244.0
10. Chloride as Cl	mg/l	IS 3025 (Part-32)	250.00	1000.00	22.99
11. Sulphate as SO <sub>4</sub>	mg/l	APHA (4500-E)	200.00	400.00	24.68
12. Nitrate as NO <sub>3</sub>	mg/l	APHA (4500 NO3 -B)	45.00	No relaxation	3.12

SHIBESHWAR PRASAD  
Digitally signed by SHIBESHWAR PRASAD  
Date: 2023.07.25  
16:20:44 +05'30'

Verified by :  
*Dr. Shibeshwar Prasad*  
Technical Manager



Shreyasee Prasad  
Digitally signed by Shreyasee Prasad  
Date: 2023.07.25  
16:28:31 +05'30'

Authorized Signatory  
*Dr. (Mrs.) Shreyasee Prasad*  
Quality Manager

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## TEST REPORT

Ref. No. <i>STH/TR/23-24/2663</i>	Dt: <i>25.07.2023</i>	Your Work Order No. <i>3260</i>	Dt: <i>13.03.2023</i>
[a] Name and address of the Customer	Chief General Manager M/s Harinagar Sugar Mills (Distillery Division) P.O.: Harinagar ; W. Champaran - 845 103		
[b] Details of Sample	<i>Borewell Water Sample</i>		
[c] Sample Collected by	<i>By Pradeep Kumar (Lab Representative) of Shiva Test House on 11.07.23</i>		
[d] Sampling Location	<i>Collected from Piezometers Near End of boundary wall. East Side, Yard no. 2</i>		
[e] Method of Sampling	IS 3025, APHA		
[f] Sampling Environmental Condition	Temp. (°C)	33	Humidity (%) 67
[g] Details of Sample Container (No. & Type of Container )	Plastic Bottle (02)		
[h] Sample Quantity	2 Litres		
[i] Sample Code	<i>BW-2663</i>		
[j] Sample Condition on Receipt	Fit for Analysis		
[k] Items required to be tested	As per contract.		
[l] Whether any specific Method of Test has been suggested by the customer	No		
[m] Date of receiving the sample in Laboratory	<i>12.07.23</i>		
[n] Analysis Start Date / Analysis Completion Date	<i>12.07.23 / 13.07.23</i>		

Parameters	Unit	Method of Test	Limit as per IS 10500 : 2012		Results
			Limit (mg/l.) Desirable	Permissible Limit in the absence of alternative source	
1. Colour	Hazen	IS 3025 (Part-4)	5.0	15	< 5.0
2. pH at 25 °C	---	IS 3025 (Part-11)	6.5	8.5	7.31
3. Total Dissolved Solids	mg/l	IS 3025 (Part-16)	500.00	2000.00	309.0
4. Turbidity on NTU	NTU	IS 3025 (Part-10)	1.00	5.00	2.87
5. Total Hardness as CaCO <sub>3</sub>	mg/l	IS 3025 (Part-21)	200.00	600.00	309.0
6. Calcium as Ca	mg/l	IS 3025 (Part-40)	75.00	200.00	70.48
7. Magnesium as Mg	mg/l	IS 3025 (Part-46)	30.00	100.0	15.06
8. Iron as Fe	mg/l	IS 3025 (Part-53)	1.00	No relaxation	0.35
9. Total Alkalinity as CaCO <sub>3</sub>	mg/l	IS 3025 (Part-23)	200.00	600.00	264.0
10. Chloride as Cl	mg/l	IS 3025 (Part-32)	250.00	1000.00	24.99
11. Sulphate as SO <sub>4</sub>	mg/l	APHA (4500-E )	200.00	400.00	26.4
12. Nitrate as NO <sub>3</sub>	mg/l	APHA (4500 NO <sub>3</sub> -B)	45.00	No relaxation	3.34

SHIBESHWAR PRASAD  
Digitally signed by SHIBESHWAR PRASAD  
Date: 2023.07.25 16:20:57 +05'30'

Verified by :  
Dr. Shibeshwar Prasad  
Technical Manager



Shreyasee Prasad  
Digitally signed by Shreyasee Prasad  
Date: 2023.07.25 16:28:45 +05'30'

Authorized Signatory  
Dr. (Mrs.) Shreyasee Prasad  
Quality Manager

-- END OF TEST REPORT --

- This report applies only to sample tested as above.
- Total Liability of our Laboratory is limited to invoiced amount.
- Test Report endorsed only the tests and not the product certificate.
- Test Report can not be reproduced partially or full for legal/court purpose without written permission of the Laboratory.

Page 1 of 1

Contact us : 122-C, Aastha, Road No. 5A, Palliputra Colony, Patna - 800 013 (Bihar)  
Mob.: +918676886249 ; +919431047908 Email : [sthpatna1@yahoo.co.in](mailto:sthpatna1@yahoo.co.in) ; [mfo@shivatest.com](mailto:mfo@shivatest.com)  
Website : [www.shivatest.com](http://www.shivatest.com) ; [www.shivatesthouse.com](http://www.shivatesthouse.com)



# SHIVA TEST HOUSE

Patliputra Colony ; Patna – 800 013

E.mail : sthpatna1@yahoo.co.in

AMBIENT NOISE LEVEL MONITORING												
SAMPLING LOCATION	Apr.'23		May'23		Jun.'23		Jul.'23		Aug.'23		Sep.'23	
	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time
1. Near Main Gate	63.4	57.6	64.2	55.6	64.8	56.2	60.5	53.2	60.6	51.6	58.2	48.6
2. Near Boiler House	65.8	61.4	66.4	59.4	66.2	51.2	61.7	50.6	62.8	47.6	64.2	45.0
3. Near Adm. Building	53.8	50.6	54.2	51.2	53.8	50.8	62.7	48.1	62.2	45.2	62.6	44.3
4. Near South Gate	64.7	58.3	65.1	56.3	65.2	53.6	61.9	52.4	61.8	50.6	59.8	51.2
5. Near Laboratory	62.1	55.6	60.5	52.1	61.2	48.6	59.6	46.2	61.4	45.9	61.4	42.9

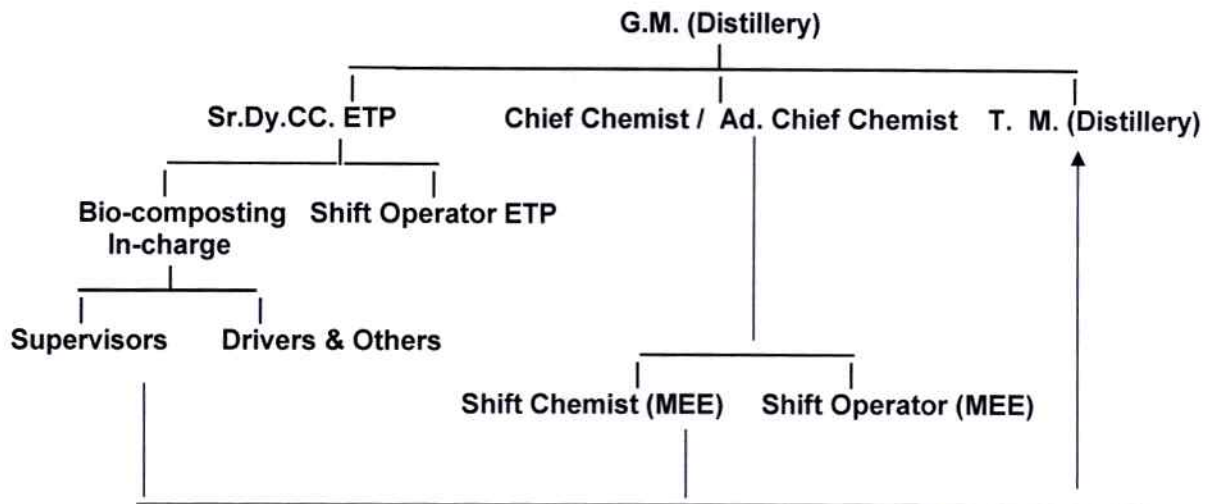
Dr. S. Prasad  
(Authorized Signatory)





HARINAGAR SUGAR MILLS LTD., DISTILLERY DIVISION), HARINAGARENVIRONMENTAL CELL

The management have qualified staff for the monitoring of environment.



**Bio-compost Analysis Report****Harinagar Sugar Mills Ltd. (Distillery Division)****Harinagar, West Champaran****Bio-Compost Report Analyzed by third party M/s Shiva Test House, Patna**

Particulars	April, 2023	May, 2023	June, 2023	July, 2023	August, 2023	Sept, 2023
Org. C. (%)	18	-	18	16	17	16
Total N (%)	1.12	-	1.12	1.3	1.8	1.1
Total P (%)	0.73	-	0.73	0.79	0.81	0.84
Total K (%)	0.88	-	0.88	0.83	0.86	0.89
Moisture (%)	25	-	25	24	26	24
C:N (ratio)	16.1	-	16.1	17:23	9:4	14:5



Dy. C.C. (E.T.P / Bio-Fertilizer )





G. M. (Distillery)



## HARINAGAR SUGAR MILLS LTD. DISTILLERY (DIVISION)

SL.NO	YEAR	NO OF EMPLOYEES TESTED FOR PERIODICAL MEDICAL EXAMINATION	TEST PERFORMED
1	2018-2019	65	X-Ray, B.P., L.F.T., Throat, Blood Test, Audiometry Test
2	2019-2020	55	X-Ray, B.P., L.F.T., Throat, Blood Test, Audiometry Test
3	2020-2021	70	X-Ray, B.P., Eye, Covid-19, Blood Test
4	2021-2022	208	X-Ray, B.P., Eye, Blood Test, vaccination above 45 and above 18 age.
5	2022-2023	207	X-Ray, B.P., Eye, Blood Test, vaccination above 45 and above 18 age.
6	2023-2024 (April 23 to Sep 23)	75	X-Ray, B.P., Eye, Blood Test, L.F.T., Throat, Blood Test, Audiometry Test

  
 Medical Officer  
 Harinagar Sugar Mills Ltd.  
 Dr. A. Bhattacharya  
 Reg. No. 46578 of  
 W.B.MC  


## हरिनगर सुगर मिल्स लि0, हरिनगर

(डिस्टीलरी डिवीजन)

दिनांक

आज दिनांक 05/06/23 को 10:15 बजे हरिनगर सुगर मिल्स(डिस्टीलरी डिवीजन) के प्रांगण में महाप्रबंधक (डिस्टीलरी) की अध्यक्षता में सेपटी ऑफिसर एवं डिस्टीलरी के वरिष्ठ पदाधिकारियों द्वारा कारखाने के सुरक्षा प्रबंधों के अन्तर्गत कार्यस्थल पर सुरक्षा एवं सुरक्षित उपायों पर विस्तृत चर्चा की गई। इस प्रशिक्षण कार्यक्रम में अग्निशामक यंत्रों के संचालन, उपयोग एवं रख-रखाव की जानकारी दी गई। कारखाना में कर्मचारियों को स्वास्थ्य एवं सुरक्षा के अन्तर्गत प्राथमिक उपचार (First Aid) उपयोग में आने वाले रसायन का रख-रखाव पर विस्तृत जानकारी दी गई।

इस प्रशिक्षण कार्यक्रम में कार्यस्थल पर PPE सुरक्षा उपकरणों (Hand Gloves, Helmet, Safety Belt, Face Mask etc.) के प्रयोग पर बल दिया गया।

इस कार्यक्रम में निम्नलिखित कर्मचारियों ने भाग लिया :-

क्रम सं0	कर्मचारी का नाम सर्वश्री	हस्ताक्षर
01.	मनोज यादव	Manoj Yadav
02.	शनि कुमार	
03.	राकेश रंजन	Rakesh Ranjan
04.	सुनील कुमार	Sunil Kumar
05.	लालबहादुर	Lal Bahadur
06.	पन्नालाल प्रजापति	Pannalal Prजापति
07.	जाहिद हुसैन	Zahid Hussain
08.	मुकेश कुमार	Mukesh
09.	अंशुमन कुमार	Anshuman
10.	रंजन सिंह	Ranjan Kumar Singh
11.	केदार साह	Kedar Sah
12.	योगेन्द्र राम	Yogendra Ram
13.	विजययादव	Vijay Yadav
14.	विद्या तिवारी	Vidya Tiwari



कम सं०	कर्मचारी का नाम सर्वश्री	हस्ताक्षर
15.	बृजेश साह	
16.	संतोष यादव	
17.	सुशील पाण्डेय	
18.	त्रिभुवन सिंह	
19.	राधेश्याम गुप्ता	
20.	जेड सिंह	
21.	अखिलेश यादव	
22.	कुन्दन कुमार	
23.	संजय दत्त पंत	
24.	विपिन मिश्रा	
25.	अनुप्राश तिवारी	

26. दुर्गेश यादव  
27. अजीत सिंह

Durgesh Yadav

उपस्थित वरिष्ठ पदाधिकारियों का नाम

कम सं०	पदाधिकारी का नाम सर्वश्री	हस्ताक्षर
01.	प्रेम प्रकाश शर्मा	
02.	रामजी भक्त	
03.	संजीव कुमार झा	
04.	जीवन शर्मा	
05.	राम प्रवेश	
06.	योगेश उपाध्याय	
07.		

सेफ्टी ऑफिसर

महाप्रबंधक (डिस्टीलरी)

**HARINAGAR**Empowering Generations  
Since 1933

Ref. No. ....1483.....

