



Ref. No.: EC/21/Compl. / 7756
Date : 31-12-2021

To,
The Member Secretary
Bihar State Pollution Control Board
Parivesh Bhawan
Patliputra Industrial Area
P.O.: Sadaqat Ashram
PATNA – 800 013

SUB: 6-MONTHLY EC COMPLIANCE REPORT

Sir,

We would like to inform that we have obtained EC from SEIAA, Bihar for our Sugar Mill (expansion Project) vide Ref. No. F. No. SIA/5(j)/1276/2021 Dt: 02.04.2021.

Please find attached herewith 6-monthly compliance report for the period Apr.- Sep.'2021 for above referred EC.

With regards

Sincerely yours



S. L. Baheti
(CHIEF GENERAL MANAGER)



Ref. No.: EC/21/Compl./7755
Date : 31-12-2021

To,
The Member Secretary
State Environment Impact Assessment Authority
02nd Floor
Beltron Bhawan
L.B. Shastri Nagar
PATNA – 800 023

SUB: 6-MONTHLY EC COMPLIANCE REPORT

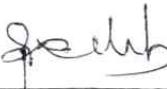
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S. L. Baheti
(CHIEF GENERAL MANAGER)

Harinagar Sugar Mills Ltd.



Ref. No.: MoEF/Rnc/21/Compl./7754
Date : 31-12-2021

To,
The Scientist 'D'
Ministry of Environment, Forest & CC,
Regional Office
Bungalow No. A-2
Shyamli Colony
RANCHI – 834 002

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(CHIEF GENERAL MANAGER)

OK

COMPLIANCE REPORT OF ENVIRONMENT CLEARANCE
(FOR PERIOD APR.- SEP.'2021)
OF
HARINAGAR SUGAR MILLS LTD., HARINAGAR

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

I. STATUTORY COMPLIANCE:-

| S. No. | PARTICULARS | COMPLIANCE |
|--------|--|---|
| a | The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose is involved in the project. | No Forest land was diverted for non-forest purpose. |
| b | The project proponent shall obtain clearance from the National Board for Wildlife, if applicable. | Not applicable |
| c | The project proponent shall prepare a Site-specific plan & Wildlife Management Plan and approval by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of Schedule-I species in the study area). | Not applicable |
| d | The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee. | We have already obtained Consent to Operate (CTO) for both Emission and Discharge vide Ref. No. – M/T-3-2018/299 (Part-II)/ 295 dated 15-02-2019 & Ref. No.M/T-3-2018/299(Part-II)/294 dated 15-02-2019 respectively for a period of 5 years. i.e. up to 15-02-2024 for existing project. Enclosed as Annexure-I . <i>We have submitted online CTE Application for expanded capacity vide Application No. -----.</i> |
| e | The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time. | We have already obtained Authorization under the Hazardous and other Waste Management Rules, 2016 vide Ref. No. HW/ B-2263 dated 10-12-2018. Enclosed as Annexure-II |
| f | The company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989. | Not applicable. |

II. Air quality monitoring and preservation

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

| | | |
|----|---|--|
| | Power Plants) as amended from time to time and connected to SPCB and CPCB online servers and the systems be calibrated according to equipment supplier's specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories. | |
| b | The project proponent shall install system carryout Continuous Ambient Air Quality monitoring for common / criterion parameters relevant to the main pollutants released (e.g. PM ₁₀ and PM _{2.5} in reference to PM emission, and SO ₂ and NO _x in reference to SO ₂ and NO _x emission) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions. (case to case basis small plants: Manual; Large plants: continuous). | Ambient Air Quality Monitoring is being done through MoEFCC Recognised Environmental Laboratory. Concn. of air quality is within the norms of NAAQS 2009. (Test Reports enclosed as Annex – III) |
| c | The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality / fugitive emission to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six monthly monitoring report. | Ambient Air Quality Monitoring & Stack Emission Monitoring is being done through MoEFCC Recognised Environmental Laboratory during season. We are submitting copy of Ambient Air & Emission Monitoring report to the BSPC Board, Patna. |
| d. | Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards. | We are spraying water at all dust generating points. We have installed wet scrubber type fly ash arrestor in our 74 TPH Boiler & 'ESP' system in 78 TPH Boiler and these are working satisfactorily. |
| e | The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16 th November, 2009 shall be complied with. | Complying. |
| f | Sulphur content should not exceed 0.5 % in the coal for use in coal fired boilers to control particulate emissions within permissible limits (as applicable). The gaseous emissions shall be dispersed through stack of adequate height as per CPCB / SPCB guidelines. | We are not using coal as fuel in our boilers. |
| g | The DG. sets shall be equipped with suitable pollution control devices and the adequate stack height so that the emissions are in conformity with the extent regulations and the guidelines in this regard. | We are not using DG sets. |
| h | Storage of raw materials, coal etc shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions. | Raw materials are being stored in covered area to prevent dust pollution and other fugitive emissions. |

III. Water quality monitoring and preservation

| S. No. | PARTICULARS | COMPLIANCE |
|--------|---|---|
| a | For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel / drain carrying effluent within the premises (applicable in case of the project achieving ZLD) and connected to SPCB and CPCB online servers | OCEMS for monitoring of effluent has been installed and same is connected to SPCB and CPCB servers. |
| b | Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises (applicable in case of the projects | We are sending our excess treated effluent to our own Farms to use as irrigation water. |

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| | achieving the ZLD) | |
| c | Process effluent / any waste water shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system. | We are maintaining this system. |
| d | The effluent discharge shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, or as specified by the State Pollution Control Board while granting Consent under Air/water Act, whichever is more stringent. | Treated effluent from our sugar mill conforms to the standards prescribed under the E(P) Rules'1986. |
| e | Total fresh water requirement shall not exceed the proposed quantity or as specified by the committee. Prior permission shall be obtained from the concerned regulatory authority / CGWA in this regard. | We are very much particular about fresh water abstraction and there was not a single day on which day we have crossed the limit i.e. 2500 KL/day (as per permission of CGWA) |
| f | Industrial / trade effluent shall be segregated into High COD/TDS and Low COD/TDS effluent streams. High TDS/COD shall be passed through stripper followed by MEE and ATFD (agitated thin film drier). Low TDS effluent stream shall be treated in ETP and then passed through RO System. | We have installed Sulphate Removal System (SRS) for the purpose to reduce High COD/TDS from the Cooling tower overflow water. |
| g | The company shall harvest rainwater from the rooftops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial operations within the plant. | We had made 8 nos. recharge pits and rooftop rainwater harvesting system has been installed. |

IV. Noise monitoring and prevention

| S. No. | PARTICULARS | COMPLIANCE |
|--------|--|--|
| a | Acoustic enclosure shall be provided to DG set for controlling the noise pollution. | Not applicable |
| b | The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. | Equipments for controlling noise pollution in and around the plant have been provided. Ambient Noise Level report is enclosed herewith which shows noise pollution level in and around the area is within the limit. ANL report enclosed herewith as Annex – IV . |
| c. | The ambient noise levels should conform to the standards prescribed under E(P) A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time. | The ambient noise levels conforms to the standards prescribed under E(P) A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time. |

V. Energy Conservation measures

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

VI. Waste Management

| S. No. | PARTICULARS | COMPLIANCE |
|--------|--|--|
| a | Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arrestors shall be provided on tank farm and the solvent transfer through pumps. | We are following these rules as per applicability for our sugar mill project |
| b | Process organic residue and spent carbon, if any, shall be sent to cement industries, ETP sludge, Process inorganic & evaporation salt shall be disposed off to the TSDF | Not applicable |
| c | The company shall undertake waste minimization measures as below:- | |

| | | |
|------|--|---|
| i. | Metering and control of equipments of active ingredients to minimize waste. | Metering of equipments of active ingredients to minimize waste is being implemented. |
| ii. | Reuse of by-products from the process as raw materials or raw material substitutes in other processes. | Our by products are as under:- Molasses: Used in Distillery as its raw material. Bagasse: Used in Boilers for steam generation Press Mud: Used in Bio-fertilizer division to mix in Bio fertilizer. Boiler Ash: Used in Bio-fertilizer division to mix in Bio fertilizer. |
| iii. | Use of automated filling to minimize spillage. | We have installed a lot of instrumentation and automation equipments in this regard. |
| iv. | Use of close feed system into batch reactors. | Not applicable. |
| v. | Venting equipment through vapour recovery system. | Not applicable. |
| vi. | Use of high pressure hoses for equipments clearing to reduce waste water generation. | We are using high pressure mechanical hoses for clearing of equipments and waste water generated is stored in a pit for further use. |

VII. Green Belt

| S. No. | PARTICULARS | COMPLIANCE |
|--------|---|---|
| a | Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The green belt shall inter alia cover the entire periphery of the plant. | Green belt has been developed in more than 33 % of the project area. We have planted native tree species in the factory command area. Photocopy of tree plantation is enclosed herewith for ready reference. |

VIII. Safety, Public hearing and Human health issues

| S. No. | PARTICULARS | COMPLIANCE |
|--------|---|--|
| a | Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented | Safety officer with his team deputed for the purpose. |
| b | The PP shall provide Personal Protection Equipment (PPE) as per norms of Factory Act | PPE is being provided as per norms of Factory Act'1948. |
| c | Training shall be imparted to all employees on safety and health aspects of chemicals handling, Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training of all employees on handling of chemicals shall be imparted. | Training imparted to employees on safety & safety equipments such as hand gloves, spectacles, Masks and medical facility is provided to the employees. Periodic medical checkup is being done as per requirement of Factory Act'1948. |
| d | Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project. | Not applicable |
| e | Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act. | A team of five medical assistants are employed under a qualified Doctor for the purpose with well equipped dispensary inside the premises. |
| f | There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places. | We are having adequate space for Vehicles for raw materials & finished goods in our premises. |

IX. Corporate Environmental Responsibility

| S. No. | PARTICULARS | COMPLIANCE |
|--------|--|--|
| a | The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA-III dated 1 st . May 2018, as | Agreed, we will comply with the provisions of OM vide F.No. 22-65/2017-IA-III dated 1 st . May 2018 |

| | | |
|----|--|--|
| | applicable, regarding Corporate Environment Responsibility. | |
| b | The company shall have a well laid down environmental policy duly approved by the Boards of Directors. The environmental policy should prescribe for standards for standard operating procedures to have proper checks and balances and to bring into focus any infringements / deviation/ violation of the environmental / forest / wildlife norms/ conditions. The company shall have defined system of reporting infringements/ deviation/ violation of the environmental / forest / wildlife norms/ conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six monthly report. | We have a well laid down environmental policy duly approved by the Board of Directors. System has been defined for reporting infringements/ deviation/ violation of the environmental conditions. |
| c. | A separate Environmental Cell both at the project and company head quarter lever, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization. | A separate Environmental Cell with qualified personnel has been set up under the control of senior Executive, who directly report to the head of the organization. |
| d. | Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report. | Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company will be prepared and will be duly approved by competent authority. The year wise funds earmarked for environmental protection measures are kept in separate account and will not be diverted for any other purpose. Year wise progress of implementation of action plan will be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report. |
| e. | Self Environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out. | Self Environmental audit has been conducted annually. Every three years third party environmental audit will be carried out. |

X. Miscellaneous

| S. No. | PARTICULARS | COMPLIANCE |
|--------|---|---|
| a | The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently. | Public notice has been published in 2 local dailies. Copy attached herewith as Annex – V. |
| b | The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal bodies in addition to the relevant officers of the Government who in turn has to display the same for 30 days from the date of receipt. | The copies of the environmental clearance has been submitted to the Heads of local bodies, in addition to the relevant officers of the Government. |
| c | The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitoring data on their website and update the same on half-yearly basis. | We are uploading the status of compliance of the stipulated environment clearance conditions, including results of monitoring data on our website and update the same on half-yearly basis. |
| d | The project proponent shall monitor the criteria pollutants level namely: PM ₁₀ , SO ₂ , NO _x | Monitoring the criteria pollutants level namely: PM ₁₀ , SO ₂ , NO ₂ (ambient levels as well as stack |

[Signature]



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

Ref. No.- M/T-3/2018/299(Part-II)

Patna, dated-

'CONSENT-TO-ESTABLISH' (NOC)

UNDER SECTIONS 25/26 OF THE WATER (PREVENTION AND CONTROL OF POLLUTION) ACT, 1974 AND 21 OF THE AIR (PREVENTION AND CONTROL OF POLLUTION) ACT, 1981

REFERENCE:

- (i) Name and address of the Proponent: Sri Laxminarayan Babulal Agrawal, Director, M/s Harinagar Sugar Mills Ltd, Village & P.O.-Harinagar, Dist-West Champaran (Bihar)-845103; and
- (ii) Online Application No. 2168390 dated 31.12.2018/01.01.2019 submitted for expansion project of existing sugar unit M/s Harinagar Sugar Mills Ltd at Village & P.O. - Harinagar, Dist-West Champaran. The expansion project comprises setting up of cane crushing to increase capacity from 10,000 TCD to 11,500 TCD.

AFTER CONSIDERING:

- (i) The facts stated in their application;
- (ii) Bihar State Pollution Control Board's Notification No. 26 dated 08.11.2003;
- (iii) Provisions of the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981; and
- (iv) Related document submitted along with application dated 31.12.2018/01.01.2019 submitted by the applicant.

NOC IN FAVOUR OF THE PROONENT AT THE SAID SITE IS HEREBY ACCORDED SUBJECT TO THE FOLLOWING CONDITIONS:

- (i) That, the proponent shall obtain 'Consent-to-Operate' under section 25 & 26 of The Water Act, 1974 and Section 21 of The Air Act, 1981 prior to commissioning of the industrial plant (expansion project) from Bihar State Pollution Control Board. Operation of enhanced capacity shall not be started without CTO from the Board;
- (ii) That, they shall comply with provisions (whichever applicable) of The Water Act, 1974, The Air Act, 1981, The Environment (Protection) Act, 1986, Rules and notifications issued there under;
- (iii) That, the effluent (Domestic or Trade) and emission shall conform to the standard prescribed under The Rules;
- (iv) All other mandatory approvals and permissions from competent authority shall be obtained;
- (v) That, they shall comply with the conditions of EC as special conditions and general conditions and compliance/progress report shall be submitted to the Board;
- (vi) That, revised prior permission, if required shall be obtained from CGWA/SGWA for withdrawal of the ground water;
- (vii) That, they shall submit an action plan for modification in existing crushing unit, ETP(primary, secondary & tertiary treatment unit), primary & secondary clarifier, storage lagoon for treated effluent and irrigation management plan in light of adequacy assessment report;
- (viii) That, they shall ensure total effluent discharged should not be exceeded than permissible limit (200 liter/tone of cane crushed);
- (ix) That, process effluent/any waste water shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond;

- That, no effluent from sugar unit shall be discharged outside the plant premises and Zero Liquid Discharge shall be adopted through irrigation management plan. Water consumption shall be reduced by adopting 3 R's (reduce, reuse and recycle) concept in the process;
- (xi) The company shall adopt rainwater harvesting measures to recharge the ground water;
 - (xii) That, continuous online (24x7) monitoring system to be installed for flow measurement and measurement of pollutants within the effluent treatment unit. Data to be uploaded on company's website and provided to the CPCB/SPCB website;
 - (xiii) That, adequate facilities to control emission of particulate matter and stack height shall be as prescribed under the Rules/CPCB guidelines;
 - (xiv) Boiler ash from sugar plant shall be stored separately as per CPCB guidelines so that it shall not adversely affect the air quality, becoming air borne by wind or water regime during rainy season by flowing along with the storm water. Proper ash management plan shall be submitted to the Board for its end use;
 - (xv) That, bagasse storage shall be done in such a way that it does not get air borne or fly around due to wind;
 - (xvi) That, diesel generator sets, if any, shall have acoustic enclosures and should conform to the Environment (Protection) Rules, 1986 prescribed for air and noise emission standards and the height of the stack of the D.G. Set should be as per norms of CPCB;
 - (xvii) The proponent shall have to take all possible measures to control water & air pollution, so that nearby habitation/school should not be affected directly or indirectly; and
 - (xviii) That, tree plantation in perimeter of the campus shall be done and maintained to develop as green belt.

NOTE:

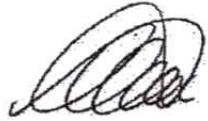
1. Bihar State Pollution Control Board reserves the option to revise or add other conditions, if necessary, for protection of Environment in general and for Pollution Control in particular;
2. The present NOC should not be construed as an assurance for the grant of 'Consent-to-Operate' the proposed project but shall be subject to compliance of all the conditions indicated above;
3. The NOC, granted, shall be valid for a period of one year from the date of issue; and
4. Issued under the instructions of the Competent Authority.

Sd/-
 (Alok Kumar)
 Member-Secretary

Memo No.: - 171

Patna, dated:- 25-11-19

Copy forwarded to Sri Laxminarayan Babulal Agrawal, Director, M/s Harinagar Sugar Mills Ltd, Village & P.O.-Harinagar, Dist-West Champaran (Bihar)-845103/Regional Officer, BSPCB, Muzaffarpur for favour of information and necessary action.



25/11/19
 (Alok Kumar)
 Member-Secretary

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

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 - (xviii) That, tree plantation in perimeter of the campus shall be done and maintained to develop as green belt.

NOTE:

1. Bihar State Pollution Control Board reserves the option to revise or add other conditions, if necessary, for protection of Environment in general and for Pollution Control in particular;
2. The present NOC should not be construed as an assurance for the grant of 'Consent-to-Operate' the proposed project but shall be subject to compliance of all the conditions indicated above;
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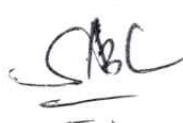
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(Alok Kumar)
Member-Secretary

Memo No.: - 171

Patna, dated:- 25-11-19

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25/11/19
(Alok Kumar)
Member-Secretary



लोक-सुनवाई की सूचना

शुद्धि-पत्र

इस समाचार पत्र के दिनांक 07.10.2018 के अंक में लोक सुनवाई की सूचना में प्रकाशित मेसर्स हरिनगर सुगर मिल्स लिं. हरिनगर पा. चम्पारण द्वारा इख पेराई की वर्तमान क्षमता 10000 टन इख/दिन के स्थान पर टकण भूलवश 1000 टन इख/दिन प्रकाशित हो गया है। इसे 10,000 टन इख/दिन पढ़ा जाय।

सदस्य-सचिव
बिहार राज्य प्रदूषण नियंत्रण पर्षद

THE TIMES OF INDIA, PATNA
EDNESDAY, OCTOBER 10, 2018

लोक-सुनवाई की सूचना

शुद्धि-पत्र

इस समाचार पत्र के दिनांक 07.10.2018 के अंक में लोक सुनवाई की सूचना में प्रकाशित मेसर्स हरिनगर सुगर मिल्स लिं. हरिनगर पा. चम्पारण द्वारा इख पेराई की वर्तमान क्षमता 10000 टन इख/दिन के स्थान पर टकण भूलवश 1000 टन इख/दिन प्रकाशित हो गया है। इसे 10,000 टन इख/दिन पढ़ा जाय।

सदस्य-सचिव
बिहार राज्य
प्रदूषण नियंत्रण
पर्षद

लोक-सुनवाई की सूचना

शुद्धि-पत्र

इस समाचार पत्र के दिनांक 07.10.2018 के अंक में लोक सुनवाई की सूचना में प्रकाशित प्रथम भूसिंगर सार मिल्स लिं. हरिनगर पा. चम्पारण द्वारा इख पेराई की वर्तमान क्षमता 10000 टन इख/दिन के स्थान पर टकण भूलवश 1000 टन इख/दिन प्रकाशित हो गया है। इसे 10,000 टन इख/दिन पढ़ा जाय।

सदस्य-सचिव
बिहार राज्य प्रदूषण नियंत्रण पर्षद

Chd

+ G.M. (C.I.T.O.)

v G.M.



