ABD/RANGAPUR/DISTILLERY/TGPCB/2024-25/32

Date: 19.09.2025

To,
The Environmental Engineer,
Regional Office, Telangana State Pollution Control Board,
4th Floor, Collectorate Office, Lakidikapul,
Hyderabad, Telangana– 500004

Dear Sir/Madam,

Subject: M/s Allied Blenders and Distillers Limited, at Survey No. 690/AA, 691/AA2 & 692, Village - Rangapuram, Mandal - Pebberu, District - Wanaparthy, State - Telangana 509104. Environmental Statement Form-V for FY 2024-2025 Submission - Regarding.

Refer:
1. **Consent Order No. 210822768023, Dated: 24.03.2021**
2. **Amendment Consent Order No. 210822768023/484, Dated: 08.12.2021**
3. **Name Change Order No. 21082276802-1626, Dated: 29.12.2022**
4. **CFO Amendment Lr. No. TGPCB/RO-HYD/HO/CFO/2024. Dated: 12.07.2024**

With reference to above, M/s Allied Blenders and Distillers Limited, at Survey No. 690/AA, 691/AA2 & 692, Village - Rangapuram, Mandal - Pebbair, District - Wanaparthy, State – Telangana, we are herewith submitting the Environmental Statement Form-V for the for the period of April – 2024 to March – 2025 for the Distillery, Rangapur Unit.

Kindly acknowledge the receipt of the same.

Thanking you.

Yours Faithfully,

M/s. Allied Blenders and Distillers Limited

M/s. Allied Blenders And Distillers Limited * RANGAPUR *

Sudhansu Sekhar Rout
(Head Distillery)

Enclosure: Form V for FY 24-25

TELANGANA POLLUTION CONTROL BOARD-REGIONAL OFFICE-HYDERABAD
Inward No.....
20 SEP 2025

Environmental Statement
(Form-V)
2024-2025
For
M/s. Allied Blenders and Distillers Limited
Rangapuram (V), Pebberu (M), Wanaparthy Dist.
Telangana State. Pin Code - 509104

Submitted to:

Regional office
Telangana State Pollution Control Board
4th Floor, Collectorate Office, Lakidikapul,
Hyderabad, Telangana– 500004

Environment Statement

An Environmental audit is a thorough self-examination of a Company's practices of pollution Control and environment protection. An "Audit" is now a legally defined activity which differs from the normal environmental reviews that were hitherto produced. The statutory audit expects evaluation of efforts for resource conservation during the period under review but does not feel satisfied unless this is reflected positively in lowering of the manufacturing cost. The statutory audit therefore suggests that this be followed by an advanced environmental audit to follow the Rule 14, not merely in letter but also in spirit.

Environmental Audit (EA) was first notified under the Environment (Protection) Act, 1986, by the Ministry of Environment and Forests, Government of India. By an Amendment, in the year 1993, the term for the document has been revised from "Environment Audit Report" to "Environment Statement". Environment Statement has to be submitted by every person carrying on an industry operation or process requiring consent under section 25 of the water (Prevention and Control of Pollution) Act 1974 or under section 21 of the Air (Prevention and Control of Pollution) Act of 1981 or both or authorization under the Hazardous wastes (Management and Handling) Rules of 1989 issued under the environment (protection) Act of 1986.

The statement has to be submitted to the concerned pollution control board for the period ending on 31st March in Prescribed format by 30th September every year beginning from 1993.

The prescribed Performa has nine parts and covers items like water and raw material consumption, pollution discharged to environment per unit of output of the parameters specified in the consent, hazardous waste from pollution control facilities, solid waste from the process and from the pollution control facilities, impact of pollution abatement measures on the conservation of natural resources and on cost of production.

Realizing the necessity and recognizing the importance of Environment statement, M/s Allied Blenders and Distillers Limited has given work permit to Dr.B.B.S.V. Seshagiri Rao to undertake the Environment Audit Studies for the year 2024-2025

STEPS IN ENVIRONMENTAL AUDITING

The activities in Environmental auditing are conducted in three main steps:

1. Pre-audit activities (homework)
2. Work at industry site (industry visit)
3. Post audit activities (work at site & home)

Audit team

The audit team is selected from officials of an organization and EMS consultant who have fair knowledge of Process and Tech-legal issues pertaining to the EHS.

1.Mr. Umasankar Padhi - Regional Manufacturing Head-South1
2.Mr. Sudhansu Sekhar Rout - Lead Distillery Operation
3.Mr. V. Srinivasa Rao – Environmental Engineer
4.Dr.B.B.S.V. Seshagiri Rao - EMS Lead Auditor

The Audit team audited the facility on 06.09.2025

PROJECT SETTING

The industry is located at Survey No. 690/AA, 691/AA2 & 692, Village -Rangapuram, Mandal - Pebberu, District - Wanaparthy, State - Telangana and TGPCB issued CFO & HWA order to the industry Consent Order No. 20234696127, Dated: 19.10.2023, Amendment Consent Lr No. TGPCB/RO/HYD/HO/CFO/2024, Dated: 12.07.2024 to produce the following products with a validity period up to 31.03.2028.