Date 11-09-2023

To,  
The Member-Secretary,  
Bihar State Pollution Control Board,  
Parivesh Bhawan, N.B. 2 Patliputra,  
Industrial Area,  
Back to P. N. Mall  
Patna – 13

Subject: Environment Impact Assessment for the year 2022-2023

Sir,

We are hereby submitting Environment Impact Assessment for the year 2022-23 for your ready reference.

Thanking you.

For Harinagar Sugar Mills Ltd

  
G. M. (Distillery)  
Chief General Manager

Encl.: As above

Cc : The Regional Officer, Bihar State Pollution Control Board, Industrial Estate, R. K. Ashram Chowk, Bela, Muzaffarpur (Bihar)  
Additional Director (MoEF&CC), Regional Office 2<sup>nd</sup> floor Headquarter  
Jharkhand State Housing Board, Harmu Chowk, Ranchi Jharkhand-834002.

Harinagar Sugar Mills Ltd.



**Environmental Statement for the Financial Year 202-223**  
**Ending on the 31<sup>st</sup> March 2023**

**Part – A**

01.	Name and address of the Owner/Occupier of the Industry, operation or process	Shri L. B. Agrawal Harinagar Sugar Mills Ltd., P. O. Harinagar-845103 Dist. West Champaran (Bihar)
02.	Industry Category Primary (STC Code) Secondary m (SIC Code)	Major (Distillery)
03.	Date of last environmental Statement submitted	06-06-2022

**Part – B**

**1. Requirement of Water**

(Ground water withdrawal 1475 cum/day NOC : CGWA NOC no- CGWA/NOC/IND/REN/1/2021/6340 and application No - 21- 4/257/BR/IND2017 Valid from 04/10/2020 to 03/10/2023. Copy enclosed (ANNEX-I)

Components	Total Water Requirement (KLD)	Fresh Water Requirement (KLD)	Recycle Water Uses (KLD)	As per actual after recycle (KLD)
Process Water	734	332	402	510
Soft Water	842	327	515	210
DM Water	862	361	501	240
<b>TOTAL</b>	<b>2438</b>	<b>1020</b>	<b>1418</b>	<b>960</b>

Name of Products.	Process Water Consumption per Unit of Product Output.	
	During the previous Financial Year 2021-22	During the Current Financial Year 2022-23
R. S. / Ethanol	107241.00 K.L	86072.00 K.L  Enclosed , ANNEX-II

**2.Raw Material Consumption**

Name of Raw Materials	Name of Products	Consumption of Raw materials per unit of output	
		During the Current Financial Year 2021-22	During the Current Financial Year 2022-23
		(1)	(2)
Molasses (In Qtls.)	R. S.	835368.00	1124837.00
Urea/ NatuNutr (In Kgs.)	Product /	9945.00	2675.00
DAP (In Kgs.)	Ethanol	0.00	0.00
Enzyme (In Kgs.)		1345.00	2261.00
Sulphuric Acid (In Kgs.)		27000.00	64910.00

**Part – C**

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

(1)	Pollutants	Concentration of Pollutants in Discharge (mass/ volume)	Percentage or variation from Prescribed standard with reason
(a)	Water	Zero Discharge	Within norms.
(b)	Stack Emission i) Particulate Matter (PM)  ii) Sulphur Dioxide ( SO <sub>2</sub> )  iii) Nitrogen Dioxide ( NO <sub>2</sub> )	43.8 mg /N M <sup>3</sup>  10.2 mg / NM <sup>3</sup>  43.7mg /N M <sup>3</sup>	Within norms Reports, Analyzed by third party Shiva Test House Patna Month October-22 to March 23 Enclosed as ANNEX -III

**Part – D**

**Hazardous Wastes**

**As Specified under Hazardous Wastes, Management and Handling Rules, 1989**

Hazardous Wastes	Total Quantity (Kg./Ltr)	
	During the previous Financial Year 2021-22	During the current Financial Year 2022-23
(a) From Process	Turbine Oil (135.00 Ltr)	Turbine Oil ( 150.00 Ltr) Copy enclosed (ANNEX-IV)
(b) From Pollution Control facilities	NA	NA

**Part – E**

**Solid Wastes**

	Total Quantity	
	During the previous Financial Year 2021-22	During the current Financial Year 2022-23
(a) From Process	2389.50 M.T. The separated sludge from Decanter & transferred to Bio-compost for decomposition & thereafter utilized as manure to improve soil structure.	3060.60 M.T. The separated sludge from Decanter and cleaning of lagoon and Ash transferred to Bio-compost for decomposition & thereafter utilized as manure production, (ANNEX-V)
(b) From Pollution control facilities	Bio-compost Treatment	Bio-compost Treatment



(c) Quantity recycled or reutilized within the unit	The Total quantity of sludge and Ash transfer to Bio- compost to enrich to improve quality of organic manure.	The Total quantity of sludge and Ash transfer to Bio- compost to enrich to improve quality of organic manure.
a. Sold	Sold	Sold
b. Disposed	Zero Liquid Discharge( ZLD)	Zero Liquid Discharge( ZLD)ZLD

### Part – F

**Please specify the characterization (in terms of composition and quantum) of hazardous as well as solid waste and indicate disposal practice adopted for both those categories of waste.**

The total generated spent wash is sent to the decanter to separate suspended solids then send to settling pit storage & further settling of suspended solids and thus to reduce the raw spent wash quantity. The decanted water is fed to the Bio Gas digester for the degradation of COD & BOD up to 70% of COD & 90% of BOD. The Biomethanated Spent Wash Evaporation cum Condensate & Stripping system has been installed to reduce the further effluent up to 30% & the same will be utilized on Press-mud to produce Bio-compost. The reduced effluent by BMSW Evaporator discharge into the lagoon. The storage lagoon is lined with the HDPE sheeting & brick soling. The storage effluent is sent to the Bio-compost for spraying on windrows with the help of 5 nos. of side Aero tiller Machine having capacity of 60 M<sup>3</sup>/hour. Evaporation of spent wash is taken place due to heat generation. We have sufficient land of Bio-compost for the consumption of generated Spent wash. Thus no discharge of effluent into the land. This is the main cause of compliance the norms of zero discharge of plant. The leachate is being received into the sump and leachate water is spraying over the windrows of Press-mud. Now we are manufacturing the Bio-fertilizer to further enrichment of Bio-compost. The report of Ethanol Production, Spent Wash Generation, Spent wash Consumption, Press-mud Production & Consumption, Ready Bio-compost production, Sale & Bio-Gas Production **April 2022 to March 2023** are enclosed as **ANNEXURE-VI**. The month wise statement of Analysis report of Raw spent wash, Treated Spent Wash, Piezometers, Ground water, Stack emission, Air ambient quality & Noise level monitoring report from **Oct 2022 to March 2023** are enclosed as **ANNEXURE – VII**

Report of Analyzed parameters of spent wash generation & its treatment are enclosed as **ANNEXURE –VIII**.

The plant was visited by CPCB & BSPCB during Distillery operation period time to time.

### Part – G

**Impact of Pollution abatement measures taken on conservation of natural resources & on the cost of production.**

Green Belt have developed all round the industry areas like Bio-compost, Lagoon and in own land about 8.2 acres and about 1,92,817 Nos. of trees planted .We have deputed a qualified person to look after the growth of trees plantation along with the working staff & such a way we have taken .measures for impact of pollution control. The survival rate of plants is around 75%. We have developed wide greenbelt along the periphery of the Distillery project, around 33% of the total project area. **ANNEXURE – IX**

## Part – H

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

Care for environment is integrated part of unit culture. So the technology of Distillery is adopted very up-gradation in standard. Cleanliness, maintenance and house keeping is also followed by us carrying for environment protection. The BMSW MEE cum Stripper System is installed to reduce the pollution load & recycle the clear condensate in the process & concentrated at Bio-compost.

## Part – I

### **Any other particulars for improving the quality of environment –**

For improving the quality of environment, we have installed the multi cyclone with dust collector with ESP boiler having 65 Meter of chimney height. Stack emission point have provided and three air ambient point have located from up stream to down stream as – (i) North gate of Distillery (ii) E. T. P. (iii) South gate of Distillery (iv) Although lagoon and Bio-compost area prepared to compacted land with lining of HDPE and Brick Soling. Yet, we have 7 Nos. of Piezometer nearby E.T.P. Lagoon, Bio Compost in which one No. at E.T.P. near Bio-digester / B.M.S.W. M.E.E. Plant & 6 Nos. are at near lagoon & Bio Compost Yard which are monitored by us & reports are enclosed & third party on monthly basis reports of Air Ambient, Stack emission and Ground Water nearby Bio-compost & Distillery are also enclosed. To monitor the working of Bio-compost and effluent handling we have installed PAN TILT ZOOM Camera at site and also we have been installed Online Stack Monitoring Equipments to monitor stack emission & these devices (Flow meter, web camera & stack monitoring system) are connected with CPCB server as per direction of CPCB.

**For Harinagar Sugar Mills Ltd.**

  
**G. M. (Distillery)**

  
**Chief General Manager**



# ANNEXURE-I



भारत सरकार  
जल शक्ति मंत्रालय  
जल ससाधन, नदी विकास  
और गंगा संरक्षण विभाग  
केन्द्रीय भूमि जल प्राधिकरण  
Government of India  
Ministry of Jal Shakti  
Department of Water Resources,  
River Development & Ganga Rejuvenation  
Central Ground Water Authority

(भूजल निकासी हेतु अनापत्ति प्रमाण पत्र)

## NO OBJECTION CERTIFICATE (NOC) FOR GROUND WATER ABSTRACTION

Project Name:	Harinagar Sugar Mills Ltd. (distillery Division)		
Project Address:	Vill : Harinagar, Block : Ramnagar, Tehsil : Ramnagar		
Town:	Ramnagar (np)	Block:	Ramnagar
District:	Pashchim Champaran	State:	Bihar
Pin Code:			
Communication Address:	Harinagar, Ramnagar, West Champaran, Ramnagar, Pashchim Champaran, Bihar - 845103		
Address of CGWB Regional Office :	Central Ground Water Board Mid Eastern Region, 6th & 7th Floor, Lok Nayak Jai Prakash Bhawan, Frazer Road Dak Banglow, Patna, Bihar - 800011		

- |  |                              |                 |            |
|--|------------------------------|-----------------|------------|
| 1. NOC No.:                            | CGWA/NOC/IND/REN/1/2021/6340 | 3. Category:    | Safe       |
| 2. Application No.:                    | 21-4/257/BR/IND/2017         | (GWRE 2020)     |            |
| 4. Project Status:                     | Existing Ground Water        | 5. NOC Type:    | Renewal    |
| 6. Valid from:                         | 04/10/2020                   | 7. Valid up to: | 03/10/2023 |
| 8. Ground Water Abstraction Permitted: |                              |                 |            |

Fresh Water		Saline Water		Dewatering		Total	
m <sup>3</sup> /day	m <sup>3</sup> /year	m <sup>3</sup> /day	m <sup>3</sup> /year	m <sup>3</sup> /day	m <sup>3</sup> /year	m <sup>3</sup> /day	m <sup>3</sup> /year
1475.00	400150.00						

9. Details of ground water abstraction /Dewatering structures

Abstraction Structure*	Total Existing No.:1						Total Proposed No.:0					
	DW	DCB	BW	TW	MP	MPu	DW	DCB	BW	TW	MP	MPu
	0	0	1	0	0	0	0	0	0	0	0	0

\*DW- Dug Well; DCB-Dug-cum-Bore Well, BW-Bore Well, TW-Tube Well, MP-Mine Pit,MPu-Mine Pumps

- |   |                    |                      |
|---|--------------------|----------------------|
| 10. Ground Water Abstraction/Restoration Charges paid (Rs.):                                      | 600225.00          |                      |
| 11. Number of Piezometers(Observation wells) to be constructed/ monitored & Monitoring mechanism. | No. of Piezometers | Monitoring Mechanism |

	Manual	DWLR**	DWLR With Telemetry
**DWLR - Digital Water Level Recorder	2	0	1

(Compliance Conditions given overleaf)

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18/11, जामनगर हाउस, मानसिंह रोड, नई दिल्ली - 110011 / 18-11, Jamnagar House, Mansingh Road, New Delhi-110011

Phone: (011) 23383561 Fax: 23382051, 23386743

Website: cgwa-noc.gov.in

पानी बचाए - जीवन बचाए  
SAVE WATER - SAVE LIFE

**HARINAGAR SUGAR MILLS LTD. (DISTILLERY DIVISION)****STATEMENT OF WATER CONSUMPTION FROM BOREWELL IN F.Y. 2022-2023**

MONTH	BOREWELL WATER (M <sup>3</sup> ) / MONTH	Remark
Apr-22	7120.00	In the month of July 2022 figures shown zero due to shutdown of Distillery
May-22	5465.00	
Jun-22	7435.00	
Jul-22	0.00	
Aug-22	1297.00	
Sep-22	2100.00	
Oct-22	9268.00	
Nov-22	3895.00	
Dec-22	16930.00	
Jan-23	14339.00	
Feb-23	9895.00	
Mar-23	8328.00	
<b>TOTAL</b>	<b>86072.00</b>	

*Ramprasad*  
Sr. Dy. C. C. (ETP)

*G. M.*  
G. M. (Distillery)

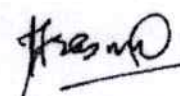



# SHIVA TEST HOUSE

Patliputra Colony ; Patna – 800 013

E.mail : sthpatna1@yahoo.co.in

35 TPH BOILER STACK EMISSION MONITORING DATA							
PARAMETERS	Unit	Oct '22	Nov '22	Dec '22	Jan '23	Feb '23	Mar '23
1. Particulate Matter (M)	mg/NM <sup>3</sup>	NA	43.4	45.8	46.7	45.3	43.8
2 Sulphur Dioxide (SO <sub>2</sub> )	mg/NM <sup>3</sup>		13.3	12.3	12.3	13.5	10.2
3 Nitrogen Dioxide (NO <sub>2</sub> )	mg/NM <sup>3</sup>		56.8	54.5	56.9	54.5	43.7

  
**Dr. S. Prasad**  
(Authorized Signatory)







**FORM 4**

[See rules 6(5), 13(8), 16(6) and 20(2)]

**FORM FOR FILING ANNUAL RETURNS****[To be submitted to State Pollution Control Board by 30<sup>th</sup> day of June of every year for preceding period April to March]**

1.	Name and address of facility	Harinagar Sugar Mills Ltd. (Distillery Division) Post Harinagar, District West Champan(Bihar) PIN- 845 103
2.	Authorization No. and Date of issue	HW/B-281 dated 21-05-2018
3.	Name of the authorized person and full address with telephone, fax number and e-mail	Shri H.K. Yadava, G.M.(Distillery) Harinagar Sugar Mills Ltd. (Distillery Division) Post Harinagar, District West Champan(Bihar) PIN- 845 103 Telephone No. - 06256-224223 Fax No. 06256-224215 E-mail: harinagarsugar@gmail.com
4.	Production during the year, 2022-23 (product wise), wherever applicable	Ethanol- 31688177.71 B.L.

