JOINT INSPECTION OF M/S PANIPAT CO-OPERATIVE SUGAR MILLS LIMITED, AT GOHANA ROAD, PANIPAT ON 12-02-2020 IN COMPLIANCE TO DIRECTION ISSUED BY HON'BLE NATIONAL GREEN TRIBUNAL IN OA NO. 911/2019, IN THE MATTER OF PRAMOD DEVI, COUNCILOR & ORS. Vs STATE OF HARYANA – REG.

1.0 BACKGROUND

The Hon'ble NGT in its order dated 31.10.2019 in O.A. No- 911/2019 in the matter of 'Pramod Devi, Councilor & Ors. Vs State Of Haryana' had directed following:

> *"...Since it is stated that even now the pollution is continuing, let the Central Pollution Control Board (CPCB) and the State Pollution Control Board (SPCB) furnish latest status report in the matter within one month by e-mail at judicial-ngt@gov.in. The SPCB will be the nodal agency for coordination and compliance."*

In compliance to the aforesaid direction, a joint team of officials of CPCB, Delhi & HSPCB, R.O, Panipat visited the premises of the unit, interacted with the complainants and the nearby residents & school representatives and also inspected the Sugar and Distillery units on **12.02.2020**.

The joint inspection team comprised of the following officials;

1. Sh. P.K. Mishra, A.D., Central Pollution Control Board
2. Smt. Reena Satavan, Sc 'D', Central Pollution Control Board
3. Sh. Kuldeep Singh, R.A., Central Pollution Control Board
4. Sh. Sandeep Singh, Regional Officer, Haryana State Pollution Control Board, Panipat
5. Sh. Pradeep Singh, Assistant Environmental Engineer, Haryana State Pollution Control Board, Panipat

2.0 INTERACTION WITH COMPLAINANTS AND NEARBY RESIDENTS & SCHOOL REPRESENTATIVES

The joint committee visited the surrounding areas around M/s Panipat Co-Operative Sugar Mills Limited & following institutions and had interactions with the representatives as detailed below;

i. **Interactions with complainant Sh. Vijay Jain & Rahul, residents of Sanjay Colony**

The joint Committee had interactions with Sh. Vijay Jain and Sh. Rahul, at the Peda sweet shop, Sanjay Colony located opposite the boundary wall of Sugar Mill at an aerial distance of approx 250m in South-East direction. They complaint about the nuisance of smell and breathing issues due to floating flyash/ Bagasse particles.

The Joint Committee at the time of visit did experience the smell & visible air pollution due to Bagasse particles.

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ii. **Shaheed Ravikant Kanya Vidhalaya (Primary School), Sanjay Colony, Panipat**

The school is situated at an aerial distance of approx 300m from the Stack of Sugar Mill towards the south-western direction. As per the discussion with Smt. Poonam Sharma, Head Teacher of the school, the major concern raised was regarding the smell nuisance, skin allergy and respiratory problem in children due to floating flyash/Bagasse particles. She also stated that the issue was more critical two years back. The school representative further stated that there are no issues with respect to ground water quality contamination and a bore well, located within school premise is found in use. Bore well sample was collected by the team, during the inspection.

The Joint Committee at the time of visit did experience the smell nuisance and also the flyash/Bagasse particles in the ambient air were noticeable.

iii. **Interactions with applicant Smt. Pramod Devi, Councilor Ward No 17- Azad Nagar Colony**

The Joint Committee also interacted with the appellant Smt. Pramod Devi, Councilor of Ward no 17 and her husband Sh. Jasmer Sharma at her office in Azad Nagar Colony, Panipat. The office was located at approx distance of 700m from the stack of Sugar Mill towards south-western direction. They complaint about the smell nuisance & dust problem associated with the flyash/Bagasse particles generated from the Sugar unit.

Committee also observed visible dust deposition on the terrace of homes & leaves of plants in the Azad Nagar Colony at the time of visit.

iv. **Interactions with Mukhija Colony resident Smt. Geeta Devi**

Mukhija Colony is located at the backside of the Sugar Mill. The Committee interacted with residents there. Smt. Geeta Devi informed that they face nuisance of smell, problem of air pollution due to Bagasse particles & flyash. A pond reportedly filled with leachate was observed at the backside of factory wall towards Mukhija colony. Residents informed that sometimes due to leakages from factory premises the water gets accumulated there resulting in breeding ground for mosquitoes, etc. Ground Water sample was collected from the borewell located near the lagoon.

At the time of visit, Committee do not experienced any visible air pollution.

v. **Navyug School (Primary School), New R.K Puram**

The school is situated at an aerial distance of approx 600m from the Stack of Sugar Mill at the backside. The school has strength of about 1400 students. As per the discussion with Smt. Sangeeta, Owner of the school the major concern raised was regarding the deposition of dust/flyash in the premises due to which students are not able to sit outside or play outdoors. She also stated that the situation has improved in last two years. The school representative further stated that there are no issues with respect to ground water contamination and a bore well, located within school premise is in use.

The Committee do not experienced any smell or visible air pollution at the time of visit.

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Analysis results of the ground water samples collected during inspection are given below:

Sampling Point	Parameters						
	pH	Cond	TDS	COD	Chloride	Sulphate	NO3
Ground water from Borewell in Shaheed Ravikant School, Sanjay Colony	7.1	1391	320	BDL	55	223	100.6
Ground water from Borewell near the lagoon towards Mukhija Colony	7.1	928	534	BDL	60	44	24.3
IS 10500-2012 drinking water Standards							
(Acceptable limit)	6.5-8.5	NA	500	---	250	200	45
(Permissible limit in the absence of alternate source)	6.5-8.5	--	2000	----	1000	400	---

As per analysis results of the ground water samples, few parameters were exceeding the Acceptable limits, which requires further assessment.

3.0 VISIT TO THE SUGAR MILL OF M/S. PANIPAT CO-OPERATIVE SUGAR MILL

The joint Committee then visited the Sugar Mill of the unit and it was observed that the sugar mill was in operation and the reported details are presented in the table below;

A: General Information		
1	Name of the Unit and Address	M/s Panipat Co-Operative Sugar Mill (Sugar – Unit) Gohana Road,, Dist.-Panipat
2	Name of the Proprietor Contact Person, Designation , Contact No.	Sh. S.P. Singh, Chief Chemist M.No. 08221000825 panipatsugarmills@gmail.com
3	Date of Inspection	12.02.2020
4	Year of Commissioning	1957
5	Sector	Co-operative
6	Cane Crushing Capacity (TCD)	Installed: 1800 TCD Present: 1800 TCD Cane crushed in 2018-19 : 255532.64 Ton
7	Sugar Produced 2018-19 (Qtls.)	249828.00
8	Molasses Generation (Qtls.)	129367.50
9	Press Mud Generation (Qtls.)	84581.29
10	Operational Status	Operating

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B: Water Pollution and its Control		
1	Water Supply Source Water Consumption (KLD) Industrial Domestic	Bore well (Avg extraction for the month of Jan 2020 was 210.4KLD) No records maintained
2	Waste Water Generation (KLD)	
	Industrial Domestic	Log-book not maintained No information
3	Waste Water Treated (KLD) Industrial Domestic	160KLD Septic Tank
4	Details of ETP	ETP consisted of Equalization tank- Primary clarifier- Aeration tank- Secondary Clarifier and Sludge drying beds
5	Mode of Disposal of treated effluent	Treated effluent was reported to be used in gardening within industry premises.
6	Flow Measuring Device	Yes (at inlet & outlet of ETP)
7	Status of Consent under the Water Act, 1974	Valid upto 30/09/2020 **(Annexure 1)**
C: Information regarding Ferti- irrigation		
1	Details of treatment of effluent before irrigation/gardening	Mentioned in ETP details & observations
2	Command area for irrigation (available land area)	06 Acre park within industry premises
3	System of transportation of treated effluent upto farmers filed	By underground pipeline from ETP outlet
4	Formal agreement with farmers to use treated effluent	As informed entire treated effluent is utilised within industry premises
5	Storage facility available for treated effluent during low demand period	No
6	Quality of effluent being used for irrigation/gardening	Analysis results of samples collected from ETP and the pit found at backside of sludge drying bed are placed in observations as Table-1 & 2.
D: Air Pollution and its control		
1	Sources of Air Pollution	Boiler 4 Nos. (3@15TPH, 1@24TPH)
	Type of fuel used with consumption Stack details with APCS	Bagasse (quantity not provided by unit) Wet scrubber followed by stack (height -30m)
2	Status of Consent under the Air & Act, 1981	Valid till 30/09/2020 **(Annexure 1)**

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E: Waste Management		
1	Type & Quantity of waste Generated	Press Mud-3.65% & Boiler Ash-7.0% of cane crushed.
2	Facility of Storage / Disposal	Press Mud: used in compost ETP Sludge: Used in gardening Boiler Ash- used in land filling Waste Oil: Agreement with third party (M/s Universal Hydrolubes, Karnal)
3	Status of Authorization	Not obtained from HSPCB

F: Observations w.r.t Sugar Industry inspection

1. The unit is engaged in production of Sugar with installed capacity of 1800 TCD using Sugarcane as major raw material. During inspection, unit was found operational & reportedly crushing @ 1800TCD on the day of inspection. The unit has started its crushing season 2019-20 on November 19, 2019.
2. The unit is meeting its fresh water requirements through bore well (01-no.). NOC from Central Ground Water Authority (CGWA) for bore well is yet to be obtained. The water meter is installed & log book on water extraction is maintained.
3. The effluent generated from the process section like mill house & floor washings, mill house cooling, boiler blow down, excess condensate & pump leakages etc. are conveyed & treated in an effluent treatment plant.
4. The unit is having ETP with capacity of 1250m^3/day. ETP comprises of Equalization tank, Primary Clarifier, Aeration Tank, Secondary Clarifier, sludge drying beds.
5. The unit has not provided proper seepage proof holding lagoon of 15 days holding capacity to store treated effluent as per norms/CTO. The treated effluent from the ETP is taken into a small collection pit which was found overflowing back in equalization tank. It was informed that the treated water is used for gardening within the factory premises via underground pipeline, which was found broken.
6. The unit has not yet prepared a comprehensive irrigation management plan validated by SPCB/agricultural universities for utilizing the treated effluent in irrigation as per notified treated irrigation protocol for sugar industries.
7. The unit has installed energy meter for ETP inside the factory & not at ETP site. However, the log book records of the untreated / treated effluent, energy consumption & chemical consumption are not being maintained by the unit.
8. It was observed that the unit has not provided proper Oil & Grease trap facility in the ETP; however the unit has provided oil & grease trapping mechanism at the process section.
9. The unit has not provided proper equalization tank in the ETP and only effluent receiving tank was available. Any mixing arrangement was not found in this tank.
10. It was observed that the launder of primary clarifier & secondary clarifier were damaged. Bulking/ floatation of sludge was observed in both Primary & secondary clarifier. Overall operation & maintenance of ETP was observed to be very poor.
11. Log book records for the Hazardous waste & solid waste generated & its management were not maintained by the unit.