बिहार राज्य प्रदूषण नियंत्रण पर्षद

गोदावरी नदी, इन्दौर-2, पाटलीपुत्र औद्धोगिक क्षेत्र
पो-सदाकर आश्रम, पाटलीपुत्र, पटना-800010

पत्रका. :- न/द-3-2018/430/
प्रका.

पटना, दिनांक:-

आलोक कुमार, नामवर्से,
सदस्य-सचिव
चैव में।

जिला पदाधिकारी

जिला-पश्चिमी चम्पारण।

विषय: मेसर्स हरिनगर सुगर मिल्स लि०, ग्राम+पो०-हरिनगर, अंचल-रामनगर, जिला-पश्चिमी चम्पारण द्वारा सुगर मिल का क्षमता विस्तार परियोजना के पर्यावरणीय स्वीकृति के वास्ते लोक सुनवाई की अध्यक्षता करने के संबंध में।

उपर्युक्त के प्रसंग में सूचित करना है कि पर्यावरण एवं वन मंत्रालय, भारत सरकार के अधिसूचना संख्या एस. आ० 1533, दिनांक 14 सितम्बर, 2006 के आलोक में मेसर्स हरिनगर सुगर मिल्स लि०, हरिनगर द्वारा पश्चिमी चम्पारण जिला अन्तर्गत आर्य समाज मंदिर परिसर, आर्य नगर, हरिनगर रेलवे स्टेशन के नजदीक, ग्राम+पो०-हरिनगर, अंचल-रामनगर, जिला-पश्चिमी चम्पारण में प्रस्तावित क्षमता विस्तार परियोजना के पर्यावरणीय स्वीकृति के वास्ते लोक सुनवाई करने हेतु अनुरोध पत्र वांछित कागजात के साथ उपलब्ध कराया गया है। लोक सुनवाई की अध्यक्षता संबंधित जिला पदाधिकारी या उनके प्रतिनिधि, जो एडिसनल डिस्ट्रीक्ट मजिस्ट्रेट के श्रेणी से कम न हो, द्वारा की जानी है।

सूचित करना है कि प्रस्तावित परियोजना के पर्यावरणीय स्वीकृति हेतु लोक-सुनवाई दिनांक 20.11.2018 को 11:30 बजे पूर्वाहन में आर्य समाज मंदिर परिसर, आर्य नगर, हरिनगर रेलवे स्टेशन के नजदीक, ग्राम+पो०-हरिनगर, जिला-पश्चिमी चम्पारण में सुनिश्चित की गयी है। इसकी सूचना दैनिक समाचार पत्रों के माध्यम से भी प्रकाशित की गई है, जिसकी छाया प्रति सुलभ जानकारी हेतु संलग्न की जा रही है। आवेदक से प्राप्त परियोजना के ड्राफ्ट ई.आई.ए. एवं कार्यपालक सार (हिन्दी एवं अंग्रेजी में) की प्रति हार्ड एवं सॉफ्ट कॉपी संलग्न कर भेजी जा रही है, ताकि परियोजना से प्रभावित होने वाले क्षेत्रों के लोगों के अवलोकनार्थ प्रदर्शित कराया जा सके।

अनुरोध होगा कि लोक सुनवाई की अध्यक्षता उपरोक्त कार्यक्रम के अनुसार सुनिश्चित करने की कृपा की जाय।

- अनुलग्नक: 1. ड्राफ्ट ई.आई.ए. की हार्ड एवं सॉफ्ट प्रति।
2. हिन्दी एवं अंग्रेजी में कार्यपालक सार की प्रति।
3. समाचार पत्र में प्रकाशित सूचना की छाया प्रति।

विश्वासमाजन्

ह०/-

(आलोक कुमार)

सदस्य-सचिव

ज्ञापांक :-

पटना, दिनांक :-

प्रतिलिपि :- आरक्षी अधीक्षक, विभाग, पश्चिमी चम्पारण को सूचनार्थ एवं आवश्यक कार्रवाई हेतु प्रेषित। अनुरोध है कि प्रासंगिक लोक सुनवाई के दौरान समुचित सुरक्षा सुनिश्चित करने हेतु संबंधित थाना को आदेश देने की कृपा की जाय।

ह०/-

(आलोक कुमार)

सदस्य-सचिव

+ G.M.(T)(I)

ज्ञापांक :—

प्रतिलिपि—

पटना, दिनांक :—
इच्छक, आर्य समाज मंदिर परिसर, आर्य नगर, हरिनगर रेलवे स्टेशन के
नज़दीक, ग्राम+पो०—हरिनगर, जिला—पश्चिमी चम्पारण को सूचनार्थ एवं
आवश्यक कार्रवाई हेतु प्रेषित।

ह0/-
(आलोक कुमार)
सदस्य—सचिव

ज्ञापांक :—

पटना, दिनांक :—

प्रतिलिपि :— थाना प्रभारी, हरिनगर, जिला— पश्चिमी चम्पारण को सूचनार्थ एवं
आवश्यक कार्रवाई हेतु प्रेषित। अनुरोध है कि ग्रासंगिक लोक सुनवाई के
दौरान समुचित सुरक्षा सुनिश्चित करने की कृपा की जाय।

ह0/-
(आलोक कुमार)
सदस्य—सचिव

ज्ञापांक :— ३५०३.

पटना, दिनांक :— १५-१०-१०

प्रतिलिपि :— श्री एस.एल.बहेती, मुख्या महाप्रबंधक, मेसर्स हरिनगर सुगर मिल्स लि०,
ग्राम+पो०—हरिनगर, अंचल—रामनगर, जिला—पश्चिमी चम्पारण को सूचनार्थ
प्रेषित। उपरोक्त लोक सुनवाई कार्यक्रम के दौरान वांछित कागजात के
साथ अपनी उपस्थिति सुनिश्चित की जाय।

१०/१०/१८
(आलोक कुमार)
सदस्य—सचिव

448 BIHAR STATE POLLUTION CONTROL BOARD
PARVESH BHAWAN, PLOT NO. NS-8/2, PALIPUTRA INDUSTRIAL AREA,
PATLIPUTRA, Patna - 800 010
Ref. No.- M/T-3-2018/299 (Parvesh) 95

Painia, dated 15-02-2019

EMISSION CONSENT ORDER

With reference to the online application no-2317426 dated 23.01.2019, CTO (Air) issued by the Board vide ref. no-4383 dated 11.12.2018 and EC for capacity expansion issued by SEIAA, Bihar vide ref. no-F.No.-SIA/E/G/523/18 dated 30.01.2019 of M/s Harinagar Sugar Mills Ltd, At & P.O- Harinagar, Dist- West Champaran-845103 for consent under sections 21 of the Air (Prevention & Control of Pollution) Act, 1981, he/she is/are granted consent to operate his/her Sugar Mill (Capacity expanded- 10000 TCD to 11500 TCD) At & P.O.- Harinagar, Dist- West Champaran-845103 for the period of five years from the date of issue with following conditions:-

- 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 and Transboundary 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, they shall submit stack monitoring and AAQ (including noise) report monthly within consent period;
 - 6 That, all air pollution control facilities provided(Wet Scrubber, ESP etc) should be operative regularly and maintained properly and they shall ensure emission of particulate matter $\leq 150 \text{ mg/Nm}^3$;
 - 7 That, the solid waste (bottom ash of boiler etc) shall be disposed of properly at designated place and monthly report containing quantity of generation, re-used, if any and disposed, site of disposal etc shall be submitted to the Board;
 - 8 That, good housekeeping shall be maintained;
 - 9 That, tree plantation shall be done with consultation of local DFO office to develop as green belt;
 - 10 They shall comply with direction of the Board issued time to time; and
 - 11 That, the Environmental Statement as prescribed in the E (P) Rules, 1986 (see rule 14) for the each financial year ending the 31st March, shall be submitted by the month of September every year.

5

The Chief General Manager,
M/s Harnagar Sugar Mills Ltd.
At & P.O.- Harnagar,
Dist- West Champaran-845113

(Alok Kumar)
Member-Secretary



SHIVA TEST HOUSE

122 - C, Aastha, Road No. 5 A
Patliputra Colony ; Patna - 800 013
E.mail : sthptnal@yahoo.co.in

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. HSM/TR/21-22/68 | Dt : 26.04.2021 | Your Work Order No. 8917 | Dt : 17.01.2021 |
|---|--|--------------------------|-----------------|
| [a] Name and address of the Customer | Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN - 845 103 | | |
| [b] Sampling Environmental Condition | Temp. (°C) | 30 | Humidity (%) |
| [c] Details of Sample | <i>Monitoring of Ambient Noise Level(Day Time) within plant premises</i> | | |
| [d] Monitored by | SHIVA TEST HOUSE on 04.04.21 | | |
| [e] Whether any specific Method of Test has been suggested by the party | No | | |
| Sampling Location | TWA of Noise Level in dB(A) (Day Time) | | |
| 1. Near Main Gate | 63.6 | | |
| 2. Near Guest House | 61.2 | | |
| 3. Near Cane Yard | 58.4 | | |
| 4. Near ETP | 55.6 | | |
| 5. Near Railway Gate | 66.4 | | |
| N.B.: | The Ambient Air Quality Standards in respect of Noise as per Noise Pollution (Regulation and Control) Rules 2000 for Industrial area is 75.0 dB(A), for Commercial area is 65.0 dB(A), for Residential area is 55.0 dB(A) & for Silence Zone is 50.0 dB(A) in daytime i.e. 6.00 am to 9.0 p.m. As per Rule 7(1&2) the authority shall take action against violator if the noise level exceed the ambient noise standards by 10 dB(A) or more against any area/zone. | | |



Authorized Signatory
Quality Manager / Dy. Quality Manager

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



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Patliputra Colony ; Patna – 800 013
E.mail : sthpatna1@yahoo.co.in

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TEST REPORT

| Ref. No. HSM/TR/21-22/697 | | Dt : 03.07.2021 | Your Work Order No. 8917 | | Dt : 17.01.2021 |
|---|---|---|---------------------------------|--------------|------------------------|
| [a] Name and address of the Customer | | Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN – 845 103 | | | |
| [b] Sampling Environmental Condition | | Temp. (°C) | 32 | Humidity (%) | 52 |
| [c] Details of Sample | | <i>Monitoring of Ambient Noise Level(Day Time) within plant premises</i> | | | |
| [d] Monitored by | | SHIVA TEST HOUSE on 26.06.21 | | | |
| [e] Whether any specific Method of Test has been suggested by the party | | No | | | |
| Sampling Location | | TWA of Noise Level in dB(A) (Day Time) | | | |
| 1. Near Main Gate | | 62.7 | | | |
| 2. Near Guest House | | 59.3 | | | |
| 3. Near Cane Yard | | 55.6 | | | |
| 4. Near ETP | | 54.3 | | | |
| 5. Near Railway Gate | | 63.9 | | | |
| N.B.: | <i>The Ambient Air Quality Standards in respect of Noise as per Noise Pollution (Regulation and Control) Rules 2000 for Industrial area is 75.0 dB(A), for Commercial area is 65.0 dB(A), for Residential area is 55.0 dB(A) & for Silence Zone is 50.0 dB(A) in daytime i.e. 6.00 am to 9.0 p.m. As per Rule 7(1&2) the authority shall take action against violator if the noise level exceed the ambient noise standards by 10 dB(A) or more against any area/zone.</i> | | | | |



SBC

Authorized Signatory
Quality Manager / Dy. Quality Manager

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TEST REPORT

| | | | |
|---|--|--------------------------|-----------------|
| Ref. No. HSM/TR/20-21/1039 | Dt : 31.07.2021 | Your Work Order No. 8917 | Dt: 17.01.2021 |
| [a] Name and address of the Customer | Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN – 845 103 | | |
| [b] Sampling Environmental Condition | Temp. (°C) | 31 | Humidity (%) 84 |
| [c] Details of Sample | <i>Monitoring of Ambient Noise Level(Day Time) within plant premises</i> | | |
| [d] Monitored by | SHIVA TEST HOUSE on 26.07.21 | | |
| [e] Whether any specific Method of Test has been suggested by the party | No | | |
| Sampling Location | TWA of Noise Level in dB(A) (Day Time) | | |
| 1. Near Main Gate | 61.4 | | |
| 2. Near Guest House | 58.2 | | |
| 3. Near Cane Yard | 54.3 | | |
| 4. Near ETP | 51.6 | | |
| 5. Near Railway Gate | 62.7 | | |
| N.B.: | The Ambient Air Quality Standards in respect of Noise as per Noise Pollution (Regulation and Control) Rules 2000 for Industrial area is 75.0 dB(A), for Commercial area is 65.0 dB(A), for Residential area is 55.0 dB(A) & for Silence Zone is 50.0 dB(A) in daytime i.e. 6.00 am to 9.0 p.m. As per Rule 7(1&2) the authority shall take action against violator if the noise level exceed the ambient noise standards by 10 dB(A) or more against any area/zone. | | |



Authorized Signatory
Quality Manager / Dy. Quality Manager

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E.mail : sthpatna1@yahoo.co.in

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TEST REPORT

| Ref. No. HSM/TR/21-22/1901 | | Dt : 30.09.2021 Your Work Order No. 8917 | | Dt : 17.01.2021 | |
|----------------------------|---|---|----|-----------------|----|
| [a] | Name and address of the Customer | Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN – 845 103 | | | |
| [b] | Sampling Environmental Condition | Temp. (°C) | 31 | Humidity (%) | 68 |
| [c] | Details of Sample | <i>Monitoring of Ambient Noise Level(Day Time) within plant premises</i> | | | |
| [d] | Monitored by | <i>SHIVA TEST HOUSE on 20.09.21</i> | | | |
| [e] | Whether any specific Method of Test has been suggested by the party | No | | | |
| <i>Sampling Location</i> | | <i>TWA of Noise Level in dB(A) (Day Time)</i> | | | |
| 1. | Near Main Gate | 63.2 | | | |
| 2. | Near Guest House | 55.1 | | | |
| 3. | Near Cane Yard | 52.8 | | | |
| 4. | Near ETP | 50.4 | | | |
| 5. | Near Railway Gate | 61.6 | | | |
| N.B.: | <i>The Ambient Air Quality Standards in respect of Noise as per Noise Pollution (Regulation and Control) Rules 2000 for Industrial area is 75.0 dB(A), for Commercial area is 65.0 dB(A), for Residential area is 55.0 dB(A) & for Silence Zone is 50.0 dB(A) in daytime i.e. 6.00 am to 9.0 p.m. As per Rule 7(1&2) the authority shall take action against violator if the noise level exceed the ambient noise standards by 10 dB(A) or more against any area/zone.</i> | | | | |



Authorized Signatory
Quality Manager / Dy. Quality Manager

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Patliputra Colony ; Patna – 800 013
E.mail : sthpatnal@yahoo.co.in**

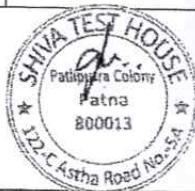


RECOGNISED AS ENVIRONMENTAL LABORATORY BY MoEFCC, GOVT. OF INDIA, UNDER ENVIRONMENT (PROTECTION) ACT 1986, DEPTT. OF INDUSTRY, FORESTS & ENVIRONMENT, GOVT. OF BIHAR AND BIHAR STATE POLLUTION CONTROL BOARD

TEST REPORT

Ref. No. HSM/TR/21-22/67 Dt : 26.04.2021 Your Work Order No. 8917 Dt : 17.01.2021

| Ref. No. HSM/TR/21-22/67 | | Dt : 26.04.2021 | Your Work Order No. 8917 | | Dt : 17.01.2021 |
|--|--|---|--|---|-------------------------|
| [a] Name and address of the Customer | | Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN – 845 103 | | | |
| [b] Details of Sample | <i>Monitoring of Ambient Air Quality</i> | | | | |
| [c] Sample Collected by | SHIVA TEST HOUSE on 03.04.21 | | | | |
| [d] Sampling Location | <i>Within Premises of Sugar Mill</i> | | | | |
| [e] Method of Sampling | IS 5182 (Part - 14) | | | | |
| [f] Sampling Environmental Condition | Temp. (°C) | 32 | Humidity (%) | 55 | |
| [g] Details of Sample Container (No. & Type of Container) | Filter Paper ; Glass Impinger | | | | |
| [h] Sample Quantity | 12 | | | | |
| [i] Items required to be tested | As per contract | | | | |
| [j] Whether any specific Method of Test has been suggested by the customer | No | | | | |
| [k] Date of receiving the sample in Laboratory | 04.04.21 | | | | |
| [l] Analysis Start Date / Analysis Completion Date | 04.04.21 / 07.04.21 | | | | |
| Parameters | Method of Test | Sampling Station | | | Limit as per NAAQS 2009 |
| | | Near Guest House | Near E.T.P. | Near Workshop | |
| [a] Particulate Matter (PM ₁₀), µg / m ³ | IS 5182 (Part-23) | 70.9 68.0 62.6 | 77.7 71.6 65.8 | 88.9 78.3 77.0 | 100 µg / m ³ |
| [b] Particulate Matter (PM _{2.5}), µg / m ³ | CPCB GMAAP Vol. I | 37.5 34.0 28.7 | 42.7 35.6 30.2 | 49.8 40.9 37.4 | 60 µg / m ³ |
| [c] Sulphur Dioxide as SO ₂ , µg / m ³ | IS 5182 (Part-2) | 17.7 21.2 20.5 13.7 10.9 15.0 | 20.7 22.8 17.8 13.6 12.2 15.0 | 17.9 24.2 16.4 14.1 12.5 15.6 | 80 µg / m ³ |
| [d] Nitrogen Dioxide as NO ₂ , µg / m ³ | IS 5182 (Part-6) | 27.3 29.0 25.8 22.3 18.5 23.7 | 34.1 30.4 27.6 24.8 22.1 25.4 | 33.6 35.4 28.3 26.0 24.4 27.7 | 80 µg / m ³ |
| 24 Hrs. Average Value | | | | 24 Hrs. Average Air Quality within the Premises | |
| PM ₁₀ | | 67.2 | 71.7 | 81.4 | 73.4 |
| PM _{2.5} | | 33.4 | 36.2 | 42.7 | 37.4 |
| SO ₂ | | 16.5 | 17.0 | 16.8 | 16.8 |
| NO ₂ | | 24.4 | 27.4 | 29.2 | 27.0 |



