

HARINAGAR SUGAR MILLS LTD., (DISTILLERY DIVISION), HARINAGAR**Compliance of Consent Condition for MOEF No. J-11011/51/2006-IA II (I)****Dated 01-06-2006 For the period of October, 2017 to March, 2018**

Consent No.	Condition of Consent	MOEF Compliance
SL. No.	Reference (Capacity) Operation Days	45 KLPD 270 days
A)	SPECIFIC CONDITION	
(i)	To ensure that the treated effluent and stack emission from the unit are within the norms stipulated under the EPA rules or SPCB	<p>The total generated spent wash is sent to the decanter to separate suspended solids then send to settling pit storage & further settling of suspended solids and thus to reduce the raw spent wash quantity. The decanted water is fed to the Bio Gas digester for the degradation of COD & BOD up to 70% of COD & 90% of BOD. The Biomethanated Spent Wash Evaporation cum Condensate & Stripping system has been installed to reduce the further effluent upto 30% & the same will be utilized on Press-mud to produce Bio-compost. The reduced effluent by BMSW Evaporator discharge into the lagoon. The storage lagoon is lined with the HDPE sheeting & brick soling. The storage effluent is sent to the Bio-compost for spraying on windrows with the help of 5 nos. of side Aerotiller Machine having capacity of 60 M³/hour. Evaporation of spent wash is taken place due to heat generation. We have sufficient land of Bio-compost for the consumption of generated Spent wash. Thus no discharge of effluent into the land. This is the Main cause of compliance the norms of zero discharge of plant. The leachate is being received into the sump and leachate water is spraying over the windrows of Press-mud. Analysis of the Bio-compost is being done regularly by Shiva Test House, Patna.</p> <p>Gases emissions for the chimney of the boiler are maintained regularly. There is multi cyclone provided before the chimney for the collection of dust going to the boiler hang. Month wise statement of Analysis report from April, 2017 to March, 2018 is enclosed as ANNEXURE-IV Analyzed by third party Shiva Test House, Patna. As per Direction of CPCB & SPCB we have been installed Mass Flow meters at Spent wash Generation, MEE Feed, MEE Condensate, MEE Concentrate & 4 nos. of PTZ IP Camera at MEE Feed, Lagoon & Bio-composting Yard and Stack monitoring device connected with online at CPCB server. The User ID & Password are as under:-</p> <p>IP Address - http://dpcc.aaxisnano.com/ User ID - harinagar_sugar Password - H@a#12r</p>
(ii)	To adopt continuous and semi-continuous fermentation technology and spent wash after Anaerobic treatment in the Bio-methanation plant shall be composted with Press Mud and Zero Discharge will be maintained.	<p>We have installed latest technology for fermentation by adopting high brix fermentation to reduce the volume of Spent wash. Anaerobic Treatment Plant and thereafter through BMSW Evaporator Effluent is consumed with the required quantity of Press-mud, to maintain the Zero Discharge. To monitor Zero Liquid Discharge we have installed I. P. Camera in Bio-composting Yard. The area acquired for spent wash spraying for Bio-composting is sufficient i.e. as under:-</p> <p>Bio-Composting areas : 21.5 acres Press-mud storage area : 3.0 “ Finished goods area : 2.5 “</p>

(iii)	To install wet fly ash arrestor and stack height as per CPCB guideline	We have installed 14 Ton/hr. Boiler of Lipi Make with Multi-Cyclone along-with Dust Collector in which 45 Meters. Emission height from ground level and porthole provided into chimney for the analysis of Air ambient quality.
(iv)	Spent wash should be stored in impervious pucca lagoons	Spent wash is being stored in impervious pucca lagoons which have been made proper lining with HDPE with brick soling, as per norms.
(v)	To install the adequate numbers of piezometers about the compost plant and piezometers to monitoring the ground water analysis.	We have installed 7 Nos. Piezometers around the E.T.P., Bio-compost Plant and Lagoon for ground water sampling purpose. The locations of Piezometers are as under:- E.T.P. :- 01 Lagoon :- 02 & 03 Bio-compost 1 st yard :- 04 & 05 Bio-compost 2 nd yard :- 06 & 07 & For ground water report one no. hand pump is located near by school and report are being submitted to State Pollution Control Board, Patna as well as MoEF. We are going to make provision to measure water level at Piezometer for proper functioning as per norms.
(vi)	Operation Days (270 Days)	We strictly follow Distillery operation from 15 th September to 15 th June i.e. 270 days every year which is under norms of BSPCB & MoEF. In previous F.Y. 2017-18 we have operated 250 days of Distillery operation.
(vii)	Green belt areas - 4 acres as reflected in EIA and EMP report	As per norms of MOEF we have developed the 8.5 Acres green belt area where the 1,85,000.00 Nos. trees planted surrounding area of Distillery plant, Bio-compost and lagoon as reflected in EMP report which are regularly monitoring by the qualified staff. The survival rate of plants is around 75%, we proposed wide green belt along the periphery of the Distillery project, 30% of the total project area.
(viii)	To measures and recharge the rain water and harvesting system.	We have been install 2 nos. of rain water harvesting system in the Distillery campus.
(ix)	Occupational health surveillance	We have own dispensary along with Doctor and medical staff with sufficient equipments in our factory for regular health checkup of the employee and as per requirement of Factory Act. Health checkup records are enclosed as ANNEXURE-VII
B)	GENERAL CONDITION	
(i)	NOC of B.S.P.C.B.	We are following the compliance condition of B.S.P.C.B. (Sheet enclosed as ANNEXURE-III).
(ii)	No further expansion and modernization without approval	If there will be any need of further expansion/modernization prior approval will be taken from MoEF and B.S.P.C.B.

