



**Ref.: ABRPL/EHS/2021/08/04**

**Date: 20<sup>th</sup> August, 2021**

To,  
**The Member Secretary**  
Pollution Control Board Assam,  
Bamunimaidam, Guwahati – 21.

**Sub: Submission of Annual Environmental Statement for FY'2020-2021**

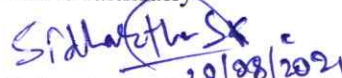
**Ref. No: F. No. J-11011/274/2015-IA II (I) dated 19<sup>th</sup> November 2019**

Dear Sir,

Kindly find enclosed herewith the **Annual Environmental Statement** in a prescribed format of Form V, for the Financial Year 2020-21 pertaining to the conditions of Environmental Clearance (EC) vide letter No F.No.J- 11011/274/2015-IA II (I) dated 6<sup>th</sup> November 2017 and subsequent amendment therein dated 19<sup>th</sup> November, 2019 and 5<sup>th</sup> January, 2021 issued in favour of Assam Bio Refinery Private Limited (ABRPL) for Bio Refinery (Bamboo based Ethanol Project) from MoEF & CC.

Thanking You,

Yours faithfully

  
20/08/2021  
Sidhartha Sankar Kowndilya  
Assistant Manager-EHS,  
Assam Bio Refinery Private Limited.

**Encl.:** 1. Form V: Environmental Statement of Assam Bio-Refinery Private Limited.

**C.C.to:**

1. **Golaghat Regional Pollution Control Board:** Pollution Control Board, Assam College Tinali, Near Circiut House, Golaghat, PIN: 785621.
2. **The Conservator of Forests (C):** Ministry of Environment, Forest and Climate Change North Eastern Regional Office, Near MTC Central Workshop, Law-u-sib, Lumbatengen, Shillong -793021

[FORM – V]

(See rule 14)

**Environmental Statement of ASSAM BIO-REFINERY PRIVATE LIMITED**  
**(Under construction phase – 31.1% of total Project construction complete till 31<sup>st</sup> Mar 2021)**  
**for the financial year - 2020-2021**

**PART – A**

- (i) Name and address of the owner/occupier of the industry operation or process : Assam Bio-Refinery Pvt. Ltd.  
Post-Box No.: 003, P.O.: NR Project  
Dist.: Golaghat, Assam, India  
PIN- 785699
- Registered Office : Assam Bio-Refinery Pvt. Ltd.  
NRL Building, 122A, G.S. Road  
Christianbasti  
Guwahati-781005
- (ii) Industry category Primary/(NIC code) : 20119  
Secondary / (NPC-MS Code) : 3413101
- (iii) Product Capacity : 49000 TPA
- (iv) Year of establishment : 04<sup>th</sup> Jun 2018 (The project is under construction from Dec 2018).
- (v) Date of the last environmental statement submitted : 18<sup>th</sup> September, 2020.

**PART – B**

**Water and River Material Consumption**

**(I) Water consumption m3/d:**

Process	: NA
Cooling	: NA
Domestic	: NA

Name of Products	Process water consumption per unit of product output.	
	During the previous financial Year 2019-2020	During the current Financial Year 2020-2021
Nil	Nil	Nil

**ii) Raw Material Consumption**

*Name of raw materials		Consumption of raw material per unit of output
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	Name of products	During the previous financial year	During the current financial year
Nil (As in construction stage)	Nil	Nil	Nil

### PART - C

Pollution discharged to environment/unit of output  
(Parameter as specified in the consent issued)

Pollutants	Quantity of pollutants discharged (mass/day)	Concentrations of pollutants in discharges (mass/volume)	Percentage of variation from prescribed standards with reasons
(a) Water	NA	NA	NA
(b) Air	NA	NA	NA

**Ambient Air Quality Monitoring, Ground Water analysis, and Noise level monitoring report attached as Annexure-I.**

### PART - D

#### Hazardous Wastes

(as specified under Hazardous Waste Management and Handling Rules, 1989)

Hazardous Waste	Total Quantity (Kg.)	
	During the previous Financial Year	During the current Financial year
(a) From Process	Nil	Nil
(b) From Pollution control facilities	Nil	Nil