Sr. No.	Products	Capacity
1	Rectified Spirit /Ethanol / ENA	65,700 KLPA (180 x 365Days)
2	Electricity	6.5 MW

The industry has complied with emissions limits for Boiler and DG set and also complied with all the rules and regulations specified in water (P&C) of P Act, 1974, Air (P&C) P Act,1981 and Hazardous waste rules.

MATERIAL AUDIT

Material Audit is very important component in Environment statement and is a basis for development of raw material balance of an industry for process highlighting the proposed utilization of raw materials during which reuse by product recovery and reduction of losses can be thought of. It is a useful mechanism to study the plant operations, check performance against design and to identify sources of raw materials loss which will be the basis for implementing the conservation measures. In the present case the main raw material used in the manufacture of broken rice/maize etc.

Precautionary steps may be taken to optimize the production of the ENA per Kg of Maize / Jowar / Broken rice. Necessary action may have to be initiated right from procurement, process Transportation Storage and in production.

ENA & By-Products Production details for the Month April 2024 to March 2025

Month	ENA in KL	Impure Sprit in KL	Fusel Oil in KL	CO2 in Metric Tons	DDGS/DWGS in Metric Tons
Apr-24	5652.1	90.98	3.00	1344.8	1240.8
May-24	4431.0	81.11	3.00	1183.6	1720.9
Jun-24	5206.5	87.70	1.50	1465.3	1459.8
Jul-24	5883.4	71.64	2.17	1423.7	2575.6
Aug-24	5682.0	76.307	1.550	1244.7	2304.7
Sep-24	4419.5	78.34	1.30	1279.1	1546.1
Oct-24	5819.8	89.98	2.48	1766.2	2374.1
Nov-24	5254.1	110.18	2.32	1509.5	2185.5
Dec-24	1831.8	48.293	0.88	279.9	830.7
Jan-25	5930.0	100.75	1.86	1223.2	2446.3
Feb-25	5344.2	85.677	1.68	1015.4	2313.9
Mar-25	5746.9	98.949	1.86	1333.2	2421.4
Total	61201.40	1019.91	23.60	15068.6	23419.8

WATER AUDIT

Water Consumption During details for the April 2024 to March 2025

Unit: KLM

Sr. No.	Description	Apr-24	May24	Jun24	Jul-24	Aug24	Sep24	Oct-24	Nov24	Dec24	Jan-25	Feb25	Mar25
1	Process	11358	10377	10599	11045	11684	9208	10930	10423	4520	11379	9804	10708
2	Cooling Tower Makeup	10943	10943	14482	11945	9357	11059	11287	11438	10050	14234	17420	18604
3	Boiler Feed	7238	6561	7697	8564	8353	7514	8474	8750	4505	9055	7909	9511
4	CO2 Plant	360	364	351.6	300	290	290	248	240	279	248	280	372
5	Domestic	450	462	444	450	333	303	217	210	248	341	308	465
6	ETP Tertiary / WTP reject Water	16866	17575	17790	17950	16240	15871	16158	16221	9201	17716	18127	22043
Total		47215	46282.25	51363.6	50254	46257	44245	47314	47282	28803	52973	53848	61703

Spent Wash, MEE & Effluent Water Details for the Month of April 2024 to March 2025									
Month	MEE Feed (M3)	MEE CONDENSATE			MEE Syrup (M3)	Effluent Water			
		Qty. Generated (M3)	Qty. Treated (M3)	Qty. Used in Process (M3)		ETP Feed (M3)	Qty. Used for Ash Quenching (M3)	Qty. Used for Cooling Tower Make-up (M3)	RO Reject (M3)
Apr-24	20672	17816	2855.2	17816	2855.2	6261	1311	3180	1770
May-24	16345	14047.8	2297	14047.8	2297	6551	1364	3358	1829
Jun-24	16345	14047.8	2297	14047.8	2297	6551	1364	3358	1829
Jul-24	20814	17149.4	3664	17149.4	3664	7512	1364	4412	1736
Aug-24	20357	16479	3878	16479	3878	7335	1240	4111	1984
Sep-24	16290	13371	2918.9	13371	2918.9	6129	1200	3009	1920
Oct-24	20225	16678.1	3546.9	16678.1	3546.9	7004	1240	3904	1860
Nov-24	19138	15790.5	3348	15790.5	3348	4544	1200	1544	1800
Dec-24	6900	5709	1191	5709	1191	4998	1240	1754	2004
Jan-25	21562	17903	3659	17903	3659	5710	1218.3	2052	2440
Feb-25	19208	15840	3368	15840	3368	5122	1100.4	1582	2440
Mar-25	20470	16700	3776	16700	3776	5708	560	627	4521
Total	218326	181531.6	36799	181531.6	36799	73425	14401.7	32890.3	26133

Treated water recycling during the year 24-25 is around 78.38%

Waste Water Quality Monitoring

Sample of wastewater was collected from the site for the assessment of impacts of the Plant on discharge point.

