# **Dhampur Bio Organics Limited**



Date: 29.11.2025

To.

The Director Ministry of Environment, Forest & Climate Change Kendriya Bhawan, 5th Floor, Sector "H" Aliganj Lucknow (Uttar Pradesh)

Subject: Six Monthly Compliance Report of Environmental Clearance for Expansion of Molasses Based Distillery from 100 KLPD to 250 KLPD by M/s Dhampur Bio Organics Limited Unit Asmoli Division Bio fuels & Spirits (Formerly Known as Dhampur Sugar Mills Limited), at Village: Asmoli, Tehsil & District: Sambhal Uttar Pradesh for the period of April, 2025 to September, 2025. Currently unit is operating production capacity i.e. 350 KLD On B Heavy Based Operation Or 375 KLD On Cane Juice Syrup Based Operation Or 325 KLD On Grain Based Operation with No Increase in Pollution Load Certificate. Or 250 KLD On C Heavy Molasses Based Operation.

EC Ref. No: J-11011/224/2007-IA II (I), dated 29.01.2019

Reg: Submission of Six-Monthly Compliance Report for Period of April, 2025 to September, 2025.

Dear Sir,

This is in connection to above mentioned subject we are hereby submitting the six-monthly compliance report of the conditions of Environmental Clearance for Expansion of Molasses Based Distillery From 100 KLPD to 250 KLPD by M/s Dhampur Bio Organics Limited Unit Asmoli Division Bio fuels & Spirits (Formerly Known as Dhampur Sugar Mills Limited), at Village: Asmoli, Tehsil & District: Sambhal Uttar Pradesh for the period of April, 2025 to September, 2025 along with annexures as follows:

- Annexure 01: Copy of CTO (Air and Water),
- Annexure 02: Copy of No increase in Pollution load certificate
- Annexure 03: Copy of Environmental Clearance
- Annexure 04: HWM Certificate
- 5. Annexure 05: Test Report
- Annexure 06: Copy of UPGWD NOC
- Annexure 07: Photographs of Green Belt

Requesting you to accept soft copy reports submitted for information please.

Thanking you,

Yours sincerely,

**Authorized Signatory** 

M/s Dhampur Bio Organics Limited

Unit Asmoli Division Bio fuels & Spirits

(Formerly Known as Dhampur Sugar Mills Limited),

at Village: Asmoli, Tehsil & District: Sambhal Uttar Pradesh

# SIX-MONTHLY ENVIRONMENTAL COMPLIANCE REPORT OF STIPULATED CONDITIONS OF ENVIRONMENTAL CLEARANCE

(April, 2025 to September, 2025)

# For

# EXPANSION OF MOLASSES BASED DISTILLERY FROM 100 KLPD TO 250 KLPD

&

AS PER NO INCREASE POLLUTION LOAD DISTILLERY
CAPACITY 350 KLD ON B HEAVY BASED OPERATION OR
375 KLD ON CANE JUICE SYRUP BASED OPERATION OR
325 KLD ON GRAIN BASED OPERATION

at

VILLAGE: ASMOLI, TEHSIL & DISTRICT: SAMBHAL UTTAR PRADESH

For Submission to:
Ministry of Environment, Forest & Climate Change
(Regional Office, Lucknow)

Submitted By:
M/s Dhampur Bio Organics Limited
Unit Asmoli Division Bio fuels & Spirits
(Formerly Known as Dhampur Sugar Mills Limited)

EC Compliance April, 2025 to September, 2025

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EC Compliance April, 2025 to September, 2025

# CHAPTER No. 01: INTRODUCTION AND PROJECT DESCRIPTION

Six monthly environmental compliance/status report is submitted for Expansion of Molasses based distillery from 100 KLPD to 250 KLPD & As Per No Increase Pollution Load Distillery Capacity 350 KLD on B Heavy based operation or 375 KLD on Cane Juice Syrup Based Operation or 325 KLD on Grain based operation by M/s Dhampur Bio Organics Limited Unit Asmoli Division Bio fuels & Sprits (formerly Known as Dhampur Sugar Mills Limited) for April, 2025 to September, 2025. The Project is located at village: Asmoli, Tehsil & District: Sambhal Uttar Pradesh. Prior Environment Clearance was obtained from MoEF wide letter no.: F. No. J-11011/224/2007-IA II (I), dated 29.01.2019. Consolidated Consent to operate for Air & Water has obtained Vide been already for the project Ref No. 225486/UPPCB/Moradabad(UPPCBRO)/CTO/both/SAMBHAL/2024 dated 04/03/2025 valid up to 31/12/2026. Copy of CTO is attached here as Annexure-1.

Unit also obtained No objection certificate for "No increase in pollution load" of Distillery capacity 350 KLD on B Heavy Molasses based operation or 325 KLD on Grain based operation or 375 KLD on Cane Juice Syrup based operation from UPPCB by Ref. No. 177/UPHOC7/EIA/SAMBHAL/2023 dated 06/01/2023 Copy is attached here as Annexure-2.

Environmental mitigation measures described in Environmental Management Plan are being implemented operation phase. M/s Dhampur Bio Organics Limited Unit Asmoli Division Bio fuels & Sprits (formerly Known as Dhampur Sugar Mills Limited) management team is fully conscious about Environmental Management and enhancing green belt development in project surrounding area.

Six monthly compliance/status reports for **April**, **2025 to September**, **2025** for conditions stipulated in the Environmental Clearance letter issued by MoEF are enclosed as **Annexure-3**. Photographs view of implemented mitigation measures are also attached for the ready reference as Photo Documentation.

EC Compliance April, 2025 to September, 2025

# CHAPTER No. 02: COMPLIANCE OF STIPULATED CONDITIONS OF ENVIRONMENTAL CLEARANCE

Name of the Project: Molasses based Distillery of 100 KLPD to 250 KLPD & As Per No Increase Pollution Load Distillery Capacity 350 KLD On B Heavy Based Operation Or 375 KLD On Cane Juice Syrup Based Operation Or 325 KLD On Grain Based Operation at village: Asmoli, Tehsil & District: Sambhal Uttar Pradesh by M/s Dhampur Bio Organics Limited Unit Asmoli Division Bio fuels & Sprits (formerly Known as Dhampur Sugar Mills Limited).

Clearance Letter No: F. No. J-11011/224/2007-IA II (I), dated 29.01.2019. No Increase Pollution Load No: 177/UPHOC7/EIA/SAMBHAL/2023 & 170/UPHOC7/EIA/SAMBHAL/2022

**Period of Compliance Report:** (April, 2025 to September, 2025)

#### **Environment Clearance conditions:**

Sr. No.	Conditions	Compliance Status		
1.	Consent to Establish/ Operate for the project shall be obtained from the state Pollution Control Board as required under the air (Prevention and Control of Pollution) Act, 1981 and the water (Prevention and Control	The Unit has obtained the CTO for the project from UPPCB for Both (Air & Water) – 225486 / UPPCB / Moradabad (UPPCBRO)/CTO/both/ SAMBHAL / 2024 Dated - 04.03.2025. Copy attached as <b>Annexure No1</b>		
2.	of Pollution) Act. 1974.  As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/Treated water shall be discharged outside premises.	Liquid Discharge & No waste/Treated water		
3.	Necessary authorization required under the hazardous and other wastes (Management and Trans boundary Movement) Rules, 2016, solid waste management rules, 2016 shall be obtained and the provisions contained in the rules shall be strictly adhered to.	The unit has obtained hazardous and other wastes (Management and Trans-Boundary Movement) Rules 2016 from UPPCB vide No. 14112/UPPCB/Moradabad(UPPCBRO)/HWM/BHIM NAGAR/2021 Dated:02/06/2021 Copy attached as <b>Annexure No4</b>		
4.	To control source and the fugitive emission, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emission shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.	35 TPH Boiler High efficiency bag filter with 70 mtr. height stack & 45 TPH Boiler (ESP) with 77 mtr. Height stack is installed. Quality of SPM has been maintained below 50 mg/Nm <sup>3</sup> .  Boiler Stack Analysis Report is Attached as Annexure-5		
5.	Total fresh water requirement shall not exceed 2000 cum/day proposed to be met from ground water. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard.	Adequate as per UPGWD Guidelines & Permission has been obtained from UPGWD vide no AUTHORIZATION/ NO-OBJECTION CERTIFICAT NO: NOC042562 Copy attached as <b>Annexure-6</b> .		

6.	Hazardous chemicals shall be stored in tanks.	The Unit has a separate area for Hazardous		
	Tank farms, drums, carboys etc. Flame	Chemicals. Hazardous waste is being stored in		
	arresters shall be provided on tank farm and	*		
	the solvent transfer through pumps.	disposal.		
7.	Process organic residue and spent carbon, if	Not Applicable.		
	any shall be sent to cement industries ETP			
	Sludge, process inorganic & evaporation salt			
0	shall be disposed off to the TSDF.	D ' 4 ' 4 1 H ' 4 14 ' 14 DECO 1'		
8.	The Company shall strictly comply with the rules and guidelines under Manufacture	Point is noted. Unit obtained the PESO license for Ethanol storage.		
	Storage and import of Hazardous chemical	for Ethanor storage.		
	(MSIHC) Rules, 1989 as amended time to			
	time all transportation of Hazardous			
	chemicals shall be as per the Motor Vehicle			
	Act (MVA), 1989.			
9.	The company shall undertake was			
	minimization measures as below.			
	(i) Metering and control of quantities of	Metering is being provided at necessary place		
	active ingredients to minimize waste.	to minimize the waste.		
	(ii) Reuse of by products from the process as	Point is noted.		
	raw materials substitutes in other			
	processes.	Point is noted.		
	(iii)Use of automated filling to minimize spillage.	Point is noted.		
	(iv) Use of close feed system into batch	Use of close feed system into batch reactors is		
	reactors.	being practiced.		
		Complied		
recovery systems		-		
	(vi) Use of high-pressure hoses for equipment	Complied.		
	clearing to reduced waste water			
10	generation.	D :: C 1 14 C4 4 1 1 4 1		
10.	The green belt of 5-10 m width shall be	Provision of green belt of total plant area has		
	developed in more than 33% of the total project area mainly along the plant periphery,	already been taken and plantation is being done as per CPCB guideline & DFO advice. We		
	in downward wind direction, and along road	have planted species of Neem, Pipal, Mango,		
	sides etc. selection of plant species shall be	Guava, Eucalyptus and Ficus etc. with		
	as per the CPCB guidelines in consultation	consultation of local DFO.		
	with the state Forest Department.	Unit planted approx. 8000 saplings in 2000		
	-	square meter area in Miyawaki Method		
		Photographs of greenbelt attached as		
		Annexure-7.		
11.	All the commitments made regarding issue	All suggestions were Implemented.		
	raised during the public hearing/consultation meeting shall be satisfactory implemented.			
12	At least 0.75% of the total project cost shall	Unit being conducted various activities under		
12	be allocated for Corporate Environment	CER i.e. construction of ponds in nearby		
	Responsibility (CER) and Item wise details	villages and spent 1.0% of the total project cost.		
along with time bound action plan shall be		5 1 · · · · · · · · · · · · · · · · · ·		
	prepared and submitted to the Ministry's			
	Regional Office.			
13.	For the DG Sets, emission limits and the	No DG Set is installed.		

	stack height shall be in conformity with the extant regulations and the CPCB guidelines.			
	Acoustic enclosure shall be provided to DG			
	set for controlling the noise pollution.			
14.	The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms.	The unit already make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Firefighting system has been provided as per the norms.		
15.	Occupational has surveillance of the workers shall be done on a regular basis & records	The Unit has own dispensary where a qualified & experienced staff are deputed for taking care		
	maintained as per the factories act.	of employees and maintaining health records.		
16.	Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emission.	Molasses is the raw material which is being stored in tanks. Bagasse is being stored in covered shed.		
17.	Continuous Online (24x7) monitoring system	Continuous Online (24x7) monitoring system		
	for stack emissions shall be installed for	for stack emissions has been installed and the		
	measurement of flue gas discharge and the	data already transmitted to CPCB and SPCB		
	pollutants concentration, and the data to be transmitted to CPCB and SPCB server for	server for online continuous monitoring.  The unit has been installed web camera with		
	online continuous monitoring of effluent, the	night vision capability & data transmitted to		
	unit shall install web camera with night	SPCB Online Server for Continue Monitoring.		
	vision capability and flow meters in the	Also, Mass flow meters at Inlet & Outlet of		
	channel/drain carrying effluent within the premises.	effluent within the premises.		
18.	CO <sub>2</sub> generated from the process shall be	80 TPD CO <sub>2</sub> Recovery Plant is under operation.		
	bottled/made solid ice and sold to authorized			
19.	vendors There shall a degree also green as inside the plant.	Condition noted and complied		
19.	There shall adequately space inside the plant premises earmarked for parking of vehicles	Condition noted and complied.		
	for raw materials and finished products, and			
	no parking to be allowed outside on public			
	places.	ONDITION		
1.	The Project authorities must strictly adhere to	The Unit will strictly adhere to the stipulations		
1.	the stipulations made by the state Pollution	made by the Uttar Pradesh State Pollution		
	Control Board (SPCB), State Government	Control Board, the State Government and any		
	and/or any other statutory authority.	other statuary authority.		
2.	No further expansion or modifications in the	No further expansion or modification job will		
	plant shall be carried out without prior approval of the Ministry of Environment,	be taken up without prior approval of MOEF & CC.		
	forest and Climate Change. In case of			
	deviation of alteration in the project proposal			
	from those submitted to this ministry for			
	clearance, a fresh reference shall be made to			
	the ministry to assess the adequacy of conditions imposed and to add additional			
	environmental protection measure required,			
	if any.			
3.	The locations of ambient air quality	Air quality monitoring stations has been set		
	monitoring stations shall be decided in	up in consideration of maximum ground level		

4.	consultation with the State Pollution Control Board (SPCB) and it shall be ensured that at least one stations each is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated. The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be complied with.	concentration of SPM, SO <sub>2</sub> , and NO <sub>X</sub> in consultation with SPCB.  Analysis Reports are Attached as <b>Annexure-5</b> .  Ambient air quality monitoring is being done within premises and results were found within NAAQS 2009. Analysis Reports are Attached as <b>Annexure-5</b> .
5.	The Overall Noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under EPA,1986 Rules, 1989 Viz 75 DBA (day time) & 70 dB A (Night time)	Noise control measures has already been placed and enclosures would be put to keep the noise level will within the 85 dB A and ambient level below 70 dB A (day time) and 65 dB A (night time).  Analysis Report are Attached as <b>Annexure-5</b> .
6.	The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and utilized the same for industrial operations within the plant.	The Company has been adopted three recharge ponds in nearby villages and shafts has been constructed in the ponds.
7.	Training shall be imparted to all employees on Safety and Health aspects of Chemicals Handling. Pre-employment and routine periodical medical examination for all employees shall be undertaken on regular basis.	The Unit has well defined training programs. The desired medical records of each employee are also maintained.
8.	The Company Shall Comply with all the environmental protection measures and safe guards proposed in the documents submitted to the ministry. All the recommendations made in the EIA/EMP in respect of Environmental Management, Risk mitigation measures and public hearing shall be implemented.	The project proponent are complying with all the environmental protection majors & safe guards recommended in the EIA / EMP report.
9.	The Company shall undertake all measures for improving socio-economic conditions of the surrounding area. CSR Activities shall be undertaken by involving local villagers' administrations and other stakeholders. Also, eco developmental measures shall be under taken for overall improvement of the environment.	The CSR Activities are finalized at the Corporate Level. The Unit at Asmoli is also part of CSR activities as per provision of Companies Act. The unit is undertaking all measures for improving socio-economic conditions of masses in surrounding area. CSR activities have undertaken by involving local villagers' administrations and other stakeholders. The unit has undertaken Eco Development measures for overall improvement.

10.	A separate environmental management cell equipped with full-fledged laboratory facilities shall be setup to carry out the environmental management and monitoring functions.  The Company shall earmark sufficient funds	A separate environmental cell equipped with full-fledged laboratory facilities has been set up to carry out the environmental management & monitoring functions.  The project authorities are providing required
	towards capital cost & recurring cost per annum to implement the conditions stipulated by the ministry of environment, Forest & Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein, the fund show earmark for environment management, pollution control measures shall not be diverted for any other purpose.	funds for both recurring & non-recurring expenditure to implement the conditions stipulated by the Ministry of Environmental & Forest as well as the state government along with the implementation schedule for all the conditions stipulated herein.
12.	A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zila Parishad, Municipal Corporation, Urbon Local Body and the Local NGO, if any from home suggestions, representation, if any, were received by processing the proposal.	The unit has shared a copy of the Environmental Clearance (EC) To the concerned Panchayat, Zila Parishad, Municipal corporation, Urban Local Body and the Local NGO, no suggestion or Representations have been received.
13.	The Project Proponent shall also submit six monthly reports on the status of compliance of the stipulated environmental clearance conditions including results of monitored data (Both in the hard copy as well email) to the respective regional office of MOEF & CC, the respective zonal office of CPCB & SPCB. A copy of Environment Clearance & Six-Monthly Compliance Status report shall be posted on the website of the company.	The six-monthly reports on the status of compliance of the stipulated environmental clearance conditions including results of monitored data to the respective Regional Office of MOEF & CC, the respective zonal office of CPCB & SPCB has been sent regularly basis.
14.	The Environmental Statement for each financial year ending 31 <sup>st</sup> March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules 1986 as amended subsequently, shall also be put on the website of the company along with the status of compliance of Environmental Clearance conditions & shall also be sent to the Respective Regional Office of MOEF & CC by email.	The unit will be submitting the Environmental Statement for each financial year ending 31st March in Form-V as a mandated to the concerned State Pollution Control Board as Prescribed under the Environmental (Protection) Rules 1986 as amended subsequently. The same shall also be put on the website of the company along with the status of compliance of Environmental Clearance condition & shall also be sent to the Respective Regional Office of MOEF & CC and SPCB.
15.	The Project Proponent shall inform the public that the project has been accorded environmental clearance by the ministry and copy of the clearance letter are available with the SPCB /Committee and may also be same at website of the ministry at	The Environment Clearance Details has been already published in two local newspapers for public information. The copy of same has been already sent to Regional Office of the Ministry.

	http://moef.nic.in this shall be advertised within seven days from the date of issue of the clearance letter, at least in two newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional office of the Ministry.	
	The Ministry reserves the right to stipulate	Condition noted.
	additional conditions, if found necessary at	
	subsequent stages and the project proponent shall	
	implement all the said conditions in a time bound	
	manner. The Ministry may revoke or suspend the	
	environmental clearance, if implementation of any	
ŀ	of the above conditions is not found satisfactory.	C 122 4 1
	The above conditions will be enforced, inter-alia	Condition noted.
	under the provisions of the water (Prevention & Control of Pollution) Act, 1974, the Air	
	(Prevention & Control of Water Pollution) Act,	
	1981, the Environment (Protection) Act, 1986, the	
	Hazardous Waste (Management Handling and	
	trans-Boundary Movement) Rules, 2016 and the	
	Public Liability Insurance Act, 1991, read with	
	subsequent amendments therein.	

EC Compliance April, 2025 to September, 2025

# **CHAPTER No. 03:**

# **DETAILS OF ENVIRONMENTAL MONITORING**

# 3.1 AMBIENT AIR QUALITY MONITORING

## 3.1.1 Ambient air Quality Monitoring Stations

Ambient air quality monitoring has been carried out at 04 locations; Near Main Gate, Near Boiler, Near Gahre ki Madaiya & Near Village Asmoli of the Near project site. This will enable to have a comparative analytical understanding about air quality and to access changes in the air environment in the study area with respect to the condition prevailing. The locations of the ambient air quality monitoring stations are given in **Table-3.1**.

**Table-3.1: Details of Ambient Air Quality Monitoring Stations** 

Sr. No	Location Code	Location Name/ Description	Environmental Setting of Surrounding
1.	AAQ - 1	Near Main Gate	Industrial
2.	AAQ - 2	Near Boiler	Industrial
3.	AAQ - 3	Near Gahre ki madaiya	Residential
4.	4. AAQ - 4 Near Village Asmoli		Residential

## AAQ - 1: Near Main Gate

The sampler was placed Near Main Gate and was free from any obstructions. Surroundings of the sampling site represent industrial environmental setting.

# AAQ - 2: Near Boiler

The sampler was placed Near Boiler and was free from any obstructions. Surroundings of the sampling site represent industrial environmental setting.

## AAQ - 3: Near Gahre ki madaiya

The sampler was placed Near Gahre ki madaiya and was free from any obstructions. Surroundings of the sampling site represent residential environmental setting.

## AAQ - 4: Near Village Asmoli

The sampler was placed near Village Asmoli and was free from any obstructions. Surroundings of the sampling site represent residential environmental setting.

# 3.1.2 Ambient Air Quality Monitoring Methodology

Monitoring was conducted in respect of the following parameters:

- Respirable Suspended Particulate Matter (PM<sub>10</sub>)
- Fine Particulate Matter (PM<sub>2.5</sub>)
- Sulphur Dioxide (SO<sub>2</sub>)
- Oxides of Nitrogen (NO<sub>X</sub>)

EC Compliance April, 2025 to September, 2025

The duration of sampling of PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>X</sub> was 24 hourly continuous sampling per day duration monitoring. The monitoring was conducted for one day at the location. This is to allow a comparison with the National Ambient Air Quality Standards.

The air samples were analyzed as per standard methods specified by Indian Standards (IS: 5182). The techniques used for ambient air quality monitoring and minimum detectable levels are given in **Table-3.2**.

Fine Particulate Sampler instruments have been used for monitoring Particulate Matter 2.5 (PM<sub>2.5</sub> i.e., <2.5 microns), and Respirable Dust Sampler with gaseous sampling attachment was used for sampling Respirable fraction (<10 microns), gaseous pollutants like SO<sub>2</sub>, and NOx.

Table-3.2:
Techniques used for Ambient Air Quality Monitoring

Sr. No	Parameter	Technique	Range of testing /limit of detection
1.	Respirable Suspended	Respirable Dust Sampler, with cyclone	5.0 - 1200
1.	Particulate Matter (PM <sub>10</sub> )	separator, Gravimetric Method	3.0 - 1200
2.	Fine Particulate Matter	Fine Particulate Sampler, Gravimetric	2.0 - 500
۷.	(PM <sub>2.5</sub> )	Method	2.0 - 300
3.	Sulphur dioxide	Modified West and Gaeke	5.0 - 1050
4.	Oxides of Nitrogen	Jacob & Hochheiser	6.0 - 750

## 3.1.3 Ambient Air Quality Monitoring Results Near Main Gate

The detailed on-site monitoring results of  $PM_{2.5}$ ,  $PM_{10}$ ,  $SO_2$  and  $NO_X$  are presented in **Table 3.3**.

Table-3.3:
Ambient Air Quality Monitoring Results Near Main Gate

Sr. No	Particulars	Protocol	Unit	Result	Range of testing /limit of detection	Standard as per NAAQS; dated 18/11/ 2009
1	Particulate matters size less than 10 $\mu$ m (PM <sub>10</sub> )	IS: 5182 (Part - 23): 2006 Reaffirmed: 2022	μg/m³	89.6	5.0 - 1200	For 24 hour =100
2	Particulate matters size less than 2.5 μm (PM <sub>2.5</sub> )	IS: 5182 (Part - 24): 2019	μg/m³	52.33	2.0 - 500	For 24 hour =60
3	Sulphur Dioxides (SO <sub>2</sub> )	IS: 5182 (Part - 02): 2001 Reaffirmed: 2022	μg/m³	14.59	5.0 - 1050	For 24 hour =80
4	Oxides of nitrogen (NO <sub>X</sub> )	IS: 5182 (Part - 06): 2006 Reaffirmed: 2022	μg/m³	21.08	6.0- 750	For 24 hour =80

EC Compliance April, 2025 to September, 2025

# 3.1.4 Ambient Air Quality Monitoring Results Near Boiler

The detailed on-site monitoring results of PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub> and NOx are presented in **Table 3.4**.