Authorized Signatory
Quality Manager / Dy. Quality Manager

- Quality Manager / Dy. Qu.*

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 2. Total Liability of our Laboratory is limited to invoiced amount.
 3. Test Report endorsed only the tests and not the product certificate.
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SHIVA TEST HOUSE

122 - C, Aastha, Road No. 5 A
Patliputra Colony ; Patna - 800 013
E-mail : sthpatna1@yahoo.co.in

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TEST REPORT

Ref. No. **HSM/TR/21-22/696** Dt : **03.07.2021** Your Work Order No. **8917** Dt : **17.01.2021**

| | | | | |
|--|--|----|--------------|----|
| [a] Name and address of the Customer | Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN – 845 103 | | | |
| [b] Details of Sample | Monitoring of Ambient Air Quality | | | |
| [c] Sample Collected by | SHIVA TEST HOUSE on 26.06.21 | | | |
| [d] Sampling Location | Within Premises of Sugar Mill | | | |
| [e] Method of Sampling | IS 5182 (Part - 14) | | | |
| [f] Sampling Environmental Condition | Temp. (°C) | 32 | Humidity (%) | 52 |
| [g] Details of Sample Container (No. & Type of Container) | Filter Paper ; Glass Impinger | | | |
| [h] Sample Quantity | 12 | | | |
| [i] Items required to be tested | As per contract | | | |
| [j] Whether any specific Method of Test has been suggested by the customer | No | | | |
| [k] Date of receiving the sample in Laboratory | 27.06.21 | | | |
| [l] Analysis Start Date / Analysis Completion Date | 27.06.21 / 29.06.21 | | | |

| Parameters | Method of Test | Sampling Station | | | Limit as per NAAQS 2009 |
|--|-------------------|------------------|-------------|---------------|-------------------------|
| | | Near Guest House | Near E.T.P. | Near Workshop | |
| [a] Particulate Matter (PM ₁₀), μg / m ³ | IS 5182 (Part-23) | 61.2 | 78.6 | 86.9 | 100 μg / m ³ |
| | | 57.0 | 69.3 | 80.6 | |
| | | 49.0 | 68.2 | 73.3 | |
| [b] Particulate Matter (PM _{2.5}), μg / m ³ | IS 5182 (Part-23) | 36.1 | 44.1 | 48.8 | 60 μg / m ³ |
| | | 33.0 | 36.2 | 44.1 | |
| | | 28.2 | 33.1 | 40.9 | |
| [c] Sulphur Dioxide as SO ₂ , μg / m ³ | IS 5182 (Part-2) | 9.4 | 9.4 | 15.2 | 80 μg / m ³ |
| | | 11.8 | 12.7 | 14.2 | |
| | | 13.7 | 8.6 | 13.3 | |
| | | 6.3 | 7.4 | 12.0 | |
| | | 5.5 | 6.5 | 11.4 | |
| | | 7.1 | 8.2 | 11.2 | |
| [d] Nitrogen Dioxide as NO ₂ , μg / m ³ | IS 5182 (Part-6) | 20.6 | 31.1 | 35.8 | 80 μg / m ³ |
| | | 25.1 | 32.8 | 34.9 | |
| | | 26.5 | 26.2 | 31.3 | |
| | | 18.1 | 24.1 | 30.7 | |
| | | 15.0 | 22.7 | 28.1 | |
| | | 18.6 | 25.7 | 28.4 | |

| | | | | |
|-----------------------|--|------|------|---|
| 24 Hrs. Average Value | | | | 24 Hrs. Average Air Quality within the Premises |
| PM ₁₀ | | 55.7 | 72.1 | 80.3 |
| PM _{2.5} | | 32.4 | 37.8 | 44.6 |
| SO ₂ | | 9.0 | 8.8 | 12.9 |
| NO ₂ | | 20.6 | 27.1 | 31.5 |
| | | | | 69.4 |
| | | | | 38.3 |
| | | | | 10.2 |
| | | | | 26.4 |



Authorized Signatory
Quality Manager / Dy. Quality Manager

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TEST REPORT

Ref. No. HSM/TR/20-21/1038

Dt : 31.07.2021

Your Work Order No. 8917

Dt: 17.01.2021

| | | | | |
|--|---|----|--------------|----|
| [a] Name and address of the Customer | Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN – 845 103 | | | |
| [b] Details of Sample | Monitoring of Ambient Air Quality | | | |
| [c] Sample Collected by | SHIVA TEST HOUSE on 26.07.21 | | | |
| [d] Sampling Location | <i>Within Premises of Sugar Mill</i> | | | |
| [e] Method of Sampling | IS 5182 (Part - 14) | | | |
| [f] Sampling Environmental Condition | Temp. (°C) | 31 | Humidity (%) | 84 |
| [g] Details of Sample Container (No. & Type of Container) | Filter Paper ; Glass Impinger | | | |
| [h] Sample Quantity | 12 | | | |
| [i] Items required to be tested | As per contract | | | |
| [j] Whether any specific Method of Test has been suggested by the customer | No | | | |
| [k] Date of receiving the sample in Laboratory | 27.07.21 | | | |
| [l] Analysis Start Date / Analysis Completion Date | 27.07.21 / 29.07.21 | | | |

| Parameters | Method of Test | Sampling Station | | | Limit as per NAAQS 2009 |
|---|-------------------|------------------|-------------|---------------|---|
| | | Near Guest House | Near E.T.P. | Near Workshop | |
| [a] Particulate Matter (PM ₁₀), $\mu\text{g} / \text{m}^3$ | IS 5182 (Part-23) | 76.4 | 79.9 | 85.0 | 100 $\mu\text{g} / \text{m}^3$ |
| | | 72.9 | 75.2 | 100.6 | |
| | | 67.5 | 72.1 | 80.0 | |
| [b] Particulate Matter (PM _{2.5}), $\mu\text{g} / \text{m}^3$ | IS 5182 (Part-23) | 38.8 | 43.9 | 50.0 | 60 $\mu\text{g} / \text{m}^3$ |
| | | 32.3 | 39.0 | 46.8 | |
| | | 27.4 | 35.7 | 40.3 | |
| [c] Sulphur Dioxide as SO ₂ , $\mu\text{g} / \text{m}^3$ | IS 5182 (Part-2) | 9.3 | 9.6 | 10.0 | 80 $\mu\text{g} / \text{m}^3$ |
| | | 10.3 | 10.2 | 10.4 | |
| | | 11.6 | 11.2 | 11.0 | |
| | | 11.0 | 8.9 | 12.1 | |
| | | 8.6 | 7.9 | 12.8 | |
| | | 7.6 | 7.2 | 9.7 | |
| | | 30.1 | 29.4 | 35.6 | |
| [d] Nitrogen Dioxide as NO ₂ , $\mu\text{g} / \text{m}^3$ | IS 5182 (Part-6) | 31.2 | 30.2 | 36.8 | 80 $\mu\text{g} / \text{m}^3$ |
| | | 35.0 | 31.3 | 38.2 | |
| | | 29.5 | 29.9 | 33.0 | |
| | | 28.6 | 26.3 | 32.2 | |
| | | 25.3 | 25.2 | 31.3 | |
| 24 Hrs. Average Value | | | | | 24 Hrs. Average Air Quality within the Premises |
| PM ₁₀ | | 72.3 | 75.7 | 88.5 | 78.8 |
| PM _{2.5} | | 32.8 | 39.6 | 45.7 | 39.4 |
| SO ₂ | | 9.7 | 9.2 | 11.0 | 10.0 |
| NO ₂ | | 29.9 | 28.7 | 34.5 | 31.1 |



Authorized Signatory
Quality Manager / Dy. Quality Manager

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TEST REPORT

Ref. No. HSM/TR/20-21/1366 Dt : 26.08.2021 Your Work Order No. 8917 Dt : 17.01.2021

| | | | | |
|--|--|----|--------------|----|
| [a] Name and address of the Customer | Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN – 845 103 | | | |
| [b] Details of Sample | <i>Monitoring of Ambient Air Quality</i> | | | |
| [c] Sample Collected by | SHIVA TEST HOUSE on 11.08.21 | | | |
| [d] Sampling Location | <i>Within Premises of Sugar Mill</i> | | | |
| [e] Method of Sampling | IS 5182 (Part - 14) | | | |
| [f] Sampling Environmental Condition | Temp. (°C) | 32 | Humidity (%) | 74 |
| [g] Details of Sample Container (No. & Type of Container) | Filter Paper ; Glass Impinger | | | |
| [h] Sample Quantity | 12 | | | |
| [i] Items required to be tested | As per contract | | | |
| [j] Whether any specific Method of Test has been suggested by the customer | No | | | |
| [k] Date of receiving the sample in Laboratory | 12.08.21 | | | |
| [l] Analysis Start Date / Analysis Completion Date | 12.08.21 / 14.08.21 | | | |

| Parameters | Method of Test | Sampling Station | | | Limit as per NAAQS 2009 |
|--|-------------------|------------------|-------------|---------------|-------------------------|
| | | Near Guest House | Near E.T.P. | Near Workshop | |
| [a] Particulate Matter (PM ₁₀), µg / m ³ | IS 5182 (Part-23) | 62.2 | 68.3 | 78.0 | 100 µg / m ³ |
| | | 59.8 | 62.8 | 68.8 | |
| | | 54.9 | 57.8 | 67.7 | |
| [b] Particulate Matter (PM _{2.5}), µg / m ³ | IS 5182 (Part-23) | 33.0 | 37.5 | 43.7 | 60 µg / m ³ |
| | | 29.9 | 31.2 | 35.9 | |
| | | 25.2 | 26.5 | 32.8 | |
| [c] Sulphur Dioxide as SO ₂ , µg / m ³ | IS 5182 (Part-2) | 11.1 | 12.9 | 11.2 | 80 µg / m ³ |
| | | 13.3 | 14.3 | 15.2 | |
| | | 12.8 | 11.2 | 10.3 | |
| | | 8.6 | 8.5 | 8.8 | |
| | | 6.9 | 7.6 | 7.8 | |
| | | 9.4 | 9.4 | 9.8 | |
| | | 33.2 | 41.5 | 40.9 | |
| [d] Nitrogen Dioxide as NO ₂ , µg / m ³ | IS 5182 (Part-6) | 35.3 | 37.0 | 43.1 | 80 µg / m ³ |
| | | 31.4 | 33.6 | 34.4 | |
| | | 27.2 | 30.2 | 31.6 | |
| | | 22.5 | 26.9 | 29.8 | |
| | | 28.9 | 31.0 | 33.7 | |

| | | | | |
|-----------------------|--|------|------|---|
| 24 Hrs. Average Value | | | | 24 Hrs. Average Air Quality within the Premises |
| PM ₁₀ | | 59.0 | 63.0 | 71.5 |
| PM _{2.5} | | 29.3 | 31.8 | 37.5 |
| SO ₂ | | 10.3 | 10.7 | 10.5 |
| NO ₂ | | 29.7 | 33.4 | 32.9 |



Kiran
Authorized Signatory
Quality Manager / Dy. Quality Manager

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TEST REPORT

Ref. No. HSM/TR/21-22/1898 Dt : 30.09.2021 Your Work Order No. 8917 Dt : 17.01.2021

| | | | | |
|--|---|----|--------------|----|
| [a] Name and address of the Customer | Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN – 845 103 | | | |
| [b] Details of Sample | <i>Monitoring of Ambient Air Quality</i> | | | |
| [c] Sample Collected by | SHIVA TEST HOUSE on 20.09.21 | | | |
| [d] Sampling Location | <i>Within Premises of Sugar Mill</i> | | | |
| [e] Method of Sampling | IS 5182 (Part - 14) | | | |
| [f] Sampling Environmental Condition | Temp. (°C) | 31 | Humidity (%) | 68 |
| [g] Details of Sample Container (No. & Type of Container) | Filter Paper ; Glass Impinger | | | |
| [h] Sample Quantity | 12 | | | |
| [i] Items required to be tested | As per contract | | | |
| [j] Whether any specific Method of Test has been suggested by the customer | No | | | |
| [k] Date of receiving the sample in Laboratory | 21.09.21 | | | |
| [l] Analysis Start Date / Analysis Completion Date | 21.09.21 / 23.09.21 | | | |

| Parameters | Method of Test | Sampling Station | | | Limit as per NAAQS 2009 |
|--|-------------------|------------------|-------------|---------------|-------------------------|
| | | Near Guest House | Near E.T.P. | Near Workshop | |
| [a] Particulate Matter (PM ₁₀), µg / m ³ | IS 5182 (Part-23) | 57.8 | 74.2 | 83.4 | 100 µg / m ³ |
| | | 53.8 | 65.5 | 79.6 | |
| | | 46.3 | 64.4 | 74.7 | |
| [b] Particulate Matter (PM _{2.5}), µg / m ³ | IS 5182 (Part-23) | 34.1 | 41.6 | 43.5 | 60 µg / m ³ |
| | | 31.1 | 34.2 | 40.6 | |
| | | 26.6 | 31.3 | 36.7 | |
| [c] Sulphur Dioxide as SO ₂ , µg / m ³ | IS 5182 (Part-2) | 11.2 | 15.3 | 18.1 | 80 µg / m ³ |
| | | 14.1 | 20.7 | 19.8 | |
| | | 16.4 | 14.0 | 21.6 | |
| | | 7.5 | 12.0 | 16.4 | |
| | | 6.5 | 10.7 | 14.5 | |
| | | 8.4 | 13.4 | 13.4 | |
| [d] Nitrogen Dioxide as NO ₂ , µg / m ³ | IS 5182 (Part-6) | 25.7 | 38.9 | 40.1 | 80 µg / m ³ |
| | | 31.4 | 41.0 | 41.9 | |
| | | 33.2 | 32.8 | 43.7 | |
| | | 22.6 | 30.0 | 38.3 | |
| | | 18.6 | 28.3 | 36.0 | |
| | | 23.2 | 32.1 | 34.7 | |

| | | | | | |
|-----------------------|--|------|------|------|---|
| 24 Hrs. Average Value | | | | | 24 Hrs. Average Air Quality within the Premises |
| PM ₁₀ | | 52.6 | 68.0 | 79.2 | 66.6 |
| PM _{2.5} | | 30.6 | 35.7 | 40.3 | 35.5 |
| SO ₂ | | 10.7 | 14.3 | 17.3 | 14.1 |
| NO ₂ | | 25.8 | 33.9 | 39.1 | 32.9 |



H.S. S.
30/09/2021

Authorized Signatory
Quality Manager / CEO

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

Ref. No.- M/T-3-2018/299 (Part-II/295)

Patna, dated- 15.02.2019

EMISSION CONSENT ORDER

With reference to the online application no-2317426 dated 23.01.2019, CTO (Air) issued by the Board vide ref. no-4383 dated 11.12.2018 and EC for capacity expansion issued by SEIAA, Bihar vide ref. no-F.No.-SI/A/50/523/18 dated 30.01.2019 of M/s Harinagar Sugar Mills Ltd, At & P.O- Harinagar, Dist- West Champaran-845103 for consent under sections 21 of the Air (Prevention & Control of Pollution) Act, 1981, he/she is/are granted consent to operate his/her Sugar Mill (Capacity expanded- 10000 TCD to 11500 TCD) 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/she 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 /she shall comply with the requirements of rule 14 of the Environment (Protection) Rules, 1986; provisions (whichever applicable) of the Hazardous And Other Wastes (Management and Transboundary 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/she shall monitor his/her 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/she 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, they shall submit stack monitoring and AAQ (including noise) report monthly within consent period;
- 6 That, all air pollution control facilities provided(Wet Scrubber, ESP etc) should be operative regularly and maintained properly and they shall ensure emission of particulate matter $\leq 150 \text{ mg/Nm}^3$;
- 7 That, the solid waste (bottom ash of boiler etc) shall be disposed of properly at designated place and monthly report containing quantity of generation, re-used, if any and disposed, site of disposal etc shall be submitted to the Board;
- 8 That, good housekeeping shall be maintained;
- 9 That, tree plantation shall be done with consultation of local DFO office to develop as green belt;
- 10 They shall comply with direction of the Board issued time to time; and
- 11 That, the Environmental Statement as prescribed in the E (P) Rules, 1986 [see rule 14] for the each financial year ending the 31st March, shall be submitted by the month of September every year.

To

The Chief General Manager,
M/s Harinagar Sugar Mills Ltd,
At & P.O.- Harinagar,
Dist- West Champaran-845103.

(Alok Kumar)
Member-Secretary

BIHAR BIHAR STATE POLLUTION CONTROL BOARD
PARIVESH BHAWAN, PLOT NO. NS-B/2, PALIPUTRA INDUSTRIAL AREA,
PATLIPUTRA, Patna - 800 010
Ref. No.- M/T-3-2018/299(Part-II)/294

Patna, dated - 15.02.2019

DISCHARGE CONSENT ORDER

With reference to the online application no- 2317426 dated 23.01.2019, CTO (water) issued by the Board vide ref. no-4384 dated 11.12.2018 and EC for capacity expansion issued by SEIAA, Bihar vide ref. no-F.No.-SIA/5(j)/523/18 dated 30.01.2019 of M/s Harinagar Sugar Mills Ltd. 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 operate his/their Sugar Mill (Capacity expanded-10000 TCD to 11500 TCD) 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 and 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, they shall operate and maintain online effluent monitoring system which has been installed as per directions of CPCB and shall connect/upload the online monitoring data at CPCB/SPCB server;*
- 6 *That, effluent treatment plant(comprising primary, secondary and tertiary treatment) shall be operated to treat the trade effluent so as to achieve the standards prescribed under the Rules or as directed time to time, whichever is stringent;*
- 7 *The treated effluent shall be disposed on land for irrigation after achieving the required standard and in no any case treated/untreated effluent shall be find its way outside the factory premises directly or indirectly. They shall maintain Zero Liquid Discharge and water consumption shall be reduced by adopting 3 R's (reduce, reuse and recycle) concept and 15 days storage capacity (pucca & lined lagoon) shall be provided for treated effluent to take care of no demand for irrigation;*
- 8 That, the unit shall comply with as under:
 - i) That, the unit shall not discharge any effluent in 'Ramrekha River';
 - ii) That, the treated effluent shall be re-used in the plant and excess water shall be stored in impervious base lagoon to ensure its use for irrigation; and
 - iii) That, the unit shall weekly monitor the water quality of Ramrekha River at up-stream and down-stream at Harinagar and submit the report to the Board.