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12. The unit is reportedly using the entire Press Mud generated in its own distillery for making bio-compost. Press mud & Boiler Ash was found dumped in the open area within industrial premises.
13. ETP was located at the farthest corner of bio-compost yard and was not easily accessible. There was no proper way to reach the ETP.
14. Wastewater conveyance line was found broken & wastewater was found spread in entire area surrounding ETP & bio-compost yard, Sugar Mill area and Molasses storage area. Many puddles filled with wastewater & rainwater was seen within the factory premises.
15. The unit has installed required Online Continuous effluent & emission Monitoring System (OCEMS).
16. The unit has 2.5 MW Co-generation power plant to generate electricity for its in-house requirements.
17. The unit has one DG set of 320KVA without acoustic enclosure & proper stack height.
18. The unit has not provided the Hazardous Waste generation & disposal display Board at the entry gate.
19. Stack monitoring could not be carried out at the time of inspection due to inadequate stack monitoring facility available at the unit. Detailed report of the Stack monitoring team is placed at **Annexure 2.**
20. During inspection, ETP was found operational. It was observed that wastewater was spread in pits here & there within the factory premises. It was reported that conveyance line carrying treated effluent to park is broken & needs required repair/maintenance.
21. The joint team had collected samples from inlet, outlet and from the lined pit at the backside of sludge drying beds near compost yard. The analysis results of the sample are as follows;

Table 1: ETP sample results

Location of sample	Parameters, mg/l except pH					
	pH	**COD**	**BOD**	**TSS**	**TDS**	**O&G**
Inlet of ETP	4.60	2427	1317	306	1328	BDL
Outlet of ETP	7.37	76	15	19	1020	BDL
Prescribed standards for irrigation *[as per the Consent granted by HSPCB]*	**5.5 to 9.0**	-	**30**	**100**	**2100**	**10**

The analysis results indicate that the treated effluent from the ETP is complying with the discharge norms permitted as per the Consent to Operated granted by Haryana State Pollution Control Board. However, the reported reduction in BOD (~99%), COD (~97%) & TSS (~94%) parameters with the existing ETP of the unit, without tertiary treatment system, seems unrealistic and requires further detailed assessment. The physical appearance of the ETP (refer **Appendix 1**), including unavailability of separate unit for oil & grease removal, ineffective equalisation tank without mixing mechanism, broken outlet weir of primary settling tank, floating oil, absence of chemical preparation/solution tanks, ineffective sludge management also does not support this performance.

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Analysis results of the Stagnant Wastewater stored in the pit located at the backside of the sludge drying bed near compost yard within industry premises is given below:

Location of sample	Parameters, mg/l except pH			
	pH	COD	BOD	Appearance
Stagnant Wastewater stored in the pit near compost yard within the premises	**5.66**	**42137**	**23750**	**Dark Black**
Prescribed standards for irrigation *[as per the Consent granted by HSPCB]*	**5.5-9.0**	-	**30**	

The analysis result indicates that the stagnant wastewater in the pit is having runoff from the compost yard/ untreated effluent.

22. **The Groundwater samples were also collected from the borewells installed within the industry premises. The analysis results of the borewell samples are as follows:**

Sampling Point	Parameters						
	pH	Cond	TDS	COD	Chloride	Sulphate	NO3
Ground water from Borewell near Compost Yard used for Distillery indsutry	7.2	1240	742	07	105	107	6.7
Ground water from Borewell near the Sugar Mill used by Sugar Mill for both domestic & industrial purpose	7.1	1414	832	08	123	162	8.9
IS 10500-2012 drinking water Standards							
(Acceptable limit)	6.5-8.5	NA	500	---	250	200	45
(Permissible limit in the absence of alternate source)	6.5-8.5	--	2000	----	1000	400	---

As per the analysis results, COD contamination was found in GW samples and TDS was exceeding the acceptable limit.

23. One extra old clarifier & aeration tank not in use was found filled with polluted/stagnant water.
24. The overall housekeeping of the unit was found very poor.
25. The excess Bagasse from the mill house was observed falling from height resulting in air pollution & unburnt Bagasse particles were also seen floating outside the premises in the direction of wind.
26. It was informed by the Chief Chemist of unit that the entire plant is in the process of shifting from this location to another location 8Km away from the present location. Unit has already applied for Environmental Clearance.

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G: Recommendations of the Committee
1. Unit shall provide a pakka seepage proof/ lined 15 days holding capacity lagoon to store treated effluent of ETP during no demand period. 2. The unit should carry out adequacy assessment of its existing ETP by reputed Institutes preferably IIT/NEERI/NSI & accordingly upgrade the same in a time bound manner. 3. The unit should optimally operate its ETP. 4. The unit shall dispose the boiler ash & ETP sludge in a scientific manner. 5. The unit shall depute qualified trained staff for the O&M of ETP. 6. The unit should prepare comprehensive Irrigation management plan for the utilization management plan for the utilization of treated effluent form effluent treatment plant in accordance with the notified irrigation protocol for the sugar Industry by reputed Institutes preferably IIT/NEERI/NSI/VSI & accordingly upgrade the same in a time bound manner. 7. Proper log book for ETP operation, Energy consumption, chemical consumption, fresh water consumption, effluent discharge shall be maintained. 8. The unit shall make necessary pumping arrangement to treat all the stagnant water stored in puddles/ pits around the ETP & compost yard in ETP and ensure that entire wastewater is diverted to ETP & such puddles/pits are dismantled/levelled. 9. The unit shall install separate flowmeter to measure spray pond overflow. 10. The unit shall provide adequate stack monitoring facility as per the recommendations of the stack monitoring team report **(Annexure 2)**. 11. The unit should improve housekeeping. 12. The unit shall obtain Authorization under Hazardous Waste (Management & TBM) Rules, 2018 from HSPCB. 13. An updated display Board at the entrance of the unit to display the generation of HW, Hazardous chemicals, etc as per Hon'ble Supreme Court directive in WP(C) No. 657/1995 shall be provided by the unit. 14. The unit shall be kept under regular surveillance by Haryana State Pollution Control Board for ensuring continuous compliance of notified norms, terms & conditions of Consent orders.

4.0 VISIT TO THE DISTILLERY UNIT OF M/S. PANIPAT CO-OPERATIVE SUGAR MILLS LTD (DISTILLERY UNIT), GOHANA ROAD, PANIPAT

The joint Committee then visited the Distillery plant of the unit and it was observed that the distillery was not in operation and the reported details are presented in the table below;

A: General Information		
1.	Name of the unit and Address	M/s. Panipat Co-operative Sugar Mills, Distillery Unit Panipat, Haryana
2.	Name of the Contact person – Designation Contact No. & e-mail	Mr. Pardeep Ahlawat HCS Managing Director 01802651269, panipatsugarmills@gmail.com
3.	Year of Commissioning.	1969
4.	Sector	Distillery

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5.	Manufacturing process	Batch. Distillery plant was not in operation at the time of visit. It was reported that Distillery unit is not functional since January 05, 2020 due to optimum production of ethanol stock. Same was found stored within the premises.		
6.	Production capacity • Installed Prod. Cap. • Present Production	4550 KL per Annum 1598 KL Annum(2019-20) up to 12.02.2020		
	Products Manufactured (KLA)	**2017-18**	**2018-19**	**2019-2020**
		2102254.2	3561832.0	1598105.4
		506584	321945	123280
		722388.50	893970.40	354293.40
	Raw materials requirement	**2017-18**	**2018-19**	**2019-2020**
		103335.05	209345.50	87892.0
7.	Actual no. of operating days in a year	113 Days	215 Days	111Days
8.	Process details (attach material balance & flow diagram)	Copy Attached **(Annexure 3)**		
9.	Status of consents & Authorization (validity/applied)	Air Consent: Valid up to 30.09.2023 **(Annexure 4)** Water Consent: Valid up to 30.09.2023 HW Authorization: Not obtained from HSPCB		
B: Water Pollution and its Control				
10.	Water Supply Source No. of bore wells Water Consumption (KLD) Logbook maintained: (Y/N) CGWA Permission Obtained: (Y/N)	Bore well from sugar mill 01 Nos 168m3/day Yes No		
11.	Waste Water Generation (KLD)			
	Stream/section	Quantity	Disposal/utilisation	
	Spent Wash	180m3	Digester	
	Spent lees	20m3	CPU(RO Plant)	
	Fermentor washing	7m3	Bio-composting	
	Floor washing	Nil	E.T.P	
	Process Condensate	62m3	CPU(RO Plant)	
	Cooling tower blow down	3.5m3	Spray on boiler ash	
	Boiler blow down	2.5m3	Spray on boiler ash	
	Others	--	--	
	Total	275	275	

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12.	**Bio digester details:**	Designed flow: 500 KLD Organic loading: 1250 kg BOD/m3/d HRT: 10 days % reduction; BOD 88-90% & 68-70% COD Biogas produced-6300-8400 m3/day Bio digester O/L sent to Nano/RO Plant
13.	**Details of R.O plant**	RO Feed rate: 7.5m^3/hr Permeate generation: 3.75 m^3/hr Reject generation: 3.75m^3/hr
14.	**Details of MEE plant**	Type: Falling Film No. of effects: Four effects MEE Feed rate : 4.1 m^3/hr Condensate generation : 2.6 m^3/hr Generation of concentrate :1.5 m^3/hr
15.	Utilisation of R.O permeate & MEE condensate	Utilisation of R.O permeate: Cooling Tower make up Utilisation of R.O Reject: MEE Utilisation of MEE concentrates: Bio-compost Utilisation of MEE condensate: Cooling Tower make up
16.	Incineration Boiler Detail (if available)	N.A
17.	Details of online Flow measuring device installed for spent wash	Online flow meter with connectivity to CPCB installed at inlet of ETP & MEE concentrate O/L Flow meter reading: URL/IP of flow meter: cpcpcloud.aaxisnano.com, hspcb.aaxisnano.com User id & p.w: panipat & P@9#12n whether operating satisfactorily: Not in operation
18.	Details of reduction in water consumption due to utilisation of R.O permeate/ MEE condensate & treatment given, if any	Fresh water consumption before R.O/MEE (per KL of alcohol):11.2 Fresh water consumption after R.O/MEE (per KL of alcohol):Nil Treatment options:
C: Information regarding Bio-composting		
19.	Active area for bio compost preparation	2.25 Acres
20.	Area for press mud storage	01 Acres
21.	Area for bio compost storage	1215 m^2 : Covered: Y/N – No
22.	Finished compost packing facility	One Acre for green belt
23.	Spent wash storage capacity	Lagoons at bio-compost site 2500m^3 Raw S.W:180 m^3, B.M S.W:180m^3 R.O feed: 180m^3, R.O reject: 90 m^3 MEE feed: 98m^3, MEE conc. :43 m^3