Parameters	Units	Methods	Apr-24		May-24		Jun-24		Jul-24		Aug-24		Standards
			ETP (Inlet)	ETP (Outlet)	ETP (Inlet)	ETP (Outlet)	ETP (Inlet)	ETP (Outlet)	ETP (Inlet)	ETP (Outlet)	ETP (Inlet)	ETP (Outlet)	Inland Surface
pH	---	APHA 4500 H^+B	7.12	8.16	7.24	8.36	7.25	8.1	7.29	8.32	7.29	8.35	5.50 to 9.00
Total Suspended Solids at 105^{0}C	mg/L	APHA 2540 D	49	23	52	24	47	24	45	23	58	29	100
Total Dissolved Solids at 180^{0}C	mg/L	APHA 2540 C	1753	346	1745	316	1689	328	1574	312	1683	294	---
Chlorides as Cl^-	mg/L	APHA 4500 Cl^-C	292	38	286	35	281	36	267	34	274	36	---
Sulphates as SO_4^{2-}	mg/L	APHA 4500 $SO_4^{2-}D$	47	16	43	14	45	19	42	16	45	13	---
Sulphide as S^{2-}	mg/L	APHA 4500 $S^{2-}F$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	---
Total Solids	mg/L	APHA 2540 B	1802	369	1797	340	1736	352	1619	335	1741	323	---
Phosphates as P	mg/L	APHA 4500 PC	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chemical Oxygen Demand	mg/L	APHA 5220 B	336	37	315	35	321	36	302	34	312	34	250
Biological Oxygen Demand	mg/L	IS 3025(P-44)	84	11	81	13	81	12	76	11	77	12	30
Oil & Grease	mg/L	APHA 5520 B	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	10
Nitrate Nitrogen as NO_3 N	mg/L	APHA 4500 NO_3^-B	4.1	1.3	4	12	3.8	1	3.2	1	4.2	1.1	1.2

Sep-24		Oct-24		Nov-24		Dec-24		Jan-25		Feb-25		Mar-25		Standards
ETP (Inlet)	ETP (Outlet)	ETP (Inlet)	ETP (Outlet)	ETP (Inlet)	ETP (Outlet)	ETP (Inlet)	ETP (Outlet)	ETP (Inlet)	ETP (Outlet)	ETP (Inlet)	ETP (Outlet)	ETP (Inlet)	ETP (Outlet)	Inland Surface
7.31	8.46	7.29	8.56	7.31	8.63	7.36	8.56	7.62	8.86	7.15	8.75	7.78	8.82	5.50 to 9.00
47	26	43	24	46	28	41	24	42	28	42	32	46	30	100
1486	304	1396	298	1406	301	1436	326	1488	374	1376	342	1526	382	---
261	31	257	29	252	31	253	25	262	30	238	36	268	34	---
40	15	36	14	38	16	36	16	38	18	36	18	42	22	---
<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	---
1533	299	1439	327	1452	329	1478	352	1530	402	1418	344	1572	412	---
<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
306	36	297	34	274	33	264	33	276	38	264	38	284	40	250
78	12	62	8	58	7	56	9	94	10	68	8	98	14	30
<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	10
3.1	1	3	1	3.6	1	3.3	1	3.5	1.1	3.4	1.1	3.8	1.2	1.2

Our ZLD Plant performance in terms of Pollution load reduction is as given below TDS reduction 78.68 %, COD reduction 87.59 %, BOD reduction 86.09 %

Waste water Generation and treatment /Day

Unit: KLD

Outlet No.	Outlets Description	Avg.waste water generation per day	Point of Disposal
1	Process	606.46	Shall be sent to decanter and the thin slope shall be sent to MEE to concentrate and the condensate shall be treated in Ecophotox plant followed by reuse in the process and concentrate sent to dryer to get DDGS
2	ETP Tertiary (RO Rejects)	73.0	
3	Boiler Blow Down	35.0	1) Shall be treated in ETP followed by Tertiary treatment in UF & RO 2) RO rejects of MEE 3) RO permeate shall be used to dust suppression /ash conditioning and for onland for gardening within the premises
4	Cooling Bleed Off	168.95	
5	CO2 Recovery Plant	10.0	
6	Domestic	10.0	
7	Fermentation cleaning and Washing Purpose	90	Shall be recycled into the process

1. Water Consumption for process @1.99 KL/KL product, Boiler feed 1.53 KL/KL product, cooling tower feed is 2.47 KL/KL of Product, ETP Tertiary/ WTP reject Water 3.29 KL/KL of Product.
2. Waste water Generation from Process is 3.56 KL/KL of Product,
3. From Boiler blow down is 0.205 KL/KL of Product
4. From cooling tower blow down is 0.99KL/KL of Product,
5. From CO_2 Plant 0.0.058KL/KL of Product
6. After treatment recycled water re used in to process @ 2.966KL/KL, Coolin tower feed water 0.53 KL/KL of Product and ash quenching is 0.23 KL/KL of product. (Total recycled water is 3.73 KL/KL of product. against the CFO amendment Order for recycling water 7.9 KL/KL of ENA and fresh water consumption is 9.43KL / KL of ENA Production against the CFO 13.33 KL/KL of Product.