- 9 That, operation of ETP of sugar mill shall be started at least one month before starting of cane crushing to achieve desired MLSS so as to meet prescribed standards from day one the operation of mill. ETP shall be operated even after completion of the crushing season so that any effluent generated during washing & maintenance shall be used in irrigation purposes after proper treatment;
- 10 That, provision of separate industrial effluent drain and storm water drain shall be maintained. Process effluent/any waste water shall not be allowed to mix with storm water and storm water drain shall be passed through guard pond;
- 11 That, the bank guarantee if any, submitted by the unit towards pollution control measures/system shall be forfeited in case of adverse as specified in them; and
- 12 That, the Environmental Statement as prescribed in the E (P) Rules, 1986 [see rule 14] for the each financial year ending the 31st March, shall be submitted by the month of September every year.

To

The Chief General Manager,
M/s Harinagar Sugar Mills Ltd.
At & P.O- Harinagar,
Dist- West Champaran, Bihar-845103.



15/2/19

(Alok Kumar)
Member-Secretary

BIHAR STATE POLLUTION CONTROL BOARD



Parivosh Bhawan, Pathiputra Industrial Area, Patna-800 010
EPABX: 0612-2261250/2262265, Fax: 0612-2261050; E-mail: bspcb@yahoo.com, Website: <http://bspcb.bih.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/2017/611 Patna, dated-17.03.2017
 2. Reference of application (No. and date) : 1735662, dated-03.10.2018
 3. M/s **Harinagar Sugar Mills Ltd.** 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.-Harinagar, Dist-West Champaran.

Details of Authorization

| 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 oil & Grease Skimming (HW cat. no. 5.1) and Oil & Grease Skimming (HW cat. no. 35.4) as per Schedule-I | Used oil: Generation, collection, storage transportation and offer for sale for the purpose of its recycling to authorized recycler. Oil & grease skimming: Incineration through authorized TSDF or can be used as fuel in furnaces for energy recovery, if it meets the specifications laid down in Part-B of Schedule-V either as such or after reprocessing. | Used oil: 1 TPA Oil & grease skimming 1 TPA |

1. The authorization shall be valid for a period of **five years from date of issue**.
 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 conduct 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 "Contingent 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 unit.
8. The imported hazardous and other wastes shall be fully insured for transit as well as for any accidental occurrence and its post-accident 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. All other guidelines for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Change of Central Pollution Control Board from time to time.
14. Annual return shall be filed by June 30th for the period ensuing 31st March of the year.

B. Specific conditions:

1. The unit shall display details of hazardous waste at the main gate on board of 6x4 size.
2. The unit shall maintain a record of hazardous waste and other waste handled in Form-3 and shall submit annual return in Form-4 to this Board on or before 30th June of every year.
3. 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.
4. The unit shall store its hazardous waste (Used Oil, HW cat. no. 5.1) for the temporary period in MS drums under covered shed for the purpose of its sale to the authorized recycler and oil and grease skimming (HW category no 35.4) for the incineration through authorized TSDF Facility or can be used as fuel in furnaces for energy recovery, if it meets the specifications laid down in Part-B of Schedule-V either as such or after reprocessing.
5. The unit shall ensure that no damage is caused to environment during collection, storage & transportation of its HW.

Alok Kumar,
Member Secretary



SHIVA TEST HOUSE

122 – C, Aastha, Road No. 5 A
Patliputra Colony ; Patna – 800 013
E.mail : sthpatna1@yahoo.co.in

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. HSM/TR/20-21/1361 | | Dt : 15.10.2020 | Your Work Order No. 6640 | | Dt : 13.12.2019 |
|--|-------------------|------------------|---|---------------|---|
| [a] Name and address of the Customer | | | Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN – 845 103 | | |
| [b] Details of Sample | | | <i>Monitoring of Ambient Air Quality</i> | | |
| [c] Sample Collected by | | | SHIVA TEST HOUSE on 05.10.20 | | |
| [d] Sampling Location | | | <i>Within Premises of Sugar Mill</i> | | |
| [e] Method of Sampling | | | IS 5182 (Part - 14) | | |
| [f] Sampling Environmental Condition | | | Temp. (°C) | 31 | Humidity (%) |
| [g] Details of Sample Container (No. & Type of Container) | | | Filter Paper ; Glass Impinger | | |
| [h] Sample Quantity | | | 12 | | |
| [i] Items required to be tested | | | As per contract | | |
| [j] Whether any specific Method of Test has been suggested by the customer | | | No | | |
| [k] Date of receiving the sample in Laboratory | | | 06.10.20 | | |
| [l] Analysis Start Date / Analysis Completion Date | | | 06.10.20 / 07.10.20 | | |
| Parameters | Method of Test | Sampling Station | | | Limit as per NAAQS 2009 |
| | | Near Guest House | Near E.T.P. | Near Workshop | |
| [a] Particulate Matter (PM ₁₀), µg / m ³ | IS 5182 (Part-23) | 75.9 | 85.3 | 83.8 | 100 µg / m ³ |
| | | 66.9 | 81.4 | 77.8 | |
| | | 65.8 | 76.4 | 70.8 | |
| [b] Particulate Matter (PM _{2.5}), µg / m ³ | IS 5182 (Part-23) | 42.5 | 44.4 | 47.1 | 60 µg / m ³ |
| | | 35.0 | 41.6 | 42.5 | |
| | | 32.0 | 37.5 | 39.5 | |
| [c] Sulphur Dioxide as SO ₂ , µg / m ³ | IS 5182 (Part-2) | 21.3 | 25.1 | 27.5 | 80 µg / m ³ |
| | | 28.7 | 27.4 | 25.8 | |
| | | 19.5 | 30.0 | 24.1 | |
| | | 16.7 | 22.7 | 21.7 | |
| | | 14.8 | 20.2 | 20.7 | |
| | | 18.5 | 18.6 | 20.4 | |
| [d] Nitrogen Dioxide as NO ₂ , µg / m ³ | IS 5182 (Part-6) | 39.8 | 41.0 | 36.8 | 80 µg / m ³ |
| | | 41.9 | 42.8 | 35.9 | |
| | | 33.5 | 44.7 | 32.2 | |
| | | 30.8 | 39.1 | 31.5 | |
| | | 28.9 | 36.7 | 28.9 | |
| | | 32.8 | 35.5 | 29.2 | |
| 24 Hrs. Average Value | | | | | 24 Hrs. Average Air Quality within the Premises |
| PM ₁₀ | | 69.5 | 81.0 | 77.5 | 76.0 |
| PM _{2.5} | | 36.5 | 41.2 | 43.0 | 40.2 |
| SO ₂ | | 19.9 | 24.0 | 23.4 | 22.4 |
| NO ₂ | | 34.6 | 40.0 | 32.4 | 35.7 |



Authorized Signatory
Quality Manager / Dy. Quality Manager

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TEST REPORT

| Ref. No. HSM/TR/20-21/1362 | Dt : 15.10.2020 | Your Work Order No. 6640 | Dt : 13.12.2019 | | |
|--|-------------------------------------|---|-----------------------------|--------------|----|
| [a] Name and address of the Customer | | Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN – 845 103 | | | |
| [b] Details of Sample | | <i>Surface water sample</i> | | | |
| [c] Sample Collected by | | SHIVA TEST HOUSE on 05.10.20 | | | |
| [d] Sampling Location | | <i>Upstream of Ramrekha Rivulet</i> | | | |
| [e] Method of Sampling | | IS 3025, APHA | | | |
| [f] Sampling Environmental Condition | | Temp. (°C) | 31 | Humidity (%) | 72 |
| [g] Details of Sample Container (No. & Type of Container) | | Plastic Bottle (02) | | | |
| [h] Sample Quantity | | 2 Litres | | | |
| [i] Items required to be tested | | As per request | | | |
| [j] Whether any specific Method of Test has been suggested by the customer | | No | | | |
| [k] Date of receiving the sample in Laboratory | | 06.10.20 | | | |
| [l] Analysis Start Date / Analysis Completion Date | | 06.10.20 / 08.10.20 | | | |
| Sl. No. | Parameters | Method of Test | Result (in mg/l.) except pH | | |
| 1. | pH | IS 3025 (Part-11) | 7.37 | | |
| 2. | Total Hardness as CaCO ₃ | IS 3025 (Part-21) | 212.0 | | |
| 3. | Dissolved Oxygen | IS 3025 (Part-38) | 7.2 | | |
| 4. | B.O.D. (3 days at 27°C) | IS 3025 (Part-44) | 1.8 | | |
| 5. | C.O.D. | APHA 5220 B | 12.0 | | |
| 6. | Chloride as Cl | IS 3025 (Part-32) | 24.0 | | |
| 7. | Ammonical Nitrogen as N | IS 3025 (Part-34) | 0.7 | | |
| 8. | Total Kjeldahl Nitrogen as N | IS 3025 (Part-34) | 1.3 | | |
| 9. | Fluoride as F | APHA (4500 F D) | 0.94 | | |
| 10. | Total Phosphate as P | IS 3025 (Part-31) | 0.37 | | |



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Quality Manager / Dy. Quality Manager

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TEST REPORT

| Ref. No. HSM/TR/20-21/1363 | | Dt : 15.10.2020 | Your Work Order No. 6640 | Dt : 13.12.2019 | |
|--|-------------------------------------|---|-----------------------------|-----------------|----|
| [a] Name and address of the Customer | | Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN – 845 103 | | | |
| [b] Details of Sample | | <i>Surface water sample</i> | | | |
| [c] Sample Collected by | | SHIVA TEST HOUSE on 05.10.20 | | | |
| [d] Sampling Location | | <i>Downstream of Ramrekha Rivulet</i> | | | |
| [e] Method of Sampling | | IS 3025, APHA | | | |
| [f] Sampling Environmental Condition | | Temp. (°C) | 32 | Humidity (%) | 72 |
| [g] Details of Sample Container (No. & Type of Container) | | Plastic Bottle (02) | | | |
| [h] Sample Quantity | | 2 Litres | | | |
| [i] Items required to be tested | | As per request | | | |
| [j] Whether any specific Method of Test has been suggested by the customer | | No | | | |
| [k] Date of receiving the sample in Laboratory | | 06.10.20 | | | |
| [l] Analysis Start Date / Analysis Completion Date | | 06.10.20 / 08.10.20 | | | |
| Sl. No. | Parameters | Method of Test | Result (in mg/l.) except pH | | |
| 1. | pH | IS 3025 (Part-11) | 7.27 | | |
| 2. | Total Hardness as CaCO ₃ | IS 3025 (Part-21) | 248.0 | | |
| 3. | Dissolved Oxygen | IS 3025 (Part-38) | 6.7 | | |
| 4. | B.O.D. (3 days at 27°C) | IS 3025 (Part-44) | 2.3 | | |
| 5. | C.O.D. | APHA 5220 B | 16.0 | | |
| 6. | Chloride as Cl | IS 3025 (Part-32) | 32.0 | | |
| 7. | Ammonical Nitrogen as N | IS 3025 (Part-34) | 1.1 | | |
| 8. | Total Kjeldahl Nitrogen as N | IS 3025 (Part-34) | 1.8 | | |
| 9. | Fluoride as F | APHA (4500 F D) | 1.24 | | |
| 10. | Total Phosphate as P | IS 3025 (Part-31) | 0.51 | | |



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Quality Manager / Dy. Quality Manager

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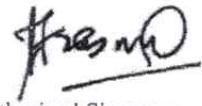
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TEST REPORT

| Ref. No. HSM/TR/20-21/1843 | | Dt : 25.11.2020 | Your Work Order No. 6640 | | Dt : 13.12.2019 |
|--|-------------------|------------------|---|---------------|---|
| [a] Name and address of the Customer | | | Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN – 845 103 | | |
| [b] Details of Sample | | | <i>Monitoring of Ambient Air Quality</i> | | |
| [c] Sample Collected by | | | SHIVA TEST HOUSE on 08.11.20 | | |
| [d] Sampling Location | | | <i>Within Premises of Sugar Mill</i> | | |
| [e] Method of Sampling | | | IS 5182 (Part - 14) | | |
| [f] Sampling Environmental Condition | | | Temp. (°C) | 28 | Humidity (%) |
| [g] Details of Sample Container (No. & Type of Container) | | | Filter Paper ; Glass Impinger | | |
| [h] Sample Quantity | | | 12 | | |
| [i] Items required to be tested | | | As per contract | | |
| [j] Whether any specific Method of Test has been suggested by the customer | | | No | | |
| [k] Date of receiving the sample in Laboratory | | | 09.11.20 | | |
| [l] Analysis Start Date / Analysis Completion Date | | | 09.11.20 / 10.11.20 | | |
| Parameters | Method of Test | Sampling Station | | | Limit as per NAAQS 2009 |
| | | Near Guest House | Near E.T.P. | Near Workshop | |
| [a] Particulate Matter (PM ₁₀), µg / m ³ | IS 5182 (Part-23) | 52.5 | 57.6 | 65.8 | 100 µg / m ³ |
| | | 50.4 | 53.0 | 58.0 | |
| | | 46.4 | 48.7 | 57.1 | |
| [b] Particulate Matter (PM _{2.5}), µg / m ³ | IS 5182 (Part-23) | 27.8 | 31.7 | 36.9 | 60 µg / m ³ |
| | | 25.2 | 26.4 | 30.3 | |
| | | 21.2 | 24.4 | 32.7 | |
| [c] Sulphur Dioxide as SO ₂ , µg / m ³ | IS 5182 (Part-2) | 18.2 | 23.1 | 21.7 | 80 µg / m ³ |
| | | 21.8 | 25.5 | 29.3 | |
| | | 21.0 | 20.0 | 19.9 | |
| | | 14.1 | 15.2 | 17.1 | |
| | | 11.2 | 13.6 | 15.1 | |
| | | 15.4 | 16.8 | 18.9 | |
| [d] Nitrogen Dioxide as NO ₂ , µg / m ³ | IS 5182 (Part-6) | 28.0 | 38.1 | 40.6 | 80 µg / m ³ |
| | | 29.8 | 34.0 | 42.8 | |
| | | 26.5 | 30.9 | 34.3 | |
| | | 22.9 | 27.8 | 31.4 | |
| | | 19.0 | 24.7 | 29.6 | |
| | | 24.4 | 28.5 | 33.5 | |
| 24 Hrs. Average Value | | | | | 24 Hrs. Average Air Quality within the Premises |
| PM ₁₀ | | 49.8 | 53.1 | 60.3 | 54.4 |
| PM _{2.5} | | 24.8 | 27.5 | 33.3 | 28.5 |
| SO ₂ | | 17.0 | 19.0 | 20.3 | 18.8 |
| NO ₂ | | 25.1 | 30.7 | 35.4 | 30.4 |




Authorized Signatory
Quality Manager / Dy. Quality Manager

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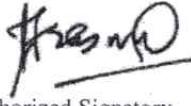
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TEST REPORT

| Ref. No. HSM/TR/20-21/1844 | | Dt : 25.11.2020 | Your Work Order No. 6640 | Dt : 13.12.2019 | |
|--|-------------------------------------|---|-----------------------------|-----------------|----|
| [a] Name and address of the Customer | | Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN – 845 103 | | | |
| [b] Details of Sample | | <i>Surface water sample</i> | | | |
| [c] Sample Collected by | | SHIVA TEST HOUSE on 08.11.20 | | | |
| [d] Sampling Location | | <i>Upstream of Ramrekha Rivulet</i> | | | |
| [e] Method of Sampling | | IS 3025, APHA | | | |
| [f] Sampling Environmental Condition | | Temp. (°C) | 28 | Humidity (%) | 68 |
| [g] Details of Sample Container (No. & Type of Container) | | Plastic Bottle (02) | | | |
| [h] Sample Quantity | | 2 Litres | | | |
| [i] Items required to be tested | | As per request | | | |
| [j] Whether any specific Method of Test has been suggested by the customer | | No | | | |
| [k] Date of receiving the sample in Laboratory | | 09.11.20 | | | |
| [l] Analysis Start Date / Analysis Completion Date | | 09.11.20 / 11.11.20 | | | |
| Sl. No. | Parameters | Method of Test | Result (in mg/l.) except pH | | |
| 1. | pH | IS 3025 (Part-11) | 7.32 | | |
| 2. | Total Hardness as CaCO ₃ | IS 3025 (Part-21) | 240.0 | | |
| 3. | Dissolved Oxygen | IS 3025 (Part-38) | 7.2 | | |
| 4. | B.O.D. (3 days at 27°C) | IS 3025 (Part-44) | 1.9 | | |
| 5. | C.O.D. | APHA 5220 B | 12.0 | | |
| 6. | Chloride as Cl | IS 3025 (Part-32) | 22.0 | | |
| 7. | Ammonical Nitrogen as N | IS 3025 (Part-34) | 0.9 | | |
| 8. | Total Kjeldahl Nitrogen as N | IS 3025 (Part-34) | 1.9 | | |
| 9. | Fluoride as F | APHA (4500 F D) | 0.91 | | |
| 10. | Total Phosphate as P | IS 3025 (Part-31) | 0.43 | | |




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Quality Manager / Dy. Quality Manager