Per: Kuldeep Singh

24.	Availability of press mud & Quantity stored	Entire quantity of press mud from Panipat Co-operative sugar unit was reported to be used in Bio-compost Quantity: 5000MT		
25.	Maturity time in days for one cycle & total cycles/year	45 days 06 cycles/year		
26.	Utilisation of S.W/Conc. S.W in bio composting	Avg. no. of days of spraying S.W in a cycle: 40 days Avg. S.W quantity sprayed in a day 43KL		
27.	Ratio of filler material to spent wash	1:1.35		
28.	Details of windrows (Number, length, height, width of stacking, space between two windrows) and equipments	Length:90mtr Width:03mtr Height:1.5 mtr Number:12 Space between rows:03mtr Quintals of press mud used in one windrow:1500 Qtls No. of aero tillers used: one No. of tractors used: 01,JCB-01, Tractor Loader-01		
29.	Details of registration from Agriculture department, as per new notification of compost quality	Copy Attached **(Annexure 5)**		
30.	Arrangement for rainy season and details regarding closure of operations for 03 months during monsoon	Photocopy of form D-14 is attached regarding closure of plant operation during monsoon season. **(Annexure 6)**		
31.	Details of PTZ cameras provided and its connectivity	Cameras provided at: 1-Bio-compost Yard 2-Spent wash Lagoon URL/I.P of camera: cpcpcloud.aaxisnano.com, hspcb.aaxisnano.com User id & p.w: panipat & P@9#12n whether operating satisfactorily: Yes		
D: Air Pollution and its Control				
32.	Sources of Air Pollution	1. Incineration boiler: NA 2. Boiler 4.5.TPH		
33.	Type of Fuel/s used with consumption and Stack details with APCD	Details	Boiler1	Boiler2
		Fuel used	NA	Baggasse/Wooden Chips/Bio-gas
		Fuel consumption	NA	12 ton/day
		Stack height & dia	NA	41.15mt height 1.22 mt Dia
		APCD attached	NA	Wet Scrubber

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34.	Details of online P.M meter (opacity) available & connectivity	P.M reading: Not in operation URL/I.P of opacity meter: User id & p.w: cpcpcloud.aaxisnano.com, hspcb.aaxisnano.com panipat & P@9#12n whether operating satisfactorily: Unit was not in operation
E: Solid & Hazardous Waste Management		
35.	Type & Quantity of Waste Generated	Fermentor sludge: 75% Bottom sludge (molasses)-- Boiler ash: 1.6% Others:Nil
36.	Facility of Storage/ Disposal	Fermentor sludge: Bio-compost Bottom sludge (molasses)-- Boiler ash: Bio-compost

F: Observations w.r.t Distillery Unit

1. The distillery unit with installed capacity of 15.17KLD was found not in operation at the time of visit. It was reported to be closed since January 05, 2020 due to no demand of country liquor. The produced stock was found stored within the distillery plant & storage area was found full.
2. It was observed that the sludge removed during reported desludging of spent wash storage lagoon was lying on ground near the lagoon.
3. It was observed that one-side of the spent wash storage lagoon was damaged.
4. It appeared from the condition of installed R.O. plant that it is not in use.
5. Number of earthen pits filled with stagnant water/puddles were seen near the spent wash storage lagoon, around compost yard & ETP area.
6. It was observed that the unit has not provided proper garland drains with collection pit along the boundary of bio-compost yard for collection of runoff from the compost yard.
7. The reported spent wash storage lagoon capacity provided for concentrated spent wash utilised in bio composting was found high as per the Bio-compositing protocol.
8. Overall housekeeping of the unit was found poor.
9. The unit has 2.25Acre active area for bio-compositing. Piezometer wells were not found in bio-compositing yard.
10. No proper defined separate covered area was provided for storage of press mud & finished product.
11. The unit is selling compost in loose & no facility for bagging was seen.

G: Recommendations of the Committee

1. The unit shall restrict the storage capacity provided for concentrated spent wash utilised in bio composting to maximum of 30 days generation of MEE concentrate utilised in bio compositing.
2. **The unit shall provide proper garland drain with collection pit and pumping arrangement of collected effluent to ETP/MEE, at the boundary (all sides) of the bio** compost yard.
3. **The unit shall ensure necessary repair work of broken side wall of spent wash** storage lagoon.

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4. The unit shall ensure complete compliance to Bio Compositing protocol.
5. After transfer of wastewater in pits/puddles to lined storage lagoon to ETP, such pits shall be dismantled/levelled in scientific manner.
6. The unit shall improve the overall housekeeping of the plant.
7. The unit shall obtain Authorization under Hazardous Waste (Management & TBM) Rules, 2018 from HSPCB.
8. The unit should provide proper ground water monitoring network with required number of peizometer/hand-pumps at upstream & downstream locations as per bio-compositing protocol & shall carryout regular monitoring of groundwater.
9. The unit shall be kept under regular surveillance by Haryana State Pollution Control Board for ensuring continuous compliance of notified norms, terms & conditions of Consent orders.

➢ **The relevant photographs taken during the visit are attached as Appendix 1.**

S No	Name & designation of inspecting officer(s)	Signature
1	P.K. Mishra, A.D., Central Pollution Control Board	
2	Reena Satavan, Sc-'D', Central Pollution Control Board	
3	Kuldeep Singh, R.A. Central Pollution Control Board	Kuldeep Singh
4	Sandeep Singh, Regional Officer, Haryana State Pollution Control Board, Panipat	
5	Pradeep Singh, A.E.E, Haryana State Pollution Control Board, Panipat	

PHOTOGRAPHS (Appendix 1)

Pic-1: Industry Main Gate

Pic-2:Joint Committee at Shaheed Ravikant Kanya Vidhalaya (Primary School), Sanjay Colony

Pic-3: ETP of the Sugar Unit

Pic-4: Distillery Bio-composting Yard

Pic-5: Distillation & MEE Section

Pic-6: Flow Meter installed at ETP Inlet

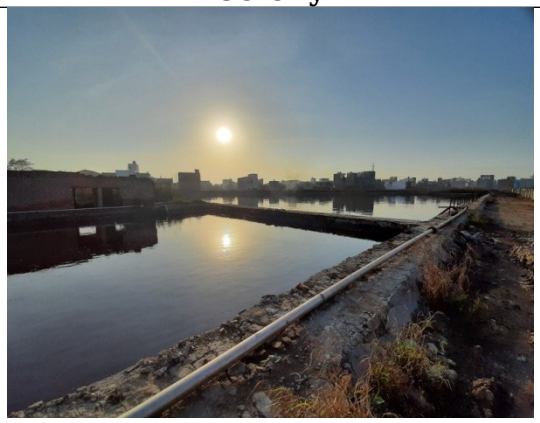
Pic-7: Flow Meter installed at RO Reject

Pic-8: Sugar ETP Inlet

Pic-9 Flow Meter Installed at Bore Well

Pic-10: Bore Well at Mukhija Colony

Pic-11: Sealed Samples



Pic-12: Storage Lagoon

Pic-13: Molasses Storage Tank

Pic-14: Cameras installed at Bio-composting Yard and at Lagoon area

Pic-15: Leaked pipeline on the way to ETP of Sugar Mill

Pic-16: Stagnant water pit/puudle in ETP area

Pic-17: Equalization Tank

Pic-18: Damaged launder of Clarifier

Pic-19: Way to ETP

Pic-20: Wastewater drain near Bio-compost yard

Pic-21: Final product Storage Area of Distillery plant

Pic-22: Bagasse storage area of Sugar Mill

Pic-23: Old aeration tank filled with polluted/stagnant water

Pic-24: Poor Housekeeping

Pic-25: Oil skimmers installed in Mill House

Pic-26: Stagnant Coloured water near Bio-composting Yard

Pic 27- Bagasse falling from Mill House

Pic 28- R.O Plant in Distillery unit

Pic 29- Broken side of Spent Wash storage lagoon

Pic 30- Improper addition of chemicals at ETP inlet

Pic-31: Damaged secondary Clarifier

Pic-32: Spray Pond

Pic-33: Lagoon at the backside of the factoy near Mukhija Colony

Pic-34: Poor Houskeeping inside factory premises

Pic-35: Dust deposition on the terrace of homes in the Azad Nagar Colony

Pic-35: Dust deposition on plant leaves in Azad Nagar Colony

Pic-36: Small treated effluent collection pit at ETP

Annexure-1

HARYANA STATE POLLUTION CONTROL BOARD
SCO-55, Sec.25, HUDA,
Panipat Ph. 0180-2672037

E-mail: hspcb.pkl@sify.com

No. HSPCB/Consent/ : 313093918PITCTO5786241 **Dated:23/11/2018**

To.

M/s :THE PANIPAT COOP. SUGAR MILLS LTD., PANIPAT
GOHANA ROAD

Subject: Grant of consent to operate to M/s THE PANIPAT COOP. SUGAR MILLS LTD., PANIPAT.

Please refer to your application no. 5786241 received on dated 2018-11-10 in regional office Panipat.With reference to your above application for consent to operate,M/s THE PANIPAT COOP. SUGAR MILLS LTD., PANIPAT is here by granted consent as per following specification/Terms and conditions.