**Part A, To be filled by hazardous waste generators**

1.	Total quantity of waste generated category wise	Used turbine oil -Aturbrio 46 Stock at beginning year 1 <sup>st</sup> April 2022=0.00 Ltrs Generated 1 <sup>st</sup> April 22 to March, 23=150.00 Ltrs.
2.	Quantity dispatched	Nil
	i) to disposal facility	Re-used
	ii) to recycler or co-processors or pre-processor	Re-cycled
	iii) Others	Nil
3.	Quantity utilized in-house, if any	150.00 Ltrs.
4.	Quantity in storage at the end of the year 2022-23	Nil

**Part B, To be filled by Treatment, storage hazardous waste generators**

1.	Total quantity received	Not Applicable
2.	Quantity in stock at the beginning of the year 2022	Not Applicable
3.	Quantity treated	Not Applicable
4.	Quantity disposed in landfills as such and after treatment	Not Applicable
5.	Quantity incinerated (if applicable)	Not Applicable

6.	Quantity processed other than specified above	Not Applicable
7.	Quantity in storage at the end of the year 2022-23	Not Applicable

**Part C, To be filled by recyclers or co-processors or other users**

1.	Quantity of waste received during the year 2022-23	Not Applicable
	i. domestic sources	Not Applicable
	ii. imported (if applicable)	Not Applicable
2.	Quantity in stock at the beginning of the year 2022	Not Applicable
3.	Quantity recycled or co-processed or used	Not Applicable
4.	Quantity of products dispatched (wherever applicable)	Not Applicable
5.	Quantity of waste generated	Not Applicable
6.	Quantity of waste disposed	Not Applicable
7.	Quantity re-exported (wherever applicable)	Not Applicable
8.	Quantity in storage at the end of the year 2022-23	Not Applicable

*H Yadava*

Signature of the Occupier or  
Operator of the disposal facility

Place: Harinagar



## HARINAGAR SUGAR MILLS LTD. (DISTILLERY DIVISION)

STATEMENT OF SLUDGE GENERATION IN F.Y. April -2022 to March- 2023

MONTH	GENERATION (IN M.T.)	Remark
Apr-22	69.60	It is stored near lagoon biocompost yard and after dry it is utilised in biocompost
May-22	84.00	
Jun-22	205.20	
Jul-22	540.80	
Aug-22	487.20	
Sep-22	25.50	
Oct-22	76.80	
Nov-22	56.00	
Dec-22	87.20	
Jan-23	120.80	
Feb-23	107.20	
Mar-23	124.80	
<b>TOTAL</b>	<b>1985.10</b>	

Ram Prasad  
Dy. C. C. ETP/Bio-Fertilizer

  
G. M. (Distillery)

HARINAGAR SUGAR MILLS LTD. (DISTILLERY DIVISION)

STATEMENT OF ASH GENERATION IN F.Y . April-22 to March- 2023

MONTH	GENERATION (IN M.T.)	Remark	
Apr-22	106.00	In the month of July , August and Sept 2022 figures shown zero due to shutdown of Distillery Boiler	
May-22	117.00		
Jun-22	76.50		
Jul-22	0.00		
Aug-22	0.00		
Sep-22	66.50		
Oct-22	100.00		
Nov-22	98.50		
Dec-22	133.00		
Jan-23	130.00		
Feb-23	116.50		
Mar-23	131.50		
<b>TOTAL</b>	<b>1075.50</b>		

Ram Kaveri  
Dy. C. C. ETP/Bio-Fertilizer

G. M. (Distillery)



## Central Pollution Control Board Format for evaluation of Distillery ETP performance

Name of the Distillery: M/s Harinagar Sugar Mills Ltd. Distillery Division

Date: 11-04-2023

Address: Harinagar, West Champaran, Bihar

Capacity of the Distillery:

A. A. 120 KLPD on C-Hy / 200 KLPD B-Hy / Cane Syrup ; 3,24,00,000 / 5,40,00,000 Lit/Annum  
 ((Vide EC Letter No.IA-J-11011/463/2017-IA-II(I) Date 26-11-2018) & CTO for 200 KLPD of Ethanol  
 Production on using B-Hy / Cane Syrup Molasses by BSPCB, Patna on dated 28-10-2022.

Distillery ETP Configuration:

Fermentation & Distillation followed by Bio-methanation followed by BMSW MEE  
 cum Degasification & Condensate Stripping System followed by Bio-composting

SPENT WASH CONCENTRATION SECTION									
Month	Total Alcohol Production	Raw Spent Wash generation as per online mass flow meter	Spent wash generation per liter of Alcohol produced	Raw Spent wash Total Solids	Cumulative Raw Spent wash generation as per online mass flow meter totaliser	Conc. Spent wash generation as per online mass flow meter	Conc. Spent wash Total Solids	Cumulative Conc. Spent wash generation as per online mass flow meter totaliser	Condensate quantity generated
	Liters	MT	Liter/Liter	%	MT	MT	%	MT	MT
April-22	3600093.58	21605	6.0	5.2	21605	8230	30.0	8230	21230
May-22	3720019.40	22050	6.0	4.5	43655	8810	28.0	17040	24105
June-22	1811241.17	10655	6.0	4.7	54310	6310	28.0	23350	16320
July-22	0.00	0	0.0	0.0	54310	0	0.0	23350	0
August-22	0.00	0	0.0	0.0	54310	0	0.0	23350	0
September-22	1680022.86	12550	7.2	4.5	66860	4141	30.0	27491	10986
October-22	2296027.36	19742	8.9	5.5	86602	6587	30.0	34078	18949
November-22	2204760.44	12885	6.4	5.2	99487	6070	29.0	34078	20045
December-22	4316001.89	19585	4.5	4.8	119072	8260	29.0	48408	21340
January-23	3820002.84	26940	7.1	5.4	146012	8735	28.0	57143	24299
February-23	3910004.46	18020	4.5	4.6	183822	9230	28.0	76563	22175
March-23	4330003.71	19790	4.53	5.2	183822	10190	29.0	76563	22240
<b>Total</b>	<b>31688177.71</b>	<b>183822.00</b>	<b>4.53</b>	<b>5.2</b>	<b>183822</b>	<b>76563.00</b>	<b>29.0</b>	<b>76563</b>	<b>201689</b>

Ramkumar

Sr. Dy Chief Chemist (ETP/ Bio-Fertilizer)

  
 G.M. (Distillery)

**Central Pollution Control Board Format for evaluation of Distillery ETP performance**

Name of the Distillery: M/s Harinagar Sugar Mills Ltd. Distillery Division

Date: 11-04-2023

Address: Harinagar, West Champaran, Bihar

Capacity of the Distillery: A. A. 120 KLPD on C-Hy / 200 KLPD B-Hy & Cane Syrup ; 3,24,00,000 / 5,40,00,000 Lit/Annum (Vide EC Letter No.IA-J-11011/463/2017-IA-II(I) Date 26-11-2018) & CTO for 200 KLPD of Ethanol Production on using B-Hy / Cane Syrup Molasses by BSPCB, Patna on dated 28-10-2022.

Distillery ETP Configuration: Fermentation & Distillation followed by Bio-methanation followed by BMSW MEE cum Degasification & Condensate Stripping System followed by Bio-composting

Month	Press Mud Cake Procured	Press Mud Cake (PMC) consumption 14000 MT (In Process)		Concentrated Spent Wash Consumption			Concentrated spent wash to PMC ratio achieved	Distance travelled by aerotiller machine					Bio-compost Produced OB=30475.92	Quality of Bio-compost				Bio-compost Sold		
		MT	MT/ Windrow	MT/Month	Totalizer Reading	MT/ Windrow		MT/Month	M-1 Km	M-2 Km	M-3 Km	M-4 Km		M-5 Km	MT	N (%)	P (%)		K (%)	Moisture (%)
Apr-22	0.00	0.00	0.00	7320.00	5.00	7320.00	1:0.52	55.50	26.00	50.50	53.50	0.00	0.00	1.06	0.74	0.84	28.00	2129.76		
May-22	0.00	0.00	0.00	5350.00	5.00	12670.00	1:0.91	35.50	28.00	28.00	32.00	0.00	0.00	1.28	0.73	0.91	27.00	2398.10		
Jun-22	0.00	0.00	0.00	4100.00	5.00	16770.00	1:0.56	28.00	22.00	26.00	28.00	0.00	0.00	1.24	0.74	0.93	26.00	1433.34		
Jul-22	0.00	0.00	0.00	2750.00	5.00	19520.00	1:1.39	30.00	21.00	12.00	0.00	0.00	0.00	1.18	0.75	0.91	25.00	585.22		
Aug-22	0.00	0.00	0.00	0.00	0.00	19520.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.01	0.61	0.82	24.00	85.15		
Sep-22	0.00	9800.00	9800.00	1800.00	5.00	21320.00	1:1.025	21.50	25.00	0.00	0.00	0.00	4200.00	1.12	0.64	0.88	26.00	295.82		
Oct-22	0.00	0.00	0.00	6270.00	0.00	27590.00	1:1.22	44.50	52.50	0.00	0.00	0.00	0.00	1.02	0.72	0.82	32.00	1050.99		
Nov-22	7990.00	0.00	0.00	5200.00	0.00	32790.00	1:1.35	46.00	43.50	0.00	0.00	0.00	0.00	1.06	0.74	0.86	28.00	2642.86		
Dec-22	15233.80	23200.00	33000.00	6930.00	5.00	39720.00	1:1.20	50.50	21.00	36.50	22.00	0.00	3500.00	1.12	0.78	0.88	29.00	3412.52		
Jan-23	15133.70	18050.00	51050.00	8000.00	5.00	47720.00	1:1.15	51.00	27.00	64.00	0.00	0.00	7500.00	1.04	0.80	0.86	32.00	5111.12		
Feb-23	13523.70	0.00	51050.00	8400.00	5.00	63870.00	1:1.09	75.50	25.00	56.50	0.00	0.00	0.00	1.12	0.84	0.80	27.30	4144.88		
Mar-23	6963.30	16400.00	67450.00	7750.00	5.00	63870.00	1:1.2	73.00	62.00	31.00	0.00	0.00	5700.00	1.12	0.89	0.79	28.00	3798.05		
<b>Total</b>	<b>58844.50</b>	<b>67450.00</b>	<b>67450.00</b>	<b>63870.00</b>	<b>5.00</b>	<b>63870.00</b>	<b>1:1.2</b>	<b>511.00</b>	<b>353.00</b>	<b>304.50</b>	<b>82.00</b>	<b>0.00</b>	<b>51375.92</b>	<b>1.12</b>	<b>0.89</b>	<b>0.80</b>	<b>27.30</b>	<b>27087.81</b>		

*Ram Pravega*  
Sr. Dy. Chief Chemist (ETP/ Bio-Fertilizer)

*G. M.*  
G. M. (Distillery)



M/s HARINAGAR SUGAR MILLS LTD. (DISTILLERY DIVISION), HARINAGAR (WEST CHAMPARAN), BIHAR

Monthwise statement showing details of Alcohol Production, Spent Wash Generation / MEE Feed & Consumption of Strong Spent Wash, Press-mud Available, Production, Utilized,