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TEST REPORT

| Ref. No. HSM/TR/20-21/1845 | Dt : 25.11.2020 | Your Work Order No. 6640 | Dt : 13.12.2019 | | |
|--|-------------------------------------|---|-----------------------------|--------------|----|
| [a] Name and address of the Customer | | Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN - 845 103 | | | |
| [b] Details of Sample | | Surface water sample | | | |
| [c] Sample Collected by | | SHIVA TEST HOUSE on 08.11.20 | | | |
| [d] Sampling Location | | Downstream of Ramrekha Rivulet | | | |
| [e] Method of Sampling | | IS 3025, APHA | | | |
| [f] Sampling Environmental Condition | | Temp. (°C) | 28 | Humidity (%) | 68 |
| [g] Details of Sample Container (No. & Type of Container) | | Plastic Bottle (02) | | | |
| [h] Sample Quantity | | 2 Litres | | | |
| [i] Items required to be tested | | As per request | | | |
| [j] Whether any specific Method of Test has been suggested by the customer | | No | | | |
| [k] Date of receiving the sample in Laboratory | | 09.11.20 | | | |
| [l] Analysis Start Date / Analysis Completion Date | | 09.11.20 / 11.11.20 | | | |
| Sl. No. | Parameters | Method of Test | Result (in mg/l.) except pH | | |
| 1. | pH | IS 3025 (Part-11) | 7.48 | | |
| 2. | Total Hardness as CaCO ₃ | IS 3025 (Part-21) | 252.0 | | |
| 3. | Dissolved Oxygen | IS 3025 (Part-38) | 6.8 | | |
| 4. | B.O.D. (3 days at 27°C) | IS 3025 (Part-44) | 2.1 | | |
| 5. | C.O.D. | APHA 5220 B | 16.0 | | |
| 6. | Chloride as Cl | IS 3025 (Part-32) | 28.0 | | |
| 7. | Ammonical Nitrogen as N | IS 3025 (Part-34) | 1.2 | | |
| 8. | Total Kjeldahl Nitrogen as N | IS 3025 (Part-34) | 2.4 | | |
| 9. | Fluoride as F | APHA (4500 F D) | 1.14 | | |
| 10. | Total Phosphate as P | IS 3025 (Part-31) | 0.54 | | |



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Quality Manager / Dy. Quality Manager

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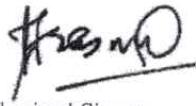
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TEST REPORT

| Ref. No. HSM/TR/20-21/2771 | | Dt : 23.12.2020 | Your Work Order No. 6640 | Dt : 13.12.2019 | |
|--|------------------------------|---|---------------------------------------|-----------------|----|
| [a] Name and address of the Customer | | Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN – 845 103 | | | |
| [b] Details of Sample | | <i>Untreated Effluent sample</i> | | | |
| [c] Sample Collected by | | SHIVA TEST HOUSE on 12.12.20 | | | |
| [d] Sampling Location | | <i>From Inlet of ETP</i> | | | |
| [e] Method of Sampling | | IS 3025, APHA | | | |
| [f] Sampling Environmental Condition | | Temp. (°C) | 22 | Humidity (%) | 68 |
| [g] Details of Sample Container (No. & Type of Container) | | Plastic Bottle (02) | | | |
| [h] Sample Quantity | | 2 Litres | | | |
| [i] Items required to be tested | | As per contract | | | |
| [j] Whether any specific Method of Test has been suggested by the customer | | No | | | |
| [k] Date of receiving the sample in Laboratory | | 12.12.20 | | | |
| [l] Analysis Start Date / Analysis Completion Date | | 12.12.20 / 16.12.20 | | | |
| Sl. No. | Parameters | Method of Test | Result(in mg/l.) except pH, Colour | | |
| 1. | Colour | IS 3025 (Part-4) | Passes Test | | |
| 2. | pH | IS 3025 (Part-11) | 6.54 | | |
| 3. | Suspended Solids | IS 3025(Part-17) | 318.0 | | |
| 4. | Total Dissolved Solids | IS 3025(Part-16) | 1844.0 | | |
| 5. | Oil & Grease | IS 3025 (Part-39) | 3.2 | | |
| 6. | B.O.D.(3 days at 27°C) | IS 3025 (Part-44) | 350.0 | | |
| 7. | C.O.D. | APHA 5220 B | 984.0 | | |
| 8. | Dissolved Phosphate as P | APHA (4500-P-D) | 4.3 | | |
| 9. | Ammonical Nitrogen as N | IS 3025 (Part-34) | 25.0 | | |
| 10. | Total Kjeldahl Nitrogen as N | APHA (4500 N org) | 48.0 | | |




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Quality Manager / Dy. Quality Manager

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SHIVA TEST HOUSE

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TEST REPORT

| Ref. No. HSM/TR/20-21/2772 | | Dt : 23.12.2020 | Your Work Order No. 6640 | | Dt : 13.12.2019 | | |
|--|------------------------------|---|--|--------------|------------------------------------|--|--|
| [a] Name and address of the Customer | | Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN – 845 103 | | | | | |
| [b] Details of Sample | | <i>Treated Effluent sample</i> | | | | | |
| [c] Sample Collected by | | SHIVA TEST HOUSE on 12.12.20 | | | | | |
| [d] Sampling Location | | <i>From Outlet of ETP</i> | | | | | |
| [e] Method of Sampling | | IS 3025, APHA | | | | | |
| [f] Sampling Environmental Condition | | Temp. (°C) | 22 | Humidity (%) | 68 | | |
| [g] Details of Sample Container (No. & Type of Container) | | Plastic Bottle (02) | | | | | |
| [h] Sample Quantity | | 2 Litres | | | | | |
| [i] Items required to be tested | | As per contract | | | | | |
| [j] Whether any specific Method of Test has been suggested by the customer | | No | | | | | |
| [k] Date of receiving the sample in Laboratory | | 12.12.20 | | | | | |
| [l] Analysis Start Date / Analysis Completion Date | | 12.12.20 / 16.12.20 | | | | | |
| S. N. | Parameters | Method of Test | <i>Limit as per E (P) Rules for disposal on land</i> | | Result(in mg/l.) except pH, Colour | | |
| 1. | Colour | IS 3025 (Part-4) | Not Specified | | Colourless | | |
| 2. | pH | IS 3025 (Part-11) | 5.5 to 8.5 | | 7.18 | | |
| 3. | Suspended Solids | IS 3025(Part-17) | 100.0 | | 21.0 | | |
| 4. | Total Dissolved Solids | IS 3025(Part-16) | 2100.00 | | 1260.0 | | |
| 5. | Oil & Grease | IS 3025 (Part-39) | 10.00 | | <1.0 | | |
| 6. | B.O.D.(3 days at 27°C) | IS 3025 (Part-44) | 100.0 | | 23.0 | | |
| 7. | C.O.D. | APHA 5220 B | Not Specified | | 116.0 | | |
| 8. | Dissolved Phosphate as P | APHA (4500-P-D) | Not Specified | | 1.3 | | |
| 9. | Ammonical Nitrogen as N | IS 3025 (Part-34) | Not Specified | | 15.0 | | |
| 10. | Total Kjeldahl Nitrogen as N | APHA (4500 N org) | Not Specified | | 31.0 | | |




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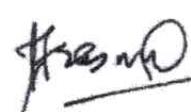
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TEST REPORT

| Ref. No. HSM/TR/20-21/2766 | Dt : 23.12.2020 | Your Work Order No. 6640 | Dt : 13.12.2019 | |
|--|---|---|-----------------------------|----|
| [a] Name and address of the Customer | Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN – 845 103 | | | |
| [b] Details of Sample | <i>Monitoring of Stack Emission</i> | | | |
| [c] Sample Collected by | SHIVA TEST HOUSE on 11.12.20 | | | |
| [d] Sampling Location | <i>Stack attached to Boilers after Wet Scrubber</i> | | | |
| [e] Method of Sampling | IS 11255 (Part-1,2,3 & 7) | | | |
| [f] Sampling Environmental Condition | Temp. (°C) | 22 | Humidity (%) | 68 |
| [g] Details of Sample Container (No. & Type of Container) | Thimble & Glass Impinger | | | |
| [h] Sample Quantity | 3 | | | |
| [i] Items required to be tested | As per contract | | | |
| [j] Whether any specific Method of Test has been suggested by the customer | No | | | |
| [k] Date of receiving the sample in Laboratory | 12.12.20 | | | |
| [l] Analysis Start Date / Analysis Completion Date | 12.12.20 / 14.12.20 | | | |
| Parameters | Method of Test | Results | | |
| 1. Type of Fuel | | Bagasse | | |
| 2. Stack Connected to | | Boiler Spreader Stroker with Wet Scrubber having Steam generation capacity 74 T / hr. | | |
| 3. Height of Stack (as reported) | | 40 m. | | |
| 4. Dia of Stack at Top (as reported) | | 2.73 m. | | |
| 5. Material of Construction | | M.S. | | |
| 6. Ambient Temperature, °C | | 22.0 | | |
| 7. Flue Gas Temperature, °C | | 104.0 | | |
| 8. Velocity, m/sec. | IS 11255 (Part-3) | 8.5 | | |
| 9. Volumetric Flow Rate (NM ³ /hr.) | | 141511.4 | | |
| 10. Sampling Point | | 25 m. | | |
| | | Concentration (mg / NM ³) | Limit as per E(P) Rules | |
| 11. Particulate Matter (P.M.) | IS 11255 (Part-1) | 94.1 | 150.00 mg / Nm ³ | |
| 12. Sulphur Dioxide (SO ₂) | IS 11255 (Part-2) | 11.3 | Not Specified | |
| 13. Oxides of Nitrogen (NOx) | IS 11255 (Part-7) | 38.4 | Not Specified | |




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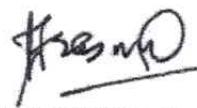
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TEST REPORT

| Ref. No. HSM/TR/20-21/2767 | Dt : 23.12.2020 | Your Work Order No. 6640 | Dt : 13.12.2019 | |
|--|--|---|-------------------------|----|
| [a] Name and address of the Customer | Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN – 845 103 | | | |
| [b] Details of Sample | <i>Monitoring of Stack Emission</i> | | | |
| [c] Sample Collected by | SHIVA TEST HOUSE on 11.12.20 | | | |
| [d] Sampling Location | <i>Stack attached to Boilers after ESP Outlet</i> | | | |
| [e] Method of Sampling | IS 11255 (Part-1,2,3 & 7) | | | |
| [f] Sampling Environmental Condition | Temp. (°C) | 22 | Humidity (%) | 68 |
| [g] Details of Sample Container (No. & Type of Container) | Thimble & Glass Impinger | | | |
| [h] Sample Quantity | 3 | | | |
| [i] Items required to be tested | As per contract | | | |
| [j] Whether any specific Method of Test has been suggested by the customer | No | | | |
| [k] Date of receiving the sample in Laboratory | 12.12.20 | | | |
| [l] Analysis Start Date / Analysis Completion Date | 12.12.20 / 14.12.20 | | | |
| Parameters | Method of Test | Results | | |
| 1. Type of Fuel | | Bagasse | | |
| 2. Stack Connected to | | Boiler with ESP having Steam generation capacity 78.0 T / hr. | | |
| 3. Height of Stack (as reported) | | 40 m. | | |
| 4. Dia of Stack at Top (as reported) | | 2.7 m. | | |
| 5. Material of Construction | | M.S. | | |
| 6. Ambient Temperature, °C | | 22.0 | | |
| 7. Flue Gas Temperature, °C | | 98.0 | | |
| 8. Velocity, m/sec. | | 7.9 | | |
| 9. Volumetric Flow Rate (NM³/hr.) | | 130728.2 | | |
| 10. Sampling Point | | 21.50 M. | | |
| | | Concentration (mg / NM³) | Limit as per E(P) Rules | |
| 11. Particulate Matter (P.M.) | IS 11255 (Part-1) | 82.1 | 150.00 mg / Nm³ | |
| 12. Sulphur Dioxide (SO₂) | IS 11255 (Part-2) | 10.2 | Not Specified | |
| 13. Oxides of Nitrogen (NOx) | IS 11255 (Part-7) | 32.7 | Not Specified | |

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TEST REPORT

| Ref. No. HSM/TR/20-21/2764 | Dt : 23.12.2020 | Your Work Order No. 6640 | Dt : 13.12.2019 | | |
|--|--|--------------------------|-----------------|---|-------------------------|
| [a] Name and address of the Customer | Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN – 845 103 | | | | |
| [b] Details of Sample | <i>Monitoring of Ambient Air Quality</i> | | | | |
| [c] Sample Collected by | SHIVA TEST HOUSE on 11.12.20 | | | | |
| [d] Sampling Location | <i>Within Premises of Sugar Mill</i> | | | | |
| [e] Method of Sampling | IS 5182 (Part - 14) | | | | |
| [f] Sampling Environmental Condition | Temp. (°C) | 22 | Humidity (%) | 68 | |
| [g] Details of Sample Container (No. & Type of Container) | Filter Paper ; Glass Impinger | | | | |
| [h] Sample Quantity | 12 | | | | |
| [i] Items required to be tested | As per contract | | | | |
| [j] Whether any specific Method of Test has been suggested by the customer | No | | | | |
| [k] Date of receiving the sample in Laboratory | 12.12.20 | | | | |
| [l] Analysis Start Date / Analysis Completion Date | 12.12.20 / 14.12.20 | | | | |
| Parameters | Method of Test | Sampling Station | | Limit as per NAAQS 2009 | |
| | | Near Guest House | Near E.T.P. | | Near Workshop |
| [a] Particulate Matter (PM ₁₀), µg / m ³ | IS 5182 (Part-23) | 88.2 | 85.2 | 92.1 | 100 µg / m ³ |
| | | 84.7 | 78.4 | 81.2 | |
| | | 78.0 | 72.1 | 79.9 | |
| [b] Particulate Matter (PM _{2.5}), µg / m ³ | IS 5182 (Part-23) | 46.7 | 46.9 | 51.7 | 60 µg / m ³ |
| | | 42.3 | 39.1 | 42.4 | |
| | | 35.6 | 36.1 | 45.8 | |
| [c] Sulphur Dioxide as SO ₂ , µg / m ³ | IS 5182 (Part-2) | 8.9 | 6.9 | 13.0 | 80 µg / m ³ |
| | | 7.4 | 5.7 | 17.6 | |
| | | 10.8 | 8.3 | 11.9 | |
| | | 12.4 | 10.2 | 10.3 | |
| | | 8.2 | 6.0 | 9.1 | |
| | | 6.9 | 5.4 | 11.3 | |
| [d] Nitrogen Dioxide as NO ₂ , µg / m ³ | IS 5182 (Part-6) | 31.4 | 32.4 | 45.5 | 80 µg / m ³ |
| | | 25.6 | 28.9 | 47.9 | |
| | | 39.7 | 26.3 | 38.4 | |
| | | 33.4 | 23.6 | 35.2 | |
| | | 21.3 | 21.0 | 33.2 | |
| | | 27.3 | 24.2 | 37.5 | |
| 24 Hrs. Average Value | | | | 24 Hrs. Average Air Quality within the Premises | |
| PM ₁₀ | | 83.6 | 78.6 | 84.4 | 82.2 |
| PM _{2.5} | | 41.6 | 40.7 | 46.6 | 43.0 |
| SO ₂ | | 9.1 | 7.1 | 12.2 | 9.5 |
| NO ₂ | | 29.8 | 26.1 | 39.6 | 31.8 |



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TEST REPORT

| Ref. No. HSM/TR/20-21/2765 | Dt : 23.12.2020 | Your Work Order No. 6640 | Dt : 13.12.2019 | |
|---|--|--------------------------|-----------------|----|
| [a] Name and address of the Customer | Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN – 845 103 | | | |
| [b] Sampling Environmental Condition | Temp. (°C) | 22 | Humidity (%) | 68 |
| [c] Details of Sample | <i>Monitoring of Ambient Noise Level(Day Time) within plant premises</i> | | | |
| [d] Monitored by | SHIVA TEST HOUSE on 11.12.20 | | | |
| [e] Whether any specific Method of Test has been suggested by the party | No | | | |
| Sampling Location | TWA of Noise Level in dB(A) (Day Time) | | | |
| 1. Near Main Gate | 71.4 | | | |
| 2. Near Guest House | 65.3 | | | |
| 3. Near Cane Yard | 72.6 | | | |
| 4. Near ETP | 69.4 | | | |
| 5. Near Railway Gate | 70.8 | | | |
| N.B.: | The Ambient Air Quality Standards in respect of Noise as per Noise Pollution (Regulation and Control) Rules 2000 for Industrial area is 75.0 dB(A), for Commercial area is 65.0 dB(A), for Residential area is 55.0 dB(A) & for Silence Zone is 50.0 dB(A) in daytime i.e. 6.00 am to 9.0 p.m. As per Rule 7(1&2) the authority shall take action against violator if the noise level exceed the ambient noise standards by 10 dB(A) or more against any area/zone. | | | |



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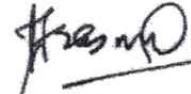
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TEST REPORT

| Ref. No. HSM/TR/20-21/2768 | Dt : 23.12.2020 | Your Work Order No. 6640 | Dt : 13.12.2019 |
|--|-------------------------------------|--|-----------------------------|
| [a] Name and address of the Customer | | Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN – 845 103 | |
| [b] Details of Sample | | <i>Surface water sample</i> | |
| [c] Sample Collected by | | SHIVA TEST HOUSE on 12.12.20 | |
| [d] Sampling Location | | <i>Upstream of Ramrekha Rivulet</i> | |
| [e] Method of Sampling | | IS 3025, APHA | |
| [f] Sampling Environmental Condition | | Temp. (°C) 22 Humidity (%) 68 | |
| [g] Details of Sample Container (No. & Type of Container) | | Plastic Bottle (02) | |
| [h] Sample Quantity | | 2 Litres | |
| [i] Items required to be tested | | As per request | |
| [j] Whether any specific Method of Test has been suggested by the customer | | No | |
| [k] Date of receiving the sample in Laboratory | | 12.12.20 | |
| [l] Analysis Start Date / Analysis Completion Date | | 12.12.20 / 16.12.20 | |
| Sl. No. | Parameters | Method of Test | Result (in mg/l.) except pH |
| 1. | pH | IS 3025 (Part-11) | 7.24 |
| 2. | Total Hardness as CaCO ₃ | IS 3025 (Part-21) | 224.0 |
| 3. | Dissolved Oxygen | IS 3025 (Part-38) | 6.1 |
| 4. | B.O.D. (3 days at 27°C) | IS 3025 (Part-44) | 1.9 |
| 5. | C.O.D. | APHA 5220 B | 12.0 |
| 6. | Chloride as Cl | IS 3025 (Part-32) | 16.0 |
| 7. | Ammonical Nitrogen as N | IS 3025 (Part-34) | 0.8 |
| 8. | Total Kjeldahl Nitrogen as N | IS 3025 (Part-34) | 1.3 |
| 9. | Fluoride as F | APHA (4500 F D) | 0.54 |
| 10. | Total Phosphate as P | IS 3025 (Part-31) | 0.37 |




