INSPECTION REPORT OF SRI. M.LAKSHMAN, REGIONAL SENIOR ENVIRONMENTAL OFFICER, KSPCB, EAST-ZONE, BENGALURU

Officer accompanied	:	Sri. Ramesh K.M, EO,KSPCB, RO-Nelamangala
Name and address of the industry inspected	:	M/s.United Breweries Ltd., Sy.No.35/1A, 1B/3, 12B, (Previous sy.nos.15/3, 11/2A, 11/2B of Gangadarapalya) 20th Mile, Tumkuru Road, Nelamangala Taluk, Pin-562123, Bengaluru Rural District
Date of inspection	:	10.04.2018
Person contacted	:	1. Sri. Thanigai Nathan – Unit Head 2. Sri. Suresh.U – Asset Care Manager
Reference	:	B.O Memo No.PCB/05/EGV-16/5347 Dated:- 29/12/2017.

Preamble: M/s. United Breweries Limited is an existing industry established and operating since 1994 and is located at Sy.No.35/1A, 1B/3, 12B, of Gangadarapalya Village, 20th Mile, Tumkuru Road, Nelamangala Taluk, Bengaluru Rural District. This is a Large Red unit as per CPCB category notification (>100KLD effluent) and is engaged in manufacture of Beer of capacity 10 Cr/Annum.

The industry is having valid consent under Water Act and Air Act for the period upto 30.06.2021 and also having authorization under HWM Rules for the period upto 30.06.2016. The authorization submitted by the industry was forwarded to RSEO, KSPCB, North Zone, Bengaluru on 28.07.2016 and issue is pending. But, as per the new Rule, the industry is required to make new application for disposal of hazardous waste.

As per the Random sampling inspection of organization email dated:- 29/12/2017, this industry was inspected on 10.04.2018 along with EO, KSPCB, RO-Nelamangala and following are the observations noticed during inspection:

1. The industry is working and engaged in manufacture of beer of Beer of capacity 10 Cr/Annum.
2. The industry is having valid consent for the period upto 30.06.2021 and not having valid authorization under Hazardous and Other Waste (Management and Transboundary Movement) Rules, 2016.
3. Industry has not displayed consent and authorization copy in the prominence place.

4. The source of water is bore well. There are 05 bore wells existing in the industry premises and also drawing water from 06 bore wells located outside the factory premises. The five bore wells are registered with Ground Water Department. The other bore wells are not registered and not obtained NOC from Ground water Board.

Domestic:

1. The water consumption for domestic purpose and sewage generation is reported as 60 KLD and 50 KLD respectively.
2. The industry is having separate STP of capacity 70 KLD for treating domestic effluent but as per the log book, they are treating 30-35 KLD of sewage than the consent capacity of 50 KLD.
3. The treated sewage is being used for onland for irrigation within the plant premises.
4. The industry has provided a separate flow meter to the STP and maintained log book.
5. The industry has not provided unit name with capacity on the STP units and flow diagram is not proper. Industry was advised to complete the same within 30 days
6. Industry is monitoring the treated sewage effluent through outside laboratory and submitting analysis reports. The Regional office has office also monitoring the quality of the treated sewage effluent on 19.01.2018 and the results are tabulated as follows. The treated sewage effluent is confirm to the standards.

Sl.No.	**Parameter**	**Standards**	19.01.2018
01	pH	5.5 to 9.0	6.6
02	BOD (3 days at 27^0C in mg/M^3)	100	13
03	TSS (in mg/M^3)	100	14
04	Oil and grease (in mg/l)	10	BDL

Trade effluent:

1. The details of water consumption and effluent generation from the various processes in the industry are as follows

Sl. No	Particulars	Consumption in KLD	Discharge in KLD	Treatment method and disposal	Remarks
1	Boiler feed (make up)	110 (recycled water)	10	Provided ETP with tertiary treatment system and RO	ETP is not working efficiently and RO plant is not working since 8 months.
2	Cooling water (make up)	30 (recycled water)	00		
3	Washings	300	300		
4	Process	540	300		
	Total	**980**	**810**		

2. The primary clarifier was under maintenance. It was informed that the maintenance work will be completed in couple days and the same will be put into use. Rests of the ETP units were operating at the time of inspection.
3. The industry has provided a separate energy meter and flow meter to the ETP.
4. The treated effluent was used on land for gardening and irrigation within the plant premises.
5. The effluent generation is around 700-850 KLD which needs to be disposed properly during rainy season. Hence, the industry should have a separate treated effluent collection tank of 15 days holding capacity.
6. The industry has 20 acres of land for utilization of treated effluent and they are not utilizing the treated effluent for irrigation efficiently which needs the guidance of agricultural experts for rotation of crops and utilization and management of 850 KLD of treated effluent. Hence to have informed to contact GKVK Bangalore for utilization of their treated effluents on the land for irrigation.
7. The industry is monitoring the quality of the treated effluent through outside laboratory and regularly submitting the analysis reports to Regional Office. As per the analysis report the parameters are conforming to the standards specified by the Board.
8. Industry is monitoring the treated sewage effluent through outside laboratory and submitting analysis reports. The Regional office has office also monitoring the quality of the treated trade effluent conforms on 19.01.2018 and the results are tabulated as follows. The treated trade effluent is confirmed to the standards.