Bio-compost Production & Sold and Bio-Gas Production for the F. Y. 2022-23

DATE: 11-04-2023

Month	Alcohol Production	Spent Wash Details							Press-mud Details					Bio-compost Details			Bio Gas Generation	
		Generation of Spent Wash from Distillation Plant R.S.W. + Misc.	Weak Spent Wash Feed in MEE Plant		Strong Spent Wash after MEE Plant		Closing Balance of Weak Spent Wash (a + d - b)	Consumption of Strong Spent Wash on Bio-compost	Closing Balance of Strong Spent Wash	Available	Production		Utilized	Closing Balance	Production	Sold		Closing Balance
			Own	Purchased														
		(a)	(b)		(c)		(d)	(e)	c - e = (f)									
Unit	B.L.	M <sup>3</sup>	M <sup>3</sup> /Month	MT/Month	M <sup>3</sup> /Month	MT/Month	M <sup>3</sup>	M <sup>3</sup>	M <sup>3</sup>	Tons	Tons	Tons	Tons	Tons	Tons	Tons	M <sup>3</sup>	
O.B. on 01-04-2022		3837.00			0.00				1841.00	25917.74			In Process 14000		O.B. 30475.92			
April, 2022	3600093 58	21345+8640+2655	28515 00	29270 00	7285 00	8230 00	8142 00	7320(spray)+180(Recycle)	1626 00	25917 74	0 00	0 00	0 00	25917 74	0 00	2129 76	28346 16	844800
May, 2022	3720019 40	21460+8920+1665	31985 00	32660 00	7880 00	8810 00	8617 00	5350(spray)+415(Recycle)	3741 00	25917 74	0 00	0 00	0 00	25917 74	0 00	2398 10	25948 06	816200
June, 2022	1811241 17	10400+4485+1000	21825 00	22265 00	5505 00	6310 00	3107 00	4100(spray)+430(Recycle)	4716 00	25917 74	0 00	0 00	0 00	25917 74	0 00	1433 34	24514 72	398000
July, 2022	0 00	0	0 00	0 00	0 00	0 00	3107 00	2750 00	1966 00	25917 74	0 00	0 00	0 00	25917 74	0 00	585 22	23929 50	0
August, 2022	0 00	0	0 00	0 00	0 00	0 00	3107 00	2750 00	1966 00	25917 74	0 00	0 00	0 00	25917 74	0 00	85 15	23844 35	0
September, 2022	1680022 86	12240+1760+490	14745 00	15245 00	3759 00	4141 00	3117 00	1800(spray)+265(Recycle)	3660 00	25917 74	0 00	0 00	9800 00	16117 74	4200 00	295 82	27748 53	0
October, 2022	2296027 36	19025+7970+1660	24830 00	25800 00	5881 00	6587 00	6942 00	6270(spray)+0(Recycle)	3271 00	25917 74	0 00	0 00	0 00	16117 74	0 00	1050 99	26697 54	75100
November, 2022	2204760 44	12720+6025+1860	25385 00	25920 00	5340 00	6070 00	2892 00	5200(spray)+730(Recycle)	2861 00	25917 74	7990 00	0 00	0 00	24107 74	0 00	2642 86	24054 68	380300
December, 2022	4316001 89	19330+8420+2740	28710 00	29160 00	7370 00	8260 00	4672 00	6930 00	3121 00	25917 74	15233 80	0 00	23200 00	16141 54	3500 00	3412 52	24142 16	685750
January, 2023	3820002 84	26170+8725+1940	32080 00	32870 00	7781 00	8735 00	9427 00	8000 00	2902 00	25917 74	15133 70	0 00	18050 00	13225 24	7500 00	5111 12	26531 04	898000
February, 2023	3910004 46	17606+9440+1410	30380 00	31180 00	8205 00	9230 00	6003 00	8400 00	2702 00	25917 74	13523 70	0 00	0 00	26748 94	0 00	4144 88	22386 10	840290
March, 2023	4330003 71	19486+1430+9000	31155 00	32360 00	8915 00	10190 00	4764 00	7750 00	3867 00	25917 74	6963 30	0 00	16400 00	17312 24	5700 00	3798 05	24288 11	468960
Total	31688177.71	268517.00	269610.00	276730.00	67921.00	76563.00	4764.00	63870.00	3867.00	25917.74	58844.50	0.00	67450.00	17312.24	51375.92	27087.81	24288.11	5407400

Note: 1. All Upstream/Downstream parameters are analyzed by own laboratory for the month of March, 2023 Analysis report is enclosed.

2. Upstream /Downstream, Distillery borewell and bio-compost borewell Analysis report of third party by Shiva Test House, Patna for the month of March, 2023 is enclosed.

Rambhadr  
Sr. Dy. Chief Chemist (ETP/ Bio-Fertilizer)

G. M. (Distillery)



## HARINAGAR SUGAR MILLS LIMITED (DISTILLERY DIVISION), HARINAGAR

## ANALYSIS REPORT OCTOBER 2022 TO MARCH 2023

E Ground Water Analysis Report from Factory Borewell		All Parameters are analyzed by third party Shiva Test House, Patna					
Sampling date		15.10.22	22.11.22	26.12.22	17.01.23	13.02.23	06.03.23
1	Location						
2	Colour	Hazen	<5.00	<5.00	<5.00	<5.00	<5.00
3	pH		7.32	7.51	7.05	7.61	7.63
4	Total Dissolved Solids	mg/l.	219.0	248	247.0	256.0	249.0
5	Turbidity on NTU	NTU	0.9	0.8	<1.00	<1.00	0.7
6	Total Hardness as CaCo3	mg/l.	198.0	178	202	182	158
7	Calcium as Ca	mg/l.	49.7	45.7	51.3	38.4	35.2
8	Magnesium as Mg	mg/l.	18.0	15.5	18.0	20.9	17.0
9	Iron As Fe	mg/l.	0.33	0.26	0.35	0.36	0.34
10	Total Alkalinity as CaCo3	mg/l.	226.0	208	226	202	184
11	Chloride as Cl	mg/l.	19.0	12.0	18.0	16.0	14.0
12	Sulphate as So4	mg/l.	22.2	20.4	24.1	24.7	33.1
13	Nitrate as No3	mg/l.	1.48	1.28	1.42	1.53	1.67
14	Phosphate as Po4	mg/l.	0.19	0.12	-	0.1	0.11
F Ground Water Analysis Report from near Biocomposting							
1	Location						
2	Colour	Hazen	<5.00	<5.00	<5.00	<5.00	<5.00
3	ph		7.39	7.48	7.54	7.52	7.47
4	Total Dissolved Solids	mg/l.	234	246	261	262	276
5	Turbidity on NTU	NTU	0.9	0.9	<1.00	<1.00	0.8
6	Total Hardness as CaCo3	mg/l.	200	182	206.0	180.0	188.0
7	Calcium as Ca	mg/l.	49.7	45.7	52.9	40.0	40.8
8	Magnesium as Mg	mg/l.	18.5	16.5	18.0	20.9	20.9
9	Iron As Fe	mg/l.	0.35	0.32	0.38	0.34	0.36
10	Total Alkalinity as CaCo3	mg/l.	218	208	232.0	208.0	210.0
11	Chloride as Cl	mg/l.	21.0	19.0	20.0	19.0	18.0
12	Sulphate as So4	mg/l.	22.6	21.2	24.3	22.6	23.4
13	Nitrate as No3	mg/l.	1.6	1.50	1.5	1.63	1.71
14	Phosphate as Po4	mg/l.	0.17	0.15	-	0.13	0.11
G Effluent Sample Before Digester							
1	pH		-	4.65	4.61	4.53	4.64
2	Total Suspended Solids	mg/l.	-	16180	17200	17600	15670
3	B. O. D.	mg/l.	-	70000	75000	80000	75000
4	C. O. D.	mg/l.	-	150000	154000	158000	148000
H Effluent Sample After Digester							
1	pH		-	7.63	7.69	7.67	7.62
2	Total Suspended Solids	mg/l.	-	8600	8400	8500	8540
3	B. O. D.	mg/l.	-	152000	18000	20000	16000
4	C. O. D.	mg/l.	-	44000	48000	52000	51200
I Boiler Stack Emission							
Sampling date			22.11.22	20.12.22	17.01.23	13.02.23	06.03.23
1	Particular Matter (P.M.)	Mg/NM <sup>3</sup>	-	43.4	45.8	46.7	45.3
2	Sulphur Dioxide (So2)	Mg/NM <sup>3</sup>	-	13.3	12.3	12.3	13.5
3	Nitrognedioxide as NO2	Mg/NM <sup>3</sup>	-	56.8	54.5	56.9	54.5
J Ambient Noise Level							
Sampling date			14.10.22	21.11.22	25.12.23	16.01.23	12.02.23
1	Near Main Gate	dB(A)	61.2	61.4	57.1	59.1	61.3
2	Near Boiler House	dB(A)	63.6	64.8	56.3	64.7	64.4
3	Near ADM Building	dB(A)	54.9	63.8	58.2	55.2	63.1
4	Near South Gate	dB(A)	51.2	61.5	59.6	62.3	59.4
5	Near Laboratory	dB(A)	58.7	63.1	55.7	63.5	64.1

Ramkrishna  
Sr. Dy. C. C. (ETP / Bio-Fertilizer)

101  
G. M. (Distillery)

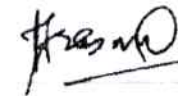


# SHIVA TEST HOUSE

Patliputra Colony ; Patna – 800 013

E.mail : sthpatna1@yahoo.co.in

ANALYSIS OF PIEZOMETER WATER SAMPLE					
	UNIT	Piezometers No.1, Near ETP	Piezometer No.2, Near lagoon, 3 <sup>rd</sup> Yard, Bio-compost area	Piezometer No.3, Near 01 <sup>st</sup> yard, Bio- compost area	Piezometer No. 4, Near 2 <sup>nd</sup> yard, Bio-compost area
1. Colour	Hazen	< 5.0	< 5.0	< 5.0	< 5.0
2. pH	--	7.23	7.30	7.42	7.54
3. Total Dissolved Solids	mg/l.	343.0	381.0	282.0	308.0
4. Turbidity on NTU	NTU	2.4	2.9	1.8	2.7
5. Total Hardness as CaCO <sub>3</sub>	mg/l.	280.0	288.0	192.0	212.0
6. Calcium as Ca	mg/l.	64.9	69.7	48.9	50.5
7. Magnesium as Mg	mg/l.	28.7	27.7	17.0	20.9
8. Iron as Fe	mg/l.	0.46	0.48	0.41	0.42
9. Total Alkalinity as CaCO <sub>3</sub>	mg/l.	328.0	338.0	210.0	226.0
10. Chloride as Cl	mg/l.	19.0	21.0	19.0	20.0
11. Sulphate as SO <sub>4</sub>	mg/l.	28.1	28.5	23.7	25.8
12. Nitrate as NO <sub>3</sub>	mg/l.	3.27	3.58	1.80	2.94



Dr. S. Prasad  
(Authorized Signatory)

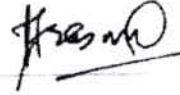


# SHIVA TEST HOUSE

Patliputra Colony ; Patna – 800 013

E.mail : sthpatna1@yahoo.co.in

ANALYSIS OF PIEZOMETER WATER SAMPLE					
	UNIT	Piezometers No.5, Piezometers Near First Yard South Side	Piezometer No.6, Near Biofertilizer Lab	Piezometer No. 7, Near leachate Pit Yard No. 2	Piezometer No. 8, Near AA Storage Tank
1. Colour	Hazen	< 5.0	< 5.0	< 5.0	< 5.0
2. pH	--	7.47	7.54	7.61	7.61
3. Total Dissolved Solids	mg/l.	310.0	298.0	319.0	326.0
4. Turbidity on NTU	NTU	2.2	2.6	2.2	2.0
5. Total Hardness as CaCO <sub>3</sub>	mg/l.	224.0	220.0	238.0	230.0
6. Calcium as Ca	mg/l.	48.9	48.1	47.3	49.7
7. Magnesium as Mg	mg/l.	24.8	24.3	29.2	25.8
8. Iron as Fe	mg/l.	0.38	0.41	0.34	0.4
9. Total Alkalinity as CaCO <sub>3</sub>	mg/l.	264.0	252.0	258.0	248.0
10. Chloride as Cl	mg/l.	20.0	21.0	21.0	18.0
11. Sulphate as SO <sub>4</sub>	mg/l.	25.1	24.8	26.7	26.7
12. Nitrate as NO <sub>3</sub>	mg/l.	2.82	2.69	2.59	2.87

  
Dr. S. Prasad  
(Authorized Signatory)