(iii)	To locate the Ambient Air Quality Monitoring Station to analyze the SPM and SO ₂ NOX	Following station have been located for Air Ambient quality monitoring to analyze the SPM and SOX NOX:- 1) Near Main Gate of Distillery 2) Near E.T.P. 3) Back Gate of Distillery Analysis reports are already submitted. We have installed continuous stack monitoring system.
(iv)	To analyze the adequate number of influent and effluent quality monitoring report submit to B.S.P.C.B.	The regular monitoring of the influent and effluent quality is being submitted to B.S.P.C.B. time to time analyzed by the third party Shiva Test House, Patna Analysis reports are enclosed as ANNEXURE-IV
(v)	Noise Level	We are regular being analyzed of the noise level & Analysis report is already submitted.
(vi)	Environmental protection and safety.	The management believes in putting continuous efforts and to protect the environment. The object of our company is to maintain and protect the environment. In this regard fire and safety equipments system, water hydrates system. Fire extinguishers are installed for the safety which is provided surrounding of required areas.
(vii)	Separate environmental management cell equipped with full fledged laboratory.	We have full fledged and well equipped separate laboratory and also Management have qualified staff for monitoring the environment.

<p>(viii)</p>	<p>To provide funds (Rs. 3.00 crores as mentioned in the Questionnaire No. xix of the EIA/EMP report) for both recurring and non-recurring expenditure to implement the condition as per Ministry of Environment and Forests as well as State Government</p>	<p>We have expanded sufficient Fund in recurring and non recurring implementation for the proper functioning of the plant more than as advised, which are as under:-</p> <p>I <u>PRIMARY TREATMENT PLANT (PROJECT COST)</u></p> <p>A) Bio Digester, Gas holder Parallel : Rs. 76172000.00 plate Lamella Clarifier Fabrication & erection, Pump Motors and Blowers, Civil works, Bio-digester, Foundation</p> <p>B) BIO-COMPOST : Rs. 10735000.00 Installation of pipe line fitting from Bio-digester treated spent wash pit to lagoon tank and Bio-compost yard Site. Land preparation, lagoon, Bio-compost yard, pump with motor, Self propelled Bio-composting m/c Aero tiller – 2 Nos.</p> <p>1. <u>Expenses for the year April 2007 to March 2008</u> Bio-compost & Primary : Rs. 86907000.00 Treatment Cost (I+II)</p> <p>2. <u>Expenses for the year April 2008 to March 2009</u> Bio-digester Operational, Bio-compost : Rs. 11839284.12 yard preparation, Bio-compost Processing, Green Belt Development</p> <p>3. <u>Expenses for the year April 2009 to March 2010</u> Bio-digester Operational, Bio-compost : Rs. 6229725.52 Processing, Green Belt Development, Press-mud shifting (Transportation)</p> <p>4. <u>Expenses for the period of April 2010 to March 2011</u> Bio-digester Operational, Bio-compost : Rs. 8812212.07 Processing, Green Belt Development Press-mud shifting (Transportation)</p> <p>5. <u>Expenses for the period of April 2011 to March 2012</u> Bio-digester Operational : Rs. 1053057.50 Bio-compost Processing & Press-mud : Rs. 7829758.68 Shifting Green Belt Development : Rs. 467087.50 Preparation of Bio-compost Yard : Rs. 2147721.99 Side Aero tiller/Tractor & Dumper : <u>Rs. 5222270.00</u> TOTAL : <u>Rs. 16719895.67</u></p> <p>6. <u>Expenses for the period of April 2012 to March 2013</u> Bio-digester Operational : Rs. 1507771.35 Bio-compost processing & Press-mud : Rs. 11587489.89 Shifting Green Belt Development : Rs. 453107.79 Press-mud Purchasing : <u>Rs. 13027402.60</u> TOTAL : <u>Rs. 26575771.63</u></p> <p>7. <u>Expenses for the period of April 2013 to March 2014</u> Bio-digester Operational : Rs. 1804311.43 Bio-compost processing & Press-mud : Rs. 13347151.99 Shifting Green Belt Development : Rs. 570871.74 Bio-compost Purchased from Other : Rs.11682448.10 Parties Loader Purchasing : Rs. 360000.00 Monitoring of Ambient Air, Ground water : Rs. 299996.00 stock emission & effluent by third party Preparation of Bio-compost Yard : <u>Rs. 17126444.11</u> TOTAL : <u>Rs. 45191223.37</u></p>
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8. Expenses for the period of April 2014 to March 2015