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TEST REPORT

| Ref. No. HSM/TR/20-21/2769 | Dt : 23.12.2020 | Your Work Order No. 6640 | Dt : 13.12.2019 | | |
|--|-------------------------------------|---|-----------------------------|--------------|----|
| [a] Name and address of the Customer | | Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN – 845 103 | | | |
| [b] Details of Sample | | Surface water sample | | | |
| [c] Sample Collected by | | SHIVA TEST HOUSE on 12.12.20 | | | |
| [d] Sampling Location | | Downstream of Ramrekha Rivulet | | | |
| [e] Method of Sampling | | IS 3025, APHA | | | |
| [f] Sampling Environmental Condition | | Temp. (°C) | 22 | Humidity (%) | 68 |
| [g] Details of Sample Container (No. & Type of Container) | | Plastic Bottle (02) | | | |
| [h] Sample Quantity | | 2 Litres | | | |
| [i] Items required to be tested | | As per request | | | |
| [j] Whether any specific Method of Test has been suggested by the customer | | No | | | |
| [k] Date of receiving the sample in Laboratory | | 12.12.20 | | | |
| [l] Analysis Start Date / Analysis Completion Date | | 12.12.20 / 16.12.20 | | | |
| Sl. No. | Parameters | Method of Test | Result (in mg/l.) except pH | | |
| 1. | pH | IS 3025 (Part-11) | 7.29 | | |
| 2. | Total Hardness as CaCO ₃ | IS 3025 (Part-21) | 236.0 | | |
| 3. | Dissolved Oxygen | IS 3025 (Part-38) | 5.8 | | |
| 4. | B.O.D. (3 days at 27°C) | IS 3025 (Part-44) | 2.1 | | |
| 5. | C.O.D. | APHA 5220 B | 16.0 | | |
| 6. | Chloride as Cl | IS 3025 (Part-32) | 24.0 | | |
| 7. | Ammonical Nitrogen as N | IS 3025 (Part-34) | 1.0 | | |
| 8. | Total Kjeldahl Nitrogen as N | IS 3025 (Part-34) | 1.6 | | |
| 9. | Fluoride as F | APHA (4500 F D) | 0.87 | | |
| 10. | Total Phosphate as P | IS 3025 (Part-31) | 0.41 | | |



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TEST REPORT

| Ref. No. HSM/TR/20-21/2773 | Dt : 23.12.2020 | Your Work Order No. 6640 | Dt : 13.12.2019 | | |
|--|-----------------------------|---|---------------------------------------|--------------|----|
| [a] Name and address of the Customer | | Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN – 845 103 | | | |
| [b] Details of Sample | | <i>Water sample</i> | | | |
| [c] Sample Collected by | | SHIVA TEST HOUSE on 12.12.20 | | | |
| [d] Sampling Location | | <i>Cooling Tower Blow Down</i> | | | |
| [e] Method of Sampling | | IS 3025, APHA | | | |
| [f] Sampling Environmental Condition | | Temp. (°C) | 22 | Humidity (%) | 68 |
| [g] Details of Sample Container (No. & Type of Container) | | Plastic Bottle (02) | | | |
| [h] Sample Quantity | | 2 Litres | | | |
| [i] Items required to be tested | | As per contract | | | |
| [j] Whether any specific Method of Test has been suggested by the customer | | No | | | |
| [k] Date of receiving the sample in Laboratory | | 12.12.20 | | | |
| [l] Analysis Start Date / Analysis Completion Date | | 12.12.20 / 16.12.20 | | | |
| S. N. | Parameters | Method of Test | Result(in mg/l.) except pH, Colour | | |
| 1. | pH | IS 3025 (Part-11) | 7.79 | | |
| 2. | Suspended Solids | IS 3025(Part-17) | 8.0 | | |
| 3. | Total Dissolved Solids | IS 3025(Part-16) | 360.0 | | |
| 4. | B.O.D.(3 days at 27°C) | IS 3025 (Part-44) | 11.0 | | |
| 5. | C.O.D. | APHA 5220 B | 40.0 | | |
| 6. | Sulphate as SO ₄ | IS 3025 (Part-24) | 496.0 | | |




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SHIVA TEST HOUSE

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Patliputra Colony ; Patna - 800 013
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TEST REPORT

| Ref. No. HSM/TR/20-21/2774 | Dt : 23.12.2020 | Your Work Order No. 6640 | Dt : 13.12.2019 | | |
|--|-----------------------------|---|---------------------------------------|--------------|----|
| [a] Name and address of the Customer | | Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN - 845 103 | | | |
| [b] Details of Sample | | <i>Water sample</i> | | | |
| [c] Sample Collected by | | SHIVA TEST HOUSE on 12.12.20 | | | |
| [d] Sampling Location | | <i>SRS Outlet</i> | | | |
| [e] Method of Sampling | | IS 3025, APHA | | | |
| [f] Sampling Environmental Condition | | Temp. (°C) | 22 | Humidity (%) | 68 |
| [g] Details of Sample Container (No. & Type of Container) | | Plastic Bottle (02) | | | |
| [h] Sample Quantity | | 2 Litres | | | |
| [i] Items required to be tested | | As per contract | | | |
| [j] Whether any specific Method of Test has been suggested by the customer | | No | | | |
| [k] Date of receiving the sample in Laboratory | | 12.12.20 | | | |
| [l] Analysis Start Date / Analysis Completion Date | | 12.12.20 / 16.12.20 | | | |
| S. N. | Parameters | Method of Test | Result(in mg/l.) except pH, Colour | | |
| 1. | pH | IS 3025 (Part-11) | 10.58 | | |
| 2. | Suspended Solids | IS 3025(Part-17) | 14.0 | | |
| 3. | Total Dissolved Solids | IS 3025(Part-16) | 760.0 | | |
| 4. | B.O.D.(3 days at 27°C) | IS 3025 (Part-44) | 176.0 | | |
| 5. | C.O.D. | APHA 5220 B | 148.0 | | |
| 6. | Sulphate as SO ₄ | IS 3025 (Part-24) | 81.0 | | |



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TEST REPORT

Ref. No. HSM/TR/20-21/3454 Dt : 30.01.2021 Your Work Order No. 8917 Dt : 17.01.2021

| [a] Name and address of the Customer | Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN - 845 103 | | | |
|--|---|-------------------|--|----|
| [b] Details of Sample | Untreated Effluent sample | | | |
| [c] Sample Collected by | SHIVA TEST HOUSE on 13.01.21 | | | |
| [d] Sampling Location | From Inlet of ETP | | | |
| [e] Method of Sampling | IS 3025, APHA | | | |
| [f] Sampling Environmental Condition | Temp. (°C) | 17 | Humidity (%) | 82 |
| [g] Details of Sample Container (No. & Type of Container) | Plastic Bottle (02) | | | |
| [h] Sample Quantity | 2 Litres | | | |
| [i] Items required to be tested | As per contract | | | |
| [j] Whether any specific Method of Test has been suggested by the customer | No | | | |
| [k] Date of receiving the sample in Laboratory | 14.01.21 | | | |
| [l] Analysis Start Date / Analysis Completion Date | 14.01.21 / 17.01.21 | | | |
| Sl. No. | Parameters | Method of Test | Result (in mg/l.) except pH, Colour | |
| 1. | Colour | IS 3025 (Part-4) | Passes Test | |
| 2. | pH | IS 3025 (Part-11) | 6.11 | |
| 3. | Suspended Solids | IS 3025(Part-17) | 312.0 | |
| 4. | Total Dissolved Solids | IS 3025(Part-16) | 1740.0 | |
| 5. | Oil & Grease | IS 3025 (Part-39) | 3.6 | |
| 6. | B.O.D.(3 days at 27°C) | IS 3025 (Part-44) | 400.0 | |
| 7. | C.O.D. | APHA 5220 B | 1032.0 | |
| 8. | Dissolved Phosphate as P | APHA (4500-P-D) | 4.7 | |
| 9. | Ammonical Nitrogen as N | IS 3025 (Part-34) | 26.9 | |
| 10. | Total Kjeldahl Nitrogen as N | APHA (4500 N org) | 47.0 | |



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TEST REPORT

| Ref. No. HSM/TR/20-21/3455 | | Dt: 30.01.2021 | Your Work Order No. 8917 | Dt: 17.01.2021 |
|--|------------------------------|---|---|-------------------------------------|
| [a] Name and address of the Customer | | Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN - 845 103 | | |
| [b] Details of Sample | | <i>Treated Effluent sample</i> | | |
| [c] Sample Collected by | | SHIVA TEST HOUSE on 13.01.21 | | |
| [d] Sampling Location | | <i>From Outlet of ETP</i> | | |
| [e] Method of Sampling | | IS 3025, APHA | | |
| [f] Sampling Environmental Condition | | Temp. (°C) | 17 | Humidity (%) 82 |
| [g] Details of Sample Container (No. & Type of Container) | | Plastic Bottle (02) | | |
| [h] Sample Quantity | | 2 Litres | | |
| [i] Items required to be tested | | As per contract | | |
| [j] Whether any specific Method of Test has been suggested by the customer | | No | | |
| [k] Date of receiving the sample in Laboratory | | 14.01.21 | | |
| [l] Analysis Start Date / Analysis Completion Date | | 14.01.21 / 17.01.21 | | |
| S. N. | Parameters | Method of Test | Limit as per E (P) Rules for disposal on land | Result (in mg/l.) except pH, Colour |
| 1. | Colour | IS 3025 (Part-4) | Not Specified | Colourless |
| 2. | pH | IS 3025 (Part-11) | 5.5 to 8.5 | 7.24 |
| 3. | Suspended Solids | IS 3025(Part-17) | 100.0 | 24.0 |
| 4. | Total Dissolved Solids | IS 3025(Part-16) | 2100.00 | 1180.0 |
| 5. | Oil & Grease | IS 3025 (Part-39) | 10.00 | <1.0 |
| 6. | B.O.D.(3 days at 27°C) | IS 3025 (Part-44) | 100.0 | 20.0 |
| 7. | C.O.D. | APHA 5220 B | Not Specified | 104.0 |
| 8. | Dissolved Phosphate as P | APHA (4500-P-D) | Not Specified | 1.1 |
| 9. | Ammonical Nitrogen as N | IS 3025 (Part-34) | Not Specified | 12.3 |
| 10. | Total Kjeldahl Nitrogen as N | APHA (4500 N org) | Not Specified | 22.4 |



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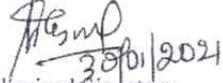
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TEST REPORT

| Ref. No. HSM/TR/20-21/3462 | Dt : 30.01.2021 | Your Work Order No. 8917 | Dt : 17.01.2021 |
|--|---|---|-----------------------------|
| [a] Name and address of the Customer | Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN - 845 103 | | |
| [b] Details of Sample | Monitoring of Stack Emission | | |
| [c] Sample Collected by | SHIVA TEST HOUSE on 13.01.21 | | |
| [d] Sampling Location | Stack attached to Boilers after Wet Scrubber | | |
| [e] Method of Sampling | IS 11255 (Part-1,2,3 & 7) | | |
| [f] Sampling Environmental Condition | Temp. (°C) | 17 | Humidity (%) 82 |
| [g] Details of Sample Container (No. & Type of Container) | Thimble & Glass Impinger | | |
| [h] Sample Quantity | 3 | | |
| [i] Items required to be tested | As per contract | | |
| [j] Whether any specific Method of Test has been suggested by the customer | No | | |
| [k] Date of receiving the sample in Laboratory | 14.01.21 | | |
| [l] Analysis Start Date / Analysis Completion Date | 14.01.21 / 16.01.21 | | |
| Parameters | Method of Test | Results | |
| 1. Type of Fuel | | Bagasse | |
| 2. Stack Connected to | | Boiler Spreader Stroker with Wet Scrubber having Steam generation capacity 74 T / hr. | |
| 3. Height of Stack (as reported) | | 40 m. | |
| 4. Dia of Stack at Top (as reported) | | 2.73 m. | |
| 5. Material of Construction | | M.S. | |
| 6. Ambient Temperature, °C | | 17.0 | |
| 7. Flue Gas Temperature, °C | | 101.0 | |
| 8. Velocity, m/sec. | IS 11255 (Part-3) | 8.2 | |
| 9. Volumetric Flow Rate (NM ³ /hr.) | | 137611.9 | |
| 10. Sampling Point | | 25 m. | |
| | | Concentration (mg / NM ³) | Limit as per E(P) Rules |
| 11. Particulate Matter (P.M.) | IS 11255 (Part-1) | 91.6 | 150.00 mg / Nm ³ |
| 12. Sulphur Dioxide (SO ₂) | IS 11255 (Part-2) | 10.7 | Not Specified |
| 13. Oxides of Nitrogen (NOx) | IS 11255 (Part-7) | 33.1 | Not Specified |




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TEST REPORT

| Ref. No. HSM/TR/20-21/3463 | Dt : 30.01.2021 | Your Work Order No. 8917 | Dt : 17.01.2021 | |
|--|---|---|-----------------------------|----|
| [a] Name and address of the Customer | Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN – 845 103 | | | |
| [b] Details of Sample | <i>Monitoring of Stack Emission</i> | | | |
| [c] Sample Collected by | SHIVA TEST HOUSE on 13.01.21 | | | |
| [d] Sampling Location | <i>Stack attached to Boilers after ESP Outlet</i> | | | |
| [e] Method of Sampling | IS 11255 (Part-1,2,3 & 7) | | | |
| [f] Sampling Environmental Condition | Temp. (°C) | 17 | Humidity (%) | 82 |
| [g] Details of Sample Container (No. & Type of Container) | Thimble & Glass Impinger | | | |
| [h] Sample Quantity | 3 | | | |
| [i] Items required to be tested | As per contract | | | |
| [j] Whether any specific Method of Test has been suggested by the customer | No | | | |
| [k] Date of receiving the sample in Laboratory | 14.01.21 | | | |
| [l] Analysis Start Date / Analysis Completion Date | 14.01.21 / 16.01.21 | | | |
| Parameters | Method of Test | Results | | |
| 1. Type of Fuel | | Bagasse | | |
| 2. Stack Connected to | | Boiler with ESP having Steam generation capacity 78.0 T / hr. | | |
| 3. Height of Stack (as reported) | | 40 m. | | |
| 4. Dia of Stack at Top (as reported) | | 2.7 m. | | |
| 5. Material of Construction | | M.S. | | |
| 6. Ambient Temperature, °C | | 17.0 | | |
| 7. Flue Gas Temperature, °C | | 109.0 | | |
| 8. Velocity, m/sec. | IS 11255 (Part-3) | 7.7 | | |
| 9. Volumetric Flow Rate (NM ³ /hr.) | | 123749.5 | | |
| 10. Sampling Point | | 21.50 M. | | |
| | | Concentration (mg / NM ³) | Limit as per E(P) Rules | |
| 11. Particulate Matter (P.M.) | IS 11255 (Part-1) | 104.1 | 150.00 mg / Nm ³ | |
| 12. Sulphur Dioxide (SO ₂) | IS 11255 (Part-2) | 11.8 | Not Specified | |
| 13. Oxides of Nitrogen (NOx) | IS 11255 (Part-7) | 37.4 | Not Specified | |



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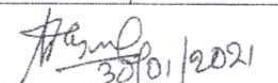
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TEST REPORT

| Ref. No | HSM/TR/20-21/3460 | Dt : | 30.01.2021 | Your Work Order No. | 8917 | Dt: | 17.01.2021 | | |
|--|-------------------|------------------|-------------|---|--------------------------------|---|------------|--|--|
| [a] Name and address of the Customer | | | | Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN – 845 103 | | | | | |
| [b] Details of Sample | | | | Monitoring of Ambient Air Quality | | | | | |
| [c] Sample Collected by | | | | SHIVA TEST HOUSE on 13.01.21 | | | | | |
| [d] Sampling Location | | | | Within Premises of Sugar Mill | | | | | |
| [e] Method of Sampling | | | | IS 5182 (Part - 14) | | | | | |
| [f] Sampling Environmental Condition | | | | Temp. (°C) | 17 | Humidity (%) | 82 | | |
| [g] Details of Sample Container (No. & Type of Container) | | | | Filter Paper : Glass Impinger | | | | | |
| [h] Sample Quantity | | | | 12 | | | | | |
| [i] Items required to be tested | | | | As per contract | | | | | |
| [j] Whether any specific Method of Test has been suggested by the customer | | | | No | | | | | |
| [k] Date of receiving the sample in Laboratory | | | | 14.01.21 | | | | | |
| [l] Analysis Start Date / Analysis Completion Date | | | | 14.01.21 / 16.01.21 | | | | | |
| Parameters | Method of Test | Sampling Station | | | Limit as per NAAQS 2009 | | | | |
| | | Near Guest House | Near E.T.P. | Near Workshop | | | | | |
| [a] Particulate Matter (PM ₁₀), $\mu\text{g} / \text{m}^3$ | IS 5182 (Part-23) | 70.9 | 74.1 | 78.8 | 100 $\mu\text{g} / \text{m}^3$ | | | | |
| | | 67.5 | 69.7 | 93.2 | | | | | |
| | | 62.6 | 66.8 | 74.2 | | | | | |
| [b] Particulate Matter (PM _{2.5}), $\mu\text{g} / \text{m}^3$ | IS 5182 (Part-23) | 36.0 | 40.7 | 46.4 | 60 $\mu\text{g} / \text{m}^3$ | | | | |
| | | 29.9 | 36.2 | 43.4 | | | | | |
| | | 25.4 | 33.1 | 37.4 | | | | | |
| [c] Sulphur Dioxide as SO ₂ , $\mu\text{g} / \text{m}^3$ | IS 5182 (Part-2) | 13.2 | 13.6 | 14.2 | 80 $\mu\text{g} / \text{m}^3$ | | | | |
| | | 14.6 | 14.5 | 14.7 | | | | | |
| | | 16.5 | 15.9 | 15.7 | | | | | |
| | | 15.6 | 12.7 | 17.2 | | | | | |
| | | 12.3 | 11.3 | 18.1 | | | | | |
| | | 10.9 | 10.3 | 13.7 | | | | | |
| [d] Nitrogen Dioxide as NO ₂ , $\mu\text{g} / \text{m}^3$ | IS 5182 (Part-6) | 35.6 | 34.8 | 42.1 | 80 $\mu\text{g} / \text{m}^3$ | | | | |
| | | 36.9 | 35.7 | 43.5 | | | | | |
| | | 41.5 | 37.0 | 45.2 | | | | | |
| | | 34.9 | 35.3 | 39.1 | | | | | |
| | | 33.9 | 31.2 | 38.1 | | | | | |
| | | 29.9 | 29.8 | 37.0 | | | | | |
| 24 Hrs. Average Value | | | | | | 24 Hrs. Average Air Quality within the Premises | | | |
| PM ₁₀ | | 67.0 | 70.2 | 82.1 | 73.1 | | | | |
| PM _{2.5} | | 30.4 | 36.7 | 42.4 | 36.5 | | | | |
| SO ₂ | | 13.8 | 13.1 | 15.6 | 14.2 | | | | |
| NO ₂ | | 35.4 | 34.0 | 40.8 | 36.8 | | | | |