**M/s Harinagar Sugar Mills Ltd (Distillery Division)**

**Analysis report of all Peizometer from month Oct, 2022 to Mar, 2023**

**Analyzed by Distillery E.T.P Lab**

Oct - 2022							
Peizometer Location	Near ETP/ BMSW MEE Plant	Near Spent wash storage Lagoon	Near Bagging Machine 1st yard North side	Near 1st yard South side	Near Bio- Fertilizer Lab	Leachate Pit Yard No. 2	Near end of Boundary wall East side Yard no 2
	Piezometer No. 1	Piezometer No. 2	Piezometer No. 3	Piezometer No. 4	Piezometer No. 5	Piezometer No. 6	Piezometer No. 7
Date of Sampling	12.10.22	12.10.22	12.10.22	12.10.22	29.10.22	29.10.22	29.10.22
1. Level in Mtr	4.5	4.5	-	5	4.8	4.6	5.5
2. pH	7.5	7.3	7.23	7.23	7.24	7.25	7.34
3. T.D.S	224	230	235	242	250	240	255
4. D.O	6.2	6.1	6	6.2	6.2	6.3	6.5
5. Conductivity	350	355	360	362	375	365	350
6. Temp.	27.5	27.8	28.2	27.9	27.5	27.5	29.5
Nov - 2022							
Peizometer Location	Near ETP/ BMSW MEE Plant	Near Spent wash storage Lagoon	Near Bagging Machine 1st yard North side	Near 1st yard South side	Near Bio- Fertilizer Lab	Leachate Pit Yard No. 2	Near end of Boundary wall East side Yard no 2
	Piezometer No. 1	Piezometer No. 2	Piezometer No. 3	Piezometer No. 4	Piezometer No. 5	Piezometer No. 6	Piezometer No. 7
Date of Sampling	15.11.22	15.11.22	15.11.22	15.11.22	29.11.22	29.11.22	-
1. Level in Mtr	3.54	4.5	4	4.3	4.5	5.2	-
2. pH	7.26	7.32	7.28	7.25	7.32	7.35	-
3. T.D.S	260	255	245	250	262	270	-
4. D.O	6.5	6.5	6.6	6.6	6.5	6.7	-
5. Conductivity	405	398	382	390	408	421	-
6. Temp.	28.9	29.2	29.7	28.9	29.2	29.8	-
Dec - 2022							
Peizometer Location	Near ETP/ BMSW MEE Plant	Near Spent wash storage Lagoon	Near Bagging Machine 1st yard North side	Near 1st yard South side	Near Bio- Fertilizer Lab	Leachate Pit Yard No. 2	Near end of Boundary wall East side Yard no 2
	Piezometer No. 1	Piezometer No. 2	Piezometer No. 3	Piezometer No. 4	Piezometer No. 5	Piezometer No. 6	Piezometer No. 7
Date of Sampling	10.12.22	10.12.22	10.12.22	10.12.22	28.12.22	28.12.22	28.12.22
1. Level in Mtr	3.55	4.5	4.55	5	5.2	5.3	5.5
2. pH	7.25	7.32	7.29	7.31	7.28	7.27	7.2
3. T.D.S	265	270	255	262	260	268	255
4. D.O	6.6	6.5	6.2	6.8	6.5	6.5	6.4
5. Conductivity	405	421	395	409	399	415	395
6. Temp.	29.2	29.5	28.9	29.2	28.8	29.5	28.5
Jan-2023							
Peizometer Location	Near ETP/ BMSW MEE Plant	Near Spent wash storage Lagoon	Near Bagging Machine 1st yard North side	Near 1st yard South side	Near Bio- Fertilizer Lab	Leachate Pit Yard No. 2	Near end of Boundary wall East side Yard no 2
	Piezometer No. 1	Piezometer No. 2	Piezometer No. 3	Piezometer No. 4	Piezometer No. 5	Piezometer No. 6	Piezometer No. 7
Date of Sampling	13.01.23	13.01.23	13.01.23	13.01.23	30.01.23	30.01.23	30.01.23
1. Level in Mtr	3.55	5.5	4.5	4.2	4.5	5.2	-
2. pH	7.15	7.22	7.13	7.23	7.22	7.22	7.21
3. T.D.S	275	265	268	270	267	261	265
4. D.O	6.2	6.3	6.4	6.5	6.8	6.4	6.3
5. Conductivity	422	419	425	425	426	417	410
6. Temp.	29.5	28.8	29.2	27.2	28.2	29	29.1

**M/s Harinagar Sugar Mills Ltd (Distillery Division)**

**Analysis report of all Peizometer from month Oct, 2022 to Mar, 2023**

**Analyzed by Distillery E.T.P Lab**

Feb-2023							
Peizometer Location	Near ETP/ BMSW MEE Plant	Near Spent wash storage Lagoon	Near Bagging Machine 1st yard North side	Near 1st yard South side	Near Bio- Fertilizer Lab	Leachate Pit Yard No. 2	Near end of Boundary wall East side Yard no 2
	Piezometer No. 1	Piezometer No. 2	Piezometer No. 3	Piezometer No. 4	Piezometer No. 5	Piezometer No. 6	Piezometer No. 7
Date of Sampling	11.02.23	11.02.23	-	11.02.23	-	28.02.23	-
1. Level in Mtr	4.2	5.5	-	5.3	-	5.5	-
2. pH	7.15	7.19	-	7.28	-	7.26	-
3. T.D.S	265	265	-	271	-	283	-
4. D.O	6.6	6.3	-	-	-	-	-
5. Conductivity	415	410	-	385	-	365	-
6. Temp.	29.2	29	-	27.7	-	-	-

**Mar.23**

Peizometer Location	Near ETP/ BMSW MEE Plant	Near Spent wash storage Lagoon	Near Bagging Machine 1st yard North side	Near 1st yard South side	Near Bio- Fertilizer Lab	Leachate Pit Yard No. 2	Near end of Boundary wall East side Yard no 2
	Piezometer No. 1	Piezometer No. 2	Piezometer No. 3	Piezometer No. 4	Piezometer No. 5	Piezometer No. 6	Piezometer No. 7
Date of Sampling	10.03.23	10.03.23	10.03.23	10.03.23	27.03.23	27.03.23	27.03.23
1. Level in Mtr	3.95	5.2	5.5	5.5	5.2	5.8	6
2. pH	7.15	7.26	7.31	7.35	7.312	7.29	7.35
3. T.D.S	265	278	277	265	265	285	270
4. D.O	6.5	6.4	-	6.5	6.6	-	6.2
5. Conductivity	330	345	385	-	395	-	390
6. Temp.	27.8	-	28.1	29.5	28.5	27.5	29

*Ram Prasad*  
Sr. Dy. C. C. (ETP/Bio-Fertilizer)

*G. M.*  
G. M. (Distillery)



**SHIVA TEST HOUSE**

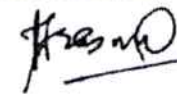
Patliputra Colony ; Patna – 800 013

E.mail : sthpatna1@yahoo.co.in

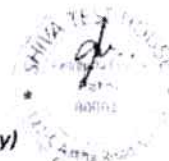
**HARINAGAR SUGAR MILLS (DISTILLERY PROJECT)****Summary of Ambient Air Monitoring Data ( For the Period Oct. '2022 – Mar.'2023 )**

Location	Ambient Air Quality Monitoring Data																	
	Near Main Gate (North Side)						Near ETP (Besides Lab)						Near Gate No. 2 (South Side)					
	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>	C <sub>6</sub> H <sub>6</sub>	Pb	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>	C <sub>6</sub> H <sub>6</sub>	Pb	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>	C <sub>6</sub> H <sub>6</sub>	Pb
Parameters / Unit	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>
Oct '22	79.4	40.5	13.7	38.6	0.15	BDL*	67.8	37.4	12.0	39.9	0.16	BDL*	75.8	38.6	11.1	35.3	0.18	BDL*
Nov '22	81.1	41.7	14.5	40.4	0.17	BDL*	69.0	38.4	12.7	40.9	0.20	BDL*	78.5	36.3	12.4	36.5	0.19	BDL*
Dec '22	80.4	43.3	12.9	35.3	0.14	BDL*	75.2	39.3	11.8	31.5	0.08	BDL*	78.1	39.6	13.8	36.4	0.10	BDL*
Jan '23	81.3	44.1	13.6	36.7	0.10	BDL*	76.2	40.6	12.7	32.7	0.08	BDL*	79.4	41.7	14.6	37.5	0.11	BDL*
Feb '23	79.3	40.7	12.9	35.3	0.09	BDL*	74.7	38.0	13.6	33.0	0.08	BDL*	78.1	39.6	13.8	36.5	0.10	BDL*
Mar '23	72.7	43.1	14.0	35.1	0.25	BDL*	65.2	39.2	13.1	31.5	0.19	BDL*	68.6	40.5	12.1	32.0	0.19	BDL*
<b>NAAQS 2009</b>	<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>5</b>	<b>1</b>	<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>5</b>	<b>1</b>	<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>5</b>	<b>1</b>
<b>N.B.:</b>	BDL* : Below Detectable Limit < 0.05 µg/m <sup>3</sup>																	

Location	Ambient Air Quality Monitoring Data																	
	Near Main Gate (North Side)						Near ETP (Besides Lab)						Near Gate No. 2 (South Side)					
	CO	NH <sub>3</sub>	O <sub>3</sub>	BaP	As	Ni	CO	NH <sub>3</sub>	O <sub>3</sub>	BaP	As	Ni	CO	NH <sub>3</sub>	O <sub>3</sub>	BaP	As	Ni
Parameters / Unit	mg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	ng/m <sup>3</sup>	ng/m <sup>3</sup>	ng/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	ng/m <sup>3</sup>	ng/m <sup>3</sup>	ng/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	ng/m <sup>3</sup>	ng/m <sup>3</sup>	ng/m <sup>3</sup>
Oct '22	0.25	14.8	10.2	BDL <sup>#</sup>	BDL <sup>#</sup>	BDL <sup>#</sup>	0.15	20.4	16.8	BDL <sup>#</sup>	BDL <sup>#</sup>	BDL <sup>#</sup>	0.21	14.9	0.21	BDL <sup>#</sup>	BDL <sup>#</sup>	BDL <sup>#</sup>
Nov '22	0.18	11.2	18.6	BDL <sup>#</sup>	BDL <sup>#</sup>	BDL <sup>#</sup>	0.12	15.8	21.4	BDL <sup>#</sup>	BDL <sup>#</sup>	BDL <sup>#</sup>	0.14	9.1	0.20	BDL <sup>#</sup>	BDL <sup>#</sup>	BDL <sup>#</sup>
Dec '22	0.12	8.0	12.6	BDL <sup>#</sup>	BDL <sup>#</sup>	BDL <sup>#</sup>	0.10	10.2	15.2	BDL <sup>#</sup>	BDL <sup>#</sup>	BDL <sup>#</sup>	0.11	17.6	0.18	BDL <sup>#</sup>	BDL <sup>#</sup>	BDL <sup>#</sup>
Jan '23	0.21	12.6	14.8	BDL <sup>#</sup>	BDL <sup>#</sup>	BDL <sup>#</sup>	0.14	16.4	16.0	BDL <sup>#</sup>	BDL <sup>#</sup>	BDL <sup>#</sup>	0.15	11.0	0.17	BDL <sup>#</sup>	BDL <sup>#</sup>	BDL <sup>#</sup>
Feb '23	0.15	10.4	15.2	BDL <sup>#</sup>	BDL <sup>#</sup>	BDL <sup>#</sup>	0.10	11.6	18.3	BDL <sup>#</sup>	BDL <sup>#</sup>	BDL <sup>#</sup>	<0.10	13.5	0.20	BDL <sup>#</sup>	BDL <sup>#</sup>	BDL <sup>#</sup>
Mar '23	0.32	16.8	13.7	BDL <sup>#</sup>	BDL <sup>#</sup>	BDL <sup>#</sup>	<0.10	12.9	13.6	BDL <sup>#</sup>	BDL <sup>#</sup>	BDL <sup>#</sup>	0.16	14.5	0.17	BDL <sup>#</sup>	BDL <sup>#</sup>	BDL <sup>#</sup>
<b>NAAQS 2009</b>	<b>4</b>	<b>400</b>	<b>180</b>	<b>1</b>	<b>6</b>	<b>20</b>	<b>4</b>	<b>400</b>	<b>180</b>	<b>1</b>	<b>6</b>	<b>20</b>	<b>4</b>	<b>400</b>	<b>180</b>	<b>1</b>	<b>6</b>	<b>20</b>
<b>N.B.:</b>	BDL# : Below Detectable Limit < 1 ng/m <sup>3</sup>																	



**Dr. S. Prasad**  
(Authorized Signatory)



# SHIVA TEST HOUSE

Patliputra Colony ; Patna – 800 013


E.mail : sthpatna1@yahoo.co.in

## HARINAGAR SUGAR MILLS (DISTILLERY PROJECT)

Summary of Ambient Air Monitoring Data ( For the Period Oct. '2022 – Mar.'2023 )

Location	Near Biocompost					
	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>	C <sub>6</sub> H <sub>6</sub>	Pb
Parameters / Unit	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>
Oct. '22	66.5	36.5	10.4	31.5	0.13	BDL*
Nov. '22	68.2	38.1	11.8	32.7	0.16	BDL*
Dec. '22	76.8	38.0	12.6	33.8	0.11	BDL*
Jan. '23	77.4	39.2	13.5	34.3	0.11	BDL*
Feb. '23	76.8	38.0	12.6	33.8	0.11	BDL*
Mar. '23	42.5	32.5	13.9	33.1	0.21	BDL*
<b>NAAQS 2009</b>	<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>5</b>	<b>1</b>
<b>N.B.:</b>	BDL* : Below Detectable Limit < 0.05 µg / m <sup>3</sup>					

Location	Near Biocompost					
	CO	NH <sub>3</sub>	O <sub>3</sub>	BaP	As	Ni
Parameters / Unit	ng / m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	ng/m <sup>3</sup>	ng/m <sup>3</sup>	ng/m <sup>3</sup>
Oct. '22	<0.10	38.4	14.6	BDL#	BDL#	BDL#
Nov. '22	0.12	56.1	10.2	BDL#	BDL#	BDL#
Dec. '22	<0.10	84.2	8.7	BDL#	BDL#	BDL#
Jan. '23	0.10	70.0	11.4	BDL#	BDL#	BDL#
Feb. '23	<0.10	81.3	6.8	BDL#	BDL#	BDL#
Mar. '23	<0.10	77.2	9.3	BDL#	BDL#	BDL#
<b>NAAQS 2009</b>	<b>4</b>	<b>400</b>	<b>180</b>	<b>1</b>	<b>6</b>	<b>20</b>
<b>N.B.:</b>	BDL# : Below Detectable Limit < 1 ng / m <sup>3</sup>					