Consent Under	BOTH
Period of consent	14/11/2018 - 30/09/2020
Industry Type	Sugar (excluding Khandsari)
Category	RED
Investment(In Lakh)	15550.0
Total Land Area(Sq. meter)	338800.0
Total Builtup Area(Sq. meter)	15100.0
Quantity of effluent	
1. Trade	150.0 KL/Day
2. Domestic	2.0 KL/Day
Number of outlets	2.0
Mode of discharge	
1. Domestic	Septic Tank
2. Trade	ETP
Domestic Effluent Parameters	
1. NA	
Trade Effluent Parameters	
1. BOD	30 mg/l
2. COD	250 mg/l
3. TSS	100 mg/l
4. pH	9.0
5. Oil and grease	10 mg/l
Number of stacks	2
Height of stack	

1. Stack attached to 15 X 3 TPH Boiler	30 meter
2. Stack attached to 24 TPH Boiler	30 meter
Emission parameters	
1. SPM	150 mg/m3
Product Details	
1. Sugar	1800 Metric Tonnes/day
Capacity of boiler	
1. BAGASSE fired Boiler No. 01	15 Ton/hr
2. BAGASSE fired Boiler No. 02	15 Ton/hr
3. BAGASSE fired Boiler No. 03	15 Ton/hr
4. BAGASSE fired Boiler No. 04	24 Ton/hr
Type of Furnace	
1. NA	
Type of Fuel	
1. BAGASSE	480 Ton/Day
Raw Material Details	
Sugar Cane	1800 Metric Tonnes/Day

HARYANA STATE

Regional Officer, Panipat

Haryana State Pollution Control Board.

Terms and conditions

1. The applicants shall maintain good house keeping both within factory and in the premises. All hose pipelines values, storage tanks etc. shall be leak proof. In plant allowable pollutants levels, if specified by State Board should be met strictly.
2. The applicant/company shall comply with and carry out directive/orders issued by the Board in this consent order at all subsequent times without negligence of his /its part. The applicant/company shall be liable for such legal action against him as per provision of the law/act in case of violation of any order/directives. Issued at any time and or non compliance of the terms and conditions of his consent order.
3. The applicant shall make an application for grant of consent at least 90 days before the date of expiry of this consent.
4. Necessary fee as prescribed for obtaining renewal consent shall be paid by the applicant alongwith the consent application.
5. If due to any technological improvement or otherwise this Board is of opinion that all or any of the conditions referred to above required variation (including the change of any control equipment either in whole or in part) this Board shall after giving the applicant an opportunity of being heard vary all or such condition and there upon the applicant shall be bound to comply with the conditions so varied.

6. The industry shall provide adequate arrangement for fighting the accidental leakages, discharge of any pollutants gas/liquids from the vessels, mechanical equipment etc. which are likely to cause environment pollution.
7. The industry shall comply noise pollution (Regulation and control) Rules, 2000.
8. The industry shall comply all the direction/Rules/Instructions as may be issued by the MOEF/CPCB/HSPCB from time to time.
9. The industry shall ensure that various characteristics of the effluents remain within the tolerance limits as specified in EPA Standard and as amended from time to time and at no time the concentration of any characteristics should exceed these limits for discharge.
10. The industry would immediately submit the revised application to the Board in the event of any change in the raw material in process, mode of treatment/discharge of effluent. In case of change of process at any stage during the consent period, the industry shall submit fresh consent application alongwith the consent to operate fee, if found due, which may be on any account and that shall be paid by the industry and the industry would immediately submit the consent application to the Board in the event of any change during the year in the raw material, quantity, quality of the effluent, mode of discharge, treatment facilities etc.
11. The officer/official of the Board shall reserve the right to access for the inspection of the industry in connection with the various process and the treatment facilities. The consent to operate is subject to review by the Board at any time.
12. Permissible limits for any pollutants mentioned in the consent to operate order should not exceed the concentration permitted in the effluent by the Board.
13. The industry shall pay the balance fee, in case it is found due from the industry at any time later on.
14. If the industry fails to adhere to any of the conditions of this consent to operate order, the consent to operate so granted shall automatically lapse.
15. If the industry is closed temporarily at its own, they shall inform the Board and obtain permission before restart of the unit.
16. The industry shall comply all the Directions/ Rules/Instructions issued from time to time by the Board.

Specific Conditions :

1.That CTO granted subject to outcome of the decision of the court in O.A. 09 of 2018 titled as Amit Kaushik V/s Panipat Co-operative sugar Mill pending before Hon'lbe NGT.
2. That the unit will submit the analysis report of air emission within seven days to ascertain the adequacy of APCM upgraded by your unit.
3. That if the analysis report found exceeding the prescribed standard consent to operate granted by the board will be revoked.
4. That the unit will operate its APCM regularly and effectively to keep the parameter of air emission within prescribed standard.
5. That the unit maintain proper log book for its APCM.
6. That unit will apply for renewal of consent to operate 90 days earlier before expiry of previous of consent to operate granted by the Board.
7. That the unit will comply with the provision of water Act, 1974, Air Act, 1981 and EP Act, 1986.

Bhupinder Singh
Digitally signed by Bhupinder Singh
Date: 2018.11.23 09:18:05 -08'00'
Regional Officer, Panipat

HARYANA STATE

Annexure-2

A Brief visit Report on Source Emission monitoring at M/s Panipat Cooperative Sugar Mill, Panipat, Haryana State

To comply the Direction of Hon'ble NGT(O.A.No.911/2019), the Air lab team consist of following members visited to the above unit for carryout source emission monitoring on 12.02.2020.

(1) Sh. P. Krishnamurthy, Sci.'D'- Team Leader
(2) Sh. Subhash Chand, STS
(3) Sh. K.P. Rathi, JSA

Observation:

During the time of visit, the industry was in operation. There are two no.of stacks are under operation.
Stack-1 (attached with boiler-1 &2): boiler 1&2 is having 15 TPH capacity each.
Stack-2 (attached with boiler-3): boiler 3 is having 25 TPH capacity.
APCD installed : Wet scrubber working
Fuel used : Bagasse

In the stack No.1, there is no smoke due to natural draft and there is no provision of ID fan as per their design.
In the stack No.2. huge smoke observed and induced draft with ID fan system available.

It is also important to note that the company has installed Real time online continuous emission monitoring systems in both stacks for the measurement of Particulate matter and it was working smoothly and data transformed through spcb/cpcb server. The data collected was given in annexure-I.

In the year 2018, third party agency of Haryana Test house Lab has conducted stack monitoring and the test certificate given was complying the standard limits (annexure-II).

Air lab team made an efforts but it was not possible to climb up on the stack and carryout monitoring due to the following reasons.

(i) Port hole & platform provided at the height of approximately 22 meters with monkey ladder facility without safety access and it is not as per standard norms.

(ii) There is no rest platform while climbing on the monkey ladder in between the ground to sampling location of the stack. The platform provided is not safe and it cannot sustain the weight of the Instrument and monitoring officials who are conduct the monitoring will be a high risk.

(iii) Port hole with platform may be provided at the height of 8 times of dia of the stack from the last disturbance point (e-g Stack inner dia = 2mt, 2mt x 8 = 16mt from the last disturbance/ turbulence) which has not followed.

(iv) Port hole was covered by the monkey ladder there is no approach to insert the sampling probe in the existing facility.

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(v) Overall not complying the safe and easy access as per ERP-III norms(page no.20 and clause 2.5.4)

(vi) Industry is under the process of shifting this unit to another location which is 5 Km away from the existing unit. Therefore, within 3 months, all stacks will be demolished and new unit will be established as per the norms.

Recommendation:

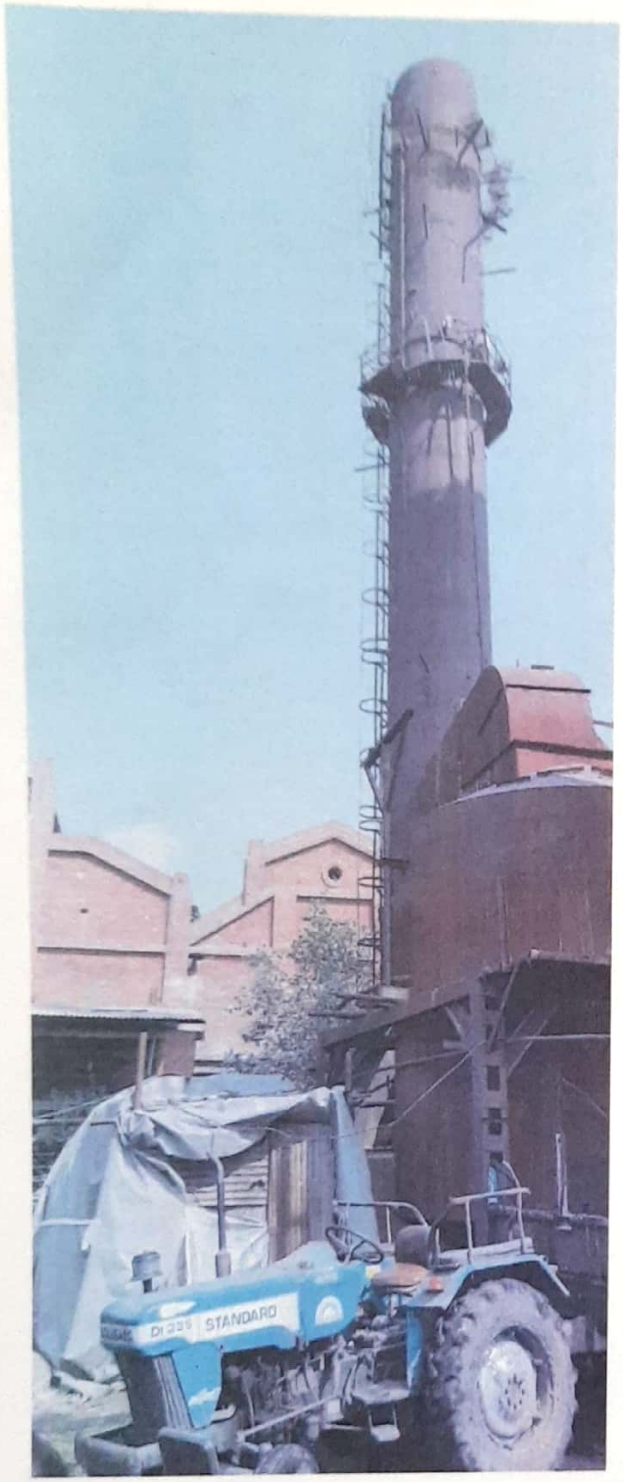
1. It is required to provide rest platform in the stack or it is suggested to provide scaffold or spiral type ladder facility for considering the safety of the monitoring personnel and smooth access.

2. Since it is a highly risk and inadequate facility made in the platform and port hole, it should be made as per ERP –III norms for smooth manual sampling.

Scanned with CamScanner

M/s Panipat Cooperative Sugar Mill, Panipat, Haryana State

Stack No-1 (Capacity 15 TPH+15TPH)



Stack No-2(Capacity 25 TPH)

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Stack no. 2

Stack no. 2 another view

A bad shape of platform and porthole location for Manual sampling.

