



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

Ref. No.: - 970

Patna, dated:- 09-06-23

CONSENT ORDER

From,
The Member Secretary
Bihar State Pollution Control Board,
Parivesh Bhawan, Patliputra Industrial Area,
PO.-Sadaquat Ashram, Patna-800010
Phone No. 0612-2261250/2262265

To,
Abhishek Kumar, Director,
M/s Muzaffarpur Bio-Fuels Pvt. Ltd.,
At-Shiv Kunj, Madnani Lane, Mithanpura,
Muzaffarpur (Bihar).

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

PCB ID: 7595603	Date: 28.04.2023
CCA issued vide:	Date:

CCA is hereby granted to M/s. **Muzaffarpur Bio-Fuels Pvt. Ltd.**, located at Shiv Kunj, Madnani Lane, Mithanpura, Muzaffarpur, **Latitude: 26.285251, Longitude: 85.082003** (*Geographical Coordinates*) subject to the provisions of the Water Act, Air Act and Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the orders that may be made further and subject to following terms and conditions: -

1. This CCA is granted for the period upto **31/03/2028** from the date of issuance of this letter, under Section-25 of the "Water (Prevention & Control of Pollution) Act, 1974.
2. This CCA is granted for the period upto **31/03/2028** from the date of issuance of this letter, under Section-21 of the "Air (Prevention & Control of Pollution) Act, 1981.
3. Unit shall submit application under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016" notified under "Environment (Protection) Act, 1986 within one month.

4. Production capacity:

Sl.No.	Raw Material used	Product	
		Name of product	Maximum permitted quantity
1.	Rice /Maize	Ethanol/ Impure spirit/ DDGS	Ethanol - 110 KLPD TA - 3 KLPD DDGS - 45 TPD

5. Production process infra-structure:

Declared by the unit					Permitted by the Board
Sl.no.	Number of fermenters	Capacity of fermenters	Type of fermentation technology adopted	Type of Distillation	
1	4	600 M ³	Fed. Batch	MPR	

6. Water conservation:

A. Fresh water consumption:

- Categorization of existing groundwater area: **Safe**
- Status of NOC from CGWA: **Granted**
- Validity of NOC: **12.09.2024.**
- Details of Artificial recharge system/**rain water harvesting unit** installed with capacity
- Details of piezometer installed i.e., numbers with coordinates.
- Industry shall install sealed and calibrated flow meters at fresh water abstraction and consumption points (process & domestic) and maintain the logbooks for same.
- The unit shall obtain permission for abstraction of ground water from Central Ground Water Authority (CGWA)/ Name of State GWA.
- The unit shall monitor ground water level through piezometers (fitted with digital water level recorder).
- Industry shall install separate sealed, calibrated Electromagnetic Flowmeters with flow totalizer at all water abstraction sources, utilization lines process, domestic and boiler.
- The industry shall maintain duly signed logbook of fresh water consumption and utilization.
- The specific water consumption shall not exceed values mentioned below as per consented product type.

Category	Specific Water Consumption not to exceed
Grain	8-10KL/KL of product

	Declared by the Industry	Permitted by NOC issued by CGWA	CGWA conditions
No. of borewells	2	Yes	Subject to compliance of the conditions mentioned in NOC issued by CGWA

B. Effluent generation, treatment and disposal:

- a) The quantity of maximum specific effluent discharge shall be as specified below:

Category	Specific Effluent Generation, not to exceed
Grain	6-8KL/KL of product

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

S.No.	Kind of Effluent	Maximum daily discharge, KLD	Treatment Facility and Discharge point
1	Domestic	NA	STP
2	Industrial	ZLD	N/A

- c) Arrangement should be made for collection of water used in process and domestic effluent separately in closed water supply system. It should be ensured that domestic effluent should not be discharged in the storm water drain.
- d) The quantity of maximum daily effluent generation & discharge should not be more than the following:
- e) Arrangement should be made for collection of water used in process and domestic effluent separately in closed water supply system. It should be ensured that domestic effluent should not be discharged in the storm water drain.
- f) The domestic effluent should be treated in the treatment plant and it should be in conformity with the norms of treated effluent as stipulated in E.P. Rules, 1986 as amended.
- g) The unit shall have separate system for industrial effluent and storm water. They shall ensure that storm water is not allowed to mix with industrial effluent in any case.
- h) The unit shall identify recipient drains/ rivulets and their u/s & d/s locations < **coordinates of the drain** > in consultation with SPPCB for monthly monitoring by industry to ensure ZLD from distilleries within 30 days. The monitoring report shall be submitted to CPCB on monthly basis.