  
**Dr. S. Prasad**  
 (Authorized Signatory)





# SHIVA TEST HOUSE

Patliputra Colony ; Patna – 800 013

E.mail : sthpatna1@yahoo.co.in

AMBIENT NOISE LEVEL MONITORING												
SAMPLING LOCATION	Oct '22		Nov '22		Dec '22		Jan '23		Feb '23		Mar '23	
	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time
1. Near Main Gate	61.2	55.8	61.4	58.3	57.1	54.3	59.1	53.4	61.3	56.4	59.3	54.7
2. Near Boiler House	63.6	57.1	64.8	60.2	56.3	51.8	64.7	57.8	67.4	61.2	67.2	58.2
3. Near Adm. Building	54.9	52.3	63.8	56.4	58.2	50.2	55.2	51.6	63.1	54.2	64.9	55.9
4. Near South Gate	61.2	51.6	61.5	55.2	59.6	52.4	62.3	54.2	59.4	55.6	62.8	53.8
5. Near Laboratory	58.7	50.2	63.1	57.6	55.7	48.6	63.5	53.1	64.1	52.1	61.4	51.6

Dr. S. Prasad  
(Authorized Signatory)



HARINAGAR SUGAR MILLS LIMITED (DISTILLERY DIVISION), HARINAGAR														
Six monthly Analysis Report of Raw Spent Wash, Treated Effluent,														
( From October 2022 to March 2023)														
.SL. No.	Particulars	Unit/Limit	Oct-22		Nov-22		Dec-22		Jan-23		Feb-23		Mar-23	
			10.10.22	29.10.22	04.11.22	26.11.22	16.12.22	26.12.22	05.01.23	15.01.23	04.02.23	12/02/2023	06.03.23	16.03.23
A	Raw Spent Wash		7440		10670		16535		22745		21795		18005	
1	Total Feed	M <sup>3</sup>	7440		10670		16535		22745		21795		18005	
2	Feed Temp	°C	48	42	45.0	44.2	45.5	45.9	47.5	47.6	45.5	43.6	44.5	44.0
3	Feed pH		4.5	4.8	4.9	5.3	4.6	4.5	4.46	4.55	4.7	4.5	4.8	5.1
4	Feed COD	PPM	138950	148950	125000	128950	110000	115500	125900	140000	116950	111500	120390	125000
5	Feed BOD	PPM	75900	76900	65500	65450	60350	63500	69950	75950	62190	61910	66950	67950
6	T.S.S.	PPM	11870	11750	10990	10790	9895	9775	10150	12950	8950	12150	12510	13130
7	T.D.S.	PPM	37950	36990	37500	35980	31950	32150	32190	33590	35530	40510	38890	39510
B	Digester Sample													
1	Digester pH		7.52	7.52	7.52	7.54	7.54	7.51	7.52	7.54	7.55	7.49	7.56	7.55
2	COD	PPM	34150	35500	32000	31850	35900	34500	32900	34950	32500	35500	35550	39990
3	BOD	PPM	5150	5070	5690	5310	5750	5550	4950	5190	6500	5130		
4	VFA	PPM	5150	5150	5060	5070	4860	4150	4230	4900	5170	5000	5540	5510
5	Alkanity	PPM	24950	23900	25100	26170	26850	27850	28710	29550	29550	29510	31700	30990
C	Treated Effluent													
1	COD	PPM	31510	30950	30000	27950	31990	29550	26190	28150	29990	32300	31500	31900
2	BOD	PPM	4320	4500	5150	4840	4850	4150	4050	4190	4050	4930	-	-
3	pH	PPM	7.52	7.52	7.52	7.50	7.52	7.53	7.55	7.5	7.56	7.52	7.52	7.52
4	TSS	PPM	4850	5860	4590	4280	5150	4050	3870	4050	4250	4850	4090	4150
5	TDS	PPM	28900	28950	28970	28960	30000	29150	25150	26130	28710	31000	31000	29550
D	Bio-Gas Production	M <sup>3</sup>	75100		380300		685750		898000		840290		468960	

Note: Distillery has been started from 16.09.22

Bio-gas Digester commissioning started from 20-09-2022

Ranbavegi  
Sr. Dy. C. C. (ETP / Bio-Fertilizer)

G. M. (Distillery)



**HARINAGAR SUGAR MILLS LTD. (DISTILLERY DIVISION)****DETAILS OF PLANTATION (GREEN BELT) IN DISTILLERY PREMISES,  
STAFF COLONY, BIO-COMPOST YARD & LAGOON  
FROM 1<sup>ST</sup> APRIL 2022 TO 31<sup>ST</sup> MARCH 2023**

Name of the plant	Place of plantation	Nos. of plants	Area
Mahogany	West side of Press mud storage area	24	<b>3.500 Acres</b>
Mahogany	East side of Bio-fertilizer lab	30	
Palm	Near leachet pit of Bio-compost Yard No.2	16	
Mehndi	Corner East side Bio-compost 1 <sup>st</sup> Yard	150	
Aonla	East side of lab Bio-compost 1 <sup>st</sup> Yard	2	
Kanak	West side of Press mud storage	10	
Sagwan	Spent wash storage lagoon Near Bio-compost Yard No. 3	250	
Sagwan	North Corner Bio-compost Yard No.2	150	
Palm	Road side Bio-compost Yard No. 3	05	
<b>TOTAL PLANTATION</b>		<b>637</b>	

*jd*  
G. M. (Distillery)



**BIHAR STATE POLLUTION CONTROL BOARD**  
 PARIVESH BHAWAN, PLOT NO. NS-B/2, PALIPUTRA INDUSTRIAL AREA,  
 PATLIPUTRA, Patna - 800 010

Ref. No.-3289

Patna, dated-28/10/22

**EMISSION CONSENT ORDER**

With reference to the online application no: 6513641, dated 02.09.2022; received on dated: 03.09.2022, previous CTE was granted vide letter no. 137, dated 20.01.2022; which validity: 19.01.2023 of M/s Harinagar Sugar Mills Ltd (Distillery Division), At & P.O.- Harinagar, Dist- West Champaran-845103 for consent under sections 21 of the Air (Prevention & Control of Pollution) Act, 1981, he/they is/are granted consent to operate his/their plant (Ethanol expanded capacity: molasses based distillery from 120 KLPD to 200 KLPD) At & P.O.- Harinagar, Dist- West Champaran-845103 for the period of five years from the date of issue with the following conditions:-

- 1 That, he/they shall not make any alteration, addition, deletion or modification in the plant without the prior clearance from the Board and shall also abide by the obligations under sections 22, 23 and 31A of the Air (Prevention & Control of Pollution) Act, 1981 and further shall extend co-operation to the Board in performing its functions entrusted under sections 24,25 and 26 of the Act;
- 2 That, he /they shall comply with the requirements of rule 14 of the Environment (Protection) Rules, 1986; provisions (whichever applicable) of the Hazardous and Other Wastes (Management & Tran-boundary Movement), Rules 2016; rules 4, 5, 7, 8, 10, 11, 12, 13, 15, 17 and 18 of the Manufacture, Storage and Import of Hazardous Chemical Rules,1989; and the provisions of the Public Liability Insurance Act, 1991, whichever is applicable;
- 3 That, he/they shall monitor his/their emission(s) and the ambient air quality from representative point regularly and shall maintain its quality in conformity with Board's standards and shall produce its proof, as and when asked for;
- 4 That, he/they shall submit application for consent again 30 days before the expiration of the period of consent or within 30 days from the date of receipt of this order, whichever is applicable;
- 5 That, the unit shall operate its air pollution control devices regularly and shall maintain the emission standard;
- 6 That, the unit shall develop pucca roads inside the premises;
- 7 That, they shall maintain particulate matter emission (50 mg/Nm<sup>3</sup>; from the existing stack attached with boiler of 35 TPH steam generation capacity along with ESP as air pollution control device;
- 8 That, the proponent shall ensure no increase in pollution load as committed/proposed in the application for increasing its production capacity by change of raw material matrix;
- 9 That, continuous online (24x7) monitoring system installed for emission shall be continued and maintained. Data to be uploaded on company's website and provided to the CPCB/SPCB;
- 10 That, ambient air quality (including noise) shall be carried out regularly as per CPCB norms/under the Rules/EC and reports shall be submitted to the Board & Authority of MOEF&CC, accordingly;
- 11 That, they shall comply with the following as under:
  - i. The unit shall submit monitoring report of benzene parameter with other VOCs in 'Indoor Ambient Air' of distillation section, ethanol storage and its loading/unloading area;

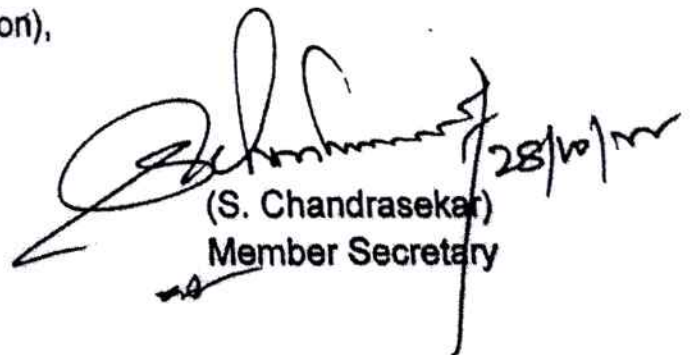


- ii. They shall also submit monitoring report of benzene parameter with other in the 'Ambient Air' of distillery unit; and  
iii. These monitoring shall be done quarterly and report shall be submitted to the Board accordingly.

- 12 That, proper management of fermentation house, no longer retention of fermented wash etc to avoid generation of putrefying microorganism shall be practiced to control odour problems and to protect nearby school/local ecology of the area;  
13 That, they shall comply with conditions of CTE granted by the Board vide memo no.- 137, dated: 20.01.2022;  
14 That, the unit shall maintain good housekeeping;  
15 That, the unit shall comply the provisions of the Solid Waste Management Rules, 2016, the Bio-Medical Waste Management Rules, 2016 and the Hazardous & Other Waste (Management & Trans-boundary Movement) Rules, 2016 as applicable;  
16 That, the unit shall maintain green vegetation in compliance with EC conditions; and  
17 That, the Environmental Statement as prescribed in the E (P) Rules, 1986 [see rule 14] for the each financial year ending the 31<sup>st</sup> March, shall be submitted by the month of September every year;  
18 That, in compliance of direction of the Hon'ble Supreme Court and vide Board's HQ ref no.- 2638, dated 09.07.2019, they shall make provisions for display of data outside main factory gate about quantity and quality of water discharge and air emission along with solid waste generated within the factory premises;  
19 That, not withstand any thing stated above, the applicant unit shall abide by all the provisions of the environmental laws including policies and guidelines made there under; and  
20 That, this CTO is granted on the basis of the undertaking/affidavit up-loaded by the applicant and it is subject to the condition that in the event of any information/documents submitted by the proponent are found false or misleading at any stage, the NOC/CTO granted, shall be revoked and legal action shall be initiated.

To,

Sri Laxminarayan Babulal Agrawal, Director,  
M/s Harinagar Sugar Mills Ltd (Distillery Division),  
Village & P.O.-Harinagar,  
Dist-West Champaran (Bihar)-845103.

  
(S. Chandrasekar)  
Member Secretary





# BIHAR STATE POLLUTION CONTROL BOARD

PARIVESH BHAWAN, PLOT NO. NS-5/2, PALIPUTRA INDUSTRIAL AREA,  
PATLIPUTRA, Patna - 800 010

Patna, dated- 28.10.22

Ref. No.- 3090

## DISCHARGE CONSENT ORDER

With reference to the online application no: 6513641, dated 02.09.2022, received on dated: 03.09.2022, previous CTE was granted vide letter no. 137, dated 20.01.2022; which validity: 19.01.2023 of M/s Harinagar Sugar Mills Ltd (Distillery Division), At & P.O.- Harinagar, Dist- West Champaran-845103 for consent under sections 25/26 of the Water (Prevention & Control of Pollution) Act, 1974, he/they is/are granted consent to bring into use his/their new/alterd/existing outlet(s) for discharge of trade effluent and/or domestic sewage (Ethanol expanded capacity: molasses based distillery from 120 KLPD to 200 KLPD) At & P.O.- Harinagar, Dist- West Champaran-845103 for the period of five years from the date of issue with the following conditions:-

- 1 That, he/they shall not make any alteration, addition, deletion or modification in the plant without the prior clearance from the Board and shall also abide by the obligations under sections 24, 31 and 33A of the Water (Prevention & Control of Pollution) Act, 1974 and further shall extend co-operation to the Board in performing its functions entrusted under sections 20, 21, 23, 30 and 32 of the Act;
- 2 That, he /they shall comply with the requirements of rule 14 of the Environment (Protection) Rules, 1986; provisions (whichever applicable) of the Hazardous and Other Wastes (Management & Transboundary Movement), Rules 2016, rules 4, 5, 7, 8, 10, 11, 12, 13, 15 and 18 of the Manufacture, Storage and Import of Hazardous Chemical Rules, 1989; and the provisions of the Public Liability Insurance Act, 1991, whichever is applicable;
- 3 That, he/they shall monitor his/their effluent(s) regularly and maintain its quality in conformity with Board's standards and shall produce its proof, as and when asked for;
- 4 That, he/they shall submit application for consent again 30 days before the expiration of the period of consent or within 30 days from the date of receipt of this order, whichever is applicable;
- 5 That, the unit shall operate its ETP system regularly and they shall maintain ZLD by installed system viz. Anaerobic Reactor, Bio-methanation, MEE, lined lagoon, & bio-composting;
- 6 That, they shall restrict its ethanol production to 120 KLPD, if they use C-Hy molasses;
- 7 That, they shall restrict its ethanol production to 200 KLPD, if they use enriched B-Hy molasses or cane syrup;
- 8 That, they shall restrict spent wash generation to the tune of 8.0 KL/KL of ethanol produced on using C-Hy molasses and 4.5 KL/KL of ethanol produced on using B-Hy molasses/cane syrup/cane sugar;
- 9 That, they shall restrict ground water extraction to 1475 KLD as per NOC issued by CGWA;
- 10 That, they shall maintain surveillance system like web camera at bio-composting yard, spent wash storage lagoon, mass flow meter at MEE feed, MEE concentrate and ensure linking with CPCB and BSPCB servers;