Table 3.4:
Ambient Air Quality Monitoring Results Near Boiler

Sr. No	Particulars	Protocol	Unit	Result	Range of testing /limit of detection	Standard as per NAAQS; dated 18/11/ 2009
1	Particulate matters size less than 10 μm (PM <sub>10</sub> )	IS: 5182 (Part - 23): 2006 Reaffirmed: 2022	μg/m³	82.4	5.0 - 1200	For 24 hour =100
2	Particulate matters size less than 2.5 μm (PM <sub>2.5</sub> )	IS: 5182 (Part - 24): 2019	μg/m³	51.11	2.0 - 500	For 24 hour =60
3	Sulphur Dioxides (SO <sub>2</sub> )	IS: 5182 (Part - 02): 2001 Reaffirmed: 2022	μg/m³	14.56	5.0 - 1050	For 24 hour =80
4	Oxides of nitrogen (NO <sub>X</sub> )	IS: 5182 (Part - 06): 2006 Reaffirmed: 2022	μg/m³	20.39	6.0- 750	For 24 hour =80

# 3.1.5 Ambient Air Quality Monitoring Results Near Gahre ki Madaiyan

The detailed on-site monitoring results of  $PM_{2.5}$ ,  $PM_{10}$ ,  $SO_2$  and  $NO_X$  are presented in **Table 3.5**.

Table-3.5:
Ambient Air Quality Monitoring Results Near Gahre ki Madaiyan

Sr. No	Particulars	Protocol	Unit	Result	Range of testing /limit of detection	Standard as per NAAQS; dated 18/11/ 2009
1	Particulate matters size less than 10 μm (PM <sub>10</sub> )	IS: 5182 (Part - 23): 2006 Reaffirmed: 2022	$\mu g/m^3$	79.8	5.0 - 1200	For 24 hour =100
2	Particulate matters size less than 2.5 μm (PM <sub>2.5</sub> )	IS: 5182 (Part - 24): 2019	μg/m³	48.78	2.0 - 500	For 24 hour =60
3	Sulphur Dioxides (SO <sub>2</sub> )	IS: 5182 (Part - 02): 2001 Reaffirmed: 2022	μg/m³	13.76	5.0 - 1050	For 24 hour =80
4	Oxides of nitrogen (NO <sub>X</sub> )	IS: 5182 (Part - 06): 2006 Reaffirmed: 2022	μg/m³	19.25	6.0- 750	For 24 hour =80

# 3.1.6 Ambient Air Quality Monitoring Results Near Village: Asmoli

The detailed on-site monitoring results of  $PM_{2.5}$ ,  $PM_{10}$ ,  $SO_2$  and  $NO_X$  are presented in **Table 3.6**.

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Table-3.6:
Ambient Air Quality Monitoring Results Near Village: Asmoli

Sr. No	Particulars	Protocol	Unit	Result	Range of testing /limit of detection	Standard as per NAAQS; dated 18/11/ 2009
1	Particulate matters size less than 10 $\mu$ m (PM <sub>10</sub> )	IS: 5182 (Part - 23): 2006 Reaffirmed: 2022	μg/m³	78.2	5.0 - 1200	For 24 hour =100
2	Particulate matters size less than 2.5 μm (PM <sub>2.5</sub> )	IS: 5182 (Part - 24): 2019	μg/m³	46.81	2.0 - 500	For 24 hour =60
3	Sulphur Dioxides (SO <sub>2</sub> )	IS: 5182 (Part - 02): 2001 Reaffirmed: 2022	μg/m³	12.82	5.0 - 1050	For 24 hour =80
4	Oxides of nitrogen (NO <sub>X</sub> )	IS: 5182 (Part - 06): 2006 Reaffirmed: 2022	μg/m³	17.33	6.0- 750	For 24 hour =80

# 3.1.7 Discussion on Ambient Air Quality in the Study Area

The value of PM<sub>10</sub> at Ambient Air Monitoring Station No: 1, 2, 3 & 4 are 89.6  $\mu$ g/m³, 82.4  $\mu$ g/m³, 79.8  $\mu$ g/m³ & 78.2  $\mu$ g/m³ respectively which were within permissible limit of 100  $\mu$ g/m³ and PM<sub>2.5</sub> levels are 52.33  $\mu$ g/m³ Near Main Gate, 51.11  $\mu$ g/m³ at Near Boiler, 48.78  $\mu$ g/m³ at Near Gahre ki Madaiyan and 46.81  $\mu$ g/m³ at Near Village: Asmoli, were also observed within permissible limit of 60  $\mu$ g/m³ (for residential, rural and other areas as stipulated in the National Ambient Air Quality Standards). SO<sub>2</sub> ranges between 12.82  $\mu$ g/m³ to 14.59  $\mu$ g/m³ and NO<sub>X</sub> ranges between 17.33  $\mu$ g/m³ to 21.08  $\mu$ g/m³ was also observed within the corresponding stipulated limits (Limit for SO<sub>2</sub> and NO<sub>X</sub>; 80  $\mu$ g/m³) at all of the 04 monitoring locations. Station wise variation of ambient air quality parameters has been graphically shown in **Figure-3.1 to 3.4**.

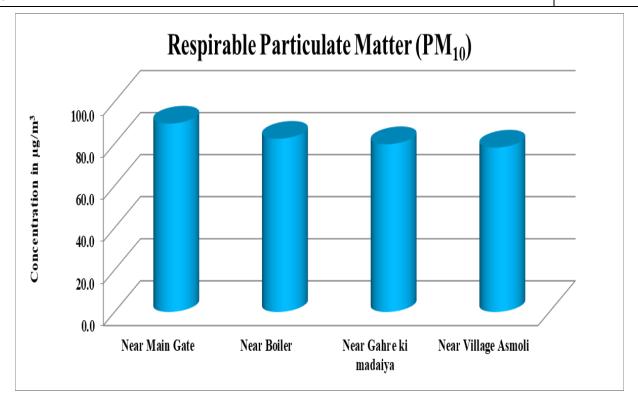


Figure-3.1: Graphs Showing PM<sub>10</sub> Concentration at all sites

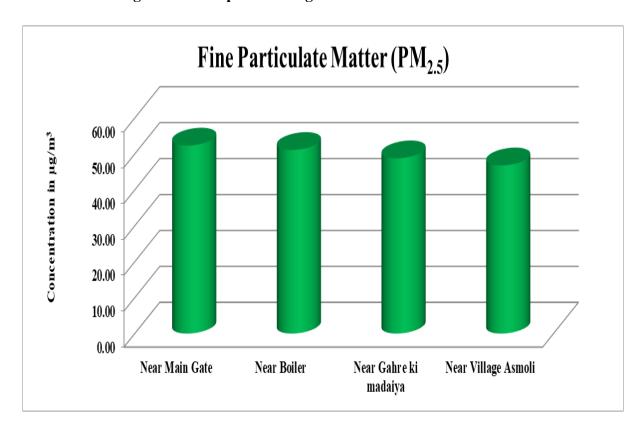


Figure-3.2: Graphs Showing PM<sub>2.5</sub> Concentration at all sites

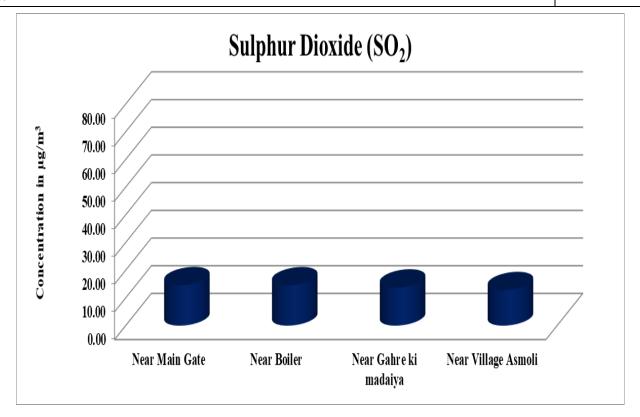


Figure-3.3: Graphs Showing SO<sub>2</sub> Concentration at all sites

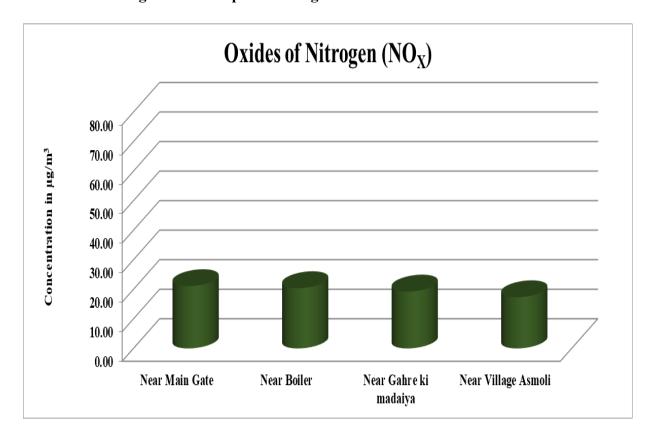


Figure-3.4: Graphs Showing NOx Concentration at all sites

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#### 3.2 STACK EMISSION MONITORING

Stack Emission monitoring was carried out by EPA approved Laboratory on date 25.09.2025 for the installed 35.0 TPH and 45 TPH slop fired boilers (attached with Bag filter (35 TPH) and Electro Static Precipitator as air pollution control device with a stack height of 70 and 77.0 meters).

# 3.2.1 Stack Emission Monitoring Methodology

Monitoring was conducted in respect of the following parameters:

• Particulate Matter (PM)

The Method used for Stack Emission monitoring and range of testing with CPCB standard are given in **Table-3.7** 

Table-3.7:
Details of Stack Emission Monitoring Results

Sr. No.	Parameter	Unit	Protocol	Stack-01	Stack-02	Range of Testing/ Limit of Detection	Standard (as per CPCB)
1	Particulate Matter	mg/Nm³	IS: 11255 (Part-1): 1985 Reaffirmed: 2019	45.20	44.52	2.0 - 1000	150

#### 3.3 AMBIENT NOISE MONITORING

## 3.3.1 Ambient Noise Monitoring Locations

The main objective of noise monitoring in the study area is to assess the present ambient noise levels near project site due to various industrial activities and increased vehicular movement. A preliminary reconnaissance survey has been undertaken to identify the major noise generating sources in the area. Ambient noise monitoring was conducted at 01 location as given in **Table-3.8**.

**Table-3.8: Details of Ambient Noise Monitoring Stations** 

Sr. No	Location Code	Location name and description	Date of Monitoring
1.	NQ - 1	Near Main Gate	19/09/2025 to 21/09/2025
2.	NQ – 2	Near Boiler	19/09/2025 to 21/09/2025
3.	NQ – 3	Near Distillery Area	19/09/2025 to 21/09/2025
4.	NQ - 4	Near Gahre ki Madaiyan	19/09/2025 to 21/09/2025
5.	NQ -5	Near Village: Asmoli	19/09/2025 to 21/09/2025

## 3.3.2 Methodology of Noise Monitoring

Noise levels were measured using sound level meter. Noise level monitoring was carried out continuously for 24-hours with one hour interval starting at 06:00 hrs to 06:00 hrs next day. The noise levels were monitored on working days only. During each hour Leq were directly computed by the instrument based on the sound pressure levels. Monitoring was carried out at 'A' response.

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# 3.3.3 Ambient Noise Monitoring Results

The location wise ambient noise monitoring results is summarized in **Table-3.9**. The noise levels are graphically presented in **Figure-3.5**.

**Table-3.9: Ambient Noise Monitoring Results** 

	Ambient Noise Level								
Sr. No	Parameter	Unit	Results Day Time (06:00 AM - 10:00 PM)	Results Night Time (10:00 PM - 06:00 AM)					
1	<b>Equivalent sound level</b>	dB(A)	61.32	52.44					
2	<b>Equivalent sound level</b>	dB(A)	65.82	56.52					
3	<b>Equivalent sound level</b>	dB(A)	60.30	50.55					
4	<b>Equivalent sound level</b>	dB(A)	54.74	45.23					
5	<b>Equivalent sound level</b>	dB(A)	51.02	42.19					

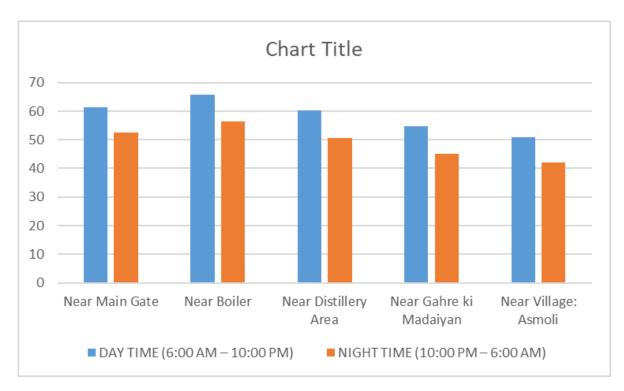


Figure 3.5: Day and Night Time noise Level Within Plant Premises

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Table-3.10: Noise Standards as per CPCB Schedule rule 3(1) and 4(1)

Area	Category of	Limits in dB(A) Leq			
Code	Area/Zone	Day Time	Night Time		
A	Industrial Area	75	70		
В	Commercial Area	65	55		
С	Residential Area	55	45		
D	Silence Zone	50	40		

# 3.3.4 Discussion on Ambient Noise Levels in the Study Area

# Day Time Noise Levels (Lday):

The day time noise level at monitoring station was found to range between 51.02 to 65.82 dB(A), which is within limits prescribed for industrial area i.e., 75 dB (A).

# Night Time Noise Levels (Lnight):

The night time noise level at monitoring station was found to range between 42.19 to 56.52 dB(A), which is within limit prescribed for industrial area i.e., 70 dB (A).

## 3.4 GROUND WATER QUALITY MONITORING

## 3.4.1 Ground water Quality Monitoring Locations

Keeping in view the importance of ground water, sample of ground water was collected from the project site for the assessment of impacts of the project on the groundwater quality.

Water sample was collected from the project site. The sample was analysed for various parameters to compare with the standards for Ground water as per IS: 10500 for Groundwater sources. The details of water sampling locations are given in **Table-3.10**.

**Table-3.11: Details of Water Quality Monitoring Station** 

Sr. No	Location Code	Location name and description	Date of Monitoring
1.	GW - 01	Borewell Within Premises	14 <sup>th</sup> April, 2025
2.	GW - 01	Borewell Within Premises	19 <sup>th</sup> May, 2025
3.	GW - 01	<b>Borewell Within Premises</b>	10 <sup>th</sup> June, 2025
4.	GW - 01	Borewell Within Premises	04 <sup>th</sup> July, 2025
5.	GW - 01	<b>Borewell Within Premises</b>	06 <sup>th</sup> August, 2025
6.	GW - 01	<b>Borewell Within Premises</b>	22 <sup>th</sup> September, 2025

# 3.4.2 Methodology of ground water Quality Monitoring

Sampling of ground water was carried out on 14.04.2025, 19.05.2025, 10.06.2025, 04.07.2025, 06.08.2025 and 22.09.2025. Samples were collected as grab sample and sampling forms are filled in as per the sampling plan. The preservative sample were properly added to preserve as per standard operating procedures (SOP) and stored immediately in ice boxes, which were ensured for appropriate temperatures. **Sample for chemical analysis was** 

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collected in polyethylene carboys. Sample collected for metal content were acidified to <2 pH with 1 ml HNO<sub>3</sub>. A sample for bacteriological analysis was collected in sterilized glass bottles.

Soon after the completion of sampling, chain of custody sheets for the samples are filled in and then they were transported by road to Environmental & Technical Research Centre, Lucknow for further analysis. Proper care was taken during packing and transportation of samples. All the samples reached the central laboratory within the holding times for different parameters. After ensuring the same the samples were forwarded immediately for analysis. The samples were analysed as per the standard procedures specified in 'Standard Methods for the Examination of Water and Wastewater' published by American Public Health Association (APHA) and CPCB. The analytical techniques and the test methods adopted for testing of ground water are given in **Table-3.12 to Table-3.17.** 

# 3.4.3 Ground water Quality Monitoring Results

The detailed Ground water quality monitoring results are presented in **Table-3.12 to Table-3.17.** 

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Table-3.12:
Ground water Quality Results at Borewell Within Premises (April, 20

	(	Ground	water Quality Results at Bo	rewell With	in Premises (Ap		
Sr. No	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection	1050	Standard 00: 2012
			Physico-chemical Par	ameters		Desirable	Permissible
1	Colour	Hazen	IS: 3025 (Part-4): 1983 Reaffirmed: 2017	<5.0	5 - 30	5	15
2	Odour	-	IS: 3025 (Part-5): 1983 Reaffirmed: 2017	Agreeable	Qualitative	Agreeable	Agreeable
3	pН	-	APHA 23 <sup>rd</sup> Ed. 2017-4500 H <sup>+</sup>	7.4	1 - 14	6.5-8.5	No Relaxation
4	Turbidity	NTU	APHA 23 <sup>rd</sup> Ed. 2017-2130 B	<2.0	2 - 40	1	5
5	Total Dissolved Solids (TDS)	mg/l	IS: 3025 (Part-16): 1984 Reaffirmed: 2017	358.4	10 - 5000	500	2000
6	Ammonia (as total ammonia-N)	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-4500-NH <sub>3</sub> F	<0.5	0.5 - 2.0	0.5	No Relaxation
7	Anionic Detergents (as MBAS)	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-5540 C	<0.05	0.05 - 0.5	0.2	1.0
8	Calcium as Ca	mg/l	IS: 3025 (Part-40): 1991 Reaffirmed: 2019	57.6	2.0 - 600	75	200
9	Magnesium as Mg	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3500 Mg, B	27.216	0.1 - 200	30	100
10	Chloride as Cl	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-4500-CI <sup>-</sup> B	24.0	2.0 - 2000	250	1000
11	Fluoride as F	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-4500 F <sup>-</sup> C	0.38	0.02 - 5.0	1.0	1.5
12	Free Residual Chlorine	mg/l	IS: 3025 (Part-26): 1986 Reaffirmed: 2019	<0.1	0.1 - 5.0	0.2	1.0
13	Nitrate as NO <sub>3</sub>	mg/l	IS: 3025 (Part-34): 1986 Reaffirmed: 2019	<1.0	1.0 - 70	45	No Relaxation
14	Phenolic Compound (as C <sub>6</sub> H <sub>5</sub> OH)	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-5530 C	<0.001	0.001 - 0.005	0.001	0.002
15	Sulphate as SO <sub>4</sub>	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-4500- SO <sub>4</sub> <sup>2-</sup>	28.0	1.0 - 500	200	400
16	Alkalinity as CaCO <sub>3</sub>	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-2320 B	284.0	2.0 - 1000	200	600
17	Total Hardness as CaCO <sub>3</sub>	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-2340 C	256.0	5.0 - 800	200	600
18	Aluminium as Al	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	<0.015	0.015 - 5.0	0.03	0.2
19	Boron as B	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	<0.05	0.05 - 2.0	0.5	1.0
20	Copper as Cu	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	<0.03	0.03 - 10	0.05	1.5
21	Iron as Fe	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	0.14	0.05 - 20	0.3	No Relaxation
22	Manganese as Mn	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	0.03	0.02 - 5.0	0.1	0.3
23	Zinc as Zn	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	0.36	0.05 - 15	5	15
24	Cadmium as Cd	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	<0.05	0.05 - 2.0	0.003	No Relaxation
25	Lead as Pb	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	<0.01	0.01 - 10	0.01	No Relaxation
26	Mercury as Hg	μg/l	APHA 23 <sup>rd</sup> Ed. 2017-3112 B	<0.5	0.5 - 1000	1.0	No Relaxation
27	Nickel as Ni	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	<0.05	0.05 - 5.0	0.02	No Relaxation
28	Arsenic as As	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	<0.02	0.02 - 2	0.01	0.05
29	Total Chromium	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	<0.03	0.03 - 5.0	0.05	No Relaxation
			Microbiological Para	meters			
30	E. coli	MPN/ 100 ml	IS: 1622 - 1981 Reaffirmed: 2019	Absent	≥2 MPN Present or Absent per 100 ml	100 n	detected in any nl sample
31	T. coli	MPN/ 100 ml	IS: 1622 - 1981 Reaffirmed: 2019	Absent	≥2 MPN Present or Absent per 100 ml		detected in any nl sample

Table-3.13:
Ground water Quality Results at Borewell Within Premises (May, 2025)

Sr. No	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing	Indian Standard 10500: 2012	
110					/iiiiit of detection	Desirable Permissible	
			Physico-chemical Par	ameters	T	T	1
1	Colour	Hazen	IS: 3025 (Part-4): 1983 Reaffirmed: 2017	<5.0	5 - 30	5	15
2	Odour	-	IS: 3025 (Part-5): 1983 Reaffirmed: 2017	Agreeable	Qualitative	Agreeable	Agreeable
3	pН	-	APHA 23 <sup>rd</sup> Ed. 2017-4500 H <sup>+</sup>	7.5	1 - 14	6.5-8.5	No Relaxation
4	Turbidity	NTU	APHA 23 <sup>rd</sup> Ed. 2017-2130 B	<2.0	2 - 40	1	5
5	Total Dissolved Solids (TDS)	mg/l	IS: 3025 (Part-16): 1984 Reaffirmed: 2017	390.2	10 - 5000	500	2000
6	Ammonia (as total ammonia-N)	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-4500-NH <sub>3</sub> F	<0.5	0.5 - 2.0	0.5	No Relaxation
7	Anionic Detergents (as MBAS)	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-5540 C	<0.05	0.05 - 0.5	0.2	1.0
8	Calcium as Ca	mg/l	IS: 3025 (Part-40): 1991 Reaffirmed: 2019	49.6	2.0 - 600	75	200
9	Magnesium as Mg	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3500 Mg, B	28.188	0.1 - 200	30	100
10	Chloride as Cl	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-4500-CI <sup>-</sup> B	26.0	2.0 - 2000	250	1000
11	Fluoride as F	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-4500 F-C	0.39	0.02 - 5.0	1.0	1.5
12	Free Residual Chlorine	mg/l	IS: 3025 (Part-26): 1986 Reaffirmed: 2019	<0.1	0.1 - 5.0	0.2	1.0
13	Nitrate as NO <sub>3</sub>	mg/l	IS: 3025 (Part-34): 1986 Reaffirmed: 2019	<1.0	1.0 - 70	45	No Relaxation
14	Phenolic Compound (as C <sub>6</sub> H <sub>5</sub> OH)	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-5530 C	<0.001	0.001 - 0.005	0.001	0.002
15	Sulphate as SO <sub>4</sub>	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-4500- SO <sub>4</sub> <sup>2</sup> -	24.0	1.0 - 500	200	400
16	Alkalinity as CaCO <sub>3</sub>	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-2320 B	268.0	2.0 - 1000	200	600
17	Total Hardness as CaCO <sub>3</sub>	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-2340 C	240.0	5.0 - 800	200	600
18	Aluminium as Al	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	<0.015	0.015 - 5.0	0.03	0.2
19	Boron as B	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	<0.05	0.05 - 2.0	0.5	1.0
20	Copper as Cu	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	<0.03	0.03 - 10	0.05	1.5
21	Iron as Fe	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	0.10	0.05 - 20	0.3	No Relaxation
22	Manganese as Mn	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	0.05	0.02 - 5.0	0.1	0.3
23	Zinc as Zn	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	0.45	0.05 - 15	5	15
24	Cadmium as Cd	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	<0.05	0.05 - 2.0	0.003	No Relaxation
25	Lead as Pb	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	<0.01	0.01 - 10	0.01	No Relaxation
26	Mercury as Hg	μg/l	APHA 23 <sup>rd</sup> Ed. 2017-3112 B	<0.5	0.5 - 1000	1.0	No Relaxation
27	Nickel as Ni	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	<0.05	0.05 - 5.0	0.02	No Relaxation
28	Arsenic as As	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	<0.02	0.02 - 2	0.01	0.05
29	Total Chromium	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	<0.03	0.03 - 5.0	0.05	No Relaxation
			Microbiological Para	meters	T	1	
30	E. coli	MPN/ 100 ml	IS: 1622 - 1981 Reaffirmed: 2019	Absent	≥ 2 MPN Present or Absent per 100 ml	100 r	detected in any nl sample
31	T. coli	MPN/ 100 ml	IS: 1622 - 1981 Reaffirmed: 2019	Absent	≥ 2 MPN Present or Absent per 100 ml		detected in any nl sample