Scanned with CamScanner

Stack no. 2

Condensates falling on the platform

Scanned with CamScanner

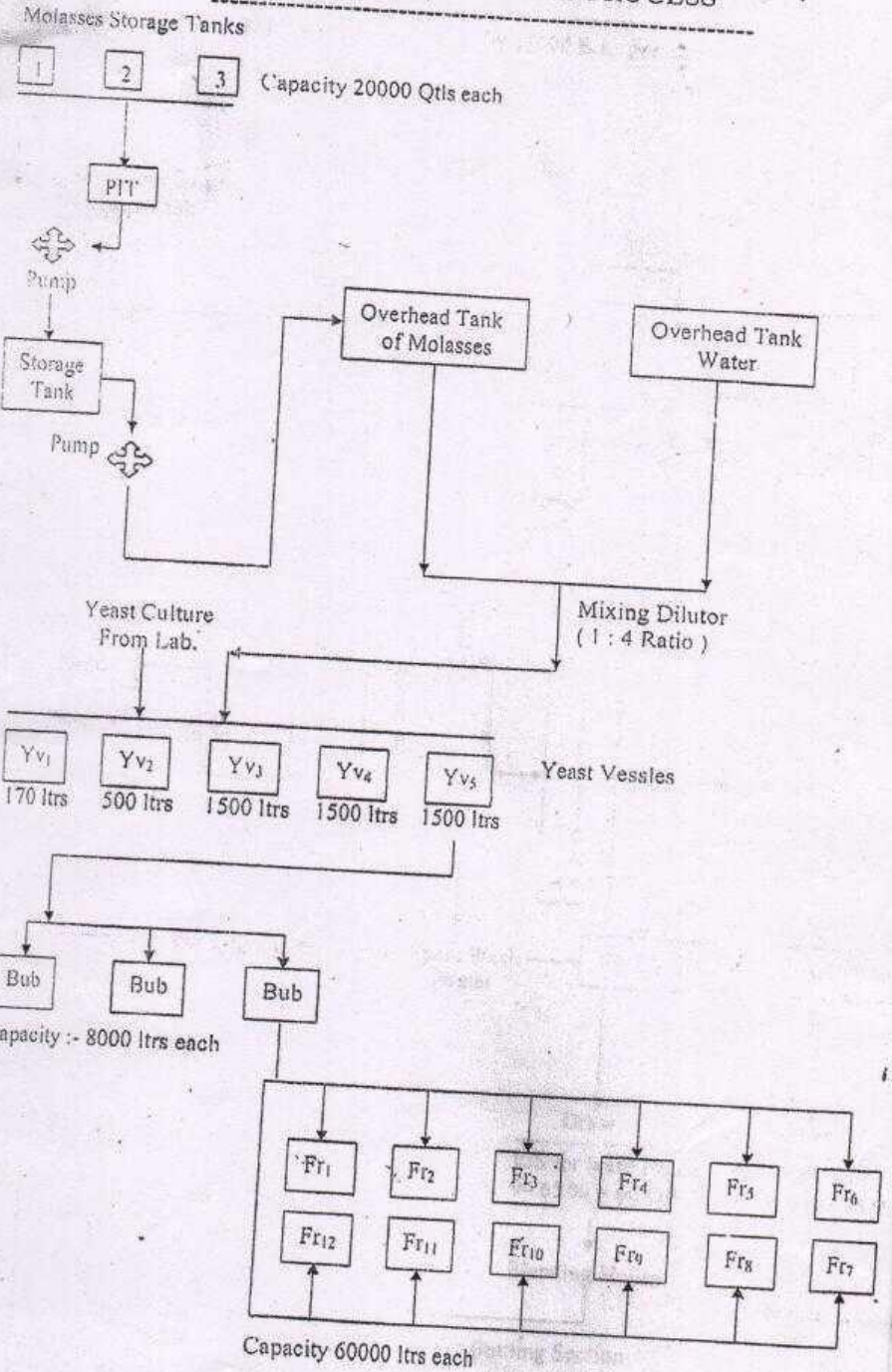
Annexure-3

THE PANIPAT COOP. SUGAR MILLS LTD., DISTILLERY UNIT PANIPAT

(Material Balance Sheet)

Plant Capacity	**15 KLPD Distillery**		
Molasses	80 KL	Spent Wash	180 KL
Water	125 KL	Spent Leese	20 KL
Spent Leese(recycle)	10 KL	Rectified Spirit	15 KL
Total	215 KL	Total	215 KL