- 11 That, the proponent shall ensure no increase in pollution load as committed/proposed in the application for increasing its production capacity by change of raw material matrix;
- 12 That, the unit shall not discharge any effluent outside the premises. In case of any uneven situation plant shall be shutdown to maintain zero liquid discharge;
- 13 That, the unit shall install piezometer inside the premises & submit the summary report regarding level of ground water;
- 14 That, they shall comply with conditions of CTE granted by the Board vide memo no.- 137, dated: 20.01.2022;
- 15 That, the unit shall maintain good housekeeping;
- 16 That the unit shall ensure that there is no mixing of any industrial effluent with the storm water and unit shall take all preventive measures for the same;
- 17 That, they shall comply with provisions under the Rules, conditions of EC issued by competent authority of MoEF&CC, Govt. of India as well as directions issued either by SPCB/CPCB time-to time. Reports shall be submitted to the Board also;
- 18 That, they shall adopt rainwater harvesting measures to recharge the ground water and proper records shall be maintained;
- 19 That, the Environmental Statement as prescribed in the E (P) Rules, 1986 [see rule 14] for the each financial year ending the 31<sup>st</sup> March, shall be submitted by the month of September every year;
- 20 That, in compliance of direction of the Hon'ble Supreme Court and vide Board's HQ ref no.- 2638, dated 09.07.2019, they shall make provisions for display of data outside main factory gate about quantity and quality of water discharge and air emission along with solid waste generated within the factory premises;
- 21 That, notwithstanding any thing stated above, the applicant unit shall abide by all the provisions of the environmental laws including policies and guidelines made there under; and
- 22 That, this CTO is granted on the basis of the undertaking/affidavit up-loaded by the applicant and it is subject to the condition that in the event of any information/documents submitted by the proponent are found false or misleading at any stage, the NOC/CTO granted, shall be revoked and legal action shall be initiated.

To,

Sri Laxminarayan Babulal Agrawal, Director,  
M/s Harinagar Sugar Mills Ltd (Distillery Division),  
Village & P.O.-Harinagar,  
Dist-West Champaran (Bihar)-845103.

  
(S. Chandrasekar)  
Member Secretary

**HARINAGAR SUGAR MILLS LTD. (DISTILLERY DIVISION)**

**ANNEXURE-IX**

**STATEMENT OF MONTH WISE PRODUCTION OF ABSOLUTE ALCOHOL**  
**FOR THE PERIOD OF APRIL, 2023 TO SEPTEMBER, 2023**

SL. No.	Particulars	Unit	April 2023	May 2023	June 2023	July 2023	August 2023	September 2023	TOTAL
01	Absolute Alcohol	B.L.	4125023.53	4334005.53	2175200.18	0.00	0.00	2100009.67	<b>12734238.91</b>

  
**G. M. (Distillery)**




**BIHAR STATE POLLUTION CONTROL BOARD**

 PARIVESH BHAWAN, PLOT NO. NS-B/2, PALIPUTRA INDUSTRIAL AREA,  
 PATLIPUTRA, Patna – 800 010

From

 S. Chandrasekar,  
 Member Secretary

To,

 M/s Harinagar Sugar Mills Ltd. (Distillery Division),  
 At+P.O-Harinagar,  
 Dist-West Champaran- 845103  
 Bihar

**Subject:** Consolidated Consent to Operate and Authorisation hereinafter referred to as the CCA (Consolidated Consent & Authorization) Renewal under Section- 25 of the "Water (Prevention & Control of Pollution) Act., 1974" and under Section- 21 of the "Air (Prevention & Control of Pollution) Act, 1981" and Authorization under "Rule -6(2)" of the "Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016" notified under "Environment (Protection) Act, 1986" as applicable (to be referred hereinafter as Water Act, Air Act and HW Rules respectively).

Application ID- 7638337

Dated: 17.05.2023

CCA (Renewal) ...15.7.9.

Date: - 11/8/23.

**Consolidated Consent to Operate and Authorization (CCA):**

CCA is hereby granted to M/s. Harinagar Sugar Mills Ltd. (Distillery Division), located at P.O- Harinagar, West Champaran- 845103 subject to the provisions of the Water Act, Air Act and Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the orders that may be made further and subject to following terms and conditions:

1. This CCA is granted for the period upto **17.05.2028** under Section-25 of the "Water (Prevention & Control of Pollution) Act, 1974.
2. This CCA is granted for the period upto **17.05.2028** under Section-21 of the "Air (Prevention & Control of Pollution) Act, 1981.
3. This CCA is granted for the period upto **HWB – 281 upto 20.05.2023**. Unit has applied for authorization under Hazardous and other wastes (Management and Transboundary Movement) Rules, 2016, which is under process, notified under "Environment (Protection) Act, 1986.
4. **Production Capacity: Denatured ethanol 140 KLPD based on C-Heavy molasses & 200 KLPD based on B-Heavy molasses / Cane Syrup.**

S.No.	Declared by the industry			Permitted by the Board
	Raw Material/ Feedstock (Qtl/day) C-Heavy/ B-Heavy/ Sugar cane syrup	Finished Product (kl/day)	Type of Product	
I.	C- Heavy molasses	Denatured ethanol 140 KLPD	Denatured ethanol	-140 KLPD
II.	B-Heavy molasses / Cane Syrup	Denatured ethanol 200 KLPD	Denatured ethanol	200 KLPD

#### 5. Production Process Infrastructure

S.no.	Declared by the unit				Permitted by the Board
	Number of fermenters	Capacity of fermenters	Type of fermentation technology adopted	Type of Distillation	
1	10	280 m3	Fed batch Hiferm	TVS	140 KLPD on C- Heavy
2	10	280 m3	Fed batch Hiferm	TVS	200 KLPD on B- Heavy / Syrup

#### Molasses storage infrastructures:

Capacity	Declared by the unit		Permitted by SPCB
	No. of tanks	No. of lined pits*	
325043 Qtls.	12 Nos.	-	-

\*The unit shall not store molasses in Kaccha/ unlined pits.

#### 6. Water Conservation

##### A. Fresh water Consumption

- The unit shall obtain permission / NOC from State or Central Ground Water Authority for Groundwater abstraction and shall comply with the conditions mentioned in the NOC.
- Industry shall install separate sealed, calibrated Electro Magnetic Flow meters with flow totalizer at all water abstraction sources, utilization lines- process, domestic and boiler.
- The industry shall maintain duly signed logbook of fresh water consumption and utilization.
- The specific water consumption shall not exceed values mentioned below as per consented product type.



<u>Category</u>	<u>Specific Water Consumption not to exceed</u>
CGRE 2020 (Safe) NOC NO. CGA/NOC/IND/REN/ 12021/6340 Valid upto 03.10.2023	
B-heavy	8-10 KL/KL of product
C-Heavy	8-10 KL/KL of product
Cane syrup/ sugar cane juice	6-8 KL/KL of product

	Declared by the Industry	Permitted by NOC issued by CGWA	CGWA conditions
No. of borewells	1	1	Complied
Daily quantity of water to be abstracted (KLD)	425/816	1475	

**B. Effluent generation, treatment and disposal:**

- i. The quantity of maximum specific effluent generation shall be as specified below:

<u>Category</u>	<u>Specific spent wash generation, not to exceed</u>
B-heavy	4.5 KL/KL of product
C-Heavy	8.0 KL/KL of product
Cane syrup/ sugar cane juice	4.5 KL/KL of product

- ii. The quantity of maximum daily effluent generation & discharge should not be more than the following:

S. No.	Kind of Effluent	Maximum daily generation	Maximum daily discharge, KLD	Treatment Facility and Discharge point
1	Domestic	KLD		STP Installed
2	Industrial (Spent wash)	960 KLD		ZLD

- iii. Arrangement should be made for collection of water used in process and domestic effluent separately in closed water supply system. It should be ensured that domestic effluent should not be discharged in the storm water drain.
- iv. The domestic effluent should be treated in sewage treatment plant (STP) and it should be in conformity with the norms of treated effluent as stipulated in E.P. Rules, 1986 as amended.
- v. The unit shall identify recipient drains/ rivulets and their u/s & d/s locations <coordinates of the drain > in consultation with SPPCB for monthly monitoring by industry to ensure ZLD from distilleries within 30 days. The monitoring report shall be submitted to CPCB on monthly basis.

S.No.	Name of recipient drain/rivulets	Latitude	Longitude	Quality of effluent of drain	Name of the recipient river
1	Upstream (U/s) Near Railway Bridge between Harinagar Railway Station	27.1659 N	84.3270 E	D.O. 7.6 mg/ Ltr. BOD 2.0 mg / Ltr. COD 20 mg / Ltr.	Ramrekha Rivulet
2	Down-stream (D/s) Near Bridge of cane entrance gate at Bio-composting yard.			D.O. 7.6 mg/ Ltr. BOD 2.0 mg / Ltr. COD 20 mg / Ltr.	Ramrekha Rivulet

- vi. The industry shall achieve Zero Liquid Discharge (ZLD). ZLD refers to installation of facilities and system which will enable industrial effluent (all stream) for absolute recycling of or re-use in to industrial process and converting solute (dissolved organic and in-organic compounds / salts) into residue in solid form by adopting method such as concentration/ evaporation/drying. ZLD will be recognized and certified based on two broad parameters that is, water consumption versus waste water reused or recycled (permeate) and correspondingly solids recovered (percent total dissolved / suspended solids in effluents).

#### C. Effluent Management Infrastructure:

Bio-digester					
S.no.	No. of digesters	Designed Capacity (m3)	Sludge generation from digester	Method of disposal/ utilization of sludge	
1	2	14000 m3 / day 7500 m3	1-2% Total capacity volume	Mix with Bio-composting to enrich organic manure.	
Multi Effect Evaporator (MEE)					
S.No.	No of MEE	Design Capacity (m3)	Type of technology of MEE (stages)	Mass flow meter installed at inlet and outlet of MEE	
1	1	1440 m3 / day	BMSW MEE 8 Falling Fillm + 1 Force Recirculation	Yes	
Condensate Polishing Unit (CPU):					
**For treatment of MEE condensate and other low-strength effluent					
S.No.	Design Capacity (m3)	Type of technology of CPU	Sources of effluent coming into CPU with Quantity	Quantity of treated effluent from CPU and its utilization	Quantity of CPU sludge & its disposal mechanism



1	1800 m3	Paques Technology Aerobic and Anaerobic with UV	MEE condensate and cooling tower blow down	1800	1-2 m3 / day and separate from centrifuge decanter
Reverse Osmosis (RO) system					
S.No.	Design Capacity (m3)	No. of stages	Quantity of RO permeate (m3) & purpose of utilization	Quantity of RO reject (m3) & disposal mechanism	
1	1150	3	978 m3	172 m3 and used for cooling and spraying on fly ash to cool the ash.	

- vii. All process and non-process effluents such as Spent lees, Process condensates, Boiler RO reject, CT blowdown, Softener/DM plant backwash, Pump gland cooling water etc. should be treated through CPU and recycled back in the process.
- viii. The unit shall install mass flowmeters with totalizers at inlet and outlet of Multi Effect Evaporator (MEE) (concentrate) and shall connect the same with CPCB and OCMES server. OCMES Installed user ID - [harinagardistillery@gmail.com](mailto:harinagardistillery@gmail.com) Password :- Hari@123
- ix. The unit shall install electromagnetic flowmeters with totalizer at CPU inlet & outlet and at water recirculation points like make up water for cooling towers & in process. The unit shall have separate energy meter for ETP/CPU and maintain the duly signed logbook of the same.
- x. The unit shall maintain duly signed logbooks of spent wash generation, MEE feed, MEE condensate, MEE concentrate, CPU inlet & outlet, Cooling tower make up water and treated effluent reused in process.
- xi. The unit shall ensure proper marking/and colour coding of all the pipelines carrying industrial effluent accordingly.