ENVIRONMENTAL QUALITY

The basic aim of Environmental Quality Audit is to make industry aware of the benefits and promote low and non-waste technological methods of production which help in minimizing generation of residuals and thereby preserving environmental quality. Proper operation and maintenance practices also help in reducing emissions from the industry to arrest Environmental Quality deterioration. Environmental Quality is visualized through the following components.

1. Waste water
2. Air Quality
3. Noise
4. Solid Wastes

AIR QUALITY

The various air pollutants generated from the industry are grouped as under:

Stack Connected to	-	Boiler
Fuel	-	Coal/Rice husk
Total Height	Meters	54
Sampling Height	Meters	24.5
Stack Diameter	Meters	2.3
Stack Cross Sectional Area	m^2	4.1564
Ambient Temp (Ta)	K	307.42
Stack Temperature (Ts)	K	413.08
Velocity	m/sec	10.32
Flow Rate	m^3/hr	131326

Stack Emissions attached to 50 TPH Boiler Month of April 2024 to March 2025

Months	SPM mg/Nm3	SO2 mg/Nm3	Nox mg/Nm3
CPCB Guideline as per CFO	<115	<600	<800
Method	IS-11255 (Part-1): 1985	IS-11255 (Part-7): 2005	IS-11255 (Part-2): 1985
Apr-24	48	66	53
May-24	46	55	60
Jun-24	44	52	65
Jul-24	45	59	64
Aug-24	44	52	65
Sep-24	45	59	64
Oct-24	44	58	63
Nov-24	42	56	61
Dec-24	47	52	63
Jan-25	44	54	60
Feb-25	44	52	60
Mar-25	44	54	60
Average	44.75	55.75	61.50

Avg. SPM levels are 61.09 % less than the Standard limit
Avg. SO2 levels are 90.71 % less than the Standard limit
Avg. NOx levels are 92.31 % less than the Standard limit

Stack Connected to	--	1500 kVA D.G. Set.
Stack Height	Meters	12.0
Stack Diameter	Meters	0.25
Stack Cross Sectional Area	Sq. m	0.049
Temperature	K	405
Velocity	m/s	11
Flow Rate	m^3/hr	1897

Stack Emissions attached to 1500 kVA DG set Month of April 2024 to March 2025

Month	PM (mg/Nm3)	Oxides of Nitrogen (mg/Nm3)	Sulphur Dioxide(mg/Nm3)
CPCB Guidelines as per GSR 771 (E)	<115 mg/Nm^3	<600 mg/Nm^3	<800 mg/Nm^3
Method	IS-11255 (Part-1): 1985	IS-11255 (Part-7): 2005	IS-11255 (Part-2): 1985
Apr-24	54	55	43
May-24	62	72	57
Jun-24	52	64	89
Jul-24	46	58	72
Aug-24	42	63	82
Sep-24	48	69	76
Oct-24	45	57	68
Nov-24	43	52	64
Dec-24	45	51	66
Jan-25	43	54	62
Feb-25	45	52	65
Mar-25	45	56	68
Average	47.5	58.58	67.67

SPM levels are 58.70% less than the standard limit

SO2 levels are 90.24% less than the Standard limit

NOx levels are 91.54% less than the Standard limit

AMBIENT AIR QUALITY

Ambient air quality survey was also carried out to know the general atmosphere conditions prevailing in the vicinity of the industry. Three permanent points were located and monitored regularly every month. The results show that there is not much of a difference in both the conditions as can be seen from the results are given below indicates low concentration of PM10, PM2.5, SO_2 and NO_x compared to ambient air quality standards. Fugitive emissions were also tested every month from various dust generating points and the dust concentration was found to be within the stipulated limits.