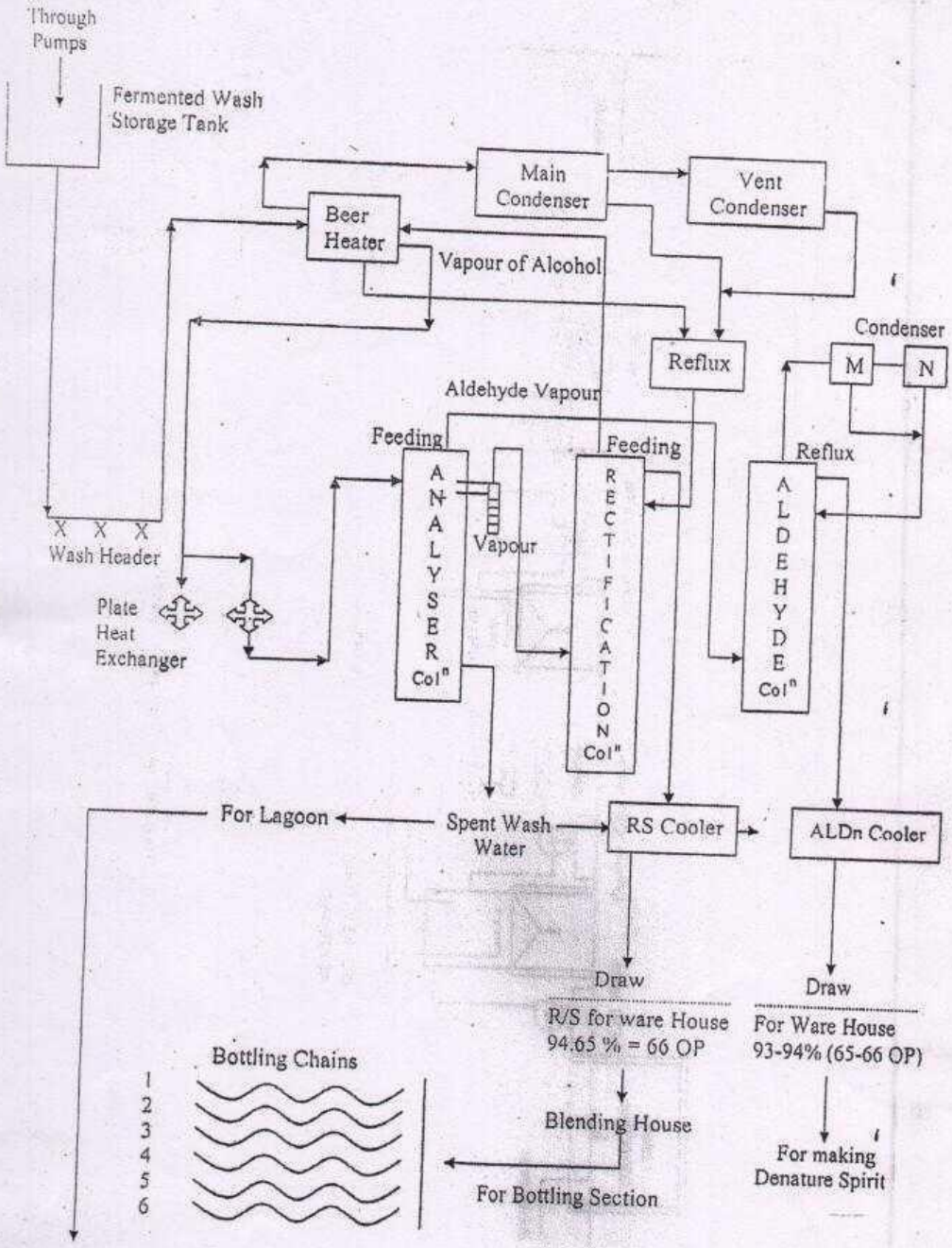
FERMENTATION HOUSE PROCESS



Distillery Manager
The Panipat Co-op. Sugar Mills Ltd.
(D Unit) PANIPAT

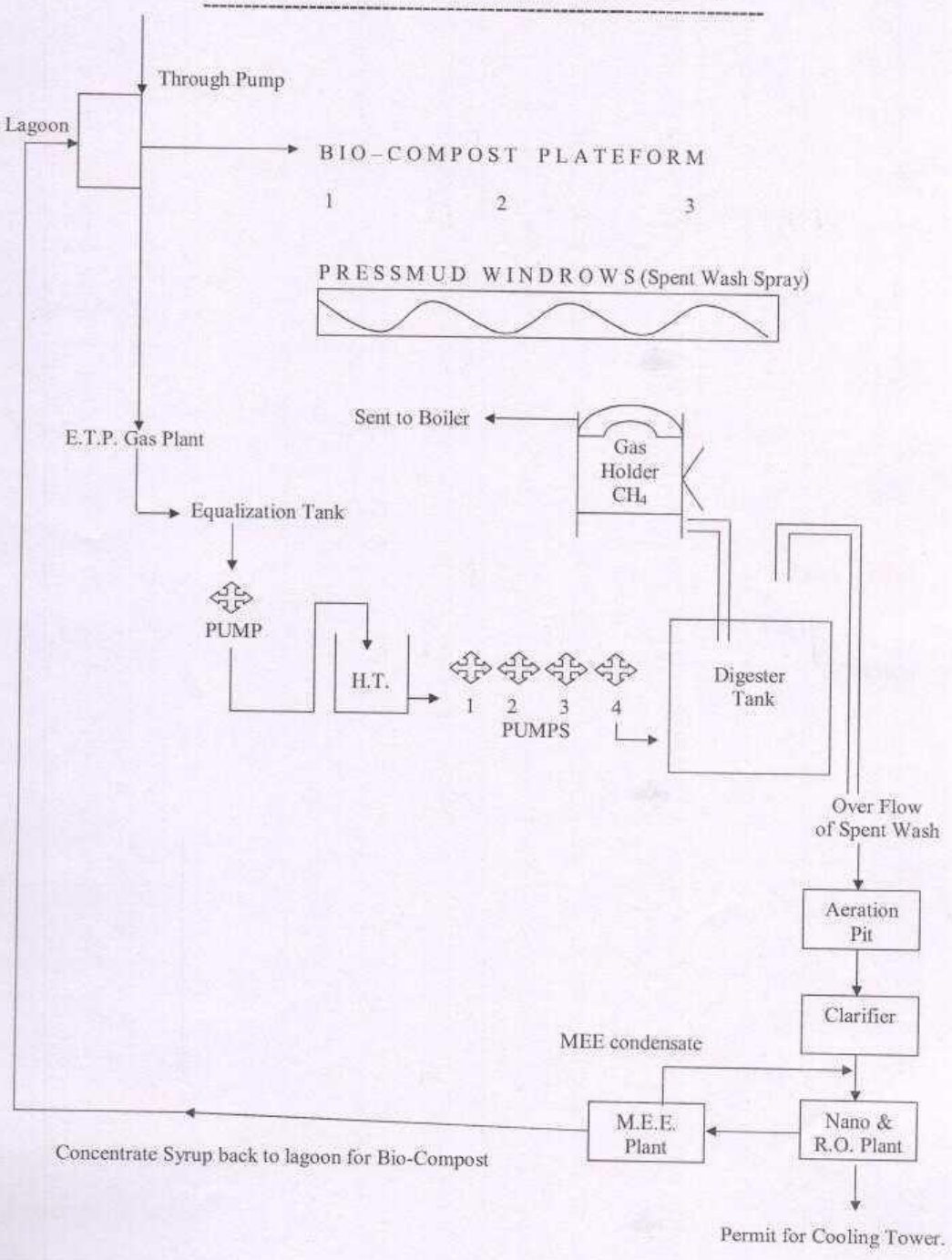
DISTILLATION HOUSE

Distillation Plant Capacity 15000 B.L. per day



Distillery Manager
The Panipat Coop. Sugar Mills Ltd.
(D.Unit) PANIPAT

SPENT WASH FROM DISTILLATION PLANT



Annexure-4

HARYANA STATE POLLUTION CONTROL BOARD
SCO-55, Sec.25, HUDA,
Panipat Ph. 0180-2672037
E-mail: hspcb.pkl@sify.com

No. HSPCB/Consent/ : 313106518PITCTO5424623 **Dated:04/09/2018**

To.

M/s :THE PANIPAT COOP SUGAR MILLS LTD DISTILLERY UNIT
GOHANA ROAD, PANIPAT

Subject: Grant of consent to operate to M/s THE PANIPAT COOP SUGAR MILLS LTD DISTILLERY UNIT.

Please refer to your application no. 5424623 received on dated 2018-08-06 in regional office Panipat.With reference to your above application for consent to operate,M/s THE PANIPAT COOP SUGAR MILLS LTD DISTILLERY UNIT is here by granted consent as per following specification/Terms and conditions.

Consent Under	BOTH
Period of consent	01/10/2018 - 30/09/2023
Industry Type	Distillery (molasses / grain / yeast based)
Category	RED
Investment(In Lakh)	2370.52002
Total Land Area(Sq. meter)	60702.0
Total Builtup Area(Sq. meter)	12140.0
Quantity of effluent	
1. Trade	0.0 KL/Day
2. Domestic	10.0 KL/Day
Number of outlets	2.0
Mode of discharge	
1. Domestic	SEPTIC TANK
2. Trade	ZLD(MEE)
Domestic Effluent Parameters	
1. NA	
Trade Effluent Parameters	
1. NA	
Number of stacks	1
Height of stack	
1. BAGASSE/W.CHIPS fired Boiler	41.15 meter
Emission parameters	
1. SPM	800 mg/m3
Product Details	

1. RECTIFIED SPIRIT	15.17 Kilo liters/Day
2. COUNTRY LIQUOR	5000 Cases/day
3. ETHANOL	45000 Kilo liters/Day
4. IMFL	166.67 Kilo liters/Day
Capacity of boiler	
1. WOODEN CHIP AND BAGGASE AND BIO GAS	5 Ton/hr
Type of Furnace	
1. NA	
Type of Fuel	
1. WOODEN CHIP AND BAGGASE AND BIO GAS	30 MT/Day
Raw Material Details	
Molasses	60 Metric Tonnes/Day
Grain	41.67 Metric Tonnes/Day
Urea	0.18 Metric Tonnes/Day

Regional Officer, Panipat
Haryana State Pollution Control Board.

Terms and conditions

1. The applicants shall maintain good house keeping both within factory and in the premises. All hose pipelines values, storage tanks etc. shall be leak proof. In plant allowable pollutants levels, if specified by State Board should be met strictly.
2. The applicant/company shall comply with and carry out directive/orders issued by the Board in this consent order at all subsequent times without negligence of his /its part. The applicant/company shall be liable for such legal action against him as per provision of the law/act in case of violation of any order/directives. Issued at any time and or non compliance of the terms and conditions of his consent order.
3. The applicant shall make an application for grant of consent at least 90 days before the date of expiry of this consent.
4. Necessary fee as prescribed for obtaining renewal consent shall be paid by the applicant alongwith the consent application.
5. If due to any technological improvement or otherwise this Board is of opinion that all or any of the conditions referred to above required variation (including the change of any control equipment either in whole or in part) this Board shall after giving the applicant an opportunity of being heard vary all or such condition and there upon the applicant shall be bound to comply with the conditions so varied.
6. The industry shall provide adequate arrangement for fighting the accidental leakages, discharge of any pollutants gas/liquids from the vessels, mechanical equipment etc. which are likely to cause environment pollution.
7. The industry shall comply noise pollution (Regulation and control) Rules, 2000.
8. The industry shall comply all the direction/Rules/Instructions as may be issued by the MOEF/CPCB/HSPCB from time to time.

9. The industry shall ensure that various characteristics of the effluents remain within the tolerance limits as specified in EPA Standard and as amended from time to time and at no time the concentration of any characteristics should exceed these limits for discharge.
10. The industry would immediately submit the revised application to the Board in the event of any change in the raw material in process, mode of treatment/discharge of effluent. In case of change of process at any stage during the consent period, the industry shall submit fresh consent application alongwith the consent to operate fee, if found due, which may be on any account and that shall be paid by the industry and the industry would immediately submit the consent application to the Board in the event of any change during the year in the raw material, quantity, quality of the effluent, mode of discharge, treatment facilities etc.
11. The officer/official of the Board shall reserve the right to access for the inspection of the industry in connection with the various process and the treatment facilities. The consent to operate is subject to review by the Board at any time.
12. Permissible limits for any pollutants mentioned in the consent to operate order should not exceed the concentration permitted in the effluent by the Board.
13. The industry shall pay the balance fee, in case it is found due from the industry at any time later on.
14. If the industry fails to adhere to any of the conditions of this consent to operate order, the consent to operate so granted shall automatically lapse.
15. If the industry is closed temporarily at its own, they shall inform the Board and obtain permission before restart of the unit.
16. The industry shall comply all the Directions/ Rules/Instructions issued from time to time by the Board.

HARYANA STATE

Specific Conditions :

1. That the unit will operate its MEE and APCM regularly and effectively and will comply with the provisions of Water Act, 1974 and Air Act, 1981.
2. That the unit will provide separate energy meter, flow meter at the inlet and outlet of ETP.
3. That the unit will provide flow meter at the source of water supply and will maintain the log book for the same.
4. That the unit will provide energy meter on its APCM.
5. That the unit will maintain the log book of ETP and APCM installed by the unit.
6. That the unit will adopt cleaner technology thereby reducing pollution load of unit.
7. That the unit will not increase its production capacity and will not made any expansion within existing plant without prior permission of the Board
8. That the unit will not add nay water and air polluting activity which results in increase in pollution load of the industry without prior permission of the Board.
9. That the unit will made agreement with GEPIL for disposal of hazardous waste generated by the unit.
10. That the unit will deposit the balance consent fee as per schedule, if any.
11. That the unit will submit the compliance of the conditions of consent to operate granted by the Board yearly.
12. That the CTO so granted will become invalid in case of violation of any of the condition.
13. That the unit will comply with the direction issued by the HSPCB/CPCB/NGT/MoEFF&CC time to time.

Bhupinder Singh Digitally signed by Bhupinder Singh
Date: 2018.09.03 22:44:37 -07'00'

Regional Officer, Panipat

Haryana State Pollution Control Board.

Annexure-5

हरियाणा HARYANA

T 445843

Agreement for Production and Sale of Bio-compost in sealed bags.

This Agreement is made, signed executed and entered into on 4th day of August, 2018 ("**Effective Date - 10-07-2018**") by and between:-

Balaji Operation and Maintenance Services Private Ltd. a company incorporated under the Companies Act, 1956, having its Registered Office at 2nd Floor, A-Block, Plot No. 14, Factory Road, Ring Road, New Delhi 110029. (hereinafter called as "Purchaser", which expression shall unless repugnant to the subject or context or meaning thereof, include its successors and assigns) on the First Part

And

The Panipat Cooperative Sugar Mills Ltd., a company incorporated under the Haryana Cooperative Societies Act, 1984, established in the year 1956, having its office/registered office at Gohana Road, Panipat, Haryana 132103 (hereinafter referred to as 'Seller' which expression shall unless repugnant to the context or meaning thereof be deemed to include its successors and permitted assigns) on the Second Part;.

Purchaser and **Seller** shall hereinafter be referred to individually as "Party" and collectively as "Parties".

Whereas

A. Balaji Operation and Maintenance Services ("Purchaser") is a professional Engineering company which provides EPC Solutions as well as Operation & Maintenance Services in the Infrastructure and Energy sector. Purchaser is also engaged in the field of manufacturing of Organic Fertiliser products, PROM etc. from the Year, 2017-18.

B. The Panipat Cooperative Sugar Mills (the "Seller") was established in the year 1956. It has a capacity of 1800 TCD (tonnes cane per day) and Distillation Plant of 30KLPD. The Seller has won National Award for Cane Development during the season 2014-15, 2015-16 & 2016-17.

M. Singh Bobo

C. The Seller on 22-09-2017 called for tenders for selling of 10000 MT of Bio-Compost for one year.

D. The Purchaser, having intended to purchase Bio-compost for production of Organic Fertiliser, participated in this bidding process and submitted its bid till 07-10-2017 .

E. The Purchaser being the highest bidder, was issued a Sale order bearing No.PO/2017-18/3313 dated 07-11-2017 by the Seller for sale of 10000 MT of Bio Compost.

F. Both the Purchaser and the 'Seller' are desirous to work in cooperation on mutually agreed Terms and Conditions for the purchase of the Bio-Compost on long term basis. This will help both Parties towards fulfilment of their business objectives in a more effective manner.

G. With intent to achieve the aforesaid objectives, the Parties are desirous of entering into this Agreement being these presents.