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Table-3.14:
Ground water Quality Results at Borewell Within Premises (June, 2025)

	Ground water Quality Results at Borewell Within Premises (June, 2025)								
Sr. No	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing	1050	Standard 00: 2012		
			Physico-chemical Par	amotors	,	Desirable	Permissible		
			IS: 3025 (Part-4): 1983						
1	Colour	Hazen	Reaffirmed: 2017 IS: 3025 (Part-5): 1983	<5.0	5 - 30	5	15		
2	Odour	-	Reaffirmed: 2017	Agreeable	Qualitative	Agreeable	Agreeable		
3	рН	-	APHA 23 <sup>rd</sup> Ed. 2017-4500 H <sup>+</sup>	7.5	1 - 14	6.5-8.5	No Relaxation		
4	Turbidity	NTU	APHA 23 <sup>rd</sup> Ed. 2017-2130 B	<2.0	2 - 40	1	5		
5	Total Dissolved Solids (TDS)	mg/l	IS: 3025 (Part-16): 1984 Reaffirmed: 2017	396.6	10 - 5000	500	2000		
6	Ammonia (as total ammonia-N)	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-4500-NH <sub>3</sub> F	<0.5	0.5 - 2.0	0.5	No Relaxation		
7	Anionic Detergents (as MBAS)	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-5540 C	<0.05	0.05 - 0.5	0.2	1.0		
8	Calcium as Ca	mg/l	IS: 3025 (Part-40): 1991 Reaffirmed: 2019	57.6	2.0 - 600	75	200		
9	Magnesium as Mg	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3500 Mg, B	27.21	0.1 - 200	30	100		
10	Chloride as Cl	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-4500-CI B	26.0	2.0 - 2000	250	1000		
11	Fluoride as F	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-4500 F <sup>-</sup> C	0.36	0.02 - 5.0	1.0	1.5		
12	Free Residual Chlorine	mg/l	IS: 3025 (Part-26): 1986 Reaffirmed: 2019	<0.1	0.1 - 5.0	0.2	1.0		
13	Nitrate as NO <sub>3</sub>	mg/l	IS: 3025 (Part-34): 1986 Reaffirmed: 2019	<1.0	1.0 - 70	45	No Relaxation		
14	Phenolic Compound (as C <sub>6</sub> H <sub>5</sub> OH)	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-5530 C	<0.001	0.001 - 0.005	0.001	0.002		
15	Sulphate as SO <sub>4</sub>	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-4500- SO <sub>4</sub> <sup>2-</sup>	24.0	1.0 - 500	200	400		
16	Alkalinity as CaCO <sub>3</sub>	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-2320 B	288.0	2.0 - 1000	200	600		
17	Total Hardness as CaCO <sub>3</sub>	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-2340 C	256.0	5.0 - 800	200	600		
18	Aluminium as Al	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	<0.015	0.015 - 5.0	0.03	0.2		
19	Boron as B	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	<0.05	0.05 - 2.0	0.5	1.0		
20	Copper as Cu	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	<0.03	0.03 - 10	0.05	1.5		
21	Iron as Fe	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	0.14	0.05 - 20	0.3	No Relaxation		
22	Manganese as Mn	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	0.05	0.02 - 5.0	0.1	0.3		
23	Zinc as Zn	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	0.49	0.05 - 15	5	15		
24	Cadmium as Cd	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	<0.05	0.05 - 2.0	0.003	No Relaxation		
25	Lead as Pb	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	<0.01	0.01 - 10	0.01	No Relaxation		
26	Mercury as Hg	μg/l	APHA 23 <sup>rd</sup> Ed. 2017-3112 B	<0.5	0.5 - 1000	1.0	No Relaxation		
27	Nickel as Ni	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	<0.05	0.05 - 5.0	0.02	No Relaxation		
28	Arsenic as As	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	<0.02	0.02 - 2	0.01	0.05		
29	Total Chromium	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	<0.03	0.03 - 5.0	0.05	No Relaxation		
		1 (7) 7	Microbiological Para	meters	Ī	G1 11 .	1		
30	E. coli	MPN/ 100 ml	IS: 1622 - 1981 Reaffirmed: 2019	Absent	≥ 2 MPN Present or Absent per 100 ml	100 n	detected in any		
31	T. coli	MPN/ 100 ml	IS: 1622 - 1981 Reaffirmed: 2019	Absent	≥ 2 MPN Present or Absent per 100 ml		detected in any nl sample		

Table-3.15: Ground water Quality Results at Borewell Within Premises (July, 2025)

Sr. No	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing /limit of detection	Indian Standard 10500: 2012	
110					/iiiiit of detection	Desirable	Permissible
1			Physico-chemical Par	ameters	I	1	T.
1	Colour	Hazen	IS: 3025 (Part-4): 1983 Reaffirmed: 2017	<5.0	5 - 30	5	15
2	Odour	-	IS: 3025 (Part-5): 1983 Reaffirmed: 2017	Agreeable	Qualitative	Agreeable	Agreeable
3	pН	-	APHA 23 <sup>rd</sup> Ed. 2017-4500 H <sup>+</sup>	7.5	1 - 14	6.5-8.5	No Relaxation
4	Turbidity	NTU	APHA 23 <sup>rd</sup> Ed. 2017-2130 B	<2.0	2 - 40	1	5
5	Total Dissolved Solids (TDS)	mg/l	IS: 3025 (Part-16): 1984 Reaffirmed: 2017	376.4	10 - 5000	500	2000
6	Ammonia (as total ammonia-N)	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-4500-NH <sub>3</sub> F	<0.5	0.5 - 2.0	0.5	No Relaxation
7	Anionic Detergents (as MBAS)	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-5540 C	<0.05	0.05 - 0.5	0.2	1.0
8	Calcium as Ca	mg/l	IS: 3025 (Part-40): 1991 Reaffirmed: 2019	48.0	2.0 - 600	75	200
9	Magnesium as Mg	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3500 Mg, B	33.534	0.1 - 200	30	100
10	Chloride as Cl	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-4500-CI <sup>-</sup> B	30.0	2.0 - 2000	250	1000
11	Fluoride as F	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-4500 F <sup>-</sup> C	0.41	0.02 - 5.0	1.0	1.5
12	Free Residual Chlorine	mg/l	IS: 3025 (Part-26): 1986 Reaffirmed: 2019	<0.1	0.1 - 5.0	0.2	1.0
13	Nitrate as NO <sub>3</sub>	mg/l	IS: 3025 (Part-34): 1986 Reaffirmed: 2019	<1.0	1.0 - 70	45	No Relaxation
14	Phenolic Compound (as C <sub>6</sub> H <sub>5</sub> OH)	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-5530 C	<0.001	0.001 - 0.005	0.001	0.002
15	Sulphate as SO <sub>4</sub>	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-4500- SO <sub>4</sub> <sup>2</sup> -	28.0	1.0 - 500	200	400
16	Alkalinity as CaCO <sub>3</sub>	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-2320 B	284.0	2.0 - 1000	200	600
17	Total Hardness as CaCO <sub>3</sub>	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-2340 C	258.0	5.0 - 800	200	600
18	Aluminium as Al	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	<0.015	0.015 - 5.0	0.03	0.2
19	Boron as B	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	<0.05	0.05 - 2.0	0.5	1.0
20	Copper as Cu	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	<0.03	0.03 - 10	0.05	1.5
21	Iron as Fe	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	0.17	0.05 - 20	0.3	No Relaxation
22	Manganese as Mn	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	0.08	0.02 - 5.0	0.1	0.3
23	Zinc as Zn	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	0.41	0.05 - 15	5	15
24	Cadmium as Cd	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	<0.05	0.05 - 2.0	0.003	No Relaxation
25	Lead as Pb	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	<0.01	0.01 - 10	0.01	No Relaxation
26	Mercury as Hg	μg/l	APHA 23 <sup>rd</sup> Ed. 2017-3112 B	<0.5	0.5 - 1000	1.0	No Relaxation
27	Nickel as Ni	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	<0.05	0.05 - 5.0	0.02	No Relaxation
28	Arsenic as As	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	<0.02	0.02 - 2	0.01	0.05
29	Total Chromium	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	<0.03	0.03 - 5.0	0.05	No Relaxation
1		3 (D3.7/	Microbiological Para	meters	T	G1 11	1
30	E. coli	MPN/ 100 ml	IS: 1622 - 1981 Reaffirmed: 2019	Absent	≥ 2 MPN Present or Absent per 100 ml		detected in any nl sample
31	T. coli	MPN/ 100 ml	IS: 1622 - 1981 Reaffirmed: 2019	Absent	≥ 2 MPN Present or Absent per 100 ml	Shall not be	detected in any

Table-3.16:
Ground water Quality Results at Borewell Within Premises (August, 2025)

Sr. No	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing	1050	Standard 00: 2012
110	1.0			/iiiiit of detection	Desirable Permissible		
1			Physico-chemical Par	ameters	I	1	T.
1	Colour	Hazen	IS: 3025 (Part-4): 1983 Reaffirmed: 2017	<5.0	5 - 30	5	15
2	Odour	-	IS: 3025 (Part-5): 1983 Reaffirmed: 2017	Agreeable	Qualitative	Agreeable	Agreeable
3	pН	-	APHA 23 <sup>rd</sup> Ed. 2017-4500 H <sup>+</sup>	7.6	1 - 14	6.5-8.5	No Relaxation
4	Turbidity	NTU	APHA 23 <sup>rd</sup> Ed. 2017-2130 B	<2.0	2 - 40	1	5
5	Total Dissolved Solids (TDS)	mg/l	IS: 3025 (Part-16): 1984 Reaffirmed: 2017	380.0	10 - 5000	500	2000
6	Ammonia (as total ammonia-N)	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-4500-NH <sub>3</sub> F	<0.5	0.5 - 2.0	0.5	No Relaxation
7	Anionic Detergents (as MBAS)	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-5540 C	<0.05	0.05 - 0.5	0.2	1.0
8	Calcium as Ca	mg/l	IS: 3025 (Part-40): 1991 Reaffirmed: 2019	54.4	2.0 - 600	75	200
9	Magnesium as Mg	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3500 Mg, B	28.188	0.1 - 200	30	100
10	Chloride as Cl	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-4500-CI <sup>-</sup> B	26.0	2.0 - 2000	250	1000
11	Fluoride as F	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-4500 F <sup>-</sup> C	0.35	0.02 - 5.0	1.0	1.5
12	Free Residual Chlorine	mg/l	IS: 3025 (Part-26): 1986 Reaffirmed: 2019	<0.1	0.1 - 5.0	0.2	1.0
13	Nitrate as NO <sub>3</sub>	mg/l IS: 3025 (Part-34): 1986 Reaffirmed: 2019		1.0 - 70	45	No Relaxation	
14	Phenolic Compound (as C <sub>6</sub> H <sub>5</sub> OH)	olic Compound ADLA 22rd Ed. 2017, 5520 C C 0001		<0.001	0.001 - 0.005	0.001	0.002
15	Sulphate as SO <sub>4</sub>			22.0	1.0 - 500	200	400
16	Alkalinity as CaCO <sub>3</sub>	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-2320 B	280.0	2.0 - 1000	200	600
	Total Hardness as						
17	CaCO <sub>3</sub>	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-2340 C APHA 23 <sup>rd</sup> Ed. 2017-3120 B	252.0	5.0 - 800	200	600
18	Aluminium as Al	mg/l	(ICP-OES) APHA 23 <sup>rd</sup> Ed. 2017-3120 B	<0.015	0.015 - 5.0	0.03	0.2
19	Boron as B	mg/l	(ICP-OES) APHA 23 <sup>rd</sup> Ed. 2017-3120 B	<0.05	0.05 - 2.0	0.5	1.0
20	Copper as Cu	mg/l	(ICP-OES) APHA 23 <sup>rd</sup> Ed. 2017-3120 B	<0.03	0.03 - 10	0.05	1.5
21	Iron as Fe	mg/l	(ICP-OES) APHA 23 <sup>rd</sup> Ed. 2017-3120 B	0.16	0.05 - 20	0.3	No Relaxation
22	Manganese as Mn	mg/l	(ICP-OES) APHA 23 <sup>rd</sup> Ed. 2017-3120 B	0.03	0.02 - 5.0	0.1	0.3
23	Zinc as Zn	mg/l	(ICP-OES) APHA 23 <sup>rd</sup> Ed. 2017-3120 B	0.38	0.05 - 15	5	15
24	Cadmium as Cd	mg/l	(ICP-OES)	<0.05	0.05 - 2.0	0.003	No Relaxation
25	Lead as Pb	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	<0.01	0.01 - 10	0.01	No Relaxation
26	Mercury as Hg	μg/l	APHA 23 <sup>rd</sup> Ed. 2017-3112 B	<0.5	0.5 - 1000	1.0	No Relaxation
27	Nickel as Ni	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	<0.05	0.05 - 5.0	0.02	No Relaxation
28	Arsenic as As	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	<0.02	0.02 - 2	0.01	0.05
29	Total Chromium	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	<0.03	0.03 - 5.0	0.05	No Relaxation
		3.577-7.	Microbiological Para	meters	Т		
30	E. coli	MPN/ 100 ml	IS: 1622 - 1981 Reaffirmed: 2019	Absent	≥ 2 MPN Present or Absent per 100 ml	100 r	detected in any nl sample
31	T. coli	MPN/ 100 ml	IS: 1622 - 1981 Reaffirmed: 2019	Absent	≥ 2 MPN Present or Absent per 100 ml		detected in any nl sample

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**Table-3.17:** 

Sr.	Test Parameter	Ground Y Unit	water Quality Results at Borev  Protocol/Test Method	vell Within P Result	Range of testing	Indian	Standard 00: 2012
No		0 3240			/limit of detection	Desirable	Permissible
1			Physico-chemical Par	ameters	I	1	I
1	Colour	Hazen	IS: 3025 (Part-4): 1983 Reaffirmed: 2017	Reaffirmed: 2017		5	15
2	Odour	-	IS: 3025 (Part-5): 1983 Reaffirmed: 2017	Agreeable	Qualitative	Agreeable	Agreeable
3	рН	-	APHA 23 <sup>rd</sup> Ed. 2017-4500 H <sup>+</sup>	7.4	1 - 14	6.5-8.5	No Relaxation
4	Turbidity	NTU	APHA 23 <sup>rd</sup> Ed. 2017-2130 B	<2.0	2 - 40	1	5
5	Total Dissolved Solids (TDS)	mg/l	IS: 3025 (Part-16): 1984 Reaffirmed: 2017	382.4	10 - 5000	500	2000
6	Ammonia (as total ammonia-N)	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-4500-NH <sub>3</sub> F	<0.5	0.5 - 2.0	0.5	No Relaxation
7	Anionic Detergents (as MBAS)	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-5540 C	<0.05	0.05 - 0.5	0.2	1.0
8	Calcium as Ca	mg/l	IS: 3025 (Part-40): 1991 Reaffirmed: 2019	56.0	2.0 - 600	75	200
9	Magnesium as Mg	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3500 Mg, B	27.216	0.1 - 200	30	100
10	Chloride as Cl	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-4500-CI <sup>-</sup> B	24.0	2.0 - 2000	250	1000
11	Fluoride as F	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-4500 F <sup>-</sup> C	0.38	0.02 - 5.0	1.0	1.5
12	Free Residual Chlorine	mg/l	IS: 3025 (Part-26): 1986 Reaffirmed: 2019	<0.1	0.1 - 5.0	0.2	1.0
13	Nitrate as NO <sub>3</sub>	mg/l	IS: 3025 (Part-34): 1986 Reaffirmed: 2019	<1.0	1.0 - 70	45	No Relaxation
14	Phonolic Compound		APHA 23 <sup>rd</sup> Ed. 2017-5530 C	<0.001	0.001 - 0.005	0.001	0.002
15	Sulphate as SO <sub>4</sub>	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-4500- SO <sub>4</sub> <sup>2-</sup>	26.0	1.0 - 500	200	400
16	Alkalinity as CaCO <sub>3</sub>	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-2320 B	280.0	2.0 - 1000	200	600
17	Total Hardness as CaCO <sub>3</sub>	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-2340 C	252.0	5.0 - 800	200	600
18	Aluminium as Al	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	<0.015	0.015 - 5.0	0.03	0.2
19	Boron as B	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	<0.05	0.05 - 2.0	0.5	1.0
20	Copper as Cu	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	<0.03	0.03 - 10	0.05	1.5
21	Iron as Fe	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	0.13	0.05 - 20	0.3	No Relaxation
22	Manganese as Mn	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	0.03	0.02 - 5.0	0.1	0.3
23	Zinc as Zn	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	0.68	0.05 - 15	5	15
24	Cadmium as Cd	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	<0.05	0.05 - 2.0	0.003	No Relaxation
25	Lead as Pb	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	<0.01	0.01 - 10	0.01	No Relaxation
26	Mercury as Hg	μg/l	APHA 23 <sup>rd</sup> Ed. 2017-3112 B	<0.5	0.5 - 1000	1.0	No Relaxation
27	Nickel as Ni	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	<0.05	0.05 - 5.0	0.02	No Relaxation
28	Arsenic as As	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	<0.02	0.02 - 2	0.01	0.05
29	Total Chromium	mg/l	APHA 23 <sup>rd</sup> Ed. 2017-3120 B (ICP-OES)	<0.03	0.03 - 5.0	0.05	No Relaxation
			Microbiological Para	meters	T	l at	
30	E. coli	MPN/ 100 ml	IS: 1622 - 1981 Reaffirmed: 2019	Absent	≥ 2 MPN Present or Absent per 100 ml	100 n	detected in any nl sample
31	T. coli	MPN/ 100 ml	IS: 1622 - 1981 Reaffirmed: 2019	Absent	≥ 2 MPN Present or Absent per 100 ml		detected in any nl sample

EC Compliance April, 2025 to September, 2025

# 3.5 SOIL MONITORING

# 3.5.1 Soil Monitoring Locations

The objective of the soil monitoring is to identify the impacts of ongoing project activities on soil quality and also predict impacts, which have arisen due to execution of various constructions allied activities. Accordingly, a study of assessment of the soil quality has been carried out.

To assess impacts of ongoing project activities on the soil in the area, the Physico-chemical characteristics of soils were examined by obtaining soil samples from selected points and analysis of the same. Single sample of soil was collected from the project site for studying soil characteristics, the location of which is listed in **Table-3.18**.

Table-3.18:
Details of Soil Monitoring Stations

Sr. No	<b>Location Code</b>	Location name and description
1.	SQ - 1	Near Plant Premises

# 3.5.2 Methodology of Soil Monitoring

The sampling has been done in line with IS: 2720 & Methods of Soil Analysis, Part-1<sup>st</sup>, 2<sup>nd</sup> Edition, 1986 of American Society for Agronomy and Soil Science Society of America. The homogenized samples were analyzed for physical and chemical characteristics (physical, chemical and heavy metal concentrations). The soil samples were collected in the month of September on 22.09.2025.

The samples have been analyzed as per the established scientific methods for Physico-chemical parameters. The heavy metals have been analyzed by using Atomic Absorption Spectro-photometer.

# 3.5.3 Soil Monitoring Results

Single sample of soil is collected from the site to check the quality of soil of the study area. The Physico-chemical characteristics of the soil, as obtained from the analysis of the soil sample, are presented in **Table-3.19**.

EC Compliance April, 2025 to September, 2025

Table-3.19: Physico-Chemical Characteristics of Soil at near Plant Site

Sr. No.	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing / limit of detection
1	pН	-	IS: 2720 (Part - 26): 1987 Reaffirmed: 2021	7.2	1 - 14
2	Electrical Conductivity	μS/cm	IS: 14767: 2000 Reaffirmed: 2021	310.0	1 - 40000
3	Moisture Contents	%	IS: 2720 (Part - 02): 1973 Reaffirmed: 2020	3.16	1.0 - 50
4	Nitrate as N	kg/Hec	Method Manual of Soil Testing in Inda	224.2	5.0 - 500
5	Phosphorus (as P <sub>2</sub> O <sub>5</sub> )	kg/Hec	Method Manual of Soil Testing in Inda	17.4	1 - 2000
6	Potash as K <sub>2</sub> O	kg/Hec	Method Manual of Soil Testing in Inda	176.0	1.0 - 2000
7	Copper as Cu	mg/kg	Method Manual of Soil Testing in Inda	0.41	0.3 - 500
8	Zinc as Zn	mg/kg	Method Manual of Soil Testing in Inda	12.25	1.0 - 500
9	Iron as Fe	mg/kg	Method Manual of Soil Testing in Inda	142.0	5.0 - 500
10	Manganese as Mn	mg/kg	Method Manual of Soil Testing in Inda	8.6	5.0 - 500
11	Sulphur	mg/kg	IS: 14685:1999 Reaffirmed:2019	12.0	5.0 - 100

# 3.5.4 Discussion on Soil Characteristics in the Study Area

The soil in study area is characterized by moderate organic content. The soil quality in the project area has not been affected by the project activities



#### **Uttar Pradesh Pollution Control Board**

Building. No TC-12V Vibhuti Khand, Gomti Nagar, Lucknow-226010

Phone:0522-2720828,2720831, Fax:0522-2720764, Email: info@uppcb.in, Website: www.uppcb.com

Category: RED Amended Certificate Application Id: 28902819

225486/UPPCB/Moradabad(UPPCBRO)/CTO/both/SAMBHAL/2024

Date: 04/03/2025

To,

M/s

DHAMPUR BIO ORGANICS LIMITED UNIT ASMOLI DIVISION BIOFUELS AND SPIRITS

Vill - Asmoli, Distt - Sambhal, SAMBHAL, 244304

Consolidated Consent to Operate and Authorisation hereinafter referred to as the CCA (Consolidated Consent & authorization) (Fresh) 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

CCA is hereby granted to **DHAMPUR BIO ORGANICS LIMITED UNIT ASMOLI DIVISION BIOFUELS AND SPIRITS** located at **Vill - Asmoli, Distt - Sambhal,SAMBHAL,244304**. subject to the provisions of **the Water Act, Air Act** and the orders that may be made further and subject to following terms and conditions:-

1. This CCA DHAMPUR BIO ORGANICS LIMITED UNIT ASMOLI DIVISION BIOFUELS AND SPIRITS granted for the period from 01/01/2025 to 31/12/2026 and valid for manufacturing of following products.

S No	Product	Quantity	Unit
1	RS/ENA/AA ( Cane juice syrup based operation )	375	Kilo Liters/Day
2	RS/ENA/AA ( B- Heavy Molasses based operation )	350	Kilo Liters/Day
3	RS/ENA/AA ( C- Heavy Molasses based operation )	250	Kilo Liters/Day
4	DDGS	156	Metric Tonnes/Day
5	Co-generated power	8.5	Megawatt
6	RS/ENA/AA ( Grain based operation )	325	Kilo Liters/Day

- 2. Conditions under Water(Prevention and Control of Pollution) Act -1974 as amended :-
- (i) The daily quantity of effluent discharge (KLD) :-

Kind of Effluent	Quantity(KLD)	Treatment facility	Discharge point
Domestic	32 KLD	STP	Irrigation in unit premises
Industrial	ZLD	ETP	ZLD

RAM GOPAL Digitally signed by RAM GOPAL Date: 2025.03.08 13:08:26 +05'30' (ii) Trade Effluent Treatment and Disposal:-The applicant shall operate Effluent Treatment Plant consisting of primary/secondary and tertiary treatment as is required with reference to influent quantity and quality.