Bio-digester Operational	:	Rs. 3988542.64
Bio-compost processing & Press-mud Shifting	:	Rs. 15937723.82
Green Belt Development	:	Rs. 712668.57
Pressmud purchased from Other factories	:	Rs. 4863502.50
Repair & Maintenance Bio-compost Yard	:	Rs. 217673.00

EQUIPMENT PURCHASE

Bull make loader	:	Rs. 668821.19
New Holland Tractor	:	Rs. 1156729.00
John Deere Tractor	:	Rs. 2181976.00
Eicher Terra Tippler Truck	:	Rs. 1640128.00
Aerotiller	:	Rs. 3695098.98
Decanter for Solid Separation from S. W.	:	Rs. 11959525.89

Arrangement of Waste Water Recycle

Rainwater harvesting arrangement	:	Rs. 476763.21
Waste Water Recirculation arrangement	:	Rs. 1424906.52
Neutralization Pit arrangement	:	Rs. 790200.04
Monitoring of Air Ambient/Ground Water Stack Emission & Effluent by third party	:	Rs. 198000.00

TOTAL : Rs. 49912259.36

9. Expenses for the period of April 2015 to March 2016

Bio-digester Operational	:	Rs. 1127245.72
Bio-compost processing & Press-mud Shifting	:	Rs. 18557859.14
Green Belt Development	:	Rs. 769780.17
Repair & Maintenance Bio-compost Yard	:	Rs. 1939035.72
Press-mud Purchase from others	:	Rs. 16886896.00
Repair & maintenance of Decanter Centrifuge	:	Rs. 86020.76
Repair & maintenance of Bio-compost Yard	:	Rs. 1450128.42
Rain Water Harvesting	:	Rs. 216198.55
Sludge drying Bed extension work	:	Rs. 399478.52
Repairing of Press-mud Yard	:	Rs. 1182453.25
Repairing of Leachate Pit	:	Rs. 60083.00

EQUIPMENT PURCHASE

One No. Trailer for shifting of sludge	:	Rs. 174000.00
Installation of I. P. Camera 4 Nos. with Video Recorder & Media Converter	:	Rs. 1136319.41
Kent make Water in line Flow meter	:	Rs. 35015.17
Online Stack monitoring system	:	Rs. 316975.00
Stack Emission & Effluent by 3 rd Party	:	Rs. <u>198000.00</u>
TOTAL	:	Rs. <u>44535488.83</u>

10. Expenses for the period of April 2016 to March 2017

Bio-digester Operational	:	Rs. 2990281.98
Bio-compost processing & Press-mud Shifting	:	Rs. 33587778.25
Press-mud Purchase	:	Rs. 199599.75
Green Belt Development	:	Rs. 811144.93
Repair & Maintenance Bio-compost	:	Rs. 889202.47
Degassification-cum-Evaporator (BMSW)	:	Rs. 209794994.62
Bio-compost filling & bagging system	:	Rs. 12027159.78
Camera Network Video Recorder	:	Rs. 668438.00
Stack monitoring by third party (Shiva Test House, Patna)	:	Rs. 198000.00

TOTAL : Rs. 261166599.78

		<p>11. Expenses for the period of April 2017 to March 2018</p> <p>Bio Gas Digester Operational : Rs. 5314099.85 Bio-compost processing & Press-mud Shifting : Rs. 22115655.07 Green Belt Development : Rs. 772306.63 Repair & Maintenance Bio-compost : Rs. 3126472.42 Degassification-cum-Evaporator(BMSW) : Rs. 20458038.91 High Pressure Reciprocating Plunger : Rs. 1094309.74 Pump for cleaning of MEE Calandria Tube Stack monitoring by third party (Shiva Test House, Patna) : Rs. 234000.00 Online connectivity of camera and Data On CPCB Server by Axis Nano Technology : Rs. 606900.00 Corriolus Mass Flow meter BMSW Plant : Rs. 1077637.25</p> <p>TOTAL : Rs. 54799419.87</p>
(ix)	To Submit the six month compliance status report B.S.P.C.B./MOEF.	We are submitting the six monthly reports from October 2017 to March 2018.
(x)	To inform public that project accorded environmental clearance by the Ministry and advertised there of in two local newspapers	Yes, we had already been informed to public through advertisement in news papers "AAZ" and "TIMES OF INDIA" dated 11-06-2006 regarding Environmental Clearance granted by MoEF & CC, Govt. of India vide letter no. J-11011/51/2006-1A II(I) dated 01-06-2006. As we have received copy of EC through Speed post on dated 08-06-2006 after receipt of EC we have approach news paper agency for publishing information regarding grant of environmental clearance on dated 09-06-2006. Due to lack of vacant slot in news papers on 10-06-2006, our notice was published in news paper dated 11-06-2006.
(xi)	To inform Regional Office and Ministry the date of financial closure and final approval of the project and date of starting land development work.	Yes Date of Final Approval of Project: 02-10-2006 (Copy Encl.) Date of Financial Closure: 05-04-2008 (Copy enclosed)