### PART - E

#### Solid Wastes

Solid Wastes generated/ disposed	Total Quantity	
	During the previous financial year 2019-2020	During the current financial year 2020-2021
(a) From process	2.8 MT (construction waste)	7.2 MT (construction waste)
(b) From pollution control facility	Nil	Nil
(c) (i) Quantity recycled or re-utilized within the unit	Nil	Nil
(ii) Sold	Nil	Nil
(iii) Disposed	2.8 MT	7.2 MT

### PART - F

Please specify the characterizations (in terms of the composition of quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

The solid waste generated inside ABRPL project site, which is under construction phase (only 31.1% of total construction activity till 31<sup>st</sup> Mar 2021) during FY 2020-2021, are of non-hazardous in nature and categorically those are non-incinerable but reusable/recyclable waste comprising of scrap metals and wood/plyboards. After collection of waste by individual contractors from their respective work areas, they take away their waste from the project site for proper disposal, reuse and recycling.

## **PART – G**

Impact of the pollution abatement measures taken on the conservation of natural resources and the cost of production.

ABRPL endorses conservation and sustainable utilization of resources. There is an in-house bamboo nursery with capacity of 10,000 saplings per annum. The purpose of the nursery is to cater free saplings to farmers and to promote greenery. ABRPL has distributed 40000 bamboo saplings till date. In addition, in order to provide Quality Planting Material (QPM) and promote massive plantation in the raw material sourcing areas, a state-of-the-art Bamboo tissue culture laboratory has been established with funding from Numaligarh Refinery Limited.

The Social forestry division of Golaghat district is being consulted for periphery plantation of the Biorefinery.

Sustainable harvesting practice for conservation of bamboo population shall be adopted, and for the same cause, farmers are being trained.

## **PART – H**

Additional measures/investment proposal for environmental protection including abatement of pollution, prevention of pollution.

An ambitious green belt plan is under development to ensure the prevention of pollution and protection to the environment. A green belt of 10 m width is to be developed to act as a barrier for air pollutants and noise.

## **PART – I**

Any other particulars for improving the quality of the environment.

Currently, Bamboo available in the region is of less valued to the farmer which bears no or limited market linkage. So, in some places large bamboo growing areas are being burnt for alternate cultivation options. These areas includes community forest as well as privately owned which spans to hundreds of hectares of areas. Such practice is tremendously changing the land use pattern as well as contributing to environmental degradation as a whole. In this regards, ABRPL is an opportunity to the farmers for use of standing bamboo and earning livelihoods by practicing scientific sustainable harvesting and also preventing forest degradation.

ABRPL is developing and promoting bamboo cultivation in its sourcing areas through various inhouse initiatives as well as government subsidiary schemes as follows:

1. A state of the art Bamboo Tissue Culture facility has been established under the aegis of NRL (major promoter of ABRPL) for mass multiplication of certified bamboo saplings.
2. ABRPL aims to provide these quality planting materials (QPM) at a subsidized rate for wider farmer acceptability.
3. ABRPL is also working in association with State Bamboo Agency for promotion of Bamboo FPOs (Farmer Producer Organisations) in Assam.

## ANNEXURE - I

### Ambient Air Quality Monitoring, Ground Water analysis, and Noise level monitoring report



Digboi Stores Building, New Market  
Digboi, Assam - 786 171  
Ph: 03751-264414, 9435006657, 8876028672  
E-mail: envirocon@rediffmail.com  
Website: www.envirocon.net.in



Report No.: ENV/ABRPL/EM/20-21/AA-02

Date : 25/03/2021

Report Issued To: **ASSAM BIO REFINERY PRIVATE LIMITED**  
Numaligarh, Dist. - Golaghat (Assam)

#### AMBIENT AIR QUALITY TEST RESULTS

Sl No.	LOCATION(S) ↓	Date of Sampling	PM 2.5 (µg/m <sup>3</sup> )	PM 10 (µg/m <sup>3</sup> )	SO <sub>2</sub> (µg/m <sup>3</sup> )	NO <sub>2</sub> (µg/m <sup>3</sup> )
	LIMIT(S) →	---	60	100	80	80
01	Near Labour Rest Shed (ABRPL Project Campus West Side)	16.03.2021	26.8	57.2	5.9	8.5
02	Near Electric Sub-Station (ABRPL Project Campus East Side)	16.03.2021	23.5	54.8	5.4	8.1
03	Near Rajabari Village (ABRPL Project Campus North Side)	16.03.2021	17.2	43.6	BDL	BDL

Analysis Protocol: IS 5182

BDL: Below Detectable Limit



Checked By: Mr. Pankaj Baroi, ENVIROCON

**NOTE:**  
1. Results reported are valid at the time of and under the prevailing conditions of measurement.  
2. Results refer only to the particular parameters tested.  
3. This test report shall not be reproduced except in full, without the written permission of ENVIROCON, Digboi Stores Building, New Market, Digboi - 786171, Assam.