NOW THEREFORE, IN CONSIDERATION OF THE PREMISES AND MUTUAL AGREE-MENTS, COVENANTS AND CONDITIONS SET FORTH HEREIN, IT IS HEREBY AGREED BY AND BETWEEN THE PARTIES:

1.0 PURPOSE:-

1.1 The Parties hereby agree to use their respective resources and experience for supply of Bio-compost and simultaneously production of organic fertilisers /PROM in India.

1.2 The Parties hereby agree to fully co-operate and act in good faith, with the intention of achieving synergy, using each other's experience in their respective fields for mutual benefit.

1.3 This Agreement envisions the expansion of the relationship between the Parties, depending on available business opportunities and negotiation of mutually acceptable commercial terms.

2.0 Responsibilities of the Parties:-

2.1 The 'Seller' shall provide the raw material for Bio-compost i.e. press mud for entire quantity it produces, around 10000 MT per annum approximately.

2.2 However, the process of Bio-Composting will be carried out by M/s BOMSPL as per the terms & conditions of work order bearing No.PO/2016-17/4239 dated 11-01-2018. The terms of this order expire on 30-06-2018. After that on the written request of the BOMSPL i.e. purchaser dated 04-04-2018 and as per resolution passed by the Board of Administrators of the mills held on 08-05-2018 vide Agenda item No.40, the work of Contract for formation of windows, spent wash feeding, spraying, providing machinery and manpower for bio-composting and sale of bio-compost has been allotted to M/s. Balaji Operation & Maintenance Services Pvt. Ltd., vide PO/Sale order No.1292, dated 10-07-2018 and the tenure of PO No.3313, dated 07-11-2017 has been extended for next 3 years and the terms & conditions will remain the same as mentioned in PO order dated 07-11-2017. The work of Contract for formation of windows, spent wash feeding, spraying, providing machinery and manpower for bio-composting has also been included in the sale rate of Bio-compost already finalized in the PO order dated 07-11-2017 i.e. Rs.85/- per quintal.

2.3 Seller shall allow BOMSPL enrichment of the Bio compost inside its premises.

2.4 Seller shall also provide space for enrichment of bio compost, space for storage of material required for enrichment and storage for the enriched bio compost.

2.5 The 'Seller' shall ensure supply of entire press mud generated from the plant and sufficient quantity of spent wash for processing of the Bio-composting.

2.6 BOMSPL shall be responsible for formation of windows, spent wash feeding, spraying and consumption of spent wash, providing machinery and manpower for bio-composting and transportation of the Bio-compost from The Panipat Cooperative Sugar Mills as per the Delivery Schedule provided.

2.7 BOMSPL entitled to claim equal quantity of brought out raw material such as Rock Phosphate or any other material utilized/mixed for enrichment inside Seller premises in form of Bio Compost. The Seller shall issue equal quantum of brought out material in form of Bio Compost free of cost.

2.8 BOMSPL shall be responsible for any late or irregular lifting of Bio Compost and any losses on this account shall not be claimed from seller.

2.9 In case due to Environmental compliances or due to technological changes, seller is not producing press mud i.e. raw material required for production of Bio-compost, BOMSPL will not have any right of claims. However seller may permit purchase of Bio-compost from other sources and use the premises of seller in such cases where seller fail to provide press mud i.e. raw material required for production of Bio-compost.

2.10 The 'Seller & Purchaser', each shall arrange one number of Aerotiller with prime mover of suitable capacity (75to 90HP) for composting.

2.11 The 'Seller' shall arrange one number of Loader with prime mover in good working condition for the composting process.

2.12 The 'Seller' shall provide on free of cost the fuel, electricity for the equipment/ motors/ lighting/office & laboratory etc. for the process.

2.13 The 'Seller' shall make the arrangement for spraying system of spent wash and drain water alongwith pump's & motors, flexible hose pipes & nozzles etc. for the composting process.

2.14 The 'Seller' shall arrange maintenance of all the equipment's & spraying system provided to BOMSPL for the composting process. If BOMSPL incurred for cost of such maintenance, same may be reimbursed by the Seller in form of payment or inform of Bio-Compost.

2.15 The 'Seller' shall prepare/make necessary arrangements for ground/yard levelling by concreting or pavement with proper slope & connected to drainages.

2.16 The 'Seller' shall make Infrastructure facilities including proper drainage system as per CPCB guidelines.

2.17 The 'Seller' shall provide appropriate coverage facility for safeguarding the composting system and BOMSPL raw material from the rains.

2.18 The 'Seller' shall provide proper office place with sufficient water, electricity & other facilities for BOMSPL's staff working and setup/conduct day to day laboratory testing near the yard.

3.0 Price :

The Price of the Bio-Compost shall be as per the Letter of Award Ref. No PO/2017-18/3313 dated 07.11.2017 for the year 2017-18. For the subsequent years the quantity of Bio-compost shall be intimated in advance. Rate shall be escalated year to year basis beyond 2017-18 and Escalation in the prices shall be based on the Wholesale Prices Index in India published in RBI Bulletin under the subgroup "Fertilisers and Nitrogenous Compounds" under the group of "Manufacture of Chemicals and Chemical Products".

4.0 Notifications & Language:

Each Party agrees to nominate one person from within each Party to be the representative. The following persons are initially nominated by each Party as their representative:-

For BOMSPL:

E-mail: scm@balajioperations.com
Mobile Number: +91-9910037972

For PCSML: Dr.Ramesh Saroha,
Distillery Manager,
E-mail:panipatsugarmills@gmail.com
Mobile Number: +91-9729084875.

Each representative will be responsible for achieving the objectives of this Agreement and shall meet or discuss at regular intervals the future course of action to give effect to this Agreement.

Any notification required to be given by one Party to the other Party and all other communications, documentation etc. to be given under this Agreement shall be given in writing and in the English language, by personal delivery or by above E - Mail to the representative at the addresses given above.

5.0 Miscellaneous

This Agreement shall constitute the entire agreement and understanding between the Parties hereto with respect to the subject matter and supersedes all prior agreements and understandings between the Parties, whether express or implied.

No amendment to this Agreement shall be valid and binding on the Parties unless the same is in writing and duly signed by an authorized signatory of the respective Parties.

The Parties hereto undertake to execute all documents, do all acts, deeds and things as may be necessary to carry the aforesaid intention into effect.

6.0 Duration & Termination

This Agreement shall take effect from 10-07-2018 i.e. the issuance date of work order for production of Bio-compost and its sale vide which the tenure of the date of PO/2017-18/3313 dated 07.11.2017 for the year 2017-18 was extended for next three years for all purposes and intents and remain in full force unless terminated in accordance with the provision contained herein. The Parties may extend the validity of this Agreement by mutual written consent for further period of two years.

a) It is agreed that the terms and conditions of this Agreement are upon the Parties and each of the Parties shall be liable to the other party for any direct or indirect damages that are incurred or suffered as a result of a breach of the obligations set out in this Agreement.
b) In case of Termination or any dispute, Seller shall allow the enriched bio-compost as well as admixtures and other materials of the Purchaser to be lifted from its premises after clearance of all pending accounts/dues.
c) The Purchaser will have first right of refusal beyond the duration of the Agreement and would have the first right to match any price quoted by any other customer / user of the Bio-compost being produced by the Seller

7.0 Confidentiality

Each Party agrees to treat as "Confidential" any document or information that is provided to it by the other Party and identified as confidential (the "Confidential Information"), and to take reasonable measures to avoid disclosure of the Confidential Information to other parties.

8.0 Sale of Bio-Compost

The 'Seller' shall provide to purchaser the Press-Mud required for production of Bio-Compost entire quantity it produces (around being 10000 MT/year) for Three (3) years.

9.0 Governing Law & Jurisdiction of Court

This Agreement shall be governed and construed in accordance with the laws of Republic of India. The Managing Director, Exercising the powers of RCS, Haryana, Haryana Sugarfed, Panchkula shall act as Arbitrator in any disputes in all matters under these presents.

10.0 Dispute Resolution

Any dispute, controversy, claim or difference arising out or in connection with this Agreement shall be settled amicably by negotiations between the authorized representatives of each Party. If an amicable settlement cannot be reached such dispute, controversy, claim or difference shall be resolved by the Managing Director, Exercising the powers of RCS, Haryana, Haryana Sugarfed, Panchkula, Arbitrator appointed in mutual understanding by both i.e. Seller & Purchaser. The Arbitrator shall give reasoned Award. The Award of Arbitrator shall be final and binding. The venue of Arbitration shall be office of Haryana Sugarfed, Panchkula. The cost of arbitration would be shared amongst the parties.

11.0 Writing Form:

This Agreement will not be modified or amended except in writing and signed by authorized representatives of the Parties.

IN WITNESS WHEREOF, THE PARTIES HERETO HAVE SET OUT THEIR RESPECTIVE HANDS TO THIS AGREEMENT AT PANIPAT ON THE DAY, MONTH AND YEAR MENTIONED ABOVE IN THE PRESENCE OF THE FOLLOWING:

Balaji Operations Maintenance Services Private Ltd.	Co-operative Society of Sugar Mill
Signature: M. Suresh Babu Name: (Mr.Suresh Babu), Designation: Director	Signature: Name: (Dr. Ramesh Saroha) Designation: Distillery Manager
Address of Communication: Ph. No: +91 - 9871390919 E-mail: scm@balajioperations.com Web Site:	Address of Communication: Ph. No: +91 - 9991620516 E-mail: panipatsugarmills@gmail.com Web Site:
Witnessed By: 1. Sh. Manish Kumar. 2. Sh. Ajayveer.	Witnessed By: 1. Sh. Sanjeev Sharma. 2. Sh. Vipin Dhaka

FORM 'A 2'
ACKNOWLEDGEMENT
[Clause 8 (3)]

M/s Balaji Operation and Maintenance Services Pvt. Ltd., New Delhi

MoA No. 404

Date of issue : 15.12.2017.
Validity : 14.12.2020

Received from M/s Balaji Operation and Manitenance Services Pvt. Ltd. New Delhi a complete Memorandum of Intimation, fee of Rs. 2250/- by Treasury Challan bearing No. 31851838 dated 01.12.2017.

2. This Acknowledgement shall be deemed to be the Letter of Authorization entitling the applicant to carry on the business, as applied for, for a period of 3 years from the date of issue of this Memo of Acknowledgement unless suspended or revoked by the competent authority.