In case of stoppage of functioning of ETP, production has to be stopped immediately and this Board has to be intimated by fax/phone/email with a report in this regard to be dispatched immediately.

(iii) The treated effluent shall be recycled to the maximum extent and should be reused within the premises for gardening etc. Quality of the treated effluent shall meet to the following general and specific standards as prescribed under Environment (Protection) Rules, 1986 and applicable to the unit from time-to-time:

#### **Industrial Effluent Quality Standard**

S.No.	Parameter	Standard
1	pН	5.5-9.0
2	BOD	30 mg/l
3	TSS	100 mg/l
4	COD	250 mg/l
5	Quantity of Discharge	ZLD

- (iv) Sewage Treatment and Disposal: The applicant shall provide comprehensive STP as is required with reference to influent quantity and quality. In case of stoppage of functioning of STP, production has to be stopped immediately and this Board has to be intimated by fax/phone/email with a report in this regard to be dispatched immediately.
- (v) The treated sewage shall be reused in gardening as far as possible. The STP shall be maintained continuously so as to achieve the quality of the treated sewage to the following standards.

S No.	Parameters	Standards
1	рН	6.5 to 9
2	BOD (mg/L)	30
3	TSS (mg/L)	100
4	Fecal Coliform (MPN/100ml)	1000

## 3. Conditions under Air (Prevention and Control of Pollution) Act -1981 as amended :-

i) The applicant shall use following fuel and install a comprehensive control system consisting of control equipment as required with reference to generation of emissions and operate and maintain the same continuously so as to achieve the level of pollutants to the following standards.

#### **Air Pollution Source Details**

S No.	Air Pollution Source	Type of fuel	Stack no	Control Device	Height of Stack
1	Slop boiler 45 TPH	Spent wash and bagasses	01	Particulate Matter	Equipped with ESP and stack height of 77 meter from ground level.
2	Slop boiler 35 TPH	Spent wash and bagasses	02	Particulate Matter	Equipped with Bag filter and stack height of 70 meter from ground level.

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# **Emmission Quality Standards**

S No.	Stack no	Parameters	Standards	
1	02	Particulate Matter	50 mg/NM3	
2	01	Particulate Matter	50 mg/NM3	

In case of stoppage of functioning of air pollution control equipment, production has to be stopped immediately and this Board has to be intimated by fax/phone/email with a report in this regard to be dispatched immediately

- (ii) The unit will not use any type of restricted fuel.
- iii) Noise from the D.G. Set and other source(s) should be controlled by providing an acoustic enclosure as is required for meeting the ambient noise standards for night and day time as prescribed for respective areas/zones (Industrial, Commercial, Residential, Silence) which are as follows:-

Day time: from 6.00 a.m. to 10.00 p.m., Night time: from 10.00 p.m. to 6.00 a.m.

Standards for Noise level in db(A) Leq	Industrial Area		Commercial Area		Residential Area		Silence Zone	
	Day Time	Night Time	Day Time	Night Time	Day Time	Night Time		Night Time
	75	70	65	55	55	45	50	40

# 4. Essential documents to be submitted by the Industry/Unit as Applicable :-

- (i) Environment Statement in Form-V of Environment (Protection) Rules, 1986.
- (ii) Quarterly compliance report of the CCA, photograph of ETP/APCs/Waste Storage Area.
- 5. Competent Authority reserves the right to change/modify/add any time any condition of this CCA.
- 6. Unit has to comply with the following specific & general conditions. Non compliance of any provision of this CCA and provisions of the Water Act, Air Act and Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 will results in legal action under the aforesaid Acts and Rules.
- 7. In compliance to the G.O 1011/81-7-2021-09 (Writ)/2016 dated.13.10.2021 issued by Department of Environment, Forest and Climate Change, Uttar Pradesh. You are directed to develop Miyawaki Forest as per the SOP available at URL:-http://www.upecp.in/TrainingSession.aspx for ensuring timely compliance of this direction, you are hereby directed to submit a bank guarantee with minimum validity of one year of the amount equivalent to the sum of initial consent fees (Air and Water) or Rs. 50,000/- (Rs. Fifty Thousand Only) whichever is more, within 30 days from the date of issuance of this certificate. In case of noncompliance of this direction, your consent will be revoked by the Board.
- 8. If the unit uses the ground water and requires the permission from SGWA/CGWA for water abstraction then the industry will have to obtain No objection certificate for abstraction of ground water. It will be the responsibility of the industry to comply with the various conditions of the NOC obtained from the competent authority and submit to the Board, within 3 months time failing which CTO will be revoked.

## **General Conditions:-**

- 1. The applicant shall get analysed the samples of effluent/emission/hazardous wastes at least once in a three month from the laboratory recognized by the MoEF and shall report to the UPPCB.
- 2. 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.
- 3. Treated Industial 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.

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- 4. The applicant shall strictly comply with conditions of this CCA and submit compliance report of stipulated conditions within 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.
- 5. The applicant shall maintain good house keeping. All valves/pipes/sewer/drains etc. must be leak-proof
- 6. The industry shall provide uninterrupted entry to the STP/ETP inlet and outlet points, Air Pollution Control equipment and stack for smooth sampling/monitoring of efficiency of pollution control systems.
- 7. The industry shall provide Inspection Book at the time of inspection to the Board's officials.
- 8. 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.
- 9. The industry shall operate in a manner so that all emissions be emitted through designated chimney/stack only.
- 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 condition issued along with CCA, as may be necessary.

## **Specific Conditions:-**

- 1- This consent to operate is valid for production of RS/ENA/AA- 375 KLD ( Cane juice syrup based operation ), RS/ENA/AA- 325 KLD (Grain based operation ), RS/ENA/AA- 350 KLD ( B- Heavy Molasses based operation ), RS/ENA/AA- 250 KLD (C-Heavy Molasses based operation), Co-generation power plant 8.5 MW and DDGS -156 TPD .
- 2- Spent wash shall be concentrated in MEE's and concentrated spent wash shall be incinerated through 02 slop boiler of 45 TPH and 35 TPH and bio composting is not allowed.
- 3- Domestic effluent of 32 KLD shall be treated through STP and treated effluent is used in irrigation in the premises.
- 4- Unit Shall restrict lined storage capacity to 07 days of spent wash generation.
- 5- Unit shall identify recipient drains/ rivulets and their u/s & d/s location in consultation with UPPCB and shall carry out monthly monitoring of identified recipient drains at u/s & d/s location through lab recognized under Environment (Protection) Act,1986 and shall submit the analysis report on monthly basis by 10th of every month to CPCB and UPPCB.
- 6- Unit must strictly maintain zero liquid discharge of effluent outside premises into drain/river/water body and on land.
- 7- Unit shall operate and maintain mass flow meter at inlet and outlet of MEE and web camera and shall ensure on line connectivity of flow meter and web camera with server of CPCB and UPPCB.
- 8- Unit shall develop Green Belt in minimum 33 percent area of Industrial Premises as per the provisions laid down in office order no. H16405/220/2018/02 dated 16-02-2018 of U.P. Pollution Control Board. The copy of said office order is available on the website of U.P. Pollution Control Board www.uppcb.com.
- 9- Process effluent / any waste water shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.
- 10- The overall noise levels in and around area shall be kept well within the standards by providing noise providing noise by RAM

control measures including acoustic hoods, silencers, enclosures etc, on all sources of noise generation. The ambient noise level shall confirm to the standards under the Environment (Protection) Act 1986.

- 11- Unit shall comply the provisions of Hazardous and Other Waste (Management and Transboundary Movement) Rules 2016 and shall obtain authorization for disposal of hazardous waste.
- 12- Unit shall comply the provisions of Water (Prevention and Control of Pollution) Act 1974 as Amended and Environment (Protection) Act 1986, and direction issued by Hon'ble National Green Tribunal, New Delhi in Order dated 13.07.2017 in OA no. 200/2014, M.C. Mehta v/s Union of India.
- 13- Unit shall maintain and operate Air pollution control system i. e. Electrostatic Precipitator and stack height of 77 meter at the Slop Boiler of 45TPH regularly and ensure that stack emissions are within the prescribed norms.
- 14- Unit shall maintain and operate Air pollution control system i. e. Bag Filter and stack height of 70 meter at the Slop Boiler of 35TPH regularly and ensure that stack emissions are within the prescribed norms.
- 15- Unit shall operate and maintain the online emission monitoring system installed at the stack of slop boiler and shall ensure on line connectivity of flow meter and web camera with server of CPCB and UPPCB.
- 16- Unit shall ensure that ambient air quality of nearby areas is not adversely affected due to operation and emissions of the unit
- 17- Unit shall submit the ambient air quality report and stack report of the air pollution sources from laboratory authorized from MOEF & CC on quarterly basis.
- 18- Unit shall submit the ambient noise monitoring report of the premises and noise monitoring report of the sources such as boiler, DG set etc. done by laboratory authorized from MOEF & CC in every 3 months.
- 19- 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 water regime during rainy seasone by flowing along with storm water. Direct exposure of workers to fly ash & dust shall be avoided.
- 20- Unit shall submit ground water quality monitoring report done by MoEF & CC approved laboratory within 3 months.
- 21- This Consent order shall automatically become invalid on issuance of Closure Order by C.P.C.B / UPPCB and further on Revoking of Closure order, the Consent order shall become valid.

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Chief Environmental Officer

Copy to:

Regional Officer Moradabad to ensure compliance of the conditions imposed in the consent order.

RAM **GOPAL** 

Digitally signed by RAM GOPAL Date: 2025.03.08 Chief Environmental Officer



# मिशन LiFE - पर्यावरण के लिए जीवन शैली

# (Lifestyle For Environment ) जनसहभागिता का सन्देश



- स्वच्छता देशसेवा में अपने परिवेश की स्वच्छता हेतु अपना सक्रिय योगदान सुनिश्चित करें
- संकल्प लें -एकल उपयोग प्लास्टिक उत्पाद जैसे कप, तश्तरी, चम्मच, स्ट्रॉ, ईयरबड्स आदि का उपयोग न हो एवं पर्यावरण अनुकूल विकल्पों जैसे कागज/पत्तों से बने दोने या कटलरी को प्राथमिकता दी जाय |
- एकल उपयोग प्लास्टिक उत्पाद के प्रयोग को रोकने एवं प्लास्टिक बैग के बजाय कपड़े के थैले का उपयोग करने मात्र से 375 मिलियन टन ठोस (प्लास्टिक) कचरे का उत्सर्जन बचाया जा सकता है
- चक्रीय अर्थव्यवस्था (सर्कुलर इकोनॉमी) का समुचित कार्यान्वयन वर्ष 2030 तक लगभग 14 लाख करोड़ रुपये की अतिरिक्त बचत उत्पन्न कर सकता है | वेस्ट /अपशिष्ट फेकने के पूर्व सोचें, ये किसी का संसाधन तो नहीं ...?
- अनुपयोगी इलेक्ट्रिक / इलेक्ट्रॉनिक उत्पाद को कचरे में फेकने से रुकें | इसके उपयुक्त निस्तारण हेतु इसे प्राधिकृत ई वेस्ट रीसाइकलर को दें | प्राधिकृत ई-रीसाइक्लिंग इकाई में अनुपयोगी इलेक्ट्रिक / इलेक्ट्रॉनिक उत्पाद को देने मात्र से 0.75 मिलियन टन तक ई-कचरे का पुनर्चक्रण किया जा सकता है एवं ई-कचरे के विषम पर्यावरणीय दुष्प्रभाव से बचा जा सकता है
- बाहर जाते समय सोचें कि क्या आपको वास्तव में परिवहन की आवश्यकता है वह भी क्या व्यक्तिगत रूप से ?
   छोटी दूरी के लिए पैदल चलना पसंद करें, अथवा सम्भव हो तो कार पूल के रूप में संसाधन को साझा करें अथवा सार्वजनिक परिवहन पर विचार करें
- घरेलू स्तर पर कम से कम ठोस अपशिष्ट का उत्सर्जन करें और इनका प्र्थाक्कीकरण करें
- उपयोगी शेष खाद्य सामग्री आपके स्वयं प्रयास अथवा निकटस्थ सिक्रय स्वयं सेवी संस्थाओं की सहायता से समाज के वंचित वर्ग तक पहुंचाई जा सकती है | वहीं अनुपयोगी भोजन /खाद्य सामग्री को कंपोस्ट (वर्मी कम्पोस्ट) करने से 15 अरब टन भोजन को नष्ट होने से बचाया जा सकता है
- ध्यान रखें उपयुक्त नल और शावर के उपयोग से पानी की खपत को 30 40% तक कम किया जा सकता है। एवं उपयोग में न होने पर नलों को बंद रखने मात्र से 9 ट्रिलियन लीटर पानी बचाया जा सकता है
- ट्रैफिक लाइट/रेलवे क्रॉसिंग पर कार/स्क्टर के इंजन बंद करने मात्र से 22.5 बिलियन kWh तक ऊर्जा की बचत हो सकती है
- परम्परागत बल्ब के स्थान पर CFL का उपयोग बिजली की खपत में प्रभावी कमी लाते हैं | उपयोग में न होने पर बिजली उपकरणों को बंद करें | स्टार रेटेड विद्युत उपकरणों के उपयोग को प्राथमिकता दें

हमारे द्वारा अपनी जीवन शैली की प्राथमिकताओं का उचित और पर्यावरण अनुकूल पुनर्निर्धारण समाज और पर्यावरण के प्रति हमारा दायित्व है |



#### **Uttar Pradesh Pollution Control Board**

Building. No TC-12V Vibhuti Khand, Gomti Nagar, Lucknow-226010

Phone:0522-2720828,2720831, Fax:0522-2720764, Email: info@uppcb.in, Website: www.uppcb.com

Category: RED Application Id: 28902819

225486/UPPCB/Moradabad(UPPCBRO)/CTO/both/SAMBHAL/2024

Date: 23/12/2024

To,

M/s

DHAMPUR BIO ORGANICS LIMITED UNIT ASMOLI DIVISION BIOFUELS AND SPIRITS

Vill - Asmoli, Distt - Sambhal, SAMBHAL, 244304

Consolidated Consent to Operate and Authorisation hereinafter referred to as the CCA (Consolidated Consent & authorization) (Fresh) 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

CCA is hereby granted to **DHAMPUR BIO ORGANICS LIMITED UNIT ASMOLI DIVISION BIOFUELS AND SPIRITS** located at **Vill - Asmoli, Distt - Sambhal,SAMBHAL,244304**. subject to the provisions of **the Water Act, Air Act** and the orders that may be made further and subject to following terms and conditions:-

1. This CCA DHAMPUR BIO ORGANICS LIMITED UNIT ASMOLI DIVISION BIOFUELS AND SPIRITS granted for the period from 01/01/2025 to 31/12/2026 and valid for manufacturing of following products.

S No	Product	Quantity	Unit
1	RS/ENA/AA ( Cane juice syrup based operation )	375	Kilo Liters/Day
2	RS/ENA/AA ( Garin based operation )	375	Kilo Liters/Day
3	RS/ENA/AA ( B- Heavy Molasses based operation )	350	Kilo Liters/Day
4	RS/ENA/AA ( C- Heavy Molasses based operation )	250	Kilo Liters/Day
5	DDGS	156	Metric Tonnes/Day
6	Co-generated power	8.5	Megawatt

- 2. Conditions under Water(Prevention and Control of Pollution) Act -1974 as amended :-
- (i) The daily quantity of effluent discharge (KLD):-

Kind of Effluent	Quantity(KLD)	Treatment facility	Discharge point
Domestic	32 KLD	STP	Irrigation in unit premises
Industrial	ZLD	Septic Tank	ZLD

(ii) Trade Effluent Treatment and Disposal:-The applicant shall operate Effluent Treatment Plant consisting of primary/secondary and tertiary treatment as is required with reference to influent quantity and quality.

In case of stoppage of functioning of ETP, production has to be stopped immediately and this Board has to be intimated by fax/phone/email with a report in this regard to be dispatched immediately.

(iii) The treated effluent shall be recycled to the maximum extent and should be reused within the premises for gardening etc. Quality of the treated effluent shall meet to the following general and specific standards as prescribed under Environment (Protection) Rules, 1986 and applicable to the unit from time-to-time:

#### **Industrial Effluent Quality Standard**

S.No.	Parameter	Standard
1	рН	5.5-9.0
2	2 BOD :	
3	TSS	100 mg/l
4	COD	250 mg/l
5	Quantity of Discharge	ZLD

- (iv) Sewage Treatment and Disposal :- The applicant shall provide comprehensive STP as is required with reference to influent quantity and quality. In case of stoppage of functioning of STP, production has to be stopped immediately and this Board has to be intimated by fax/phone/email with a report in this regard to be dispatched immediately.
- (v) The treated sewage shall be reused in gardening as far as possible. The STP shall be maintained continuously so as to achieve the quality of the treated sewage to the following standards.

S No.	Parameters	Standards
1	рН	6.5 to 9
2	BOD (mg/L)	30
3	TSS (mg/L)	100
4	Fecal Coliform (MPN/100ml)	1000

#### 3. Conditions under Air (Prevention and Control of Pollution) Act -1981 as amended :-

i) The applicant shall use following fuel and install a comprehensive control system consisting of control equipment as required with reference to generation of emissions and operate and maintain the same continuously so as to achieve the level of pollutants to the following standards.

#### **Air Pollution Source Details**

S No.	Air Pollution Source	Type of fuel	Stack no	Control Device	Height of Stack
1	Slop boiler 45 TPH	Spent wash and bagasses	01	Particulate Matter	Equipped with ESP and stack height of 77 meter from ground level.
2	Slop boiler 35 TPH	Spent wash and bagasses	02	Particulate Matter	Equipped with Bag filter and stack height of 70 meter from ground level.

#### **Emmission Quality Standards**

S No.	Stack no Parameter		Standards
1	01	Particulate Matter	150 mg/Nm3
2	02	Particulate Matter	150 mg/Nm3

In case of stoppage of functioning of air pollution control equipment, production has to be stopped immediately and this Board has to be intimated by fax/phone/email with a report in this regard to be dispatched immediately

- (ii) The unit will not use any type of restricted fuel.
- iii) Noise from the D.G. Set and other source(s) should be controlled by providing an acoustic enclosure as is required for meeting the ambient noise standards for night and day time as prescribed for respective areas/zones (Industrial, Commercial, Residential, Silence) which are as follows:-

Day time: from 6.00 a.m. to 10.00 p.m., Night time: from 10.00 p.m. to 6.00 a.m.

Standards for Noise level in db(A) Leq	Industrial Area		Commercial Area		Residential Area		Silence Zone	
	Day Time	Night Time	Day Time	Night Time		Night Time	_	Night Time
	75	70	65	55	55	45	50	40

### 4. Essential documents to be submitted by the Industry/Unit as Applicable :-

- (i) Environment Statement in Form-V of Environment (Protection) Rules, 1986.
- (ii) Quarterly compliance report of the CCA, photograph of ETP/APCs/Waste Storage Area.
- 5. Competent Authority reserves the right to change/modify/add any time any condition of this CCA.
- 6. Unit has to comply with the following specific & general conditions. Non compliance of any provision of this CCA and provisions of the Water Act, Air Act and Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 will results in legal action under the aforesaid Acts and Rules.
- 7. In compliance to the G.O 1011/81-7-2021-09 (Writ)/2016 dated.13.10.2021 issued by Department of Environment, Forest and Climate Change, Uttar Pradesh. You are directed to develop Miyawaki Forest as per the SOP available at URL:-http://www.upecp.in/TrainingSession.aspx for ensuring timely compliance of this direction, you are hereby directed to submit a bank guarantee with minimum validity of one year of the amount equivalent to the sum of initial consent fees (Air and Water) or Rs. 50,000/- (Rs. Fifty Thousand Only) whichever is more, within 30 days from the date of issuance of this certificate. In case of noncompliance of this direction, your consent will be revoked by the Board.
- 8. If the unit uses the ground water and requires the permission from SGWA/CGWA for water abstraction then the industry will have to obtain No objection certificate for abstraction of ground water. It will be the responsibility of the industry to comply with the various conditions of the NOC obtained from the competent authority and submit to the Board, within 3 months time failing which CTO will be revoked.

#### **General Conditions:-**

- 1. The applicant shall get analysed the samples of effluent/emission/hazardous wastes at least once in a three month from the laboratory recognized by the MoEF and shall report to the UPPCB.
- 2. 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.
- 3. Treated Industial 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.

- 4. The applicant shall strictly comply with conditions of this CCA and submit compliance report of stipulated conditions within 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.
- 5. The applicant shall maintain good house keeping. All valves/pipes/sewer/drains etc. must be leak-proof
- 6. The industry shall provide uninterrupted entry to the STP/ETP inlet and outlet points, Air Pollution Control equipment and stack for smooth sampling/monitoring of efficiency of pollution control systems.
- 7. The industry shall provide Inspection Book at the time of inspection to the Board's officials.
- 8. 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.
- 9. The industry shall operate in a manner so that all emissions be emitted through designated chimney/stack only.
- 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 condition issued along with CCA, as may be necessary.

#### **Specific Conditions:-**

- 1- This consent to operate is valid for production of RS/ENA/AA- 375 KLD ( Cane juice syrup based operation ), RS/ENA/AA- 375 KLD (Grain based operation ), RS/ENA/AA- 350 KLD ( B- Heavy Molasses based operation ), RS/ENA/AA- 250 KLD (C-Heavy Molasses based operation), Co-generation power plant 8.5 MW and DDGS -156 TPD .
- 2- Spent wash shall be concentrated in MEE's and concentrated spent wash shall be incinerated through 02 slop boiler of 45 TPH and 35 TPH and bio composting is not allowed.
- 3- Domestic effluent of 32 KLD shall be treated through STP and treated effluent is used in irrigation in the premises.
- 4- Unit Shall restrict lined storage capacity to 07 days of spent wash generation.
- 5- Unit shall identify recipient drains/ rivulets and their u/s & d/s location in consultation with UPPCB and shall carry out monthly monitoring of identified recipient drains at u/s & d/s location through lab recognized under Environment (Protection) Act,1986 and shall submit the analysis report on monthly basis by 10th of every month to CPCB and UPPCB.
- 6- Unit must strictly maintain zero liquid discharge of effluent outside premises into drain/river/water body and on land.
- 7- Unit shall operate and maintain mass flow meter at inlet and outlet of MEE and web camera and shall ensure on line connectivity of flow meter and web camera with server of CPCB and UPPCB.
- 8- Unit shall develop Green Belt in minimum 33 percent area of Industrial Premises as per the provisions laid down in office order no. H16405/220/2018/02 dated 16-02-2018 of U.P. Pollution Control Board. The copy of said office order is available on the website of U.P. Pollution Control Board www.uppcb.com.
- 9- Process effluent / any waste water shall not be allowed to mix with storm water. Storm water drain shall be passed through guard pond.
- 10- The overall noise levels in and around area shall be kept well within the standards by providing noise

control measures including acoustic hoods, silencers, enclosures etc, on all sources of noise generation. The ambient noise level shall confirm to the standards under the Environment (Protection) Act 1986.