S.No.	Name of recipient drain/rivulets	Latitude	Longitude	Quality of effluent of drain	Name of the recipient river
	N/A	N/A	N/A	N/A	N/A

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

j) Effluent management infrastructure:

The unit shall achieve Zero Liquid Discharge (ZLD) by adopting/using the following:

- I. Decantation of distillation residue, concentration of thin/lean wash in Multi Effect Evaporator (MEE), mixing of thick syrup/concentrated slop with Distiller's Wet Grains with Soluble (DWGS) generated from decanter, drying in dryer to produce Distiller's Dried Grains with Soluble (DDGS) as poultry fish feed/ cattle feed.
- II. The unit shall install Condensate Polishing Unit (CPU) for treatment of MEE condensate and other low strength effluent and reuse it as cooling tower makeup/ process and shall not discharge any effluent outside the factory premises.

i. Centrifuge/ Decanter

S.No.	No. of centrifuge/ decanters	Capacity
01	03	15 m ³ / Hrs (Each)

ii. Multi Effect Evaporator (MEE):

S.No.	No. of MEE	Designed capacity	Type of technology	No. of effect with their HTA & MOC
01	05	595 TPD	Vacuum Tech	450 m ² x 3 No.-553.4 375 m ² x 2 No.-553.4

iii. Dryer for Distiller's Wet Grain Soluble (DWGS)/Wet cake:

S.No.	No. of Dryers	Designed capacity	Type of technology
01	01	1200 M ²	Tube Bundel Dryer

- a) The unit shall have dry milling technique only to produce Distiller's dried Grain Soluble (DDGS).

- b) The unit shall ensure 10% moisture content in DDGS through evaporation (MEE), decantation and drying.
- c) The unit should have proper disposal of fermenter/ yeast and CPU sludge and CO₂ produced during fermentation.
- d) The dryer installed should run at the rated capacity producing dry powder without caramelization and with specified moisture content.
- e) The vapour coming out of the dryer should be condensed and the uncondensed gases/fraction should be properly scrubbed before letting them out to the atmosphere.

iv. Condensate Polishing Unit (CPU):

S.No.	Technology	Designed capacity	Sources of effluent into CPU with quantity	Quantity of treated effluent from CPU	Utilization of treated condensate
1	MBR	900 M ³ /D	PC-550 m ³ SPL-110 m ³ PC-90 m ³ other-150 m ³	810 m ³	100%

v. Lagoon:

S.No.	No. of lagoons	Designed capacity
	N/A	N/A

- f) The unit should install OCEMS with stack as per CPCB directions (i.e. surveillance camera (IP camera) near CPU/R.O. and at DDGS dryer and we connected with **BSPCB** and CPCB servers within 3 months and report to the Board.
- g) The unit shall install mass flow meters with totalizers at inlet and outlet of Multi Effect Evaporator (MEE), concentrate and shall connect the same with CPCB and **BSPCB** servers.
- h) The unit shall install flowmeters with totalizer at all water abstraction points including thin stillage generation point, inlet and outlet of CPU and cooling towers and maintain daily logbooks of the same.

S.No.	Name of recipient drain	Co-ordinates of upstream & downstream	Quality of drain	Name of river with which drain is meeting
	N/A	N/A	N/A	N/A

The unit shall identify recipient drains/ rivulets and their u/s & d/s locations in consultation with respective **BSPCB** for monthly monitoring by industry to ensure ZLD. The unit shall get the samples collected from upstream and downstream locations and analysed from EPA/NABL approved laboratories and the essential parameters to be included are DO, Colour, BOD, COD, pH, and TSS.

7. The unit shall submit monthly report on alcohol production, stillage generation and stepwise stillage treatment.
8. Unit shall submit SMR, AAQ & ANL report to the Board within 3 months.
9. The unit shall colour code all the pipelines carrying industrial effluent accordingly.
10. In case of installation of any new spent wash management system or change in route for adoption of ZLD, the unit shall submit an adequacy report duly validated by recognized technical institutions like VSI, NSI or IITs etc.
11. In case the unit wants to adopt any alternative technology for achieving ZLD, the unit shall get it approved from respective State Pollution Control Boards.