Ambient Air Quality for Year 2024-25

Units: µgm/m3

Month	Near Main Gate				Near Distillation				Near power plant				Near Godown Area			
	PM10	PM2.5	SO2	NOX	PM10	PM2.5	SO2	NOX	PM10	PM2.5	SO2	NOX	PM10	PM2.5	SO2	NOX
NAAQS	100	60	80	80	100	60	80	80	100	60	80	80	100	60	80	80
Apr-24	64	31.6	17.2	27	57	64	16.8	22	69	34.9	19.7	28	54	25.6	14.6	21
May-24	63	32.2	16.5	26	51	28.4	15.8	23	67	32.2	18.6	27	51	24.9	15.1	20
Jun-24	64	31.6	17.2	27	57	29.2	16.8	22	69	34.9	14.6	21	54	25.6	14.6	21
Jul-24	18	23.1	14.8	21	19	25.4	18.1	26	31	28.6	18.1	26	29	27.4	16.6	24
Aug-24	35	18.4	14.3	22	39	21.6	16.6	27	37	20.6	17.2	29	41	22	17.2	29
Sep-24	48	21.6	13.6	22	36	17.5	14.4	19	51	24.7	17.4	28	32	15.9	16.6	21
Oct-24	46	22.7	18	21	38	18.7	16	22	58	26.7	21	24	34	16.5	15	20
Nov-24	49	24.6	19	24	39	19.8	21	28	61	29.4	26	29	35	17.6	16	25
Dec-24	47	22.4	21	27	38	19.1	24	30	59	27.6	29	35	33	16.5	18	22
Jan-25	46	21.8	18.2	30	36	18.5	22.4	28	66	25.1	26.2	34	33	16.5	18.8	22
Feb-25	52	25.6	22	28	38	20.4	24	32	64	30.1	28	34	32	16.3	18	26
Mar-25	50	23.5	16.9	32	38	19.8	24.2	30	64	28.5	26.3	36	36	18.2	20.6	24
Average	48.50	24.93	17.39	25.58	40.50	25.20	19.18	25.75	58.00	28.61	21.84	29.25	38.67	20.25	16.76	22.92

1. Avg.PM10-Near Main Gate is 48.50 µgm/m3 and 51.50 % less than the Standard limit
2. Avg.PM10-Near Distillery area is 40.50 µgm/m3 and 59.50 % less than the Standard limit
3. Avg.PM2.5-Near Main Gate is 41.54 µgm/m3 and 58.46% less than the Standard limit.
4. Avg.PM2.5-Near Distillery area is 42 µgm/m3 and 58 % less than the standard limit.
5. Avg.SO2-Near Main Gate is 21.74 µgm/m3 and 78.26 % less than the Standard limit.
6. Avg.SO2-Near Distillery area is 23.97 µgm/m3 and 76.03 % less than the Standard limit.
7. Avg.NOx–Near Main Gate area is 31.98 µgm/m3 and 68.02 % less the Standard limit
8. Avg.NOx-Near Distillery area is 32.19 µgm/m3 and 67.81 % less the Standard limit.
9. Avg.PM10-Near power Plant is 58 µgm/m3 and 42 % less than the Standard limit
10. Avg.PM10-Near Godown area is 38.67 µgm/m3 and 61.33 % less than the Standard limit
11. Avg.PM2.5-Near Power Plant is 47.68 µgm/m3 and 52.32% less than the Standard limit.
12. Avg.PM2.5-Near Godown area is 33.75 µgm/m3 and 66.25 % less than the standard limit.
13. Avg.SO2-Near Power Plant is 27.30 µgm/m3 and 72.70 % less than the Standard limit.
14. Avg.SO2-Near Godown area is 20.95 µgm/m3 and 79.05 % less than the Standard limit.
15. Avg.NOx–Near Power Plant area is 36.56 µgm/m3 and 63.44 % less the Standard limit
16. Avg.NOx-Near Godown area is 28.65 µgm/m3 and 71.35 % less the Standard limit.

Ambient Noise Quality for Year 2024-25

Month	Day time Unit: dB(A)									
	Milling Section	Fermentation Area	Boiler-DCS	Boiler Turbine Hall	CO_2 Plant Area	WTP Area	Dryer Section	Security Area	ETP Area	Near DG Set Area
Apr-24	71.4	72.3	64.7	71.9	69.8	65.3	66	46.6	66.2	71.3
May-24	70.9	71.7	65.8	71.6	68.6	66.7	66.5	45.4	64.9	70.4
Jun-24	71.8	71.2	63.7	71.6	68.7	66.4	66.8	42.6	65.7	70.6
Jul-24	70.6	71.5	62.4	70.9	69.9	66.7	67.5	41.3	64.7	70.1
Aug-24	70.3	71.5	66.2	71.9	69	65.4	68.9	41.6	63.7	70.1
Sep-24	71.2	70.7	61.5	71.8	70	64.1	66.7	40.9	53.6	70.3
Oct-24	70.8	70.5	62.4	70.9	69.9	63	65.2	38.1	51.7	70.8
Nov-24	70.4	70.1	63.7	71.6	69	64.5	64.9	36.4	52.6	70.5
Dec-24	70.1	70.6	66.3	70.2	69.8	62.4	63	34.5	51.6	70.1
Jan-25	69.8	71.2	68.4	70.7	68.9	64.2	63.8	40.5	52.2	71.5
Feb-25	69.4	71.6	64.8	72.5	69.6	64.8	65.5	38.4	51.8	70.5
Mar-25	70.5	69.7	68.4	71.2	68.4	66.5	64.3	39.6	50.5	69.9
Average	70.6	71.1	64.9	71.4	69.3	65.0	65.8	40.5	57.4	70.5
	Night Time Unit: dB(A)									
Apr-24	65.6	60.8	61.6	63.5	50.3	49.6	42.1	41.7	44.1	46.4
May-24	66.8	62.4	60.3	64.4	51.3	48.6	43.9	43.6	43.7	45.6
Jun-24	66.5	61.3	60.4	64.7	51.3	48.6	43.5	36.2	41.8	64.9
Jul-24	67.3	63.4	56.1	65.7	50.2	47.5	44.3	35.8	40.2	65.6
Aug-24	67.4	63.2	61.7	65.8	53.4	49.2	44.7	33.5	40.3	43.4
Sep-24	68.6	64.3	55	66.4	55.6	46.7	45.1	34.3	49.7	66.8
Oct-24	67.3	65.7	56.8	65.3	54.6	45.1	44.7	31.5	46	67.4
Nov-24	66.6	65.3	56.4	66.8	55.7	51.3	45.6	30.7	47.2	66.9
Dec-24	68.8	66.3	54.9	65.1	56.4	49.5	46.7	30.1	45.8	65.3
Jan-25	68.2	67.4	56.1	65.9	55.5	51.8	48.3	36.7	46.3	66.8
Feb-25	62.6	66.3	56.5	67.1	55.4	50.3	46.2	33.6	46.4	65.2
Mar-25	65.3	66.5	57.9	66.5	56.6	53.3	50.8	35.4	45.2	46.5
Average	66.75	64.41	57.81	65.60	53.86	49.29	45.49	35.26	44.73	59.23