- 11- Unit shall comply the provisions of Hazardous and Other Waste (Management and Transboundary Movement) Rules 2016 and shall obtain authorization for disposal of hazardous waste.
- 12- Unit shall comply the provisions of Water (Prevention and Control of Pollution) Act 1974 as Amended and Environment (Protection) Act 1986, and direction issued by Hon'ble National Green Tribunal, New Delhi in Order dated 13.07.2017 in OA no. 200/2014, M.C. Mehta v/s Union of India.
- 13- Unit shall maintain and operate Air pollution control system i. e. Electrostatic Precipitator and stack height of 77 meter at the Slop Boiler of 45TPH regularly and ensure that stack emissions are within the prescribed norms.
- 14- Unit shall maintain and operate Air pollution control system i. e. Bag Filter and stack height of 70 meter at the Slop Boiler of 35TPH regularly and ensure that stack emissions are within the prescribed norms.
- 15- Unit shall operate and maintain the online emission monitoring system installed at the stack of slop boiler and shall ensure on line connectivity of flow meter and web camera with server of CPCB and UPPCB.
- 16- Unit shall ensure that ambient air quality of nearby areas is not adversely affected due to operation and emissions of the unit
- 17- Unit shall submit the ambient air quality report and stack report of the air pollution sources from laboratory authorized from MOEF & CC on quarterly basis.
- 18- Unit shall submit the ambient noise monitoring report of the premises and noise monitoring report of the sources such as boiler, DG set etc. done by laboratory authorized from MOEF & CC in every 3 months.
- 19- 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 water regime during rainy seasone by flowing along with storm water. Direct exposure of workers to fly ash & dust shall be avoided.
- 20- Unit shall submit ground water quality monitoring report done by MoEF & CC approved laboratory within 3 months.
- 21- This Consent order shall automatically become invalid on issuance of Closure Order by C.P.C.B / UPPCB and further on Revoking of Closure order, the Consent order shall become valid.

RAM GOPAL Digitally signed by RAM GOPAL Date: 2024.12.30 16:44:16 +05'30'

**Chief Environmental Officer** 

Copy to:

Regional Officer Moradabad to ensure compliance of the conditions imposed in the consent order.

RAM GOPAL Digitally signed by RAM GOPAL Date: 2024,12.30 16:44:26 +05'30'

**Chief Environmental Officer** 



## मिशन LiFE - पर्यावरण के लिए जीवन शैली

## (Lifestyle For Environment ) जनसहभागिता का सन्देश



- स्वच्छता देशसेवा में अपने परिवेश की स्वच्छता हेतु अपना सक्रिय योगदान सुनिश्चित करें
- संकल्प लें -एकल उपयोग प्लास्टिक उत्पाद जैसे कप, तश्तरी, चम्मच, स्ट्रॉ, ईयरबड्स आदि का उपयोग न हो एवं पर्यावरण अनुकूल विकल्पों जैसे कागज/पत्तों से बने दोने या कटलरी को प्राथमिकता दी जाय |
- एकल उपयोग प्लास्टिक उत्पाद के प्रयोग को रोकने एवं प्लास्टिक बैग के बजाय कपड़े के थैले का उपयोग करने मात्र से 375 मिलियन टन ठोस (प्लास्टिक) कचरे का उत्सर्जन बचाया जा सकता है
- चक्रीय अर्थव्यवस्था (सर्कुलर इकोनॉमी) का समुचित कार्यान्वयन वर्ष 2030 तक लगभग 14 लाख करोड़ रुपये की अतिरिक्त बचत उत्पन्न कर सकता है | वेस्ट /अपशिष्ट फेकने के पूर्व सोचें, ये किसी का संसाधन तो नहीं ...?
- अनुपयोगी इलेक्ट्रिक / इलेक्ट्रॉनिक उत्पाद को कचरे में फेकने से रुकें | इसके उपयुक्त निस्तारण हेतु इसे प्राधिकृत ई वेस्ट रीसाइकलर को दें | प्राधिकृत ई-रीसाइक्लिंग इकाई में अनुपयोगी इलेक्ट्रिक / इलेक्ट्रॉनिक उत्पाद को देने मात्र से 0.75 मिलियन टन तक ई-कचरे का पुनर्चक्रण किया जा सकता है एवं ई-कचरे के विषम पर्यावरणीय दुष्प्रभाव से बचा जा सकता है
- बाहर जाते समय सोचें कि क्या आपको वास्तव में परिवहन की आवश्यकता है वह भी क्या व्यक्तिगत रूप से ?
   छोटी दूरी के लिए पैदल चलना पसंद करें, अथवा सम्भव हो तो कार पूल के रूप में संसाधन को साझा करें अथवा सार्वजनिक परिवहन पर विचार करें
- घरेलू स्तर पर कम से कम ठोस अपशिष्ट का उत्सर्जन करें और इनका प्र्थाक्कीकरण करें
- उपयोगी शेष खाद्य सामग्री आपके स्वयं प्रयास अथवा निकटस्थ सक्रिय स्वयं सेवी संस्थाओं की सहायता से समाज के वंचित वर्ग तक पहुंचाई जा सकती है | वहीं अनुपयोगी भोजन /खाद्य सामग्री को कंपोस्ट (वर्मी कम्पोस्ट) करने से 15 अरब टन भोजन को नष्ट होने से बचाया जा सकता है
- ध्यान रखें उपयुक्त नल और शावर के उपयोग से पानी की खपत को 30 40% तक कम किया जा सकता है। एवं उपयोग में न होने पर नलों को बंद रखने मात्र से 9 ट्रिलियन लीटर पानी बचाया जा सकता है
- ट्रैफिक लाइट/रेलवे क्रॉसिंग पर कार/स्कूटर के इंजन बंद करने मात्र से 22.5 बिलियन kWh तक ऊर्जा की बचत हो सकती है
- परम्परागत बल्ब के स्थान पर CFL का उपयोग बिजली की खपत में प्रभावी कमी लाते हैं | उपयोग में न होने पर बिजली उपकरणों को बंद करें | स्टार रेटेड विद्युत उपकरणों के उपयोग को प्राथमिकता दें

हमारे द्वारा अपनी जीवन शैली की प्राथमिकताओं का उचित और पर्यावरण अनुकूल पुनर्निर्धारण समाज और पर्यावरण के प्रति हमारा दायित्व है |



## UTTAR PRADESH POLLUTION CONTROL BOARD

#### Building. No TC-12V Vibhuti Khand, Gomti Nagar, Lucknow-226010

Phone:0522-2720828,2720831, Fax:0522-2720764, Email: info@uppcb.com, Website: www.uppcb.com

#### Ref No. - 177/UPHOC7/EIA/SAMBHAL/2023

Dated: 06/01/2023

To,

Shri JAGVEER SINGH

M/s DHAMPUR BIO ORGANICS LIMITED UNIT ASMOLI DIVISION BIOFUELS AND

**SPIRITS** 

Vill - Asmoli, Distt - Sambhal, SAMBHAL, 244304

**SAMBHAL** 

Sub:

Certificate of "No Increase in Pollution Load" in compliance of notification issued by Ministry of Environment Forest & Climate Change, Government of India, vide its notification no. S.O. 980(E) 2nd March, 2021

Sir.

Kindly refer to the application dt 05/01/2023 related to sector Distillery for obtaining "No Increase in Pollution Load Certificate" in compliance of notification issued by Ministry of Environment Forest & Climate Change, Government of India, vide its notification no. S.O. 980(E) 2nd March, 2021.

That Ministry of Environment Forest & Climate Change, Government of India, vide its notification no. S.O. 980(E) 2nd March, 2021 exempted the requirement for prior Environmental Clearance for cases of change in raw material mix without change in the quantity and pollution load as prescribed in the Environmental clearance of the project. The said provisions made in notification dated 2nd March, 2021 are as below

Existing projects (having Prior Environmental Clearance) with no increase in pollution loads: Any increase in production capacity in respect of processing or production or manufacturing sectors (listed against item numbers 2, 3, 4 and 5 in the Schedule to this notification) with or without any change in (i) raw material-mix or (ii) quantities within products or (iii) number of products including new products falling in the same category or (iv) configuration of the plant or process or operations in existing area or in area contiguous to the existing area (for which prior environmental clearance has been granted) shall be exempt from the requirement of Prior Environmental Clearance provided that there is no increase in pollution load (derived on the basis of such Prior Environmental Clearance)

In compliance of the provisions of the notification no. S.O. 980(E) 2nd March, 2021, the applicant has submitted the the following documents

- 1. "No Increase In Pollution Load" certificate from the Environmental Auditor or reputed institutions empanelled by the State Pollution Control Board or Pollution Control Committee or Central Pollution Control Board or Ministry of Environment, Forest and Climate Change
- 2. Last Consent to Operate certificate for the project or activity.
- 3. Online system generated acknowledgement of uploading of intimation and "No Increase In Pollution Load" certificate on PARIVESH Portal
- 4. Scan Copy of form only submitted for "No Increase In Pollution Load" certificate on PARIVESH Portal

After the examination of the documents submitted by the applicant "No Increase in Pollution Load Certificate" is hereby issued with the following observation and conditions with the approval of competent authority

**Obervation and Conditions** 

- I. The Project under consideration is for addition of alternative feedstock as B Heavy Molasses / Cane Juice Syrup along with Molasses with increase in production capacity i.e. 350 KLD on B Heavy Molasses based operation or 375 KLD on Cane Juice Syrup based operation by the Distillery Unit M/s Dhampur Bio Organics Limited, Unit Asmoli, Division Biofuels & Spirits (formerly known as DSM Asmoli, Distillery Division (A Unit of Dhampur Sugar Mills Limited)).
- II. Unit installed CPU of capacity 4500 cubic meter/day along with Reverse Osmosis System to enable recycling of MEE condensate, boiler blow down etc in order to fulfil the needs of fresh water.
- III. The raw material consumption will reduce by 23 TPD against 40 % increase of production capacity as B-Heavy molasses and reduce by 36 TPD against the 50 % increase in production capacity as Cane Juice Syrup has higher sugar percentage.
- IV. Unit already installed CPU of capacity 4500 cubic meter/day along with Reverse Osmosis System to enable recycling of MEE condensate, boiler blow down etc in order to fulfil the needs of fresh water.
- V. Fresh water requirement will be reduced by 83 KLD during B Heavy molasses-based operation and reduced by 133 KLD during Cane Juice Syrup based operation.
- VI. Pollutant load like BOD, COD, TDS and TSS in effluent will be reduced during B Heavy Molasses / Cane Juice based operation.
- VII. Total BOD load during C-Heavy Molasses based operation is 234000 kg/day, which will be reduced to 181944 kg / day during B-Heavy Molasses based operation and reduced to 177840 kg / day during Cane Juice Syrup based operation.
- VIII. Total COD load during C-Heavy Molasses based operation is 390000 kg/day, which will be reduced to 303240 kg / day during B-Heavy Molasses based operation and reduced to 296400 kg / day during Cane Juice Syrup based operation.
- IX. Total TDS load during C-Heavy Molasses based operation is 260000 kg/day, which will be reduced to 214562 kg / day during B-Heavy Molasses based operation and reduced to 209723 kg / day during Cane Juice Syrup based operation.
- X. Total TSS load during C-Heavy Molasses based operation is 24000 kg/day, which will be reduced to 19651 kg / day during B-Heavy Molasses based operation and reduced to 19208 kg / day during Cane Juice Syrup based operation.
- XI. Total generation of fly ash shall be reduced by 38.32 TPD during B-heavy molasses based operation and will be reduced by 8.38 TPD during Cane Juice based operation.
- XII. Concentrated spent wash generation will be reduced during B heavy Molasses based by 247 TPD and 473 TPD during Cane Juice syrup based operation.
- XIII. There shall not be any incremental rise with respect to air pollution in view of the fact that Air Pollution Control System (Bag filter & ESP) shall keep particulate matter below 50 mg/Nm3 during Grain based operation.
- XIV. Total emission load from the stack will be reduced with reduction in Slop quantity during B-Heavy Molasses and Cane Juice syrup based operations. Slop is having more solid and sulphur content in comparison to Bagasse.
- XV. Total PM Load during C-Heavy Molasses based operation is 191.85 kg/day which will be reduced to 183.20 kg/day during B-Heavy Molasses and 162.2 kg/day during Cane Juice syrup based operation.
- XVI. Total SO2 Load during C-Heavy Molasses based operation is 282.01 kg/day which will be reduced to 212.50 kg/day during B-Heavy Molasses and 205.8 kg/day during Cane Juice syrup based operation.
- XVII. Total NO2 Load during C-Heavy Molasses based operation is 363.53 kg/day which will be reduced to 331.42 kg/day during B-Heavy Molasses and 310.0 kg/day during Cane Juice syrup based operation.
- XVIII. Unit already adopted Concentration followed by Incineration technology to achieve Zero Liquid Discharge and same will be done for B- heavy Molasses / Cane Juice Syrup based operation. Thus resulting in no increment with respect to water pollution. Hence, in view of the above facts, the UPPCB is of the view that the project of Ethanol Capacity Expansion proposed by M/s Dhampur Bio Organics Limited, Unit Asmoli, Division Biofuels & Spirits (formerly known as DSM Asmoli, Distillery Division (A Unit of Dhampur Sugar Mills Limited)), at village Asmoli, Tehsil Sambhal & District Sambhal, Uttar Pradesh due to use of alternative feed stock B-heavy Molasses or Cane Juice Syrup as raw material shall result in "No Increase in Pollution Load", hence the project is recommended subject to the condition that the project is implemented strictly in accordance with the Technical details submitted by the proponent before the Board.
- The Project Proponent shall ensure strict compliance of the following conditions:
- 1. Due to change in raw material from C-Heavy molasses to B-Heavy molasses or Cane Juice Syrup expansion of Ethanol / ENA / Rectified Spirit production capacity expansion from 250 KLD to 350 KLD (on feedstock: B Heavy Molasses) or 375 KLD (on feedstock: Cane Juice Syrup) shall result

in No Increase in Pollution load subject to the condition that the project is implemented strictly in accordance with the technical details submitted by the Project Proponent in the Board.

- 2. The Project Proponent shall submit the validation report for 375 KLD Ethanol production from any reputed Institute such as NSI, Kanpur/VSI, Pune/any IIT within 03 months after starting B-Heavy molasses / Cane Juice Syrup based operation. If the validation report carried out by any reputed institute is same as claim made by the unit then SPCB may further allow to operate as per proposal of the unit.
- 3. The unit shall restrict the spent wash storage capacity to 07 days only (B-Heavy molasses).
- 4. The unit should submit monthly data of following to UPPCB:
- a. Fresh water consumption
- b. Ethanol Production
- c. Spent wash generation
- d. Slop generation
- e. Condensate generation
- f. Feed quantity of slop into incinerator
- g. Yeast sludge generation
- h. Quantity of Spent lees generation, recycle/reuse and treatment in CPU
- i. Quantity of effluent received into CPU, details of reuse/recycle etc.
- j. Steam generation, fuel consumption
- 5. The unit shall ensure to obtain fresh consent (Water and Air) under the provision of Water (Prevention and control of Pollution) Act, 1974 and Air (Prevention and control of Pollution) Act, 1981 for the proposed production of 350 KLD (B Heavy Molasses based operation) or 375 KLD (Cane Juice Syrup based operation) Alcohol from UPPCB before starting production of Alcohol based on B-Heavy molasses / Cane Juice Syrup.

**Chief Environmental Officer** 

Circle-7

## Copy

Regional Officer Moradabad to ensure the compliance of the conditions imposed in the consent order.

Chief Environmental Officer Circle-7

### F. No.J-11011/224/2007-IA II(I)

Government of India
Ministry of Environment, Forest and Climate Change
(IA-II Section)

Indira Paryavaran Bhawan Jor bagh Road, New Delhi - 3 Dated: 29<sup>th</sup> January, 2019

To

M/s Dhampur Sugar Mills Ltd Village Asmoli, Tehsil & District <u>Sambhal</u> (UP)

Sub: Expansion of molasses based distillery from 100 KLPD to 250 KLPD by M/s Dhampur Sugar Mills Limited at Village Asmoli, Tehsil & District Sambhal (UP) - Environmental Clearance - reg.

Sir,

This has reference to your online proposal No.IA/UP/IND2/30759/2006 dated 9<sup>th</sup> October, 2018 along with the EIA/EMP report containing public hearing proceedings for the above mentioned project.

- 2. The Ministry of Environment, Forest and Climate Change has examined the proposal for environmental clearance to the project for expansion of molasses based distillery from 100 KLPD to 250 KLPD by M/s Dhampur Sugar Mills Limited in an area of 80900 sqm located at Village Asmoli, Tehsil & District Sambhal (Uttar Pradesh). The project also involves increase in cogeneration power from 3.5 MW to 8.5 MW.
- 3. Existing land area is 80900 sqm. No additional land will be required for the proposed expansion. Industry has developed greenbelt in an area of 33% i.e. 27900 sqm out of total area of the project. The estimated project cost is Rs.149.65 crores. Total capital cost earmarked towards environmental pollution control measures is Rs.70.13 crores and the recurring cost (operation and maintenance) will be about Rs.2.75 crores per annum.
- **4.** There are no National parks, Wildlife Sanctuaries, Biosphere Reserves, Tiger/ Elephant Reserves, Wildlife corridors etc within 10 km from the project site.
- **5.** Total water requirement is estimated to be 4050 m³/day, of which fresh water demand of 2250 m³/day will be met from ground water. Approval from the Central Ground Water Authority has been obtained vide their letter dated 10<sup>th</sup> June, 2016 for withdrawal of 1000 KLD through existing tube well. Application for withdrawal for additional 1250 KLD of ground water is under consideration of the Central Ground Water Authority. The fresh water requirement is proposed to be reduced to 2000 cum/day i.e. 8KL/KL of Ethanol production.

Spent wash generated from the distillation process (2110 cum/day) would be fed to two stage evaporation system to concentrate solids from 18% w/w to 55% w/w by using steam. The vapors would be condensed and collected in a tank. Some part of the condensate, after treatment in the condensate polishing units, would be reused in the process and balance shall be used in cooling tower for makeup water. There will be no discharge of treated/untreated waste water from the unit, and thus conforming to Zero Liquid Discharge.

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Power requirement after expansion will be 8500 KVA, which is proposed to be met from own captive power plant.

Existing unit has 35 TPH concentrated spent wash/ bagasse/ coal fired boiler. To cater to the proposed expansion, one more boiler (spent wash/ bagasse/ coal fired) of 50 TPH shall be installed with bag filter and stack of 60 m to control particulate emissions within the statutory limit of 50 mg/Nm<sup>3</sup>.

- 6. The project/activity is covered under category A of item 5 (g) 'Distilleries' of the Schedule to the Environmental Impact Assessment Notification, 2006 and requires appraisal/approval at Central level in the Ministry.
- 7. ToR for the project was granted by the Ministry vide letter dated 5<sup>th</sup> March, 2016. Public hearing was conducted by the State Pollution Control Board on 26<sup>th</sup> May, 2018.
- 8. The proposal for environmental clearance was considered by the Expert Appraisal Committee (Industry-2) in its meeting held on 29-31 October, 2018. The project proponent and their accredited Consultant M/s Enviro Infra Solutions Pvt Ltd presented the EIA/EMP report as per the ToR. The Committee found the EIA/ EMP Report to be satisfactory, in consonance with the presented ToR, and recommended the project for grant of environmental clearance.
- **9.** Based on the proposal submitted by the project proponent and recommendations of the EAC (Industry-2), the Ministry of Environment, Forest and Climate Change hereby accords environmental clearance to the project for **expansion of molasses based distillery from 100 KLPD to 250 KLPD** by M/s Dhampur Sugar Mills Limited located at Village Asmoli, Tehsil & District Sambhal (Uttar Pradesh), under the provisions of the EIA Notification, 2006, and the amendments therein, subject to compliance of the terms and conditions as under:-
- (a) Consent to Establish/Operate for the project shall be obtained from the State Pollution Control Board as required under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.
- (b) As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises.
- (c) Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
- (d) To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- (e) Total fresh water requirement shall not exceed 2000 cum/day proposed to be met from ground water. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard.
- (f) Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.
- (g) Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.

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- (h) The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.
- (i) The company shall undertake waste minimization measures as below:-
  - (i) Metering and control of quantities of active ingredients to minimize waste.
  - (ii) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
  - (iii) Use of automated filling to minimize spillage.
  - (iv) Use of Close Feed system into batch reactors.
  - (v) Venting equipment through vapour recovery system.
  - (vi) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
- (j) The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.
- (k) All the commitments made regarding issues raised during the public hearing/consultation meeting shall be satisfactorily implemented.
- (I) At least 0.75% of the total project cost shall be allocated for Corporate Environment Responsibility (CER) and item-wise details along with time bound action plan shall be prepared and submitted to the Ministry's Regional Office.
- (m) For the DG sets, emission limits and the stack height shall be in conformity with the extant regulations and the CPCB guidelines. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- (n) The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.
- (o) Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- (p) There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places.
- (q) Storage of raw materials shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- (r) Continuous online (24x7) monitoring system for stack emissions shall be installed for measurement of flue gas discharge and the pollutants concentration, and the data to be transmitted to the CPCB and SPCB server. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises.
- (s)  $CO_2$  generated from the process shall be bottled/made solid ice and sold to authorized vendors.

- (t) There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places.
- **9.1** The grant of Environmental Clearance is further subject to compliance of other generic conditions as under:-
- (i) The project authorities must strictly adhere to the stipulations made by the state Pollution Control Board (SPCB), State Government and/ or any other statutory authority.
- (ii) No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change. In case of deviations or alterations in the project proposal from those submitted to this Ministry for clearance, a fresh reference shall be made to the Ministry to assess the adequacy of conditions imposed and to add additional environmental protection measures required, if any.
- (iii) The locations of ambient air quality monitoring stations shall be decided in consultation with the State Pollution Control Board (SPCB) and it shall be ensured that at least one stations each is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.
- (iv) The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16<sup>th</sup> November, 2009 shall be complied with.
- (v) The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).
- (vi) The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial operations within the plant.
- (vii) Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis.
- (viii) The company shall comply with all the environmental protection measures and safeguards proposed in the documents submitted to the Ministry. All the recommendations made in the EIA/EMP in respect of environmental management, risk mitigation measures and public hearing shall be implemented.
- (ix) The company shall undertake all measures for improving socio-economic conditions of the surrounding area. CSR activities shall be undertaken by involving local villagers, administration and other stake holders. Also eco-developmental measures shall be undertaken for overall improvement of the environment.
- (x) A separate Environmental Management Cell equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.

818

- (xi) The company shall earmark sufficient funds towards capital cost and recurring cost per annum to implement the conditions stipulated by the Ministry of Environment, Forest and Climate Change as well as the State Government along with the implementation schedule for all the conditions stipulated herein. The funds so earmarked for environment management/pollution control measures shall not be diverted for any other purpose.
- (xii) A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zila Parishad/ Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.
- (xiii) The project proponent shall also submit six monthly reports on the status of compliance of the stipulated Environmental Clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF&CC, the respective Zonal office of CPCB and SPCB. A copy of Environmental Clearance and six monthly compliance status report shall be posted on the website of the company.
- (xiv) The environmental statement for each financial year ending 31<sup>st</sup> March in Form-V as is mandated shall be submitted to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the respective Regional offices of MoEF&CC by e-mail.
- (xv) The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB/Committee and may also be seen at Website of the Ministry at <a href="http://moef.nic.in">http://moef.nic.in</a>. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the concerned Regional office of the Ministry.
- 10. The Ministry reserves the right to stipulate additional conditions, if found necessary at subsequent stages and the project proponent shall implement all the said conditions in a time bound manner. The Ministry may revoke or suspend the environmental clearance, if implementation of any of the above conditions is not found satisfactory.
- 11. The above conditions will be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Water Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991, read with subsequent amendments therein.