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TEST REPORT

| Ref. No. HSM/TR/20-21/3461 | Dt : 30.01.2021 | Your Work Order No. 8917 | Dt: 17.01.2021 |
|---|---|--------------------------|-----------------|
| [a] Name and address of the Customer | Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN – 845 103 | | |
| [b] Sampling Environmental Condition | Temp. (°C) | 17 | Humidity (%) 82 |
| [c] Details of Sample | <i>Monitoring of Ambient Noise Level(Day Time) within plant premises</i> | | |
| [d] Monitored by | SHIVA TEST HOUSE on 13.01.21 | | |
| [e] Whether any specific Method of Test has been suggested by the party | No | | |
| <i>Sampling Location</i> | <i>TWA of Noise Level in dB(A) (Day Time)</i> | | |
| 1. Near Main Gate | 67.9 | | |
| 2. Near Guest House | 63.8 | | |
| 3. Near Cane Yard | 70.6 | | |
| 4. Near ETP | 67.1 | | |
| 5. Near Railway Gate | 68.4 | | |
| N.B.: | <i>The Ambient Air Quality Standards in respect of Noise as per Noise Pollution (Regulation and Control) Rules 2000 for Industrial area is 75.0 dB(A), for Commercial area is 65.0 dB(A), for Residential area is 55.0 dB(A) & for Silence Zone is 50.0 dB(A) in daytime i.e. 6.00 am to 9.0 p.m. As per Rule 7(1&2) the authority shall take action against violator if the noise level exceed the ambient noise standards by 10 dB(A) or more against any area/zone.</i> | | |



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TEST REPORT

| Ref. No. HSM/TR/20-21/3458 | Dt : 30.01.2021 | Your Work Order No. 8917 | Dt : 17.01.2021 |
|--|-------------------------------------|---|-----------------------------|
| [a] Name and address of the Customer | | Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN - 845 103 | |
| [b] Details of Sample | | Surface water sample | |
| [c] Sample Collected by | | SHIVA TEST HOUSE on 13.01.21 | |
| [d] Sampling Location | | Upstream of Ramrekha Rivulet | |
| [e] Method of Sampling | | IS 3025, APHA | |
| [f] Sampling Environmental Condition | | Temp. (°C) | 17 |
| [g] Details of Sample Container (No. & Type of Container) | | Humidity (%) | |
| [h] Sample Quantity | | Plastic Bottle (02) | |
| [i] Items required to be tested | | 2 Litres | |
| [j] Whether any specific Method of Test has been suggested by the customer | | As per request | |
| [k] Date of receiving the sample in Laboratory | | No | |
| [l] Analysis Start Date / Analysis Completion Date | | 14.01.21 | |
| [m] Analysis Start Date / Analysis Completion Date | | 14.01.21 / 17.01.21 | |
| Sl. No. | Parameters | Method of Test | Result (in mg/l.) except pH |
| 1. | pH | IS 3025 (Part-11) | 7.53 |
| 2. | Total Hardness as CaCO ₃ | IS 3025 (Part-21) | 252.0 |
| 3. | Dissolved Oxygen | IS 3025 (Part-38) | 6.5 |
| 4. | B.O.D. (3 days at 27°C) | IS 3025 (Part-44) | 2.1 |
| 5. | C.O.D. | APHA 5220 B | 12 |
| 6. | Chloride as Cl | IS 3025 (Part-32) | 18.0 |
| 7. | Ammonical Nitrogen as N | IS 3025 (Part-34) | 0.6 |
| 8. | Total Kjeldahl Nitrogen as N | IS 3025 (Part-34) | 1.3 |
| 9. | Fluoride as F | APHA (4500 F D) | 0.52 |
| 10. | Total Phosphate as P | IS 3025 (Part-31) | 0.34 |



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TEST REPORT

| Ref. No. HSM/TR/20-21/3459 | | Dt : 30.01.2021 | Your Work Order No. 8917 | Dt: 17.01.2021 |
|--|-------------------------------------|---|-----------------------------|-----------------|
| [a] Name and address of the Customer | | Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN - 845 103 | | |
| [b] Details of Sample | | Surface water sample | | |
| [c] Sample Collected by | | SHIVA TEST HOUSE on 13.01.21 | | |
| [d] Sampling Location | | Downstream of Ramrekha Rivulet | | |
| [e] Method of Sampling | | IS 3025, APHA | | |
| [f] Sampling Environmental Condition | | Temp. (°C) | 17 | Humidity (%) 82 |
| [g] Details of Sample Container (No. & Type of Container) | | Plastic Bottle (02) | | |
| [h] Sample Quantity | | 2 Litres | | |
| [i] Items required to be tested | | As per request | | |
| [j] Whether any specific Method of Test has been suggested by the customer | | No | | |
| [k] Date of receiving the sample in Laboratory | | 14.01.21 | | |
| [l] Analysis Start Date / Analysis Completion Date | | 14.01.21 / 17.01.21 | | |
| Sl. No. | Parameters | Method of Test | Result (in mg/l.) except pH | |
| 1. | pH | IS 3025 (Part-11) | 7.60 | |
| 2. | Total Hardness as CaCO ₃ | IS 3025 (Part-21) | 262.0 | |
| 3. | Dissolved Oxygen | IS 3025 (Part-38) | 6.2 | |
| 4. | B.O.D. (3 days at 27°C) | IS 3025 (Part-44) | 2.2 | |
| 5. | C.O.D. | APHA 5220 B | 16.0 | |
| 6. | Chloride as Cl | IS 3025 (Part-32) | 22.0 | |
| 7. | Ammonical Nitrogen as N | IS 3025 (Part-34) | 0.9 | |
| 8. | Total Kjeldahl Nitrogen as N | IS 3025 (Part-34) | 1.4 | |
| 9. | Fluoride as F | APHA (4500 F D) | 0.73 | |
| 10. | Total Phosphate as P | IS 3025 (Part-31) | 0.44 | |



30/01/2021
✓ Authorized Signatory
Quality Manager / Dy. Quality Manager

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TEST REPORT

| Ref. No. HSM/TR/19-20/3456 | | Dt : 30.01.2021 | Your Work Order No. 8917 | Dt : 17.01.2021 |
|--|------------------------------|---|---|------------------------------------|
| [a] Name and address of the Customer | | Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN – 845 103 | | |
| [b] Details of Sample | | <i>Effluent sample</i> | | |
| [c] Sample Collected by | | SHIVA TEST HOUSE on 13.01.21 | | |
| [d] Sampling Location | | <i>From Lagoon</i> | | |
| [e] Method of Sampling | | IS 3025, APHA | | |
| [f] Sampling Environmental Condition | | Temp. (°C) | 17 | Humidity (%) 82 |
| [g] Details of Sample Container (No. & Type of Container) | | Plastic Bottle (02) | | |
| [h] Sample Quantity | | 2 Litres | | |
| [i] Items required to be tested | | As per contract | | |
| [j] Whether any specific Method of Test has been suggested by the customer | | No | | |
| [k] Date of receiving the sample in Laboratory | | 14.01.21 | | |
| [l] Analysis Start Date / Analysis Completion Date | | 14.01.21 / 17.01.21 | | |
| S. N. | Parameters | Method of Test | Limit as per E (P) Rules for disposal on land | Result(in mg/l.) except pH, Colour |
| 1. | Colour | IS 3025 (Part-4) | Not Specified | Colourless |
| 2. | pH | IS 3025 (Part-11) | 5.5 to 8.5 | 7.18 |
| 3. | Suspended Solids | IS 3025(Part-17) | 100.0 | 34.0 |
| 4. | Total Dissolved Solids | IS 3025(Part-16) | 2100.00 | 1120.0 |
| 5. | Oil & Grease | IS 3025 (Part-39) | 10.00 | <1.0 |
| 6. | B.O.D.(3 days at 27°C) | IS 3025 (Part-44) | 100.0 | 16.0 |
| 7. | C.O.D. | APHA 5220 B | Not Specified | 88.0 |
| 8. | Dissolved Phosphate as P | APHA (4500-P-D) | Not Specified | 1.2 |
| 9. | Ammonical Nitrogen as N | IS 3025 (Part-34) | Not Specified | 13.4 |
| 10. | Total Kjeldahl Nitrogen as N | APHA (4500 N org) | Not Specified | 24.1 |



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30/01/2021
Authorized Signatory
Quality Manager / Dy. Quality Manager

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TEST REPORT

| Ref. No. HSM/TR/20-21/3826 | | Dt : 25.02.2021 | Your Work Order No. 8917 | Dt : 17.01.2021 | |
|--|------------------------------|---|---------------------------------------|-----------------|----|
| [a] Name and address of the Customer | | Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN – 845 103 | | | |
| [b] Details of Sample | | <i>Untreated Effluent sample</i> | | | |
| [c] Sample Collected by | | SHIVA TEST HOUSE on 06.02.21 | | | |
| [d] Sampling Location | | <i>From Inlet of ETP</i> | | | |
| [e] Method of Sampling | | IS 3025, APHA | | | |
| [f] Sampling Environmental Condition | | Temp. (°C) | 19 | Humidity (%) | 66 |
| [g] Details of Sample Container (No. & Type of Container) | | Plastic Bottle (02) | | | |
| [h] Sample Quantity | | 2 Litres | | | |
| [i] Items required to be tested | | As per contract | | | |
| [j] Whether any specific Method of Test has been suggested by the customer | | No | | | |
| [k] Date of receiving the sample in Laboratory | | 06.02.21 | | | |
| [l] Analysis Start Date / Analysis Completion Date | | 06.02.21 / 09.02.21 | | | |
| Sl. No. | Parameters | Method of Test | Result(in mg/l.) except pH, Colour | | |
| 1. | Colour | IS 3025 (Part-4) | Passes Test | | |
| 2. | pH | IS 3025 (Part-11) | 6.19 | | |
| 3. | Suspended Solids | IS 3025(Part-17) | 319.0 | | |
| 4. | Total Dissolved Solids | IS 3025(Part-16) | 1680.0 | | |
| 5. | Oil & Grease | IS 3025 (Part-39) | 3.2 | | |
| 6. | B.O.D.(3 days at 27°C) | IS 3025 (Part-44) | 350.0 | | |
| 7. | C.O.D. | APHA 5220 B | 1200.0 | | |
| 8. | Dissolved Phosphate as P | APHA (4500-P-D) | 4.2 | | |
| 9. | Ammonical Nitrogen as N | IS 3025 (Part-34) | 23.5 | | |
| 10. | Total Kjeldahl Nitrogen as N | APHA (4500 N org) | 39.8 | | |



Authorized Signatory
Quality Manager / Dy. Quality Manager

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TEST REPORT

| Ref. No. HSM/TR/20-21/3827 | | Dt : 25.02.2021 | Your Work Order No. 8917 | Dt : 17.01.2021 |
|--|------------------------------|---|---|------------------------------------|
| [a] Name and address of the Customer | | Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN – 845 103 | | |
| [b] Details of Sample | | <i>Treated Effluent sample</i> | | |
| [c] Sample Collected by | | SHIVA TEST HOUSE on 06.02.21 | | |
| [d] Sampling Location | | <i>From Outlet of ETP</i> | | |
| [e] Method of Sampling | | IS 3025, APHA | | |
| [f] Sampling Environmental Condition | | Temp. (°C) | 19 | Humidity (%) 66 |
| [g] Details of Sample Container (No. & Type of Container) | | Plastic Bottle (02) | | |
| [h] Sample Quantity | | 2 Litres | | |
| [i] Items required to be tested | | As per contract | | |
| [j] Whether any specific Method of Test has been suggested by the customer | | No | | |
| [k] Date of receiving the sample in Laboratory | | 06.02.21 | | |
| [l] Analysis Start Date / Analysis Completion Date | | 06.02.21 / 09.02.21 | | |
| S. N. | Parameters | Method of Test | Limit as per E (P) Rules for disposal on land | Result(in mg/l.) except pH, Colour |
| 1. | Colour | IS 3025 (Part-4) | Not Specified | Colourless |
| 2. | pH | IS 3025 (Part-11) | 5.5 to 8.5 | 7.29 |
| 3. | Suspended Solids | IS 3025(Part-17) | 100.0 | 26.0 |
| 4. | Total Dissolved Solids | IS 3025(Part-16) | 2100.00 | 960.0 |
| 5. | Oil & Grease | IS 3025 (Part-39) | 10.00 | <1.0 |
| 6. | B.O.D.(3 days at 27°C) | IS 3025 (Part-44) | 100.0 | 22.0 |
| 7. | C.O.D. | APHA 5220 B | Not Specified | 96.0 |
| 8. | Dissolved Phosphate as P | APHA (4500-P-D) | Not Specified | 1.4 |
| 9. | Ammonical Nitrogen as N | IS 3025 (Part-34) | Not Specified | 11.2 |
| 10. | Total Kjeldahl Nitrogen as N | APHA (4500 N org) | Not Specified | 18.5 |



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Quality Manager / Dy. Quality Manager

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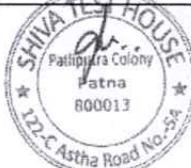
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TEST REPORT

| Ref. No. HSM/TR/20-21/3821 | | Dt : 25.02.2021 | Your Work Order No. 8917 | Dt : 17.01.2021 | |
|--|-------------------|---|--------------------------|-----------------|----|
| [a] Name and address of the Customer | | Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN – 845 103 | | | |
| [b] Details of Sample | | <i>Monitoring of Stack Emission</i> | | | |
| [c] Sample Collected by | | SHIVA TEST HOUSE on 05.02.21 | | | |
| [d] Sampling Location | | <i>Stack attached to Boilers after Wet Scrubber</i> | | | |
| [e] Method of Sampling | | IS 11255 (Part-1,2,3 & 7) | | | |
| [f] Sampling Environmental Condition | | Temp. (°C) | 18 | Humidity (%) | 68 |
| [g] Details of Sample Container (No. & Type of Container) | | Thimble & Glass Impinger | | | |
| [h] Sample Quantity | | 3 | | | |
| [i] Items required to be tested | | As per contract | | | |
| [j] Whether any specific Method of Test has been suggested by the customer | | No | | | |
| [k] Date of receiving the sample in Laboratory | | 06.02.21 | | | |
| [l] Analysis Start Date / Analysis Completion Date | | 06.02.21 / 08.02.21 | | | |
| Parameters | Method of Test | Results | | | |
| 1. Type of Fuel | | Bagasse | | | |
| 2. Stack Connected to | | Boiler Spreader Stroker with Wet Scrubber having Steam generation capacity 74 T / hr. | | | |
| 3. Height of Stack (as reported) | | 40 m. | | | |
| 4. Dia of Stack at Top (as reported) | | 2.73 m. | | | |
| 5. Material of Construction | | M.S. | | | |
| 6. Ambient Temperature, °C | | 18.0 | | | |
| 7. Flue Gas Temperature, °C | | 108.0 | | | |
| 8. Velocity, m/sec. | IS 11255 (Part-3) | 8.6 | | | |
| 9. Volumetric Flow Rate (NM³/hr.) | | 141673.0 | | | |
| 10. Sampling Point | | 25 m. | | | |
| | | Concentration (mg / NM³) | Limit as per E(P) Rules | | |
| 11. Particulate Matter (P.M.) | IS 11255 (Part-1) | 104.0 | 150.00 mg / Nm³ | | |
| 12. Sulphur Dioxide (SO₂) | IS 11255 (Part-2) | 12.3 | Not Specified | | |
| 13. Oxides of Nitrogen (NOx) | IS 11255 (Part-7) | 30.6 | Not Specified | | |



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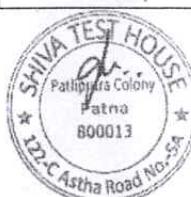
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TEST REPORT

| Ref. No. HSM/TR/20-21/3822 | | Dt : 25.02.2021 | Your Work Order No. 8917 | Dt : 17.01.2021 | |
|--|--|---|---|-------------------------|----|
| [a] Name and address of the Customer | | Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN – 845 103 | | | |
| [b] Details of Sample | | <i>Monitoring of Stack Emission</i> | | | |
| [c] Sample Collected by | | SHIVA TEST HOUSE on 05.02.21 | | | |
| [d] Sampling Location | | <i>Stack attached to Boilers after ESP Outlet</i> | | | |
| [e] Method of Sampling | | IS 11255 (Part-1,2,3 & 7) | | | |
| [f] Sampling Environmental Condition | | Temp. (°C) | 18 | Humidity (%) | 68 |
| [g] Details of Sample Container (No. & Type of Container) | | Thimble & Glass Impinger | | | |
| [h] Sample Quantity | | 3 | | | |
| [i] Items required to be tested | | As per contract | | | |
| [j] Whether any specific Method of Test has been suggested by the customer | | No | | | |
| [k] Date of receiving the sample in Laboratory | | 06.02.21 | | | |
| [l] Analysis Start Date / Analysis Completion Date | | 06.02.21 / 09.02.21 | | | |
| Parameters | | Method of Test | Results | | |
| 1. Type of Fuel | | | Bagasse | | |
| 2. Stack Connected to | | | Boiler with ESP having Steam generation capacity 78.0 T / hr. | | |
| 3. Height of Stack (as reported) | | | 40 m. | | |
| 4. Dia of Stack at Top (as reported) | | | 2.7 m. | | |
| 5. Material of Construction | | | M.S. | | |
| 6. Ambient Temperature, °C | | | 18.0 | | |
| 7. Flue Gas Temperature, °C | | | 106.0 | | |
| 8. Velocity, m/sec. | | IS 11255 (Part-3) | 7.9 | | |
| 9. Volumetric Flow Rate (NM³/hr.) | | | 127968.7 | | |
| 10. Sampling Point | | | 21.50 M. | | |
| | | | Concentration (mg / NM³) | Limit as per E(P) Rules | |
| 11. Particulate Matter (P.M.) | | IS 11255 (Part-1) | 109.2 | 150.00 mg / Nm³ | |
| 12. Sulphur Dioxide (SO₂) | | IS 11255 (Part-2) | 12.8 | Not Specified | |
| 13. Oxides of Nitrogen (NOx) | | IS 11255 (Part-7) | 32.6 | Not Specified | |