Noise levels data at various locations within the factory premises as follows,

1. Avg. Ambient Noise levels at CO2 plant area during Day time is 69.3 dB(A) (7.6% less than the Standard limit)
2. Avg. Ambient Noise levels at Boiler Turbine Hall during Day time is 71.4 dB(A) (4.8 % less than the Standard limit)
3. Avg. Ambient Noise levels at Fermentation area during Day time is 71.1 dB(A) (5.3 % less than the Standard limit)
4. Avg. Ambient Noise levels at ETP area during Day time is 57.4 dB(A) (23.4 % less than the Standard limit)
5. Avg. Ambient Noise levels at CO2 plant area during night time is 53.86 dB (A) (23.06% less than the standard limit)
6. Avg. Ambient Noise levels at Boiler Turbine Hall during the night time is 65.60 dB(A) (6.29 % less than the Standard limit)
7. Avg. Ambient Noise levels at Fermentation area during night time is 64.41 dB(A) (7.99% less than the Standard limit)
8. Avg. Ambient Noise levels at ETP area during night time is 44.73 dB(A) (36.11% less than the Standard limit)

ENVIRONMENTAL QUALITY AUDIT

Ambient Air Quality monitoring was carried out to assess the status of existing air quality within the industries complex as well as nearby vegetation area. Three air pollution parameters namely PM10, PM2.5, SO_2 and NO_x were measured during the survey. In order to assess the stack emissions, stack monitoring was carried out from a chimney of coal fired boilers as well from diesel generating sets. Monitoring and analysis of water and waste water discharges from disposal points were carried out. Work zone monitoring was carried out to know exposure concentrations. Noise levels were measured after identifying critical noise zones. Existing facilities for handling/disposal of solid waste were evaluated critically.

ENVIRONMENT QUALITY MANAGEMENT

The importance of Environmental Quality Audit is to make the industry aware of its usefulness and to promote new methods or process which will reduce or eliminate the discharge of various residues which find its way in the form of pollutants like wastewater, solid waste or noise and thereby preserving environmental quality.

Proper operation and maintenance practices also help in reducing emissions from the industry to avoid environmental quality deterioration. There are four components in environmental quality audit namely,

- Water pollution
- Air pollution
- Solid Waste
- Noise

FORM V for the year 2024-25

Environmental Statement for the financial year ending on 31st March on or before 30th of September every year.

PART -A

i.	Name and address of the owner/ Occupier of the industry operation or process	Mr. Arun Barik (Executive Director) M/s Allied Blenders and Distillers Limited at Survey No. 690/AA, 691/AA2 & 692, Village -Rangapur, Mandal - Pebberu, District - Wanaparthy, State - Telangana 509104.
ii.	Category	Red Category
iii.	List of Products	Rectified Spirit /Ethanol / ENA- 65,700 KLPA Power Plant -6.5MW
iv.	Year of Establishment	2011
v.	Date of the last Environmental Submitted	26.09.2024

PART B

Water and Raw Material Consumption and

Avg. Water Consumption/Day for the FY 2024-2025 is as given below

Sr. No.	Purpose	Total water consumption-KLD
1	Process & CO2 Plant	348.98
2	Cooling Tower make up	421.56
3	Boiler feed	261.47
4	ETP Tertiary/ WTP reject Water	560.0
6	Domestic	12.0
Total		1604.01

Water Consumption Per Unit of Product

Name of Products	During the Current Financial Year Product 2023-2024	During the Current Financial Year Product 2024-2025
Rectified Spirit /Ethanol/ENA	7.49 KL/KL of Product	9.43KL/KL of Product