Name & Address of Company	Location of sale depot/ godown	Type of Fertilizer	Source of supply
M/s Balaji Operation and Maintenance Services Pvt. Ltd., A-18, PWO Housing Complex, Sector -43, Gurgaon -122002.	M/s Balaji Operation and Maintenance Services Pvt. Ltd., Isarana –Samalkha Road, Village – Namunda, Tehsil – Samalkha, District – Panipat. Sale through authorized dealers who will obtain their MoA from concerned Deputy Director, Agriculture and Farmers Welfare Department.	<u>Organic Fertilizers</u> 1. Phosphate Rich Organic Manure (PROM) 2. Organic Manure 3. Bio-enriched Organic Manure	Sr. No. 1 to 3 are Self Manufactured.

Notified Authority-Cum- Director,
Agriculture & Farmers Welfare Department,
Haryana, Panchkula.

Endst. No. 7049 TA(QC)
Dated:- 18/12/2017

CC: All the Deputy Directors, Agriculture and Farmers Welfare Department in the State for information.

HARYANA TEST HOUSE

& Consultancy Services

NABL ACCREDITED LABORATORY

50-C, Sector-25 Part-II, HUDA, PANIPAT-132 104 (HR.)
Phones : (O) 0180-2671112, 3290403 Telefax : 0180-2671112
Web Site : www.haryanatesthouse.net, e-mail : info@haryanatesthouse.net, haryanatesthousecs@gmail.com

Recognition / Accreditation : MoEF / NABL / PPCB / HSPCB / FSSAI / ISO 9001, 14001, 18001 Certified Lab.

TEST CERTIFICATE

Report No: 170131005

Date: 04.02.2017

Issued to:
The Panipat Co-Operative Sugar Mills Ltd.,
Distillery Unit,
Gohana Road, Panipat (HR)

Party's Ref. No: Ref. No. /PCD/2016-17/505, **Dt:** 30.01.2017

Job Order No: HTH/CH/170131005, **Dt.:** 31.01.2017

Sample Description: Bio Compost Sample

Sample type	:	Bio Compost Sample
Date of receipt of sample	:	31.01.2017
Quantity of sample	:	200 gms (approx)
Purpose of analysis	:	Monitoring
Sample collected/ supplied by	:	Sample supplied by party
Period of testing	:	31.01.2017 to 04.02.2017

Test Results

Sr. No.	Parameters	Result	Protocol Used
1	pH	7.25	IS 3025 (P-11)
2	Moisture, % wt./ wt.	34.3	IS 3025 (P-26)
3	Nitorgen, % wt./ wt.	1.80	IS 7874 (P-1)
4	Phosphorus (as P), % wt./ wt.	1.75	IS 3025 (P-31)
5	Potassium (as K_2O) , % wt./ wt.	1.01	IS 3025 (P-45)
6	Organic Matter, % wt./ wt.	22.40	IS 2720 (P-22)

Note:- All Parameter analysed on received basis

Mgr. (Lab.)/ Sr. Chemist

4/2/17
Authorised Signatory
QM /TM/ AM

Contact Nos. : 098966-00073 (Off. /Acc.), 099916-75756 (Env.)

Note : 1. This report is not to be reproduced wholly or in part and cannot be used as an evidence in the court of law.
2. This report should not be used in any advertising media without our special permission in writing.
3. Sample will be destroyed after one month from the date of issue of test certificate.
4. The results are related to the test items only.

Annexure-6

THE PANIPAT CO- OPERATIVE SUGAR MILLS LTD; P

Form D-14

DAILY TOTAL OF BULK SPIRIT STORED, ISSUED AND IN THE LICENSED DISTILLERY AT PANIPAT

Monthly Summary for the m/o July-2019

Date	Class of Spirit	Last Balance or when stock is taken actual balance in proof Litres	RECEIVED and PASSED IN TO STOCK Proof Litres			ISSUED Proof Litres					BALANCE Proff Litres	Actual Bal At (		
			Direct Distillation	After Conversion	From other Distilleries in Bond	For Duty	Free of Duty In-Bond	For Bottling	For Conversion	For Denaturation		Vat No.	Class of spirit	Proof Litres
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Rectified	313009.3							ENA 99563.1	ETHANOL 238023.5	45415.7			
	Plain	NIL									NIL			
	Spiced	9375.0		18263.3				18929.0			8604.0		105.3	
	Redistilled ENA	1223.2		18610.5					18513.6		1262.5		57.6	
	Rum	8988.8									8988.8			
	Gin	NIL									NIL			
	Whisky	9077.5									9077.5			
	Brandy ETHANOL	57378.5		313229.7			364500.0				4994.5		1610.7	
	Impure spt.	9577.6		1180.7							37580		0.3	
	Spl. Denatured spt.	NIA									NIL			
	Denatured	176.3									176.3			
	Malt spt.	870.1									870.1			
	Total													
	Rectified	45415.7									45415.7			

Distillery Manager
The Panipat Co-op. Sugar Mills Ltd.
(D Unit) PANIPAT

29-06-2019

Monthly Summary for the m/o June-2019

	Spiced	12320.0														
	~~Redistilled~~ ENA	1223.2							2945.0				9375.0			
	Rum	8988.8											1223.2			
	Gin	NIP											8988.8			
	Whisky	2077.5											NIP			
	~~Brandy~~ Ethanol	57375.5											2077.5			
	Impure spt.	2577.6											57375.5			
	Spl. Denatured spt.	NIP											2577.6			
	Denatured	176.3											NIP			
	Malt spt.	870.1											176.3			
	Total												870.1			
	Rectified	241017.7	60905.3							ENA	ETHANOL					
	Plain	NIP								66701.3	468834.6		313002.3	-	1584.8	
	Spiced	9653.5		62288.7									NIP			
	~~Redistilled~~ ENA	2065.4		62594.2					62963.5				9375.0	-	304.7	
	Rum	8988.8								63197.3			1223.2	-	239.1	
	Gin	NIP											8988.8			
	Whisky	2077.5											NIP			
	~~Brandy~~ Ethanol	13968.5		414392.2				369250.0					2077.5			
	Impure spt.	11648.3		3976.9									57375.5	-	1735.2	
	Spl. Denatured spt.	NIP										13040.3	2577.6	-	7.3	
	Denatured	176.3											NIP			
	Malt spt.	870.1											176.3			
	Total												870.1			

Distillery Manager
The Panipat Co-op. Sugar Mills Ltd.
(B Unit) PANIPAT

Distillery Manager
The Panipat Co-op. Sugar Mills Ltd.
(B Unit) PANIPAT

Impure spt.	6311.6												
Spl. Denatured spt.	NIL												
Denatured	176.3												
Malt spt.	870.1												
Total													
Rectified	45418.7												

Monthly Summary for the month of Aug-2019

								ENA	ETHANOL				
								23518.6	11897.1				
Plain	NIL												
Spiced	8604.0		40016.0				47717.0						
Redistilled ENA	1062.5		40495.3					40589.8					
Rum	8988.8												
Gin	NIL												
Whisky	2077.5												
Brandy Ethanol	4994.5												
Impure spt.	3758.0		2565.5										
Spl. Denatured spt.	NIL												
Denatured	176.3												
Malt spt.	870.1												
Total													
Rectified	NIL												
Plain	NIL												
Spiced	648.0						648.0						
Redistilled ENA	1015.2												
Rum	8988.8												
Gin	NIL												
Whisky	2077.5												

Plain	NIL												
Spiced	8604.0		40016.0				47717.0				648.0		
Redistilled ENA	1062.5		40495.3					40589.8			1015.2		
Rum	8988.8										8988.8		
Gin	NIL										NIL		
Whisky	2077.5										2077.5		
Brandy Ethanol	4994.5										4994.5		
Impure spt.	3758.0		2565.5								6311.6		
Spl. Denatured spt.	NIL										NIL		
Denatured	176.3										176.3		
Malt spt.	870.1										870.1		
Total													
Rectified	NIL										NIL		
Plain	NIL										NIL		
Spiced	648.0						648.0				NIL		
Redistilled ENA	1015.2										1015.2		
Rum	8988.8										8988.8		
Gin	NIL										NIL		
Whisky	2077.5										2077.5		

2-09-2019

Distillery Manager
The Panipat Co-op. Sugar Mills Ltd
(Unit) PANIPAT

Monthly Stock Taking for the m/o Sep-2019

Brandy Ethanol	4994.5		4994.5
Impure spt.	6311.6		6311.6
Spl. Denatured spt.	Nil		Nil
Denatured	176.3		176.3
Malt spt.	870.1		870.1
Total			
Rectified	Nil		Nil
Plain	Nil		Nil
Spiced	648.0	648.0	Nil
Redistilled ENA	1015.2		1015.2
Rum	8988.8		8988.8
Gin	Nil		Nil
Whisky	2077.5		2077.5
Brandy Ethanol	4994.5		4994.5
Impure spt.	6311.6		6311.6
Spl. Denatured spt.	Nil		Nil
Denatured	176.3		176.3
Malt spt.	870.1		870.1
Total			
Rectified	Nil		Nil
Plain	Nil		Nil
Spiced	Nil		Nil
Redistilled ENA	1015.2		1015.2
Rum	8988.8		8988.8
Gin	Nil		

1-10-2019

Distillery Manager
The Panipat Co-op. Sugar Mills Ltd
(D.Unit) PANIPAT

...OPERATIVE SUGAR MILLS LTD, PA

Form D-14

DAILY TOTAL OF BULK SPIRIT STORED, ISSUED AND IN THE LICENSED DISTILLERY AT PANIPAT

Date	Class of Spirit	Last Balance or when stock is taken actual balance in proof Litres	RECEIVED and PASSED IN TO STOCK Proof Litres			ISSUED Proof Litres					BALANCE Proff Litres	Actual Balance At Stock		
			Direct Distillation	After Conversion	From other Distilleries in Bond	For Duty	Free of Duty In-Bond	For Bottling	For Conversion	For Denaturation		Vat No.	Class of spirit	Proof Litres
					monthly Summary for the m/o Oct 2019									
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Rectified	NIP	48565.5						ENA					
	Plain	NIP							24875.0		94174.6	-	115.9	
	Spiced	NIP		1859.7							NIP			
	Redistilled ENA	1015.2		33857.6				5729.0			6039.0	-	91.7	
	Rum	8988.8							13019.0		22684.6	-	169.2	
	Gin	NIP									8988.8			
	Whisky	2077.5									NIP			
	Brandy Ethanol	4994.5									2077.5			
	Impure spt.	6311.6		2173.0							4994.5			
	Spl. Denatured spt.	NIP									8479.7	-	4.9	
	Denatured	176.3									NIP			
	Malt spt.	870.1									176.3			
	Total										870.1			
	Rectified	94174.6	54839.8											
											54539.1	-	113.3	
	Plain —	NIP												

Distillery Manager
The Panipat Co-op. Sugar Mills Ltd
(D.Unit) PANIPAT