Sl.No.	Parameter	Standards	19.01.2018
01	pH	5.5 to 9.0	7.8
02	BOD (3 days at 27^0C in mg/M^3)	100	55
03	TSS (in mg/M^3)	100	6.0
04	Oil and grease (in mg/l)	10	BDL

Air Pollution Control Status: The source of air pollution and pollution control measures provided by the industry are as follows.

Sl. No.	Source of Air Pollution	Fuel used	Height of chimney and APC measure stipulated by the Board	Height of chimney and APC measure provided by the industry	Remarks
1	DG set of 1000 KVA	HSD	30 m AGL with acoustic	30 m AGL with acoustic	Complied
2	DG set of 1000 KVA	HSD	30 m AGL with acoustic	30 m AGL with acoustic	Complied
3	Gas based Generator of 1010 KVA capacity	Bio mass (CH_4)	30 m AGL	30 m AGL	Complied Not working

					at present
4	15 TPH Boiler	Rice husk	40 m AGL with	40 m AGL with	Complied
5	8 TPH Boiler	FO	40 m AGL	40 m AGL	Complied
6	4 TPH Boiler	FO	32 m AGL	30 m AGL	Complied

1. There are no changes in the sources of air pollution.
2. The industry is monitoring the emissions discharged from the stacks through outside laboratory and furnishing analysis reports to the Board. As per the analysis reports the parameters are conforming to the standards laid down by the Board.
3. The gasification plant was not operating at the time of inspection.

Solid wastes:

1. **Dried ETP sludge:** Quantity generated at the rate of 60 kgs/day and the same is dried by dewatering the same. The dried sludge is being used as manure for plantation within the factory premises.
2. **Yeast sludge:** Quantity being generated is 400 kgs/day and same is being dried in fluidized bed drier and given to outside agencies as cattle feed and for veterinary applications.
3. **Papers and plastics, broken bottles:** The packaging paper and plastics, plastic bottles are handed over to the recyclers. The broken glass bottles are also being handed over to the recyclers.
4. **Metal scraps:** These wastes generated during the time of dismantling/replacement works are collected and stored separately. It was informed that the will be handed over to the scrap dealers for recycling.

Hazardous Wastes:

1. The industry has obtained authorization under Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2008 for waste streams viz.., 5.1, 5.2 & 31.3 and the same is valid up to 30-06-2021.
2. The details of hazardous wastes generated, mode of collection, storage and disposal are as follows.

Sl. No.	Type of hazardous wastes	Waste streams	Quantity of generation	Mode of collection and storage	Mode of disposal
1	Used/waste oil	5.1	1.3 KLPA	Collected in impervious barrels and stored on concrete plat farm.	The waste is being disposed off to the authorized recyclers
2	Residues containing oil and oil filters	5.2	0.5 MTPA	---do----	The waste is being disposed off to the authorized incinerators

3	Discarded chemical containers	31.3	200 Nos./annum	Stored at a separate area.	Being disposed to MD enterprises.

3. The industry has stored the hazardous wastes in a separate area.
4. The industry has displayed the Board in front of the industry as per the directions of the Hon'ble Supreme court and not updated the details.
5. The industry is not maintained the records in Form-3 and not submitted annual report in Form-4 for the year ending with 31-12-2017.
6. The industry is not following the manifest by maintaining Form-10 regarding disposal of the hazardous wastes disposed.

General:

1. The industry has provided rain water harvesting system inside the factory premises near Canteen area (60000 liters), near refining plant (3 Lakhs liters) and near ETP area (2 Lakh liters) have been undertaken with infiltration system for ground water recharge.
2. The industry has taken up works under CSR and under which the industry has 3 RO systems to villages and restoration works with infiltration wells at Bommanahalli tank has been taken for ground water recharge.
3. The industry has obtained ISO 9002 certificate but yet to obtain ISO 14000 certificate.
4. The industry has submitted Environment statement report for the year ending with 31-03-2016.
5. The industry has established an Occupation Health Centre within the factory premises for First Aid treatment. During the time of inspection it was informed them to obtain authorization under BMW Rules. The industry has executed an agreement with CBWTDF for disposal of biomedical wastes.
6. The industry requires to improve the irrigation management area for scientific utilization of treated sewage/trade effluent during the rainy season.

Remarks:

1. The Regional Officer, KSPCB, RO- Nelamangala was inspected the industry on 19.01.2018 and issued a show cause notice on 03.02.2018. The reply submitted by the industry on 07.03.2018 was physically verified on site and found that industry is yet comply.

2. The ETP and STP units are not efficiently working which needs Performance Evaluation study. Accordingly, the industry has to takeup up gradation of ETP units if any based on the performance report.

3. Since the treated effluent quantity is more than 800KLD, the industry is making flooding in their agricultural land rather than growing any crops. During rainy

season there will be chance of soil pollution and lake pollution on the downstream of industry. Hence, it has to be properly disposed during rainy season and industry has to submit proposal on efficient utilization of treated effluent in 20 acres of land by getting report from experts of Agricultural University (GKVK). Industry agreed to do the same within 30 days.

Recommendation: Notice may be issued from the Board Office on the above observation and calling for compliance and time bound action plan.

Regional Senior Environmental Officer
Bengaluru East