Raw Materials Consumption

Raw Materials Consumption					
Name of the Raw Material	Raw Materials consumption 2020-21	Raw Materials consumption 2021-22	Raw Materials consumption 2022-23	Raw Materials consumption 2023-24	Raw Materials consumption 2024-25
Maize / Jowar / Broken rice	2.11T/KL	2.094T/KL	2.064 T/KL	2.03 T/KL	2.05 T/KL

PART C

POLLUTION GENERATED

(Parameters as Specified in the Consent Issues)

1. Water Consumption for process @1.99 KL/KL product, Boiler feed 1.53 KL/KL product, cooling tower feed is 2.47 KL/KL of Product, ETP Tertiary/ WTP reject Water 3.29KL/KL of Product.
2. Waste water Generation from Process is 3.56KL/KL of Product,
3. From Boiler blow down is 0.205KL/KL of Product
4. From cooling tower blow down is 0.99 KL/KL of Product,
5. From CO_2 Plant 0.058KL/KL of Product
6. After treatment recycled water re used in to process @ 2.96KL/KL, Coolin tower feed water 0.53 KL/KL of Product and ash quenching is 0.253KL/KL of product. Total recycled water is 3.73KL/KL of product. and freshwater consumption is 5.70 KL of KL of ENA
7. Our ZLD Plant performance in terms of Pollution load reduction is as given below TDS reduction 78.68 %, COD reduction 87.59 %, BOD reduction 86.09 %

PART D

HAZARDOUS WASTES

(as specified under Hazardous Wastes (Management and Handling) Rules, 2016)

Hazardous Waste	Total Qty. 2020-21	Total Qty. 2021-22	Total Qty. 2022-23	Total Qty. 2023-24	Total Qty. 2024-25
From Process	NIL	Nil	Nil	Nil	Nil
From Pollution Control Equipment	NIL	Nil	Nil	Nil	Nil
Waste oil	1600 LPA	1595 LPA	940 LPA	2440 LPA	710LPA

PART E

SOLID WASTES

SOLID WASTES					
Coal & Ash from Boiler	Total Qty. 2020-21	Total Qty. 2021-22	Total Qty. 2022-23	Total Qty. 2023-24	Total Qty. 2024-25
	TPA	TPA	TPA	TPA	TPA
	2358.49	9002.335	10731	13516.17	15388.07

PART F

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

1. Coal Ash: This is mainly produced from the boiler house and ash is disposed of by selling for brick making. The disposal quantity is about 15388.07 TPA during the year 2024-25
2. Waste Oil: waste oil generation is 710 LPA and we could not able to disposal authorized recyclers due to vendor unavailability.
3. DDGS/DWGS Generation and Disposal is 23419.79 TPA during the year 2024-25
4. CO2 by product Generation and Disposal is 15068.55TPA during the year 2024-25

PART G

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

M/s. ABDL has taken a number of pollution control measures with respect to Water, Air, Solid Waste and also in development of greenery within the factory premises.

Waste Water Management:

Influent and treated water quality monitoring are being done on regular basis and records are maintained in our laboratory in consultation with state pollution control board vendor M/s Re Sustainability Limited recognized with MoEF&CC & NABL.

Air Pollution

The Unit has monitoring parameters on daily basis and maintained the laboratory record. The Unit has all parameters monitoring systems (Online monitoring of Stack emission and effluent water) noise level monitoring and AAQ monitoring done once in a month by state pollution control board approved laboratory and reports are enclosed. The Unit has online continuous stack emission and treated water meters are connected with State pollution control board's website and CPCB website

The various solid wastes as mentioned in PART F are disposed-off by selling. The factory is very rich in greenery with various types of trees growing within the compound in a healthy manner.

The Unit has 5 first Aid stations at different locations in the Plant and 12 Trained & certified First Aiders. The Plant is covered in 30 Acres land and the Unit and out of which 10.81 Acres of land greenbelt development is being done.

The Unit has already obtained the permission for the withdrawal of water from Krishna River from the irrigation Department, Government of Telangana & Revenue Divisional office, Wanaparthy.

Hence, There Is No Significant Impact Since Major Pollutants Are Not Generated.

PART H

Additional measures/ investment proposal for environmental protection abatement of pollution, prevention of pollution. Investment under the Corporate Social Reasonability (CSR & Welfare) Details

Sr. No.	Financial Year	Purpose	Amount in Lakhs (Rs.)
1	2024-25	Air pollution control measures	380.0
		Water and waste water treatment	160.0
		Planation and community development	10.0
		Energy management	78.0
		Occupational health and safety	127.0

PART I

Miscellaneous

Any other particulars for improving the quality of the environment.

The Unit is monitoring noise level by Re Sustainability Limited in consultation with State Pollution Control Boards Vendor M/S Re Sustainability Limited recognized with MoEF&CC, NABL once in a month at 6 different locations within the premises. The unit has adopted Zero liquid discharge system (ZLD) for treatment of wastewater and same treated water is recycled and re-used in to Cooling tower make up and ash quenching purpose.