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TEST REPORT

| Ref. No. HSM/TR/20-21/3819 | | Dt : 25.02.2021 | Your Work Order No. 8917 | Dt : 17.01.2021 | |
|--|--|---|--------------------------|---|----|
| [a] Name and address of the Customer | | Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN – 845 103 | | | |
| [b] Details of Sample | | Monitoring of Ambient Air Quality | | | |
| [c] Sample Collected by | | SHIVA TEST HOUSE on 05.02.21 | | | |
| [d] Sampling Location | | Within Premises of Sugar Mill | | | |
| [e] Method of Sampling | | IS 5182 (Part - 14) | | | |
| [f] Sampling Environmental Condition | | Temp. (°C) | 18 | Humidity (%) | 68 |
| [g] Details of Sample Container (No. & Type of Container) | | Filter Paper ; Glass Impinger | | | |
| [h] Sample Quantity | | 12 | | | |
| [i] Items required to be tested | | As per contract | | | |
| [j] Whether any specific Method of Test has been suggested by the customer | | No | | | |
| [k] Date of receiving the sample in Laboratory | | 06.02.21 | | | |
| [l] Analysis Start Date / Analysis Completion Date | | 06.02.21 / 08.02.21 | | | |
| Parameters | Method of Test | Sampling Station | | | |
| | | Near Guest House | Near E.T.P. | Near Workshop | |
| [a] Particulate Matter (PM ₁₀), µg / m ³ | IS 5182 (Part-23) | 69.9 | 87.3 | 91.1 | |
| | | 64.1 | 74.9 | 87.0 | |
| | | 55.0 | 68.1 | 81.6 | |
| [b] Particulate Matter (PM _{2.5}), µg / m ³ | IS 5182 (Part-23) | 11.3 | 15.1 | 16.8 | |
| | | 12.3 | 17.7 | 18.4 | |
| | | 13.4 | 13.5 | 20.1 | |
| [c] Sulphur Dioxide as SO ₂ , µg / m ³ | IS 5182 (Part-2) | 9.7 | 11.0 | 15.2 | |
| | | 8.6 | 8.3 | 13.5 | |
| | | 10.8 | 12.5 | 12.4 | |
| | | 31.1 | 47.0 | 54.4 | |
| | | 36.2 | 45.0 | 56.8 | |
| | | 39.3 | 40.4 | 59.3 | |
| [d] Nitrogen Dioxide as NO ₂ , µg / m ³ | IS 5182 (Part-6) | 29.8 | 36.4 | 52.0 | |
| | | 27.6 | 34.5 | 48.8 | |
| | | 30.7 | 38.1 | 47.1 | |
| | | 69.9 | 87.3 | 91.1 | |
| | | 64.1 | 74.9 | 87.0 | |
| | | 55.0 | 68.1 | 81.6 | |
| 24 Hrs. Average Value | | | | 24 Hrs. Average Air Quality within the Premises | |
| PM ₁₀ | SHIVA TEST HOUSE Patliputra Colony Patna 800013 | 63.0 | 76.8 | 86.6 | |
| PM _{2.5} | | 11.0 | 13.0 | 16.1 | |
| SO ₂ | | 32.4 | 40.2 | 53.1 | |
| NO ₂ | | 63.0 | 76.8 | 86.6 | |



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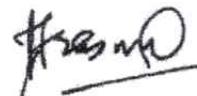
SHIVA TEST HOUSE

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TEST REPORT

| Ref. No. HSM/TR/20-21/3820 | | Dt : 25.02.2021 | | Your Work Order No. 8917 | | Dt : 17.01.2021 | |
|---|--|--|--|--------------------------|--|-----------------|--|
| [a] Name and address of the Customer | | Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN – 845 103 | | | | | |
| [b] Sampling Environmental Condition | | Temp. (°C) | | 18 | | Humidity (%) | |
| [c] Details of Sample | | Monitoring of Ambient Noise Level(Day Time) within plant premises | | | | | |
| [d] Monitored by | | SHIVA TEST HOUSE on 05.02.21 | | | | | |
| [e] Whether any specific Method of Test has been suggested by the party | | No | | | | | |
| <i>Sampling Location</i> | | <i>TWA of Noise Level in dB(A) (Day Time)</i> | | | | | |
| 1. Near Main Gate | | 66.1 | | | | | |
| 2. Near Guest House | | 64.8 | | | | | |
| 3. Near Cane Yard | | 71.4 | | | | | |
| 4. Near ETP | | 68.2 | | | | | |
| 5. Near Railway Gate | | 69.1 | | | | | |
| N.B.: | | The Ambient Air Quality Standards in respect of Noise as per Noise Pollution (Regulation and Control) Rules 2000 for Industrial area is 75.0 dB(A), for Commercial area is 65.0 dB(A), for Residential area is 55.0 dB(A) & for Silence Zone is 50.0 dB(A) in daytime i.e. 6.00 am to 9.0 p.m. As per Rule 7(1&2) the authority shall take action against violator if the noise level exceed the ambient noise standards by 10 dB(A) or more against any area/zone. | | | | | |

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TEST REPORT

| Ref. No. HSM/TR/20-21/3823 | | Dt : 25.02.2021 | Your Work Order No. 8917 | Dt : 17.01.2021 |
|--|-------------------------------------|---|-----------------------------|-----------------|
| [a] Name and address of the Customer | | Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN – 845 103 | | |
| [b] Details of Sample | | <i>Surface water sample</i> | | |
| [c] Sample Collected by | | SHIVA TEST HOUSE on 06.02.21 | | |
| [d] Sampling Location | | <i>Upstream of Ramrekha Rivulet</i> | | |
| [e] Method of Sampling | | IS 3025, APHA | | |
| [f] Sampling Environmental Condition | | Temp. (°C) | 18 | Humidity (%) 66 |
| [g] Details of Sample Container (No. & Type of Container) | | Plastic Bottle (02) | | |
| [h] Sample Quantity | | 2 Litres | | |
| [i] Items required to be tested | | As per request | | |
| [j] Whether any specific Method of Test has been suggested by the customer | | No | | |
| [k] Date of receiving the sample in Laboratory | | 06.02.21 | | |
| [l] Analysis Start Date / Analysis Completion Date | | 06.02.21 / 09.02.21 | | |
| Sl. No. | Parameters | Method of Test | Result (in mg/l.) except pH | |
| 1. | pH | IS 3025 (Part-11) | 7.49 | |
| 2. | Total Hardness as CaCO ₃ | IS 3025 (Part-21) | 268.0 | |
| 3. | Dissolved Oxygen | IS 3025 (Part-38) | 6.8 | |
| 4. | B.O.D. (3 days at 27°C) | IS 3025 (Part-44) | 2.2 | |
| 5. | C.O.D. | APHA 5220 B | 16.0 | |
| 6. | Chloride as Cl | IS 3025 (Part-32) | 16.0 | |
| 7. | Ammonical Nitrogen as N | IS 3025 (Part-34) | 0.8 | |
| 8. | Total Kjeldahl Nitrogen as N | IS 3025 (Part-34) | 1.4 | |
| 9. | Fluoride as F | APHA (4500 F D) | 0.56 | |
| 10. | Total Phosphate as P | IS 3025 (Part-31) | 0.37 | |



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Quality Manager / Dy. Quality Manager

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SHIVA TEST HOUSE

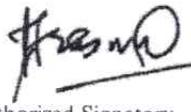
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TEST REPORT

| Ref. No. HSM/TR/20-21/3824 Dt : 25.02.2021 Your Work Order No. 8917 Dt : 17.01.2021 | | | |
|---|-------------------------------------|---|-----------------------------|
| [a] Name and address of the Customer | | Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN – 845 103 | |
| [b] Details of Sample | | Surface water sample | |
| [c] Sample Collected by | | SHIVA TEST HOUSE on 06.02.21 | |
| [d] Sampling Location | | Downstream of Ramrekha Rivulet | |
| [e] Method of Sampling | | IS 3025, APHA | |
| [f] Sampling Environmental Condition | | Temp. (°C) | 19 |
| [g] Details of Sample Container (No. & Type of Container) | | Humidity (%) | |
| [h] Sample Quantity | | Plastic Bottle (02) | |
| [i] Items required to be tested | | 2 Litres | |
| [j] Whether any specific Method of Test has been suggested by the customer | | As per request | |
| [k] Date of receiving the sample in Laboratory | | No | |
| [l] Analysis Start Date / Analysis Completion Date | | 06.02.21 | |
| | | 06.02.21 / 09.02.21 | |
| Sl. No. | Parameters | Method of Test | Result (in mg/l.) except pH |
| 1. | pH | IS 3025 (Part-11) | 7.66 |
| 2. | Total Hardness as CaCO ₃ | IS 3025 (Part-21) | 274.0 |
| 3. | Dissolved Oxygen | IS 3025 (Part-38) | 6.3 |
| 4. | B.O.D. (3 days at 27°C) | IS 3025 (Part-44) | 2.4 |
| 5. | C.O.D. | APHA 5220 B | 20.0 |
| 6. | Chloride as Cl | IS 3025 (Part-32) | 24.0 |
| 7. | Ammonical Nitrogen as N | IS 3025 (Part-34) | 1.0 |
| 8. | Total Kjeldahl Nitrogen as N | IS 3025 (Part-34) | 1.6 |
| 9. | Fluoride as F | APHA (4500 F D) | 0.71 |
| 10. | Total Phosphate as P | IS 3025 (Part-31) | 0.49 |




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TEST REPORT

| Ref. No. HSM/TR/19-20/3825 | | Dt : 25.02.2021 | Your Work Order No. 8917 | Dt : 17.01.2021 |
|--|------------------------------|---|---|------------------------------------|
| [a] Name and address of the Customer | | Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN – 845 103 | | |
| [b] Details of Sample | | <i>Effluent sample</i> | | |
| [c] Sample Collected by | | SHIVA TEST HOUSE on 06.02.21 | | |
| [d] Sampling Location | | <i>From Lagoon</i> | | |
| [e] Method of Sampling | | IS 3025, APHA | | |
| [f] Sampling Environmental Condition | | Temp. (°C) 19 Humidity (%) 66 | | |
| [g] Details of Sample Container (No. & Type of Container) | | Plastic Bottle (02) | | |
| [h] Sample Quantity | | 2 Litres | | |
| [i] Items required to be tested | | As per contract | | |
| [j] Whether any specific Method of Test has been suggested by the customer | | No | | |
| [k] Date of receiving the sample in Laboratory | | 06.02.21 | | |
| [l] Analysis Start Date / Analysis Completion Date | | 06.02.21 / 09.02.21 | | |
| S. N. | Parameters | Method of Test | Limit as per E (P) Rules for disposal on land | Result(in mg/l.) except pH, Colour |
| 1. | Colour | IS 3025 (Part-4) | Not Specified | Colourless |
| 2. | pH | IS 3025 (Part-11) | 5.5 to 8.5 | 7.24 |
| 3. | Suspended Solids | IS 3025(Part-17) | 100.0 | 48.0 |
| 4. | Total Dissolved Solids | IS 3025(Part-16) | 2100.00 | 960.0 |
| 5. | Oil & Grease | IS 3025 (Part-39) | 10.00 | <1.0 |
| 6. | B.O.D.(3 days at 27°C) | IS 3025 (Part-44) | 100.0 | 20.0 |
| 7. | C.O.D. | APHA 5220 B | Not Specified | 104.0 |
| 8. | Dissolved Phosphate as P | APHA (4500-P-D) | Not Specified | 1.4 |
| 9. | Ammonical Nitrogen as N | IS 3025 (Part-34) | Not Specified | 11.2 |
| 10. | Total Kjeldahl Nitrogen as N | APHA (4500 N org) | Not Specified | 19.6 |



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TEST REPORT

| Ref. No. HSM/TR/20-21/4374 | | Dt : 20.03.2021 | | Your Work Order No. 8917 | | Dt : 17.01.2021 |
|--|-------------------|------------------|-------------|---|---|-----------------|
| <p>[a] Name and address of the Customer</p> <p>[b] Details of Sample</p> <p>[c] Sample Collected by</p> <p>[d] Sampling Location</p> <p>[e] Method of Sampling</p> <p>[f] Sampling Environmental Condition</p> <p>[g] Details of Sample Container (No. & Type of Container)</p> <p>[h] Sample Quantity</p> <p>[i] Items required to be tested</p> <p>[j] Whether any specific Method of Test has been suggested by the customer</p> <p>[k] Date of receiving the sample in Laboratory</p> <p>[l] Analysis Start Date / Analysis Completion Date</p> | | | | <p>Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN – 845 103</p> <p>Monitoring of Ambient Air Quality</p> <p>SHIVA TEST HOUSE on 10.03.21</p> <p>Within Premises of Sugar Mill</p> <p>IS 5182 (Part - 14)</p> <p>Temp. (°C) 30 Humidity (%) 55</p> <p>Filter Paper ; Glass Impinger</p> <p>12</p> <p>As per contract</p> <p>No</p> <p>11.03.21</p> <p>12.03.21 / 15.03.21</p> | | |
| Parameters | Method of Test | Sampling Station | | | Limit as per NAAQS 2009 | |
| | | Near Guest House | Near E.T.P. | Near Workshop | | |
| [a] Particulate Matter (PM ₁₀), µg / m ³ | IS 5182 (Part-23) | 69.9 | 87.3 | 91.1 | 100 µg / m ³ | |
| | | 64.1 | 74.9 | 87.0 | | |
| | | 55.0 | 68.1 | 81.6 | | |
| [b] Particulate Matter (PM _{2.5}), µg / m ³ | CPCB GMAAP Vol. I | 11.3 | 15.1 | 16.8 | 60 µg / m ³ | |
| | | 12.3 | 17.7 | 18.4 | | |
| | | 13.4 | 13.5 | 20.1 | | |
| [c] Sulphur Dioxide as SO ₂ , µg / m ³ | IS 5182 (Part-2) | 9.7 | 11.0 | 15.2 | 80 µg / m ³ | |
| | | 8.6 | 8.3 | 13.5 | | |
| | | 10.8 | 12.5 | 12.4 | | |
| | | 31.1 | 47.0 | 54.4 | | |
| | | 36.2 | 45.0 | 56.8 | | |
| | | 39.3 | 40.4 | 59.3 | | |
| [d] Nitrogen Dioxide as NO ₂ , µg / m ³ | IS 5182 (Part-6) | 29.8 | 36.4 | 52.0 | 80 µg / m ³ | |
| | | 27.6 | 34.5 | 48.8 | | |
| | | 30.7 | 38.1 | 47.1 | | |
| | | 69.9 | 87.3 | 91.1 | | |
| | | 64.1 | 74.9 | 87.0 | | |
| | | 55.0 | 68.1 | 81.6 | | |
| 24 Hrs. Average Value | | | | | 24 Hrs. Average Air Quality within the Premises | |
| PM ₁₀ | | 63.0 | 76.8 | 86.6 | 75.4 | |
| PM _{2.5} | | 11.0 | 13.0 | 16.1 | 13.4 | |
| SO ₂ | | 32.4 | 40.2 | 53.1 | 41.9 | |
| NO ₂ | | 63.0 | 76.8 | 86.6 | 75.4 | |



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TEST REPORT

| Ref. No. HSM/TR/20-21/4375 | | Dt : 20.03.2021 | Your Work Order No. 8917 | | Dt : 17.01.2021 |
|--------------------------------------|---|---|--------------------------|--------------|-----------------|
| [a] Name and address of the Customer | | Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN – 845 103 | | | |
| [b] | Sampling Environmental Condition | Temp. (°C) | 30 | Humidity (%) | 55 |
| [c] | Details of Sample | <i>Monitoring of Ambient Noise Level(Day Time) within plant premises</i> | | | |
| [d] | Monitored by | SHIVA TEST HOUSE on 10.03.21 | | | |
| [e] | Whether any specific Method of Test has been suggested by the party | No | | | |
| <i>Sampling Location</i> | | <i>TWA of Noise Level in dB(A) (Day Time)</i> | | | |
| 1. | Near Main Gate | 66.1 | | | |
| 2. | Near Guest House | 64.8 | | | |
| 3. | Near Cane Yard | 71.4 | | | |
| 4. | Near ETP | 68.2 | | | |
| 5. | Near Railway Gate | 69.1 | | | |
| N.B.: | <i>The Ambient Air Quality Standards in respect of Noise as per Noise Pollution (Regulation and Control) Rules 2000 for Industrial area is 75.0 dB(A), for Commercial area is 65.0 dB(A), for Residential area is 55.0 dB(A) & for Silence Zone is 50.0 dB(A) in daytime i.e. 6.00 am to 9.0 p.m. As per Rule 7(1&2) the authority shall take action against violator if the noise level exceed the ambient noise standards by 10 dB(A) or more against any area/zone.</i> | | | | |




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TEST REPORT

| Ref. No. HSM/TR/20-21/4376 | Dt : 20.03.2021 | Your Work Order No. 8917 | Dt : 17.01.2021 |
|--|-------------------------------------|---|-----------------------------|
| [a] Name and address of the Customer | | Chief General Manager M/s Harinagar Sugar Mills P.O.: Harinagar W. CHAMPARAN – 845 103 | |
| [b] Details of Sample | Surface water sample | | |
| [c] Sample Collected by | SHIVA TEST HOUSE on 11.03.21 | | |
| [d] Sampling Location | Upstream of Ramrekha Rivulet | | |
| [e] Method of Sampling | IS 3025, APHA | | |
| [f] Sampling Environmental Condition | Temp. (°C) | 30 | Humidity (%) |
| [g] Details of Sample Container (No. & Type of Container) | Plastic Bottle (02) | | |
| [h] Sample Quantity | 2 Litres | | |
| [i] Items required to be tested | As per request | | |
| [j] Whether any specific Method of Test has been suggested by the customer | No | | |
| [k] Date of receiving the sample in Laboratory | 11.03.21 | | |
| [l] Analysis Start Date / Analysis Completion Date | 12.03.21 / 15.03.21 | | |
| Sl. No. | Parameters | Method of Test | Result (in mg/l.) except pH |
| 1. | pH | IS 3025 (Part-11) | 7.49 |
| 2. | Total Hardness as CaCO ₃ | IS 3025 (Part-21) | 268.0 |
| 3. | Dissolved Oxygen | IS 3025 (Part-38) | 6.8 |
| 4. | B.O.D. (3 days at 27°C) | IS 3025 (Part-44) | 2.2 |
| 5. | C.O.D. | APHA 5220 B | 16.0 |
| 6. | Chloride as Cl | IS 3025 (Part-32) | 16.0 |
| 7. | Ammonical Nitrogen as N | IS 3025 (Part-34) | 0.8 |
| 8. | Total Kjeldahl Nitrogen as N | IS 3025 (Part-34) | 1.4 |
| 9. | Fluoride as F | APHA (4500 F D) | 0.56 |
| 10. | Total Phosphate as P | IS 3025 (Part-31) | 0.37 |



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