(S. K. Srivastava) Scientist E

## Copy to: -

1

- The Additional Principal Chief Conservator of Forests, Ministry of Environment, Forest and Climate Change, Regional Office (Central Zone, Lucknow) Kendriya Bhavan, 5<sup>th</sup> Floor, Sector H, Aliganj, Lucknow - 226020
- 2. The Principal Secretary, Department of Environment, Government of Uttar Pradesh, Sachivalaya, Bapu Bhawan, Adjacent to Vidhan Sabha, Lucknow 226001 (UP)

- 3. The Member Secretary, Central Pollution Control Board Parivesh Bhawan, CBD-cum-Office Complex, East Arjun Nagar, **Delhi** 32
- 4. The Member Secretary, Uttar Pradesh Pollution Control Board, PICUP Bhawan, Vibhuti Khand, Gomti Nagar, Lucknow (UP)
- 5. Monitoring Cell, Ministry of Environment, Forest and Climate change, Indira Paryavaran Bhawan, Jorbagh Road, **New Delhi**
- 6. Guard File/Record File/Notice Board

(S. K. Srivastava) Scientist E



## UTTAR PRADESH POLLUTION CONTROL BOARD

TC-12V, Vibhuti Khand, Gomti Nagar, Lucknow-226010

Phone:0522-2720828,2720831 Fax:0522-2720764 Email: info@uppcb.com Website: www.uppcb.com

\_\_\_\_\_

## Ref. No: 14112/UPPCB/Moradabad(UPPCBRO)/HWM/BHIM NAGAR/2021

Dated: 02/06/2021

To.

M/s DSM SUGAR ASMOLI DISTILLERY DIVISION
A-5 DSM SUGAR ASMOLI ASMOLI SAMBHAL UP,SHAMBHAL,244304

**Tehsil**:Sambhal

**District**:BHIM NAGAR

**Sub :-** Authorisation issued under the provisions of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016

- 1. Number of authorization and date of issue 14112 and 02/06/2021.
- 2. Reference of application (No. and date) 11715204 and 20/03/2021.
- 3. Mr MUKESH KASHYAP of M/s DSM SUGAR ASMOLI DISTILLERY DIVISION is hereby granted an authorization based on the enclosed signed inspection report for generation, collection, utilization, storage and disposal or any other use of hazardous or other wastes or both on the premises situated at A-5 DSM SUGAR ASMOLI ASMOLI SAMBHAL UP,SHAMBHAL, .

#### **Details of Authorisation**

S No.	Category of Hazardous Waste as per the Schedules I,II and III of these rules	Authorised mode of disposal or recycling or utilization or co-processing, etc.	Quantity(ton/annum)
1	Schedule I (Category 5.1)waste oil	TSDF/ Authorized Recyclers	12KL per annum

- 1. The authorization shall be valid for a period of 02/06/2026 from the date of issue of this letter .
- 2. 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 authorised person shall comply with the provisions of the Environment (Protection Act, 1986, and the rules made there under .
- 2. The authorisation or its renewal shall be produced for inspection at the request of an officer authorised by the State Pollution 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 authorisation .
- 5. The person authorised shall implement Emergency Response Procedure (ERP) for which this authorisation 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 authorised 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 authorised 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 utilisation of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of authorisation.
- 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 authorisation 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 Changes 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 .
- 15. The Unit will file the renewal application at least 2 months prior to the expiry of this Order.

## **B** Specific Conditions of Authorization

- 1. Unit shall ensure compliance of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.
- 2. Unit shall comply with the provisions of Rule 19 of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and send copy of Form 10 regarding Manifest for Hazardous and Other Wastes.
- 3. Unit shall comply with the provisions of Rule 20 of The Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and submit Annual Returns to State Board in Form IV.

( Authorized Signatory )

#### UTTAR PRADESH POLLUTION CONTROL BOARD

Copy to: To the Regional Officer, U.P.Pollution Control Board, MORADABAD for information and necessary action .



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Email: ETRCLTH@YAHOO.IN, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OH&S) ISO 14001:2015)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986

#### ETRC/PM09/TEST-REP/FT/45

## **TEST REPORT WATER & WASTE WATER ANALYSIS**

Test Report Ref No.: ETRC/EPA/14162/2025	Date of Report: 19.04.2025
Name /Address/Type of Industry	M/s Dhampur Bio Organics Limited
	(Formerly known DSM Sugar, Distillery Division)
	Unit: Asmoli, Division: Bio fuels & Spirits
	Village: Asmoli, Tehsil: Sambhal
	District: Sambhal (U.P.) - 244303

#### **SAMPLE DETAILS**

1	Water/ Waste Water	Ground Water	5	Packing Condition	Sealed
2	2 Sample Description	Borewell Water	6	Sample Collected by	Industry self
			0	Sample Collection date	14.04.2025
3	Sample received date	14.04.2025	7	Analysis Start Date	15.04.2025
4	Sample Quantity	5.0 liters	8	Analysis End Date	18.04.2025

## **TEST RESULT**

Sr.	Test Parameter	Unit	Protocol/ Test Method	Result	Range of testing		n Standard 500: 2012		
No				/limit of detection	Desirable	Permissible			
	Physico-chemical Parameters								
_1_	Colour	Hazen	IS 3025 (Part - 04): 2021	<5.0	5 - 30	5	15		
2	Odour	-	IS 3025 (Part - 05): 2018	Agreeable	Qualitative	Agreeable	Agreeable		
3	pН	-	APHA 24 <sup>th</sup> Ed. 2023 - 4500 H <sup>+</sup>	7.4	1 - 14	6.5-8.5	No Relaxation		
4	Turbidity	NTU	APHA 24 <sup>th</sup> Ed. 2023 - 2130 B	BDL	2 - 40	11	5		
5	Total Dissolved Solids (TDS)	mg/l	IS 3025 (Part - 16): 2023	358.4	10 - 5000	500	2000		
6	Ammonia (as total ammonia-N)	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 4500-NH <sub>3</sub> F	BDL	0.5 - 2.0	0.5	No Relaxation		
7	Anionic Detergents (as MBAS)	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 5540 C	BDL	0.05 - 0.5	0.2	1.0		
8	Calcium as Ca	mg/l	IS 3025 (Part - 40): 1991 Reaffirmed: 2019	1 2/8		75	200		
9	Magnesium as Mg	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3500 Mg, B	27.216	0.1 - 200	30	100		
10	Chloride as Cl	mg/l	APHA 24th Ed. 2023 - 4500-Cl-B	24.0	2.0 - 2000	250	1000		
11	Fluoride as F	mg/l	APHA 24th Ed. 2023 - 4500 F-C	0.38	0.02 - 5.0	1.0	1.5		
12	Free Residual Chlorine	mg/l	IS 3025 (Part - 26): 1986 Reaffirmed: 2019	BDL	0.1 - 5.0	0.2	1.0		
13	Nitrate as NO <sub>3</sub>	mg/l	IS 3025 (Part - 34): 1986 Reaffirmed: 2019	BDL	1.0 - 70	45	No Relaxation		
14	Phenolic Compound (as C <sub>6</sub> H₅OH)	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 5530 C	BDL	0.001 - 0.005	0.001	0.002		
15	Sulphate as SO <sub>4</sub>	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 4500- SO <sub>4</sub> <sup>2-</sup>	28.0	1.0 - 500	200	400		
16	Alkalinity as CaCO <sub>3</sub>	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 2320 B	284.0	2.0 - 1000	200	600		
17	Total Hardness as CaCO <sub>3</sub>	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 2340 C	256.0	5.0 - 800	200	600		
18	Aluminium as Al	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	BDL	0.015 - 5.0	0.03	0.2		
19	Boron as B	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	BDL	0.05 - 2.0	0.5	1.0		
20	Copper as Cu	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	BDL	0.03 - 10	0.05	1.5		

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(ISO 9001:2015, ISO 45001:2018 (OH&S) ISO 14001:2015)

An approved laboratory from Ministry of Environment, Forest and Climate change, Goyt, of India under EPA 1986

Test Report Ref No.: ETRC/EPA/14162/2025

	Inch on Fr		APHA 24 <sup>th</sup> Ed. 2023 - 3120 B	T	1		
21	Iron as Fe	mg/l	(ICP-OES)	0.14	0.05 - 20	0.3	No Relaxation
22	Manganese as Mn	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	0.03	0.02 - 5.0	0.1	0.3
23	Zinc as Zn	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	0.36	0.05 - 15	5	15
24	Cadmium as Cd	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	BDL	0.003 - 2.0	0.003	No Relaxation
25	Lead as Pb	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	BDL	0.01 - 10	0.01	No Relaxation
26	Mercury as Hg	µg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3112 B	BDL	0.5 - 1000	1.0	No Relaxation
27	Nickel as Ni	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	BDL	0.02 - 5.0	0.02	No Relaxation
28	Arsenic as As	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	BDL	0.02 - 2.0	0.01	0.05
29	Total Chromium	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	BDL	0.03 - 5.0	0.05	No Relaxation
			Microbiological Param	neters			
30	E. coli	MPN/ 100 ml	IS 1622 - 1981 Reaffirmed: 2019	Absent	<1.8 - 16000		e detected in any ml sample
31	T. coli	MPN/ 100 ml	APHA 24 <sup>th</sup> Ed. 2023 - 9221 - A,B,C			detected in any	
BDL=	Below Detection Limit						

..... END OF REPORT......

ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects our best attempt to generate accurate results for the sample, mentioned in the report as above.

The result relate only to the items tested.

ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment constituting to the results.

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Complain register is available in our laboratory.

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**Authorized Signatory** (Sandeep Kr Verma) Lab-Incharge

CHECKED

Pilvilians Authorized Signatory (Dr. Ritu Garg) QM

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(ISO 9001:2015, ISO 45001:2018 (OH&S) ISO 14001:2015)

#### ETRC/PM09/TEST-REP/FT/45

## **TEST REPORT WATER & WASTE WATER ANALYSIS**

Test Report Ref No.: ETRC/EPA/14427/2025	Date of Report: 23.05.2025
Name /Address/Type of Industry	M/s Dhampur Bio Organics Limited
	(Formerly known DSM Sugar, Distillery Division)
	Unit: Asmoli, Division: Bio fuels & Spirits
	Village: Asmoli, Tehsil: Sambhal
	District: Sambhal (U.P.) - 244303

### **SAMPLE DETAILS**

1	Water/ Waste Water	Ground Water	5	Packing Condition	Sealed
2	Sample Description	Borewell Water	6	Sample Collected by	Industry self
	Sample Description		0	Sample Collection date	19.05.2025
3	Sample received date	19.05.2025	7	Analysis Start Date	20.05.2025
4	Sample Quantity	5.0 liters	8	Analysis End Date	23.05.2025

#### **TEST RESULT**

Sr.	Test Parameter Unit I		Protocol/ Test Method	Result	Range of testing		Standard 0: 2012
No	Toot Faramotor	J.III			/limit of detection	Desirable	Permissible
		-	Physico-chemical Parai	neters			
1	Colour	Hazen	IS 3025 (Part - 04): 2021	<5.0	5 - 30	5	15
2 ·	Odour	-	IS 3025 (Part - 05): 2018	Agreeable	Qualitative	Agreeable	Agreeable
3_	pН	-	APHA 24 <sup>th</sup> Ed. 2023 - 4500 H <sup>+</sup>	7.5	1 - 14	6.5-8.5	No Relaxation
4	Turbidity	NTU	APHA 24 <sup>th</sup> Ed. 2023 - 2130 B	BDL	2 - 40	1	5
5	Total Dissolved Solids (TDS)	mg/l	IS 3025 (Part - 16): 2023	390.2	10 - 5000	500	2000
6	Ammonia (as total ammonia-N)	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 4500-NH <sub>3</sub> F	BDL	0.5 - 2.0	0.5	No Relaxation
7	Anionic Detergents (as MBAS)	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 5540 C	BDL	0.05 - 0.5	0.2	1.0
8	Calcium as Ca	mg/l	IS 3025 (Part - 40): 1991 Reaffirmed: 2019	49.6	2.0 - 600	75	200
9	Magnesium as Mg	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3500 Mg, B	28.188	0.1 - 200	30	100
10	Chloride as Cl	mg/l	APHA 24th Ed. 2023 - 4500-CI-B	26.0	2.0 - 2000	250	1000
11	Fluoride as F	mg/l	APHA 24th Ed. 2023 - 4500 F-C	0.39	0.02 - 5.0	1.0	1.5
12	Free Residual Chlorine	mg/l	IS 3025 (Part - 26): 1986 Reaffirmed: 2019	BDL	0.1 - 5.0	0.2	1.0
13	Nitrate as NO <sub>3</sub>	mg/l	IS 3025 (Part - 34): 1986 Reaffirmed: 2019	BDL	1.0 - 70	45	No Relaxation
14	Phenolic Compound (as C <sub>6</sub> H <sub>5</sub> OH)	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 5530 C	BDL	0.001 - 0.005	0.001	0.002
15	Sulphate as SO <sub>4</sub>	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 4500- SO <sub>4</sub> <sup>2</sup> -	24.0	1.0 - 500	200	400
16	Alkalinity as CaCO <sub>3</sub>	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 2320 B	268.0	2.0 - 1000	200	600
17	Total Hardness as CaCO <sub>3</sub>	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 2340 C	240.0	5.0 - 800	200	600
18	Aluminium as Al	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	BDL	0.015 - 5.0	0.03	0.2
19	Boron as B	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	BDL	0.05 - 2.0	0.5	1.0
20	Copper as Cu	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	BDL	0.03 - 10	0.05	1.5

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Test Report Ref No.: ETRC/EPA/14427/2025

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21	Iron as Fe	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	0.10	0.05 - 20	0.3	No Relaxation
22	Manganese as Mn	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	0.05	0.02 - 5.0	0.1	0.3
23	Zinc as Zn	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	0.45	0.05 - 15	5	15
24	Cadmium as Cd	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	BDL	0.003 - 2.0	0.003	No Relaxation
25	Lead as Pb	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	BDL	0.01 - 10	0.01	No Relaxation
26	Mercury as Hg	μg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3112 B	BDL	0.5 - 1000	1.0	No Relaxation
27	Nickel as Ni	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	BDL	0.02 - 5.0	0.02	No Relaxation
28	Arsenic as As	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	BDL	0.02 - 2.0	0.01	0.05
29	Total Chromium	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	BDL	0.03 - 5.0	0.05	No Relaxation
			Microbiological Param	neters		/-	
30	E. coli	MPN/ 100 ml	IS 1622 - 1981 Reaffirmed: 2019	Absent	<1.8 - 16000		detected in any
31	T. coli	MPN/ 100 ml	APHA 24 <sup>th</sup> Ed. 2023 - 9221 - A,B,C	Absent	<1.8 - 16000		detected in any
BDI -	Relow Detection Limit						

**BDL=Below Detection Limit** 

..... END OF REPORT......

ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects our best
attempt to generate accurate results for the sample, mentioned in the report as above.

The result relate only to the items tested.

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Norma:

Authorized signatory (Sandeep Kr Verma) Lab-Incharge CHECKED CHECKED Search

Authorized Signatory (Dr. Ritu Garg)

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## ETRC/PM09/TEST-REP/FT/45

## TEST REPORT WATER & WASTE WATER ANALYSIS

Test Report Ref No.: ETRC/EPA/14607/2025	Date of Report: 14.06.2025
Name /Address/Type of Industry	Dhampur Bio Organics Limited
	(Formerly known DSM Sugar, Distillery Division)
	Unit: Asmoli, Division: Bio fuels & Spirits
	Village: Asmoli, Tehsil: Sambhal
	District: Sambhal (U.P.) - 244303

#### **SAMPLE DETAILS**

1	Water/ Waste Water	Ground Water	5	Packing Condition	Sealed
2	Sample Description	Borewell Water	6	Sample Collected by	ETRC
_	Gampio Bocomption	Borewen Water	0	Sample Collection date	10.06.2025
3	Sample received date	10.06.2025	7	Analysis Start Date	10.06.2025
4	Sample Quantity	5.0 liters	8	Analysis End Date	14.06.2025

#### **TEST RESULT**

Sr. No	Test Parameter	Test Parameter Unit Protocol/Test Method		Result	Range of testing	Indian Standard 10500: 2012	
				- Toolit	/limit of detection	Desirable	Permissible
			Physico-chemical Para	meters		14	
1	Colour	Hazen	IS: 3025 (Part - 04): 2021	<5.0	5 - 30	5	15
2	Odour	-	IS: 3025 (Part - 05): 2018	Agreeable	Qualitative	Agreeable	Agreeable
3	pH	-	APHA 24 <sup>th</sup> Ed. 2023 - 4500 H	7.5	1 - 14	6.5-8.5	No Relaxation
4	Turbidity	NTU	APHA 24 <sup>th</sup> Ed. 2023 - 2130 B	BDL	2 - 40	1	5
5	Total Dissolved Solids (TDS)	mg/l	IS: 3025 (Part - 16): 2023	396.6	10 - 5000	500	2000
6	Ammonia (as total ammonia-N)	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 4500-NH <sub>3</sub> F	BDL	0.5 - 2.0	0.5	No Relaxation
7	Anionic Detergents (as MBAS)	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 5540 C	BDL	0.05 - 0.5	0.2	1.0
8	Calcium as Ca	mg/l	IS: 3025 (Part - 40): 1991 Reaffirmed: 2019	57.6	2.0 - 600	75	200
9	Magnesium as Mg	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3500 Mg, B	27.21	0.1 - 200	30	100
10	Chloride as Cl	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 4500-Cl B	26.0	2.0 - 2000	250	1000
11	Fluoride as F	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 4500 F <sup>-</sup> C	0.36	0.02 - 5.0	1.0	1.5
12	Free Residual Chlorine	mg/l	IS: 3025 (Part - 26): 1986 Reaffirmed: 2019	BDL	0.1 - 5.0	0.2	1.0
13	Nitrate as NO <sub>3</sub>	mg/l	IS: 3025 (Part - 34): 1986 Reaffirmed: 2019	BDL	1.0 - 70	45	No Relaxation
14	Phenolic Compound (as C <sub>6</sub> H <sub>5</sub> OH)	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 5530 C	BDL	0.001 - 0.005	0.001	0.002
15	Sulphate as SO <sub>4</sub>	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 4500- SO <sub>4</sub> <sup>2-</sup>	24.0	1.0 - 500	200	400
16	Alkalinity as CaCO <sub>3</sub>	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 2320 B	288.0	2.0 - 1000	200	600
17	Total Hardness as CaCO <sub>3</sub>	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 2340 C	256.0	5.0 - 800	200	600
18	Aluminium as Al	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	BDL	0.015 - 5.0	0.03	0.2
19	Boron as B	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	BDL	0.05 - 2.0	0.5	1.0
20	Copper as Cu	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	BDL	0.03 - 10	0.05	1.5

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Iron as Fe	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	0.14	0.05 - 20	0.3	No Relaxation
Manganese as Mn	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	0.05	0.02 - 5.0	0.1	0.3
Zinc as Zn	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	0.49	0.05 - 15	5	15
Cadmium as Cd	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	BDL	0.003 - 2.0	0.003	No Relaxation
Lead as Pb	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	BDL	0.01 - 10	0.01	No Relaxation
Mercury as Hg	µg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3112 B	BDL	0.5 - 1000	1.0	No Relaxation
Nickel as Ni	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	BDL	0.02 - 5.0	0.02	No Relaxation
Arsenic as As	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	BDL	0.02 - 2.0	0.01	0.05
Total Chromium	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	BDL	0.03 - 5.0	0.05	No Relaxation
		Microbiological Param	eters			
E. coli	MPN/ 100 ml	IS: 1622 - 1981 Reaffirmed: 2019	Absent	1.8 - 1600		e detected in any ml sample
T. coli	MPN/ 100 ml	IS: 1622 - 1981 Reaffirmed: 2019	Absent	1.8 - 1600	Shall not be	e detected in any
	Manganese as Mn Zinc as Zn Cadmium as Cd Lead as Pb Mercury as Hg Nickel as Ni Arsenic as As Total Chromium E. coli	Manganese as Mn mg/l Zinc as Zn mg/l Cadmium as Cd mg/l Lead as Pb mg/l Mercury as Hg µg/l Nickel as Ni mg/l Arsenic as As mg/l Total Chromium mg/l  E. coli MPN/ 100 ml T. coli	Manganese as Mn   mg/l   APHA 24 <sup>th</sup> Ed. 2023 - 3120 B   (ICP-OES)     Zinc as Zn   mg/l   APHA 24 <sup>th</sup> Ed. 2023 - 3120 B   (ICP-OES)     Cadmium as Cd   mg/l   APHA 24 <sup>th</sup> Ed. 2023 - 3120 B   (ICP-OES)     Lead as Pb   mg/l   APHA 24 <sup>th</sup> Ed. 2023 - 3120 B   (ICP-OES)     Mercury as Hg   µg/l   APHA 24 <sup>th</sup> Ed. 2023 - 3120 B   (ICP-OES)     Mickel as Ni   mg/l   APHA 24 <sup>th</sup> Ed. 2023 - 3120 B   (ICP-OES)     Arsenic as As   mg/l   APHA 24 <sup>th</sup> Ed. 2023 - 3120 B   (ICP-OES)     Total Chromium   mg/l   APHA 24 <sup>th</sup> Ed. 2023 - 3120 B   (ICP-OES)     Total Chromium   mg/l   APHA 24 <sup>th</sup> Ed. 2023 - 3120 B   (ICP-OES)     Total Chromium   mg/l   APHA 24 <sup>th</sup> Ed. 2023 - 3120 B   (ICP-OES)     Total Chromium   mg/l   APHA 24 <sup>th</sup> Ed. 2023 - 3120 B   (ICP-OES)     Total Chromium   mg/l   APHA 24 <sup>th</sup> Ed. 2023 - 3120 B   (ICP-OES)     Total Chromium   mg/l   APHA 24 <sup>th</sup> Ed. 2023 - 3120 B   (ICP-OES)     Total Chromium   mg/l   APHA 24 <sup>th</sup> Ed. 2023 - 3120 B   (ICP-OES)     Total Chromium   mg/l   APHA 24 <sup>th</sup> Ed. 2023 - 3120 B   (ICP-OES)     Total Chromium   mg/l   APHA 24 <sup>th</sup> Ed. 2023 - 3120 B   (ICP-OES)     Total Chromium   mg/l   APHA 24 <sup>th</sup> Ed. 2023 - 3120 B   (ICP-OES)     Total Chromium   mg/l   APHA 24 <sup>th</sup> Ed. 2023 - 3120 B   (ICP-OES)     Total Chromium   mg/l   APHA 24 <sup>th</sup> Ed. 2023 - 3120 B   (ICP-OES)     Total Chromium   mg/l   APHA 24 <sup>th</sup> Ed. 2023 - 3120 B   (ICP-OES)     Total Chromium   mg/l   APHA 24 <sup>th</sup> Ed. 2023 - 3120 B   (ICP-OES)     Total Chromium   mg/l   APHA 24 <sup>th</sup> Ed. 2023 - 3120 B   (ICP-OES)     Total Chromium   mg/l   APHA 24 <sup>th</sup> Ed. 2023 - 3120 B   (ICP-OES)	Manganese as Mn	Manganese as Mn   mg/l   APHA 24 <sup>th</sup> Ed. 2023 - 3120 B   (ICP-OES)	Manganese as Mn   mg/l   APHA 24 <sup>th</sup> Ed. 2023 - 3120 B   (ICP-OES)

**BDL=Below Detection Limit** 

..... END OF REPORT......

ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects our best
attempt to generate accurate results for the sample, mentioned in the report as above.

The result relate only to the items tested.