**Core Services:** Environmental Monitoring & Data Generation, EIA & EMP, Environmental Audit & Allied Environmental Management jobs  
**Associate Services:** Certification by Competent Person (CIF), NDT, Hydraulic Testing, Chartered Engineer Services etc.

Report No.: ENV/ABRPL/EM/20-21/N-02

Date : 25/03/2021

Report Issued To : **ASSAM BIO REFINERY PRIVATE LIMITED**  
 Numalgarh, Dist. - Golaghat (Assam)

### NOISE LEVEL MEASUREMENT RESULTS

Sl No	Location(s)	Date Of Measurement	Result(s) (Day Time)		Result(s) (Night Time)	
			L <sub>eq</sub> (dB-A)	Limit (dB-A)	L <sub>eq</sub> (dB-A)	Limit (dB-A)
1	Near Piling Job of Tank Stand Area at ABRPL Project Site (South-West Side)	16.03.2021	68.4	75	51.8	70
2	Near Piling Job of Tank Stand Area at ABRPL Project Site (East Side Near Sub-Station)	16.03.2021	71.6	75	53.4	70
3	Near Rajabari Village (ABRPL Project Campus North Side)	16.03.2021	56.3	75	37.2	70



Checked By: Mr. Pankaj Baroi, ENVIROCON

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Report No.: ENV/ABRPL/EM/20-21/WQ-02

Date : 25/03/2021

Report Issued To : **ASSAM BIO REFINERY PRIVATE LIMITED**  
Numalgarh, Dist. - Golaghat (Assam)

### GROUND WATER ANALYSIS RESULTS

Sample Ref. No. : ABRPL/20-21/WQ-03/01  
Collected On : 17-03-2021

Sample Source : Deep Tube Well, ABRPL  
Received On : 18-03-2021

Sample Type : Ground Water  
Collected By : ENVIROCON & Client

Sl No.	Parameters	Results	Desirable Limit (IS:10500:2012)
01	Colour, Hazen Units, Max	2	5
02	Odour	Odourless	Agreeable
03	Taste	Acceptable	Agreeable
04	Turbidity, NTU, Max	0.52	1.0
05	pH	6.79	6.5 - 8.5
06	Total Dissolved Solids, mg/l, Max	92	500
07	Aluminium (as Al), mg/l, Max	ND	0.03
08	Boron (as B), mg/l, Max	ND	0.5
09	Calcium (as Ca), mg/l, Max	26	75
10	Chloride (as Cl), mg/l, Max	14	25.0
11	Copper (as Cu), mg/l, Max	ND	0.05
12	Fluorides (as F), mg/l, Max	0.11	1.0
13	Free Residual Chlorine, mg/l, Min	ND	0.2
14	Iron (as Fe), mg/l, Max	0.21	0.3
15	Magnesium (as Mg), mg/l, Max	3.2	30
16	Manganese (as Mn), mg/l, Max	ND	0.1
17	Zinc (as Zn), mg/l, Max	ND	5.0
18	Nitrate (as NO <sub>3</sub> ), mg/l, Max	3.6	45
19	Phenolic Compounds (as C <sub>6</sub> H <sub>5</sub> OH), mg/l, Max	ND	0.001
20	Sulfate (as SO <sub>4</sub> ), mg/l, Max	20	200
21	Total Alkalinity (as CaCO <sub>3</sub> ), mg/l, Max	73	200
22	Total Hardness, (as CaCO <sub>3</sub> ), mg/l, Max	21	200
23	Cyanide (as CN), mg/l, Max	ND	0.05
24	Lead (as Pb), mg/l, Max	ND	0.01
25	Total Arsenic (as As), mg/l, Max	ND	0.01
26	Total Chromium, (as Cr), mg/l, Max	ND	0.05
27	E. Coli / 100 ml	Absent	Absent
28	Faecal Coliform	Absent	Absent

Analysis Protocol: IS 3025  
ND: Not Detected



Checked By: Mr. Pankaj Baroi, ENVIROCON

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