12. Domestic sewage

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

Domestic Effluent/ sewage discharge norms			
S. No.	Parameter	Standard as per GSR1265(E) dt. 13.10.2017	STP standard as per NGT in OA No. 1069/2018, order dt. 30.04.2019
1.	pH	4-4.5	5.5-9.0
2.	BOD (mg/l)	2000 mg/lit	10
3.	COD (mg/l)	4000 mg/lit	< 50
4.	TSS (mg/l)	< 50 mg/lit	< 20
5.	FC (MP/100 ml)	-	< 230
6.	TN (mg/l)	NA	< 10
7.	TP (mg/l)	-	< 1

* Note:- Unit shall maintained ZLD, so STP treated water should use in plantation, dust suppression, flush etc.

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

- ii. Industry shall install the flow meter at STP inlet and outlet and maintain the daily logbook.

- iii. Industry shall explore the possibility to recycle the treated used water shall be utilised in gardening, irrigation, industrial utility and toilet flushing to minimise the fresh water consumption up to 20 % per year.
- iv. Unit shall not discharge domestic effluent (generated by workers) through paddy ash filling area into on low land area.
- v. The unit shall install surveillance camera of ETP and flow meter at Bore well with connectivity to BSPCB.

13. Conditions for air pollution mitigation:

- a) The unit shall use following fuel and install air pollution control devices (APCD) of adequate capacity to comply with the following:

Sr. No.	Stack attached with	Stack height (Mt)	Type of Fuel	Fuel Quantity	Emission Control Equipment	Emission standards not to exceed
1	Boiler 26 TPH	45	Rice husk	15 TPH	ESP	< 50 mg/Nm ³

- b) The industry should ensure the operation of the Air Pollution Control System (APCS) in such a manner that the air emission confirms with the standards prescribed under the E (P) Act 1986 as amended.
- c) Unit shall operate and maintain properly the installed OCEMS at the stack of slop; Boiler of 14 TPH regularly and ensure that stack emission is within the prescribed norms.
- d) Fly ash shall be stored separately as per CPCB guidelines so that it should not adversely affect the air quality, becoming air borne by wind or regime during rainy season by flowing along with storm water. Direct exposure of workers to fly ash & dust shall be avoided.

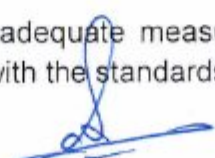
14. Noise Pollution Mitigation:

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

Standards for noise level in db(A) leq	Industrial Area	
	Day time	Night time
	75	70

Day time: - 6.00 am to 10.00 pm, Night time: - 10.00 pm to 06.00 am

- b) The industry shall take adequate measures to control of noise from its own source so as to comply with the standards as may be applicable.



- c) The industry shall provide acoustics enclosure on DG sets as per Environment (Protection) Rules, 1986.
- d) The industry shall provide ports in the chimney/stack and facilities such as ladder, platform etc. as per requirement for monitoring the air emissions and the same shall be open for inspection and use at all time) by the Board's staff, the chimney/stack attached to various sources of emission shall be designated by number such as S-1, S-2 etc. and these shall be painted/ displayed to facilitate identification.

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

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

- i. Unit shall submit application under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016" notified under "Environment (Protection) Act, 1986 within one month:
- ii. Unit shall follow the conditions under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016:
- iii. The authorization is subject to the following general and specific conditions (Please specify any conditions that need to be imposed over and above general conditions, if any):

A. General conditions of authorization:

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

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

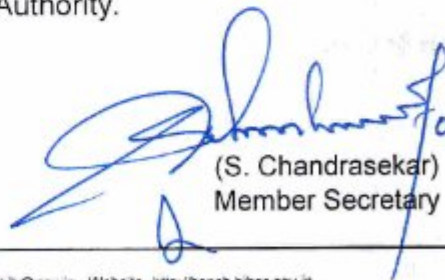
General Conditions

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

The industry shall be liable to pay compensation also in such cases as decided by the Competent Authority.

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

Issued with the permission of Competent Authority.

 09/6/23
(S. Chandrasekar)
Member Secretary