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Authorized Signatory (Sandeep Kr Verma) Lab-Incharge



Authorized Signatory
(Dr. Ritu Garg)
QM

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#### ETRC/PM09/TEST-REP/FT/45

## TEST REPORT WATER & WASTE WATER ANALYSIS

Test Report Ref No.: ETRC/EPA/14821/2025	<b>Date of Report:</b> 10.07.2025
Name /Address/Type of Industry	M/s Dhampur Bio Organics Limited
	(Formerly known DSM Sugar, Distillery Division)
	Unit: Asmoli, Division: Bio fuels & Spirits
	Village: Asmoli, Tehsil: Sambhal
	District: Sambhal (U.P.) - 244303

#### SAMPLE DETAILS

1	Water/ Waste Water	Ground Water	5	Packing Condition	Sealed
2	2 Sample Description	Borewell Water		Sample Collected by	Industry self
		Borewell Water	0	Sample Collection date	04.07.2025
3	Sample received date	04.07.2025	7	Analysis Start Date	05.07.2025
4	Sample Quantity	5.0 liters	8	Analysis End Date	09.07.2025

## **TEST RESULT**

Sr.	Test Parameter	Unit	Protocol/ Test Method	Result	Range of testing		Standard 0: 2012
No	restraiameter	Onic			/limit of detection	Desirable	Permissible
			Physico-chemical Para	meters			
1	Colour	Hazen	IS 3025 (Part - 04): 2021	<5.0	5 - 30	5	15
2	Odour	-	IS 3025 (Part - 05): 2018	Agreeable	Qualitative	Agreeable	Agreeable
3	рH	-	APHA 24 <sup>th</sup> Ed. 2023 - 4500 H <sup>+</sup>	7.5	1 - 14	6.5-8.5	No Relaxation
4	Turbidity	NTU	APHA 24 <sup>th</sup> Ed. 2023 - 2130 B	BDL	2 - 40	1	5
5	Total Dissolved Solids (TDS)	mg/l	IS 3025 (Part - 16): 2023	376.4	10 - 5000	500	2000
6	Ammonia (as total ammonia-N)	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 4500-NH <sub>3</sub> F	BDL	0.5 - 2.0	0.5	No Relaxation
7	Anionic Detergents (as MBAS)	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 5540 C	BDL	0.05 - 0.5	0.2	1.0
8	Calcium as Ca	mg/l	IS 3025 (Part - 40): 1991 Reaffirmed: 2019	48.0	2.0 - 600	75	200
9	Magnesium as Mg	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3500 Mg, B	33.534	0.1 - 200	30	100
10	Chloride as Cl	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 4500-Cl <sup>-</sup> B	30.0	2.0 - 2000	250	1000
11	Fluoride as F	mg/l	APHA 24th Ed. 2023 - 4500 F-C	0.41	0.02 - 5.0	1.0	1.5
12	Free Residual Chlorine	mg/l	IS 3025 (Part - 26): 1986 Reaffirmed: 2019	BDL.	0.1 - 5.0	0.2	1.0
13	Nitrate as NO <sub>3</sub>	mg/l	IS 3025 (Part - 34): 1986 Reaffirmed: 2019	BDL	1.0 - 70	45	No Relaxation
14	Phenolic Compound (as C <sub>6</sub> H <sub>5</sub> OH)	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 5530 C	BDL	0.001 - 0.005	0.001	0.002
15	Sulphate as SO <sub>4</sub>	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 4500- SO <sub>4</sub> <sup>2</sup> -	28.0	1.0 - 500	200	400
16	Alkalinity as CaCO <sub>3</sub>	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 2320 B	284.0	2.0 - 1000	200	600
17	Total Hardness as CaCO <sub>3</sub>	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 2340 C	258.0	5.0 - 800	200	600
18	Aluminium as Al	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	BDL	0.015 - 5.0	0.03	0.2
19	Boron as B	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	BDL	0.05 - 2.0	0.5	1.0
20	Copper as Cu	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	BDL	0.03 - 10	0.05	1.5

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st iteport iter ito i	_11(0/11	741702172020				
Iron as Fe	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	0.17	0.05 - 20	0.3	No Relaxation
Manganese as Mn	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	0.08	0.02 - 5.0	0.1	0.3
Zinc as Zn	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	0.41	0.05 - 15	5	15
Cadmium as Cd	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	BDL	0.003 - 2.0	0.003	No Relaxation
Lead as Pb	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	BDL	0.01 - 10	0.01	No Relaxation
Mercury as Hg	μg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3112 B	BDL	0.5 - 1000	1.0	No Relaxation
Nickel as Ni	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	BDL	0.02 - 5.0	0.02	No Relaxation
Arsenic as As	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	BDL	0.02 - 2.0	0.01	0.05
Total Chromium	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	BDL	0.03 - 5.0	0.05	No Relaxation
	·	Microbiological Param	eters			
E. coli	MPN/ 100 ml	IS 1622 - 1981 Reaffirmed: 2019	Absent	<1.8 - 16000		e detected in any ml sample
T. coli	MPN/ 100 ml	APHA 24 <sup>th</sup> Ed. 2023 - 9221 - A,B,C	Absent	<1.8 - 16000	Shall not be	e detected in any
	Iron as Fe  Manganese as Mn  Zinc as Zn  Cadmium as Cd  Lead as Pb  Mercury as Hg  Nickel as Ni  Arsenic as As  Total Chromium  E. coli	Iron as Fe mg/l  Manganese as Mn mg/l  Zinc as Zn mg/l  Cadmium as Cd mg/l  Lead as Pb mg/l  Mercury as Hg µg/l  Nickel as Ni mg/l  Arsenic as As mg/l  Total Chromium mg/l  E. coli MPN/ 100 ml  T. coli	Iron as Fe   mg/l   APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)     Manganese as Mn   mg/l   APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)     Zinc as Zn   mg/l   APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)     Cadmium as Cd   mg/l   APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)     Lead as Pb   mg/l   APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)     Mercury as Hg   μg/l   APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)     Nickel as Ni   mg/l   APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)     Arsenic as As   mg/l   APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)     Total Chromium   mg/l   APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)     Total Chromium   mg/l   APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)     MPN/   APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)     MPN/   Reaffirmed: 2019     T. coli   MPN/   APHA 24 <sup>th</sup> Ed. 2023 - 9221 -	Iron as Fe   mg/l   APHA 24 <sup>th</sup> Ed. 2023 - 3120 B   (ICP-OES)	Iron as Fe         mg/l         APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)         0.17         0.05 - 20           Manganese as Mn         mg/l         APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)         0.08         0.02 - 5.0           Zinc as Zn         mg/l         APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)         0.41         0.05 - 15           Cadmium as Cd         mg/l         APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)         BDL         0.003 - 2.0           Lead as Pb         mg/l         APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)         BDL         0.01 - 10           Mercury as Hg         μg/l         APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)         BDL         0.5 - 1000           Nickel as Ni         mg/l         APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)         BDL         0.02 - 5.0           Arsenic as As         mg/l         APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)         BDL         0.03 - 5.0           Total Chromium         mg/l         APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)         BDL         0.03 - 5.0           Microbiological Parameters           E. coli         MPN/ 100 ml         APHA 24 <sup>th</sup> Ed. 2023 - 9221 - Apsent         Absent         <1.8 - 16000           T. coli         MPN/ MPN/         APHA 24 <sup>th</sup> Ed. 2023 - 9221 - Apsent         Absent         <1.8 - 16000	Manganese as Mn   mg/l   APHA 24th Ed. 2023 - 3120 B   (ICP-OES)

**BDL=Below Detection Limit** 

..... END OF REPORT......

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Authorized Signatory (Dr. Ritu Garg) QM

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#### ETRC/PM09/TEST-REP/FT/45

## TEST REPORT WATER & WASTE WATER ANALYSIS

Test Report Ref No.: ETRC/EPA/15039/2025	<b>Date of Report:</b> 11.08.2025
Name /Address/Type of Industry	M/s Dhampur Bio Organics Limited
	(Formerly known DSM Sugar, Distillery Division) Unit: Asmoli, Division: Bio fuels & Spirits
	Village: Asmoli, Tehsil: Sambhal
	District: Sambhal (U.P.) - 244303

## **SAMPLE DETAILS**

1	Water/ Waste Water	Ground Water	5	Packing Condition	Sealed
2	Sample Description	Description Borewell Water 6	Sample Collected by	Industry self	
_	Cample Description		0	Sample Collection date	06.08.2025
3	Sample received date	06.08.2025	7	Analysis Start Date	07.08.2025
4	Sample Quantity	5.0 liters	8	Analysis End Date	11.08.2025

### **TEST RESULT**

Sr.	Test Parameter	Unit	Protocol/ Test Method	Result	Range of testing	Indian Standard 10500: 2012	
No				/limit of detection	Desirable	Permissible	
			Physico-chemical Para	meters			
1	Colour	Hazen	IS 3025 (Part - 04): 2021	<5.0	5 - 30	5	15
2	Odour	-	IS 3025 (Part - 05): 2018	Agreeable	Qualitative	Agreeable	Agreeable
3	рН	-	APHA 24th Ed. 2023 - 4500 H <sup>+</sup>	7.6	1 - 14	6.5-8.5	No Relaxation
4	Turbidity	NTU	APHA 24 <sup>th</sup> Ed. 2023 - 2130 B	BDL	2 - 40	1	5
5	Total Dissolved Solids (TDS)	mg/l	IS 3025 (Part - 16): 2023	380.0	10 - 5000	500	2000
6	Ammonia (as total ammonia-N)	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 4500-NH <sub>3</sub> F	BDL	0.5 - 2.0	0.5	No Relaxation
7	Anionic Detergents (as MBAS)	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 5540 C	BDL	0.05 - 0.5	0.2	1.0
8	Calcium as Ca	mg/l	· IS 3025 (Part - 40): 1991 Reaffirmed: 2019	54. <mark>4</mark>	2.0 - 600	75	200
9	Magnesium as Mg	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3500 Mg, B	28.188	0.1 - 200	30	100
10	Chloride as Cl	mg/l	APHA 24th Ed. 2023 - 4500-CI-B	26.0	2.0 - 2000	250	1000
11	Fluoride as F	mg/l	APHA 24th Ed. 2023 - 4500 F-C	0.35	0.02 - 5.0	1.0	1.5
12	Free Residual Chlorine	mg/i	IS 3025 (Part - 26): 1986 Reaffirmed: 2019	BDL	0.1 - 5.0	0.2	1.0
13	Nitrate as NO <sub>3</sub>	mg/l	IS 3025 (Part - 34): 1986 Reaffirmed: 2019	BDL	1.0 - 70	45	No Relaxation
14	Phenolic Compound (as C <sub>6</sub> H <sub>5</sub> OH)	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 5530 C	BDL	0.001 - 0.005	0.001	0.002
15	Sulphate as SO <sub>4</sub>	mg/l	APHA 24th Ed. 2023 - 4500- SO <sub>4</sub> 2-	22.0	1.0 - 500	200	400
16	Alkalinity as CaCO <sub>3</sub>	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 2320 B	280.0	2.0 - 1000	200	600
17	Total Hardness as CaCO₃	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 2340 C	252.0	5.0 - 800	200	600
18	Aluminium as Al	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	BDL	0.015 - 5.0	0.03	0.2
19	Boron as B	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	BDL	0.05 - 2.0	0.5	1.0
20	Copper as Cu	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	BDL	0.03 - 10	0.05	1.5

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lines de Fe		APHA 24th Ed. 2023 - 3120 B				
iron as re	mg/l	(ICP-OES)	0.16	0.05 - 20	0.3	No Relaxation
Manganese as Mn	mg/l	(ICP-OES)	0.03	0.02 - 5.0	0.1	0.3
Zinc as Zn	mg/l	(ICP-OES)	0.38	0.05 - 15	5	15
Cadmium as Cd	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	BDL	0.003 - 2.0	0.003	No Relaxation
Lead as Pb	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	BDL	0.01 - 10	0.01	No Relaxation
Mercury as Hg	µg/I	APHA 24 <sup>th</sup> Ed. 2023 - 3112 B	BDL	0.5 - 1000	1.0	No Relaxation
Nickel as Ni	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	BDL	0.02 - 5.0	0.02	No Relaxation
Arsenic as As	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	BDL	0.02 - 2.0	0.01	0.05
Total Chromium	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	BDL	0.03 - 5.0	0.05	No Relaxation
		Microbiological Param	neters			
E. coli	MPN/ 100 ml	IS 1622 - 1981 Reaffirmed: 2019	Absent	<1.8 - 16000		e detected in any ml sample
T. coli	MPN/ 100 ml	APHA 24 <sup>th</sup> Ed. 2023 - 9221 - A,B,C	Absent	<1.8 - 16000	Shall not be	e detected in any ml sample
	Zinc as Zn  Cadmium as Cd  Lead as Pb  Mercury as Hg  Nickel as Ni  Arsenic as As  Total Chromium  E. coli	Manganese as Mn mg/l Zinc as Zn mg/l Cadmium as Cd mg/l Lead as Pb mg/l Mercury as Hg µg/l Nickel as Ni mg/l Arsenic as As mg/l Total Chromium mg/l E. coli MPN/ 100 ml T. coli	Manganese as Mn   mg/l   APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	Manganese as Mn	Manganese as Mn   mg/l   APHA 24th Ed. 2023 - 3120 B   (ICP-OES)	Manganese as Mn   mg/l   APHA 24th Ed. 2023 - 3120 B   (ICP-OES)   0.03   0.02 - 5.0   0.1

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#### ETRC/PM09/TEST-REP/FT/42

## TEST REPORT AMBIENT AIR QUALITY MONITORING REPORT

Test Report Ref No.: ETRC/EPA/15526/2025 Name /Address/Type of Industry		Date of Report: 25.09.2025				
		M/s Dhampur Bio Organics Limited (Formerly known DSM Sugar, Distillery Division) Unit: Asmoli, Division: Bio fuels & Spirits Village: Asmoli, Tehsil: Sambhal District: Sambhal (U.P.) - 244303				
	itored by	ETRC, Lucknow				
Loc	ation of Sampling points	Near Main Gate				
1	GENERAL OBSERVATIONS	DETAILS-PM <sub>10</sub>	DETAILS-PM <sub>2.5</sub>			
(a)	Weather conditions	Clear	Clear			
(b)	Wind direction	West to East	West to East			
(c)	Average humidity (%)	56	56			
(d)	Average ambient temperature (°C)	31	31			
(e)	Time of Sampling Started (Hours)	10:15 am (19.09.2025)	10:15 am (19.09.2025)			
(f)	Time of Sampling completed (Hours)	10:03 am (20.09.2025)	10:03 am (20.09.2025)			
(g)	Total time of sampling (minutes)	24 hour (1411 minutes)	24 hour (1411 minutes)			
2	Average sampling rate for PM (m³/minute)	1.170	NA			
3	Average sampling rate for gas (LPM)	0.5	NA			
4	TOTAL VOLUME OF AIR SAMPLED					
	• PM (m³)	• 1650.402	• 23.504			
	GAS (liter)	• 705.3				

#### **TEST RESULT**

Sr. No.	Particulars	Protocol	Unit	Result	Range of testing /limit of detection	Standard as per NAAQS; dated 18/11/ 2009
1	Particulate matters size less than 10 µm (PM <sub>10</sub> )	IS 5182 (Part - 23): 2006 Reaffirmed: 2022	µg/m³	89.6	5.0 - 1200	For 24 hour =100
2	Particulate matters size less than 2.5 µm (PM <sub>2.5</sub> )	IS 5182 (Part - 24): 2019	µg/m³	52.33	2.0 - 500	For 24 hour =60
3	Sulphur Dioxide (SO <sub>2</sub> )	IS 5182 (Part - 02): 2001 Reaffirmed: 2022	µg/m³	14.59	5.0 - 1050	For 24 hour =80
4	Oxides of Nitrogen (NO <sub>x</sub> )	IS 5182 (Part - 06): 2006 Reaffirmed: 2022	µg/m³	21.08	6.0- 750	For 24 hour =80

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Authorized Signatory (Sandeep Kr Verma) Lab-Incharge



Authorized Signatory (Dr. Ritu Garg) QM

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## ETRC/PM09/TEST-REP/FT/42

## **TEST REPORT** AMBIENT AIR QUALITY MONITORING REPORT

Test Report Ref No.: ETRC/EPA/15527/2025 Name /Address/Type of Industry		Date of Report: 25.09.2025				
		M/s Dhampur Bio Organics Limited (Formerly known DSM Sugar, Distillery Division) Unit: Asmoli, Division: Bio fuels & Spirits Village: Asmoli, Tehsil: Sambhal District: Sambhal (U.P.) - 244303				
	itored by	ETRC, Lucknow	,			
Location of Sampling points		Near Boiler				
1	GENERAL OBSERVATIONS	DETAILS-PM <sub>10</sub>	DETAILS-PM <sub>2,5</sub>			
(a)	Weather conditions	Clear	Clear			
(b)	Wind direction	West to East	West to East			
(c)	Average humidity (%)	56	56			
(d)	Average ambient temperature (°C)	31	31			
(e)	Time of Sampling Started (Hours)	10:29 am (19.09.2025)	10:29 am (19.09.2025)			
(f)	Time of Sampling completed (Hours)	10:14 am (20.09.2025)	10:14 am (20.09.2025)			
(g)	Total time of sampling (minutes)	24 hour (1409 minutes)	24 hour (1409 minutes)			
2	Average sampling rate for PM (m³/minute)	1.165	NA			
3	Average sampling rate for gas (LPM)	0.5	NA NA			
4	TOTAL VOLUME OF AIR SAMPLED		141			
	• PM (m³)	• 1641.252	• 23.480			
	GAS (liter)	• 704.4	20.400			

#### **TEST RESULT**

S. No.	Particulars	Protocol	Unit	Result	Range of testing /limit of detection	Standard as per NAAQS; dated 18/11/ 2009
1	Particulate matters size less than 10 µm (PM <sub>10</sub> )	IS 5182 (Part - 23): 2006 Reaffirmed: 2022	µg/m³	82.4	5.0 - 1200	For 24 hour =100
2	Particulate matters size less than 2.5 µm (PM <sub>2.5</sub> )	IS 5182 (Part - 24): 2019	µg/m³	51.11	2.0 - 500	For 24 hour =60
3	Sulphur Dioxide (SO <sub>2</sub> )	IS 5182 (Part - 02): 2001 Reaffirmed: 2022	µg/m³	14.56	5.0 - 1050	For 24 hour =80
4	Oxides of Nitrogen (NO <sub>x</sub> )	IS 5182 (Part - 06): 2006 Reaffirmed: 2022	µg/m³	20.39	6.0- 750	For 24 hour =80

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Authorized Signatory (Sandeep Kr Verma) Lab-Incharge



ومهيد تبائ Authorized Signatory (Dr. Ritu Garg) QM



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#### ETRC/PM09/TEST-REP/FT/42

## **TEST REPORT** AMBIENT AIR QUALITY MONITORING REPORT

Test Report Ref No.: ETRC/EPA/15528/2025	<b>Date of Report:</b> 25.09.2025			
Name /Address/Type of Industry	M/s Dhampur Bio Organics Limited			
	(Formerly known DSM S	Sugar, Distillery Division)		
	Unit: Asmoli, Division	: Bio fuels & Spirits		
	Village: Asmoli, Tehsi	I: Sambhal		
	District: Sambhal (U.F	2.) - 244303		
Monitored by	ETRC, Lucknow			
Location of Sampling points	ation of Sampling points Near Gahre Ki Madaiyan			
1 GENERAL OBSERVATIONS	DETAILS-PM <sub>10</sub>	DETAILS-PM <sub>2.5</sub>		
(a) Weather conditions	Clear	Clear		
(b) Wind direction	West to East	West to East		
(c) Average humidity (%)	58	58		
(d) Average ambient temperature (°C)	31	31 ·		
(e) Time of Sampling Started (Hours)	10:28 am (20.09.2025)	10:28 am (20.09.2025)		
(f) Time of Sampling completed (Hours)	10:12 am (21.09.2025)	10:12 am (21.09.2025)		
(g) Total time of sampling (minutes)	24 hour (1402 minutes)	24 hour (1402 minutes)		
2 Average sampling rate for PM (m³/minute)	1.170	NA		
Average sampling rate for gas (LPM)	0.5	NA		
4 TOTAL VOLUME OF AIR SAMPLED				
• PM (m³)	• 1640.574	• 23.371		
GAS (liter)	• 701.1			

#### **TEST RESULT**

S. No.	Particulars	Protocol	Unit	Result	Range of testing /limit of detection	Standard as per NAAQS; dated 18/11/ 2009
1	Particulate matters size less than 10 µm (PM <sub>10</sub> )	IS 5182 (Part - 23): 2006 Reaffirmed: 2022	μg/m³	79.8	5.0 - 1200	For 24 hour =100
2	Particulate matters size less than 2.5 µm (PM <sub>2.5</sub> )	IS 5182 (Part - 24): 2019	µg/m³	48.78	2.0 - 500	For 24 hour =60
3	Sulphur Dioxide (SO <sub>2</sub> )	IS 5182 (Part - 02): 2001 Reaffirmed: 2022	µg/m³	13.76	5.0 - 1050	For 24 hour =80
4	Oxides of Nitrogen (NO <sub>X</sub> )	IS 5182 (Part - 06): 2006 Reaffirmed: 2022	µg/m³	19.25	6.0- 750	For 24 hour =80

..... END OF REPORT......

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#### ETRC/PM09/TEST-REP/FT/42

## **TEST REPORT** AMBIENT AIR QUALITY MONITORING REPORT

Test Report Ref No.: ETRC/EPA/15529/2025 Name /Address/Type of Industry		Date of Report: 25.09.2025			
		M/s Dhampur Bio Organics Limited (Formerly known DSM Sugar, Distillery Division) Unit: Asmoli, Division: Bio fuels & Spirits Village: Asmoli, Tehsil: Sambhal District: Sambhal (U.P.) - 244303			
	itored by	ETRC, Lucknow	.,		
Loc	ation of Sampling points	Near Village: Asmoli			
1	GENERAL OBSERVATIONS	DETAILS-PM <sub>10</sub>	DETAILS-PM <sub>2.5</sub>		
(a)	Weather conditions	Clear	Clear		
(b)	Wind direction	West to East	West to East		
(c)	Average humidity (%)	58	58		
(d)	Average ambient temperature (°C)	31	31		
(e)	Time of Sampling Started (Hours)	10:45 am (20.09.2025)	10:45 am (20.09.2025)		
(f)	Time of Sampling completed (Hours)	10:19 am (21.09.2025)	10:19 am (21.09.2025)		
(g)	Total time of sampling (minutes)	24 hour (1410 minutes)	24 hour (1410 minutes)		
2	Average sampling rate for PM (m³/minute)	1.165	NA		
3	Average sampling rate for gas (LPM)	0.5	NA		
4	TOTAL VOLUME OF AIR SAMPLED  PM (m³) GAS (liter)	• 1642.650 • 705.0	• 23.498		

#### **TEST RESULT**

S. No.	Particulars	Protocol	Unit	Result	Range of testing /limit of detection	Standard as per NAAQS; dated 18/11/ 2009
1	Particulate matters size less than 10 µm (PM <sub>10</sub> )	IS 5182 (Part - 23): 2006 Reaffirmed: 2022	µg/m³	78.2	5.0 - 1200	For 24 hour =100
2	Particulate matters size less than 2.5 µm (PM <sub>2.5</sub> )	IS 5182 (Part - 24): 2019	µg/m³	46.81	2.0 - 500	For 24 hour =60
3	Sulphur Dioxide (SO <sub>2</sub> )	IS 5182 (Part - 02): 2001 Reaffirmed: 2022	µg/m³	12.82	5.0 - 1050	For 24 hour =80
4	Oxides of Nitrogen (NO <sub>x</sub> )	IS 5182 (Part - 06): 2006 Reaffirmed: 2022	µg/m³	17.33	6.0- 750	For 24 hour =80

..... END OF REPORT......