Treated water Parameters and Pollution loads

Our ZLD Plant performance in terms of Pollution load reduction is as given below TDS reduction 78.68 %, COD reduction 87.59 %, BOD reduction 86.09 %

Audit Observations:

1. Average Production of ENA & IS together total production per day is 170.0 KLD against CFO 180 KLD. 5.55 % is less than the Permitted Production /Day, Avg. Water Consumption for process @1.99 KL/KL product, Boiler feed 1.53 KL/KL product, cooling tower feed is 2.47 KL/KL of Product, ETP Tertiary/ WTP reject Water 3.29 KL/KL of Product.

2. Wastewater Generation from Process is 3.56 KL/KL of Product, From Boiler blow down is 0.205 KL/KL of Product From cooling tower blow down is 0.99KL/KL of Product, From CO_2 Plant 0.058KL/KL of Product. After treatment recycled water re used in to process @ 2.966KL/KL, Coolin tower feed water 0.53 KL/KL of Product and ash quenching is 0.253 KL/KL of product. (Total recycled water is 3.73 KL/KL of product. Freshwater consumption is 5.70KL / KL of ENA Production.

3. The ZLD (Zero Liquid Discharge) plant has achieved a treated water recycling rate of approximately 78.38%. It has also demonstrated significant efficiency in reducing pollution load, with the following reductions: TDS by 78.68%, COD by 87.59%, and BOD by 86.09%.

4. Chimney of Coal fired Boiler (50 TPH) Stack diameter (2.3 m), Stack cross sectional area (4.1564 sq.m^2)., Exit velocity of flue gases (10.323 m/sec), Flow rate (131326 cum/hr).

5. Coal Consumption is 1.156Tones/KL of ENA Production Per Day. And Husk consumption is 0.182T/KL of ENA Production.

6. DG Stack emissions:
   Avg. SPM levels are 63.33% less than the Standard limit
   Avg. SO2 levels are 94.15 % less than the Standard limit
   Avg. NOx levels are 90.79 % less than the Standard limit
   Boiler Set Stack emissions:
   SPM levels are 61.09% less than the standard limit
   SO2 levels are 90.71% less than the Standard limit
   NOx levels are 92.31% less than the Standard limit
   Ambient Air Quality:
   Avg.PM10-Near Main Gate is 48.50 µgm/m3 and 51.50% less than the Standard limit
   Avg.PM10-Near Distillery area is 40.50 µgm/m3 and 59.50 % less than the Standard limit
   Avg.PM2.5-Near Main Gate is 24.93 µgm/m3 and 58.46 % less than the Standard limit.
   Avg.PM2.5-Near Distillery area is 25.20 µgm/m3 and 58.0% less than the standard limit.
   Avg.SO2-Near Main Gate is 17. 39 µgm/m3 and 78.26 % less than the Standard limit.
   Avg.SO2-Near Distillery area is 19.18 µgm/m3 and 76.03 % less than the Standard limit.
   Avg.NOx–Near Main Gate area is 25.58 µgm/m3 and 68.02 % less the Standard limit
   Avg.NOx-Near Distillery area is 25.75 µgm/m3 and 67.81 % less the Standard limit
   Noise levels data at various locations within the factory premises as follows,
   Avg. Ambient Noise levels at CO2 plant area during Day time is 69.3 dB(A) (7.6 % less than the Standard limit)
   Avg. Ambient Noise levels at Boiler Turbine Hall during Day time is 71.4 dB(A) (4.8 % less than the Standard limit)
   Avg. Ambient Noise levels at Fermentation area during Day time is 71.1 dB(A) (5.3% less than the Standard limit)
   Avg. Ambient Noise levels at ETP area during Day time is 57.4 dB(A) (23.4 % less than the Standard limit)
   Avg. Ambient Noise levels at CO2 plant area during night time is 53.86 dB (A) (23.06 % less than the standard limit)
   Avg. Ambient Noise levels at Boiler Turbine Hall during the night time is 65.60 dB(A) (6.29 % less than the Standard limit)
   Avg. Ambient Noise levels at Fermentation area during night time is 64.41 dB(A) (7.99 % less than the Standard limit)
   Avg. Ambient Noise levels at ETP area during night time is 44.73 dB(A) (36.11 % less than the Standard limit.

7. Coal & Husk Consumption for the year is 2024-25 is 81949.588 TPA
8. Coal ash generation and disposal to Brick manufacturing units during the year 2024-25 is 15388.07TPA
9. Waste oil generation and disposal to authorized recyclers during the year 2024-25 is 710 LPA
10. DDGS/DWGS generation and disposal quantity during the year 2024-25 is 23419.79 TPA
11. CO2 generation and disposal quantity during the year 2024-25 is 15068.55 TPA

Dr. B. B. S. V. Seshagiri Rao
M.sc.(Env.Sci)., L.L.M., PGDEHS., Ph.D
Lead Auditor QMS & EMS