**Distilleries opting for Bio-composting;**

- i. The final storage capacity of lagoon for storage of concentrated spent wash after M.E.E to be utilized in bio-composting shall be strictly restricted to thirty days equivalent of concentrated spent wash (40% by volume of spent wash generated and solid concentration shall be maintained 30%). The lagoon shall be impermeable and properly lined.
- ii. **Details of lagoons**

Declared by unit				Permitted By Board
S.no.	No of Lagoons	Dimensions of lagoon	Capacity of lagoon (m3)	
1	1	Bottom 28 x 88 mtr Top 40 x 11 mtr Depth 5.5 mtr (3 mtr free space)	11500 m3	For one month concentrated spent wash storage

- iii. For concentrated spent wash having total solids 27 - 30 %, the filler material (press mud) to spent wash ratio prescribed is 1: 1.6 for 60 days' cycle.
- iv. Impervious compost yard area based on material balance (plus ready compost storage area) should be made available. The unit shall strictly implement the Standard Operating Procedure (SOP) for Bio-composting operation for Molasses based distilleries. (Link: [https://cpcb.nic.in/ngrba/Biocomposting\\_SOP\\_for\\_distillery\\_Final\\_10.08.2018.pdf](https://cpcb.nic.in/ngrba/Biocomposting_SOP_for_distillery_Final_10.08.2018.pdf)).
- v. The unit having uncovered bio-compost area, shall stop its bio-compost activities in monsoon period (July –September). The unit shall make extra land arrangements for storage for press mud and ready bio-compost.
- vi. Unit must install and maintain online connectivity of PTZ web cameras at the bio-compost yard and lagoons with server of CPCB and **Installed**.
- vii. Details of Bio-composting area requirement; as permitted by the Board:

S.no.	Total area for bio-composting	Active area for bio-composting(excluding the land arrangements for storage for press mud and ready bio-compost)	Covered area	Uncovered area	Number of Piezometric wells available around the compost
	27 Acre	21.5	NA	21.5	7

- viii. Obtaining valid registration/certification for the production and quality of bio-enriched Organic manure (bio compost) as per Gazette Notification S.O. 2776 (E) dated 10.10.2015 under the Fertilizer (Control) Fourth Amendment Order, 2015 issued by Ministry of Agriculture and Farmers Welfare (Dept. Of Agriculture, Cooperation and Farmers Welfare) from the Ministry of Agriculture/ concerned agency – within a time period of four months. **Letter no. 01/2013 – 2640 dated 01.11.2021.**
- ix. The finished bio-compost shall be packed in sealed poly bags super scribed with quality and composition of bio compost along with the name of the manufacturer industry.
- x. The unit shall maintain a record of procurement/ availability of press mud, sell of compost and compost quality on monthly basis.
- xi. The unit shall not be sale ready bio-compost in open tractors/trolleys.

#### **Distilleries opting for Incineration;**

- i. Minimum Solid % in feed for slop fired incinerator shall be 55-60% in case of C-Heavy and B-Heavy molasses as feedstocks and 50-55% in case of sugar syrup/sugarcane juice as feedstock.
- ii. Maximum storage of raw spent wash utilized in MEE followed by incineration shall strictly be restricted to seven days (07) equivalent of concentrated spent wash generated. Excess storage facilities beyond this shall be levelled and dismantled.
- iii. The unit shall collect ash generated from Incineration boiler through screw/belt conveyor from common silo and should be disposed off as fertilizer or for any other use.
- iv. Fly ash shall be stored separately as per CPCB guidelines so that it should not adversely affect the air quality, becoming air borne by wind or regime during rainy season by



flowing along with storm water. Direct exposure of workers to fly ash & dust shall be avoided.

- v. The unit shall sell potash rich ash to industries for potash recovery plant, fertilizer company or sell the ash to the farmers after meeting FCO conditions.
- vi. Unit shall dispose the spent wash through MEE followed by use of concentrated spent wash (as stated in point i) fuel in the Incineration boiler of ...TPH.

S.no.	Type of Boiler	Capacity of Boiler (TPH)	Type of subsidiary fuel used	Quantity of subsidiary fuel consumed (MT/day)	Quantity of ash generated (MT/day)	Method of Ash Disposal
1	Pulsating grate water tube	35 TPH + 14 TPH	Main Fuel Bagasse & Bio gas	30000 m3 / day and Bagasse 375 MT/day	45 mt / day	Mix with Bio-compost to enrich Potash content.

**Distilleries opting for dryer;**

- i. Minimum Solid % in feed for dryer shall be 40-45%.
- ii. Maximum storage of Bio-methanated spent wash utilized in dryer shall strictly be restricted to seven days (07) equivalent of concentrated Bio-methanated spent wash generated. Excess storage facilities beyond this shall be levelled and dismantled.
- iii. The unit shall collect powder produced from dryer in common silo and should be disposed off as fertilizer.
- iv. Unit shall dispose the spent wash through Bio-methanation followed by Bio-methanated spent wash MEE followed by use of concentrated bio-methanated.

**D. Domestic sewage**

- i. The domestic effluent should be treated separately in sewage treatment plant/ soak pit so that it should be in conformity with the following norms.

Domestic Effluent/ sewage discharge norms		
S. No.	Parameter	Standard
1.	pH	As per SPCB
2.	BOD	As per SPCB
3.	COD	As per SPCB
4.	TSS	As per SPCB
5.	T. Nitrogen	As per SPCB

\*Trade effluent and domestic sewage shall be treated separately and also to be monitored for compliance w.r.t. notified norms separately. However, Single outlet can be provided after mixing for outside disposal.

- ii. Industry shall install the flow meter at STP inlet and outlet and maintain the daily logbook.
- iii. Industry shall explore the possibility to recycle the treated used water shall be utilised in gardening, irrigation, industrial utility and toilet flushing to minimise the fresh water consumption up to 20 % per year.

**7. Air pollution mitigation**

- i. The industry shall use following fuel and install air pollution control devices (APCD) of adequate capacity to comply with the following;

S. No.	Equipment	Fuel used	Stack height (m)	Air Pollution Control Device (APCD)	Stack Emission standards
I.	Equipment in use/standby	Bagasse	65	ESP	50 mg / nm3
II.	Equipment in use/standby	Biogas	-	As per EPA Rules	As per EPA Rules

- i. The industry shall operate in a manner so that all emissions be emitted through designated chimney/stack only.
- ii. The APCS will be maintained and operated in such a manner that emissions always conform to the standard laid down under the E.P Act 1986 as amended. The ash generated from the Boiler shall be disposed of properly in such a manner that not affect the environment adversely.
- iii. The unit shall install Online Stack Emission Monitoring System (OEMS) for PM and ensure with its connectivity (24x7) to CPCB server and <Name of SPCB> dashboard.
- iv. The unit shall submit manual stack emission monitoring report and ambient air quality report on quarterly basis during operation of the plant.
- v. Water shall be sprinkled on the roads and premises for suppression of road dust.
- vi. The solid waste namely boiler ash shall be disposed of properly and ensure that there is no fugitive emission from their transportation, storage and handling.
- vii. The industry shall provide ports in the chimney/stack and facilities such as ladder, platform etc. as per requirement for monitoring the air emissions and the same shall be open for inspection and use at all time) by the Board's staff, the chimney/stack attached to various sources of emission shall be designated by number such as S-1, S-2 etc. and these shall be painted/ displayed to facilitate identification.

**8. Noise Pollution Mitigation:**

- i. Noise from the D.G. Set and other source(s) should be controlled by providing an acoustic enclosure as is required for meeting the ambient noise standards for night and day time as prescribed for respective areas/zones (Industrial and Commercial) which are as follows: -

Standards for Noise level in db.(A) L <sub>eq</sub>				
Industrial Area			Commercial Area	
Day	Night		Day	Night
Time 75	Time	70	Time 65	Time 55

**Day time:** from 6.00 a.m. to 10.00 p.m., **Night time:** from 10.00 p.m. to 6.00 a.m.

- ii. The industry shall take adequate measures to control of noise from its own source so as to comply with the standards as may be applicable.
- iii. The industry shall provide acoustics enclosure on DG sets as per Environment (Protection) Rules, 1986.



9. Conditions under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016: -

**Hazardous Waste Management (As per FORM 2 - [rule 6(2)])**

- i. Number of authorization and date of issue: **HW/B-281-21/5/2018**
- ii. Reference of application (No. and date) : **945789 DATED 25/09/2017**  
of is hereby granted an authorization based on the enclosed signed inspection report for generation, collection, reception, storage, transport, reuse, recycling, recovery, pre-processing, co-processing, utilization, treatment, disposal or any other use of hazardous or other wastes or both on the premises situated at

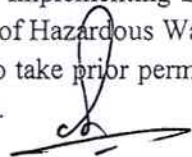
**Details of Authorization**

Sl. No	Category of Hazardous Waste as per the Schedules I, II and III of these rules	Authorised mode of disposal or recycling or utilisation or co-processing, etc.	Quantity (ton/annum)
1	<b>Used or spent oil HW cat no. 5.1 as per schedule 1</b>	<b>Generation collection storage transportation and offer for sale for the purpose of its recycling to authorized recycler</b>	Used oil 0.5 KLA (0.425 TPA)

- iii. The authorization shall be valid for a period of **20.05.2023**
- iv. The authorization is subject to the following general and specific conditions (Please specify any conditions that need to be imposed over and above general conditions, if any):

**A. General conditions of authorization:**

1. The authorized person shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under.
2. The authorization or its renewal shall be produced for inspection at the request of an officer authorized by the State Pollution Control Board.
3. The person authorized shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorization.
4. Any unauthorized change in personnel, equipment or working conditions as mentioned in the application by the person authorized shall constitute a breach of his authorization.
5. The person authorized shall implement Emergency Response Procedure (ERP) for which this authorization is being granted considering all site-specific possible scenarios such as spillages, leakages, fire etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time;
6. The person authorized shall comply with the provisions outlined in the Central Pollution Control Board guidelines on "Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty"
7. It is the duty of the authorized person to take prior permission of the State Pollution Control Board to close down the facility.



8. The imported hazardous and other wastes shall be fully insured for transit as well as for any accidental occurrence and its clean-up operation.
9. The record of consumption and fate of the imported hazardous and other wastes shall be maintained.
10. The hazardous and other waste which gets generated during recycling or reuse or recovery or pre-processing or utilization of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of authorization.
11. The importer or exporter shall bear the cost of import or export and mitigation of damages if any.
12. An application for the renewal of an authorization shall be made as laid down under these Rules.
13. Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time.
14. Annual return shall be filed by June 30th for the period ensuring 31st March of the year.

### General Conditions

1. Environmental management system
  - i. Industry shall setup the environmental management cell including unit head, purchase/store manager, process operation head, ETP in charge to effectively monitoring of environmental compliance
  - ii. Industry shall setup the environmental laboratory for testing of minimum wastewater quality parameters like pH, TSS, BOD, COD, MLSS and DO to effectively monitoring of ETP control parameters and ETP discharge norms.
2. The applicant shall get analyses the samples of effluent/emission/hazardous wastes at least once in a three month from the laboratory recognized by the MoEF&CC and shall report to the SPCB.
3. The applicant shall however, not without the prior consent of the Board bring into use any new or altered outlet for the discharge of effluent or gases emission or sewage waste from the unit.
4. Treated waste water and domestic waste water shall be disposed jointly at one disposal point. The applicant shall provide discharge measurement equipment at final disposal point.
5. The applicant shall strictly comply with conditions of this CCA and submit compliance report of stipulated conditions with 30 days of receipt of this CCA. If, at any point of time, it is found that the industry is not complying with stipulated conditions or any further direction/instruction issued by the **Board**, legal action shall be initiated against the applicant.
6. The applicant shall maintain good housekeeping. All valves/pipes/sewer/drains etc. must be leak-proof.
7. The industry shall provide uninterrupted entry to this STP's/ETP's inlet and outlet points, Air Pollution Control equipment and stack for smooth sampling/monitoring of efficiency of pollution control measures.
8. The industry shall provide "Inspection Book" at the time of inspection to the Board's officials. Whenever due to any accident or other unforeseen act or event, such emission occurs or is apprehended to occur in excess of standards laid down, such information shall be reported to the Board's offices and all other concerned offices. In case of failure of pollution control equipment, the production process connected to it shall be stopped with immediate effect
9. In case of any damage to the agriculture productivity, human habitation etc. by the operation of industry, it shall be imperative to stop production in the industry with immediate effect and such information shall be reported to Board's offices. The industry



- shall be liable to pay compensation also in such cases as decided by the Competent Authority.
10. The applicant shall apply before the 60 days of expiry of CCA or any change in production types/production capacity/manufacturing process/capacity enhancement etc. or any change in effluent discharge point or emission point.
  11. The **Board** reserves the right to revoke/add/modify any stipulated conditions issued along with CCA, as may be necessary.
  12. Any unauthorized change in personnel, equipment as working condition as mentioned in the application by the person authorized shall constitute a breach of his authorization.
  13. It is the duty of the authorized person to take prior permission of the **Board** to close down the facility.
  14. The authorization is valid for temporary storage of Hazardous Waste within premises only.
  15. It is duty of the authorized person to take prior permission of this Board to close and cleanup the facility for treatment, storage and disposal of hazardous waste.
  16. Industry shall submit the latest copy of Audit Balance sheet/C.A. Certificate (Fixed Assests+Current Assets-Current Liabilities) so that the Consent fee payable by the industry may be verified.
  17. Generated hazardous waste shall be stored temporarily in the factory premises and disposed of through authorized TSDF after obtaining the authorization from the Board
  18. Unit shall develop green belt as per the protocol of Board's office order **33 % of Total Project Area as per EC granted F. No. 1A-J-11011/463/2017-1A-1111(I)** dated **26.11.2018**, which is available on Sate Board's Website.
  19. The industry shall comply with the provisions of Environment (Protection) Amendment, Rules 2018 notified by MoEF&CC by Notification no 49 Dt. 25.01.2018, Environment (Protection) Act 1986, Water (Prevention and Control of Pollution) Act, 1974 as amended, Air (Prevention and Control of Pollution) Act, 1981 as amended, Plastic Waste Management Rule 2016, E-Waste (Management and Transboundary Movement) Rules 2016 (Whichever is applicable).
  20. If closure order is issued by CPCB or SPCB against the unit then CCA will remain suspended during the closure period. After ensuring the compliance and after revocation of the closure order, the CCA will automatically be effective from the date of issuance of the closure revocation order with additional conditions mentioned in the closure revocation order.

  
(S. Chandrasekar)  
Member Secretary