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## ETRC/PM09/TEST-REP/FT/43

## **TEST REPORT** STACK EMISSION MONITORING AND ANALYSIS REPORT

Test	Report Ref No.: ETRC/EPA/15530/2025	Date of Report: 25.09.2025				
Name /Address/Type of Industry		M/s Dhampur Bio Organics Limited				
		(Formerly known DSM Sugar, Distillery Division) Unit: Asmoli, Division: Bio fuels & Spirits Village: Asmoli, Tehsil: Sambhal District: Sambhal (U.P.) - 244303				
Monito	ored by	ETRC, Lucknow				
Sr. No.	GENERAL INFORMATION	DETAILS				
1.(a)	Date of monitoring	19.09.2025				
(b)	Stack material	RCC				
(c)	Height of stack from ground level	70.0 mts				
(d)	Source to which stack attached	Boiler				
(e)	No of Source attached with capacity	01 No., 35 TPH				
(f)	Type of fuel used	Bagasse & Conc. Spent Wash				
(g)	Details of APCS installed	Bag Filter				
2.	PARAMETERS	VALUES				
(a)	Ambient temperature (°C)	35.0				
(b)	Stack gas temperature (°C)	148.0				
(c)	Stack gas velocity (m/sec)	11.92				
(d)	Flow rate (LPM)	16				
(e)	Sampling time (minutes)	66				
(f)	Volume of air sampled (liters)	1056				

#### **TEST RESULT**

Sr. No.	Parameter	Unit	Protocol	Result	Range of Testing/ Limit of Detection	Standard (as per CPCB)
1	Particulate Matter	mg/Nm³	IS: 11255 (Part-1): 1985 Reaffirmed: 2019	45.20	2.0 - 1000	150

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ETRC/PM09/TEST-REP/FT/43

### **TEST REPORT** STACK EMISSION MONITORING AND ANALYSIS REPORT

Test	Report Ref No.: ETRC/EPA/15531/2025	Date of Report: 25.09.2025		
Name	Address/Type of Industry	M/s Dhampur Bio Organics Limited (Formerly known DSM Sugar, Distillery Division)		
		Unit: Asmoli, Division: Bio fuels & Spirits Village: Asmoli, Tehsil: Sambhal District: Sambhal (U.P.) - 244303		
Monite	ored by	ETRC, Lucknow		
Sr. GENERAL INFORMATION		DETAILS		
1.(a)	Date of monitoring	19.09.2025		
(b)	Stack material	RCC		
(c)	Height of stack from ground level	77.0 mts		
(d)	Source to which stack attached	Boiler		
(e)	No of Source attached with capacity	01 No., 45 TPH		
(f)	Type of fuel used	Bagasse & Conc. Spent Wash		
(g)	Details of APCS installed	ESP		
2.	PARAMETERS	VALUES		
(a)	Ambient temperature (°C)	36.0		
(b)	Stack gas temperature (°C)	148.0		
(c)	Stack gas velocity (m/sec)	11.93		
(d)	Flow rate (LPM)	16		
(e)	Sampling time (minutes)	65		
(f)	Volume of air sampled (liters)	1040		

#### **TEST RESULT**

Sr. No.	Parameter Un		Protocol	Result	Range of Testing/ Limit of Detection	Standard (as per CPCB)	
1	Particulate Matter	mg/Nm <sup>3</sup>	IS: 11255 (Part-1): 1985 Reaffirmed: 2019	44.52	2.0 - 1000	150	

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## ETRC/PM09/TEST-REP/FT/44

## **TEST REPORT** AMBIENT NOISE MONITORING AND ANALYSIS REPORT

Test Re	port Ref No.: ETRC/EPA/15532/2025	Date of Report: 25.09.2025		
Name /Address/Type of Industry		M/s Dhampur Bio Organics Limited (Formerly known DSM Sugar, Distillery Division) Unit: Asmoli, Division: Bio fuels & Spirits Village: Asmoli, Tehsil: Sambhal District: Sambhal (U.P.) - 244303		
Monitore	ed by	ETRC, Lucknow		
Sr. No.	GENERAL INFORMATION	DETAILS		
(a)	Date of monitoring	19/09/2025 (06.00 AM) to 21/09/2025 (06.00 AM)		
(b)	Sample Description	Ambient Noise		
(c)	Parameter	Equivalent sound level		
(d)	Environmental Condition	Normal		
(e)	Monitoring Protocol	IS: 9989: 1981, Reaffirmed: 2020		

#### **TEST RESULT**

			Ambient Noise Level	
Sr. No.	Sampling Location	Unit	Results Day Time (06.00 AM - 10.00 PM)	Results Night Time (10.00 PM - 06.00 AM)
1	Near Main Gate	dB(A)	61.32	52.44
2	Near Boiler	dB(A)	65.82	56.52
3	Near Distillery Area	dB(A)	60.30	50.55
4	Near Gahre ki Madaiyan	dB(A)	54.74	45.23
5	Near Village: Asmoli	dB(A)	51.02	42.19

Noise Standards as per CPC	B Schedule rule 3(1)	and 4(1)	
	Limits in dB(A) Leg		
Category of Arca/2011e	Day Time	Night Time	
Industrial Area	75	70	
Commercial Area	65	55	
Residential Area		45	
Silence Zone		40	
	Category of Area/Zone Industrial Area Commercial Area	Industrial Area 75 Commercial Area 65 Residential Area 55	

..... END OF REPORT......

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#### ETRC/PM09/TEST-REP/FT/45

## TEST REPORT WATER & WASTE WATER ANALYSIS

Test Report Ref No.: ETRC/EPA/15533/2025	Date of Report: 25.09.2025
Name /Address/Type of Industry	M/s Dhampur Bio Organics Limited
	(Formerly known DSM Sugar, Distillery Division) Unit: Asmoli, Division: Bio fuels & Spirits
	Village: Asmoli, Tehsil: Sambhal
	District: Sambhal (U.P.) - 244303

#### **SAMPLE DETAILS**

1	Water/ Waste Water	Ground Water	5	Packing Condition	Sealed
2	Sample Description	Borewell Water	6	Sample Collected by	ETRC
		Dorewen Water	0	Sample Collection date	22.09.2025
3	Sample received date	22.09.2025	7	Analysis Start Date	22.09.2025
4	Sample Quantity	5.0 liters	8	Analysis End Date	25.09.2025

#### **TEST RESULT**

Sr. No	Lact Parameter	Unit	Protocol/Test Method	Result	Range of testing	Indian Standard 10500: 2012	
NO			Treatment of the state of the s		/limit of detection	Desirable	Permissible
			Physico-chemical Para	meters			
1_	Colour	Hazen	IS 3025 (Part - 04): 2021	<5.0	5 - 30	5	15
2	Odour		IS 3025 (Part - 05): 2018	Agreeable	Qualitative	Agreeable	Agreeable
3	pH	-	APHA 24th Ed. 2023 - 4500 H+	7.4	1 - 14	6.5-8.5	No Relaxation
4	Turbidity	NTU	APHA 24 <sup>th</sup> Ed. 2023 - 2130 B	BDL	2 - 40	1	5
5	Total Dissolved Solids (TDS)	mg/l	IS 3025 (Part - 16): 2023	382.4	10 - 5000	500	2000
6	Ammonia (as total ammonia-N)	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 4500-NH <sub>3</sub> F	BDL	0.5 - 2.0	0.5	No Relaxation
7	Anionic Detergents (as MBAS)	mg/i	APHA 24 <sup>th</sup> Ed. 2023 - 5540 C	BDL	0.05 - 0.5	0.2	1.0
8	Calcium as Ca	mg/l	IS 3025 (Part - 40): 1991 Reaffirmed: 2019	56.0	2.0 - 600	75	200
9	Magnesium as Mg	mg/l	APHA 24th Ed. 2023 - 3500 Mg, B	27.216	0.1 - 200	30	100
10	Chloride as CI	mg/l	APHA 24th Ed. 2023 - 4500-Cl-B	24.0	2.0 - 2000	250	1000
11	Fluoride as F	mg/l	APHA 24th Ed. 2023 - 4500 F-C	0.38	0.02 - 5.0	1.0	1.5
12	Free Residual Chlorine	mg/l	IS 3025 (Part - 26): 1986 Reaffirmed: 2019	BDL	0.1 - 5.0	0.2	1.0
13	Nitrate as NO <sub>3</sub>	mg/l	IS 3025 (Part - 34): 1986 Reaffirmed: 2019	BDL	1.0 - 70	45	No Relaxation
14	Phenolic Compound (as C <sub>6</sub> H <sub>5</sub> OH)	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 5530 C	BDL	0.001 - 0.005	0.001	0.002
15	Sulphate as SO <sub>4</sub>	mg/l	APHA 24th Ed. 2023 - 4500- SO <sub>4</sub> 2-	26.0	1.0 - 500	200	400
16	Alkalinity as CaCO <sub>3</sub>	mg/l	APHA 24th Ed. 2023 - 2320 B	280.0	2.0 - 1000	200	600
17	Total Hardness as CaCO <sub>3</sub>	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 2340 C	252.0	5.0 - 800	200	600
18	Aluminium as Al	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	BDL	0.015 - 5.0	0.03	0.2
19	Boron as B	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	BDL	0.05 - 2.0	0.5	1.0
20	Copper as Cu	mg/l	APHA 24th Ed. 2023 - 3120 B (ICP-OES)	BDL	0.03 - 10	0.05	1.5

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Office & Laboratory: 2/261, Vishwas Khand, Gomti Nagar, Lucknow - 226 010 (U.P.)

Email: ETRCLTH@YAHOO.IN, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OH&S) ISO 14001:2015)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986

Test Report Ref No.: ETRC/EPA/15533/2025

21	Iron as Fe		APHA 24 <sup>th</sup> Ed. 2023 - 3120 B			T	
	non as re	mg/l	(ICP-OES)	0.13	0.05 - 20	0.3	No Relaxation
22	Manganese as Mn	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	0.03	0.02 - 5.0	0.1	0.3
23	Zinc as Zn	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	0.68	0.05 - 15	5	15
24	Cadmium as Cd	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	BDL	0.003 - 2.0	0.003	No Relaxation
25	Lead as Pb	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	BDL	0.01 - 10	0.01	No Relaxation
26	Mercury as Hg	µg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3112 B	BDL	0.5 - 1000	1.0	No Relaxation
27	Nickel as Ni	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	BDL	0.02 - 5.0	0.02	No Relaxation
28	Arsenic as As	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	BDL	0.02 - 2.0	0.01	0.05
29	Total Chromium	mg/l	APHA 24 <sup>th</sup> Ed. 2023 - 3120 B (ICP-OES)	BDL	0.03 - 5.0	0.05	No Relaxation
			Microbiological Param	neters	Ac		
30	E. coli	MPN/	IS 1622 - 1981		<1.8 -	Shall not be	detected in any
		100 ml	Reaffirmed: 2019	Absent	16000		nl sample
31	T. coli	MPN/ 100 ml	APHA 24 <sup>th</sup> Ed. 2023 - 9221 - A,B,C	Absent	<1.8 - 16000	Shall not be	detected in any
BDL=	Below Detection Limit		,=,0		10000	1001	nl sample

..... END OF REPORT......

ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects our best attempt to generate accurate results for the sample, mentioned in the report as above.

The result relate only to the items tested.

ETRC does not assume any liability for any claims or damages related to the quality of parameter analyzed in the results and/or the performance of the equipment constituting to the results.

All disputes subject to Lucknow jurisdiction.

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Complain regis er s available in our laboratory.

Joxma ..

**Authorized Signatory** (Sandeep Kr Verma) Lab-Incharge

(echni CHECKED

Authorized Signatory (Dr. Ritu Garg)

Page 2 of 2



Office & Laboratory: 2/261, Vishwas Khand, Gornti Nagar, Lucknow - 226 010 (U.P.)

Email: ETRCLTH@YAHOO.IN, Web.: www.etrcindia.com

(ISO 9001:2015, ISO 45001:2018 (OH&S) ISO 14001:2015)

An approved laboratory from Ministry of Environment, Forest and Climate change, Govt. of India under EPA 1986

### ETRC/PM09/TEST-REP/FT/46

## TEST REPORT SOIL ANALYSIS

Test Report Ref No.: ETRC/EPA/15536/2025	Date of Report: 25.09.2025
Name /Address/Type of Industry	M/s Dhampur Bio Organics Limited (Formerly known DSM Sugar, Distillery Division) Unit: Asmoli, Division: Bio fuels & Spirits
	Village: Asmoli, Tehsil: Sambhal District: Sambhal (U.P.) - 244303

## SAMPLE DETAILS

1	Sampling Location	Plant Premises	5	Packing Condition	Sealed
2	Sample Description	Soil Sample	6	Sample Collected by	ETRC
		- Com Gampio	0	Sample Collection date	22.09.2025
3	Sample received date	22.09.2025	7	Analysis Start Date	22.09.2025
4	Sample Quantity	1.0 kg	8	Analysis End Date	25.09.2025

### TEST RESULT

Sr. No.	Test Parameter	Unit	Protocol/Test Method	Result	Range of testing / limit of detection
1	pH	-	IS: 2720 (Part - 26): 1987 Reaffirmed: 2021	7.2	1 - 14
2	Electrical Conductivity	μS/cm	IS: 14767: 2000 Reaffirmed: 2021	310.0	1 - 40000
3	Moisture Contents	%	IS: 2720 (Part - 02): 1973 Reaffirmed: 2020	3.16	1.0 - 50
4	Nitrate as N	kg/Hec	IS: 14684: 1999 Reaffirmed: 2019	224.2	5.0 - 500
5	Phosphorus (as P₂O₅)	kg/Hec	ETRC/LABSOP/S/36: 2024	17.4	5.0 - 100
6	Potash as K₂O	kg/Hec	Method Manual of Soil Testing in Inda	176.0	5.0 - 1000
7	Copper as Cu	mg/kg	ETRC/LABSOPS/07: 2022	0.41	0.3 - 500
8	Zinc as Zn	mg/kg	ETRC/LABSOPS/08: 2022	12.25	1.0 - 500
9	Iron as Fe	mg/kg	ETRC/LABSOPS/09: 2022	142.0	1.0 - 500
10	Manganese as Mn	mg/kg	ETRC/LABSOPS/10: 2022	8.6	1.0 - 500
11	Sulphur	mg/kg	IS: 14685:1999 Reaffirmed:2019	12.0	5.0 - 100

Method Manual of Soil Testing in India (Department of Agriculture and Corporation Ministry of Agriculture, Government of India), 4.6.3 (16b): 2022

 ETRC warrants that all analytical work is conducted professionally in accordance with all applicable standard laboratory practices and that this data reflects our best attempt to generate accurate results for the sample, mentioned in the report as above.

The result relate only to the items tested.

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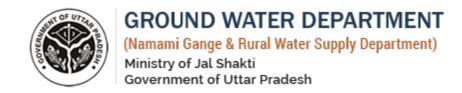
Complain register is available in our laboratory.

Authorized Signatory (Sandeep Kr Verma) Lab-Incharge



Authorized Signatory (Dr. Ritu Garg)

QM



### Form 8 (C)

# AUTHORIZATION/ NO-OBJECTION CERTIFICATE FOR SINKING OF NEW WELL FOR INDUSTRIAL/ COMMERCIAL/ INFRASTRUCTURAL OR BULK USER OF GROUND WATER

[Under Section 14 of the Uttar Pradesh Ground Water Management and Regulation Act, 2019.]

AUTHORIZATION/ NO-OBJECTION CERTIFICAT NO: NOC042562

VALID UP TO: 28/06/2026

Name of the Applicant	Ashok Malik	Son of/पुत्र	Ramesh Chand	
Address of the Applicant:	A - 9, DSM Sugar Asmoli			
Company Name:	DSM SUGAR ASMOLI DISTILLERY DIVISION	Company Address	A-5 DSM SUGAR ASMOLI ASMOL SAMBHAL UP,SHAMBHAL,24	
Serial No. of Application Form	SMBL1120NIN0001	Date of Submission	18/11/2020	
Specimen Signature of the User:				
Location particulars:				
District	Sambhal	Block	ASMOLI	
Plot No.	<b>No.</b> 310, 298, 292, 293 etc details attached			
Municipality/Corporation	NA	Ward No.	NA	
Holding No.			NA	
Rate of Withdrawal (m3/hr.)	168.00	Date of Energization (In Case of Electric Pump)		
Particulars of the Proposed W	ell and Pumping Device:			
Type of the Well	Tube Well/Boring	Purpose of the Well	Industrial	
Assembly Size (For Tube Well)	90.00	Approx. Strainer Length (For Tube Well)	0.00	
Diameter (For Dug Well)	neter (For Dug Well) 0.00		Submersible	
H.P. of the Pump:	50.00	Operational Device	Electric Motor	
Maximum Allowable Rate of Withdrawal (m3/hr.):	168.00 Maximum Allowable Running Hours Per		12.00	

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This No-Objection certificate authorizes the owner applicant (user) to sink a well in the location specified at SI. (2) for extraction of ground water at a rate not exceeding that as shown at SI. (3j), for Running Hours I day as shown at SI. (3k), and for maximum allowable annual extraction of ground water as shown at SI. (3k) and is valid subject to the observance of the conditions stated overleaf.

#### **GENERAL CONDITIONS:**

- In case of any change of ownership of the proposed well, fresh authorization has to be obtained.
- No change of location, design, rate of withdrawal and pumping device in respect of the proposed well as indicated at SL (2) and (3) of this
  certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this
  authorization
- For the purpose of measuring and recording the quantity of ground water extracted, every said user shall affix digital water flow meters (conforming to BIS/ IS standards) having telemetry system in the abstraction structure, which record rate and quantum of extraction, at outlet of pumping devices and it shall be presumed that the quantity recorded by the meter has been extracted by the said user, until the contrary is proved. The rate of extraction of ground water from the well as shown in item 3(k) shall not exceed to the recorded rate from water meters
- The concerned Authority reserves the right to stop extraction of ground water from the well due to quality hazards or any other reasons, if the situation so demands
- In case of any change of ownership of the existing well, fresh registration has to be obtained.
- No change of location, design, rate of withdrawal and pumping device in respect of the existing well as indicated at SI. (2) and (3) of this
  certificate shall be made without prior permission of the Competent Authority. Any deviation in this regard shall lead to cancellation of this
  registration
- In case, any of the particulars I information furnished by the applicant in his application for issuance of this registration is found to be incorrect during verification at any subsequent stage, this registration is liable for cancellation.
- The Certificate of Authorization/ NOC shall be valid for a period of five years from the date of issue. The applicant shall have to apply for renewal through a fresh application, at least ninety days prior to expiry of its validity.
- Construction of piezometers and installation of digital water level recorders with telemetry shall be mandatory for user. Depth and zone tapped of piezometer should be commensurate with that of the pumping well. The data, obtained from digital water level recorders shall be made available to this office on monthly basis
- Guidelines for Installation of Piezometers and their Monitoring

Piezometer is a borewell /tubewell used only for measuring the water level by lowering the tape/ sounder or automatic water level measuring equipment. It is also used to take water sample for water quality testing when ever needed. General guidelines for installation of piezometers are as follows:

- The piezometer is to be installed/constructed at the minimum of 50 m distance from the pumping well through which ground water is being withdrawn. The diameter of the piezometer should be about 4" to 6".
- The depth of the piezometer should be same as is case of the pumping well from which ground water is being abstracted. If, more than one piezometers are installed the second piezometer should monitor the shallow ground water regime. It will facilitate shallow as well as deeper ground water aquifer monitoring.
- o No. of piezometers to be constructed & Type of water level monitoring mechanism shall be as per below table:

S.No	Quantum of Cround vector withdrawal (ours/day)	No of vice-restore very inch	Monitiring Mechanism	
	Quantum of Ground water withdrawal (cum/day)	No.of piezometers required	Manual	DWLR with Telemetry
1	< 10	0	0	0
2	11 - 50	1	1	0
3	50- 500	1	0	1
4	> 500	2	0	2

- The measuring frequency should be monthly and accuracy of measurement should be up to cm. the reported measurement should be given in meter upto two decimal.
- For measurement of water level sounder or automatic water level recorder (AWLR)/ Digital Automatic water level recorder (DWLR)
   with telemetry system should be used for accuracy.
- The measurement of water level in piezometer should be taken, only after the pumping from the surrounding tube wells has been stopped for about four to six hours.
- All the details regarding coordinates, reduced level (with respect to mean level), depth, zone taped and assembly lowered should be
  provided for bringing the piezometer into the Hydrograph Monitoring System for Ground Water Department, Uttar Pradesh, and for its
  validation.

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- The ground water quality has to be monitored twice in a year during pre-monsoon (May/June) and post-monsoon (October/November) periods. Quality may be got analyzed from NABL approved lab. Besides, one sample (1 lt capacity bottle) to the concerned Director, Ground Water Department, Uttar Pradesh, for chemical analysis.
- A Permanent display board should be installed at piezometer/Tube wells site for providing the location, piezometer/ tube well number, depth and zone tapped of piezometer/tube well for standard referencing and identification.
- Any other site specific requirement regarding safety and access for measurement may be taken care off.
- Any other condition(s) that may be imposed by the concerned Authority.
- In case, any of the particulars I information furnished by the applicant in his application for issuance of this permit is found to be incorrect during verification at any subsequent stage, this permit is liable for cancellation.
- Any other condition imposed by the concerned Authority.
- SPECIFIC CONDITIONS:
- (A) For Industrial User: No Objection Certificate for ground water extraction by industries shall be granted subject to the following specific conditions:
- i) No Objection Certificate shall be granted only in such cases where local government water supply agencies are not able to supply the desired quantity of water.
- ii) All industries shall be required to adopt latest water efficient technologies so as to reduce dependence on ground water resources.
- iii) All industries abstracting ground water in excess of 100 m3/d shall be required to undertake annual water audit through Confederation of Indian Industries (CII)/ Federation Indian Chamber of Commerce and Industry (FICCI)/ National Productivity Council (NPC) certified auditors and submit audit reports within three months of completion of the same to CGWA. All such industries shall be required to reduce their ground water use by at least 20% over the next three years through appropriate means.
- iv) Construction of observation well(s) (piezometer)(s) within the premises and installation of appropriate water level monitoring mechanism as mentioned in General Condition no.10 shall be mandatory for industries drawing/ proposing to draw more than 10 m3
- /day of ground water and. Monitoring of water level shall be done by the project proponent. The piezometer (observation well) shall be constructed at a minimum distance of 15 m from the bore well/production well. Depth and aquifer zone tapped in the piezometer shall be the same as that of the pumping well/ wells. Monthly water level data shall be submitted online to the Ground Water Department, UP.
- v) The proponent shall be required to adopt roof top rain water harvesting/ recharge in the project premises. Industries which are likely to pollute ground water (chemical, pharmaceutical, dyes, pigments, paints, textiles, tannery, pesticides/ insecticides, fertilizers, slaughter house, explosives etc.) shall store the harvested rain water in surface storage tanks for use in the industry.
- vi) Injection of treated/ untreated waste water into aquifer system is strictly prohibited.
- vii) Industries which are likely to cause ground water pollution e.g. Tanning, Slaughter Houses, Dye, Chemical/ Petrochemical, Coal washeries, other hazardous units etc. (as per CPCB list) need to undertake necessary well head protection measures to ensure prevention of ground water pollution.

•

- (B) Infrastructural User: The No Objection Certificate for ground water abstraction will be granted subject to the following specific conditions:
- i) In case of infrastructure projects that require dewatering, proponent shall be required to carry out regular monitoring of dewatering discharge rate (using a digital water flow meter) and submit the data online to Ground Water Department, UP as applicable. Monitoring records and results should be retained by the proponent for two years, for inspection or reporting as required by District Ground Water Management Council.
- ii) Installation of Sewage Treatment Plants (STP) shall be mandatory for new projects, where ground water requirement is more than 20 m3 /day. The water from STP shall be utilized for toilet flushing, car washing, gardening etc

This certificate is electronically generated and does not require digital signature

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