## P-667-OGACIPL-E-SUGAR-92023

## SUMMARY ENVIRONMENTAL IMPACT ASSESSMENT (EIA) REPORT (IN ENGLISH AND MARATHI)

FOR

EXPANSION OF SUGAR FACTORY FROM 4,960 TCD TO 10,000 TCD, COGENERATION PLANT FROM 25 MW TO 33 MW AND MANUFACTURING OF 300 KLPD RS / ENA/ ETHANOL FROM C & B HEAVY MOLASSES / SUGARCANE SYRUP AND RS/ENA FROM GRAINS ALONG WITH 8 MW POWER GENERATION IN THE 300 KLPD GRAIN DISTILLERY SETUP APPROVED UNDER B2 CATEGORY FOR PRODUCT ETHANOL

BY

# OLAM GLOBAL AGRI COMMODITIES INDIA PVT. LTD.

# AT/POST: CHANNEHATTI, RAJGOLI (KH.) TAL: CHANDGAD, DIST.: KOLHAPUR, MAHARASHTRA STATE

PREPARED BY



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AN ISO 9001 : 2015 & QCI - NABET ACCREDITED ORGANIZATION



FEBRUARY - 2024



#### DATE: 21.02.2024

To, The Member Secretary Maharashtra Pollution Control Board (MPCB); 3<sup>rd</sup>& 4<sup>th</sup> Floor, Kalpataru Point, Sion Circle, Sion (E), Mumbai - 400 022

- Sub.: Application for grant of Environmental Clearance (EC) in respect of Expansion of Sugar Factory from 4,960 TCD to 10,000 TCD, Cogeneration Plant from 25 MW to 33 MW and Manufacturing of 300 KLPD RS / ENA/ Ethanol from C & B Heavy Molasses / Sugarcane Syrup and RS/ENA from Grains along with 8 MW Power Generation in 300 KLPD Grain Distillery Setup approved under B2 Category for product Ethanol by – Olam Global Agri Commodities India Pvt. Ltd (OGACIPL), At/Post: Channehatti, Rajgoli (Kh.) Tal: Chandgad, Dist.: Kolhapur, Maharashtra State.
- **Ref.**: 'Terms of Reference'(ToR) granted vide letter no. IA-J-11011/244/2023-IA-II(I) dated 12.02.2024. Copy is enclosed at **Enclosure I**.

#### Dear Sir,

We – "Olam Global Agri Commodities India Pvt. Ltd (OGACIPL)" have planned to go for an expansion of Sugar Factory from 4,960 TCD to 10,000 TCD, Cogeneration Plant from 25 MW to 33 MW and Manufacturing of 300 KLPD RS / ENA/ Ethanol from C & B Heavy Molasses / Sugarcane Syrup and RS/ENA from Grains along with 8 MW Power Generation in 300 KLPD Grain Distillery Setup approved under B2 Category for product Ethanol At/Post: Channehatti, Rajgoli (Kh.) Tal: Chandgad, Dist.: Kolhapur, Maharashtra State.

Accordingly, an application in Form -1 format was submitted to the 'Ministry of Environment, Forest and Climate Change; New Delhi' for grant of ToR's on 21.12.2023. Subsequently, standard ToR's were granted. Refer **Enclosure** – I for copy of ToR letter. In the ToR letter, directions were given to conduct Public Hearing w.r.t. our proposed project. Now, in order to conduct Public Hearing, we hereby are submitting all the relevant documents and information to your office.

Along with the Public Hearing application, a draft EIA Report as per the generic structure stipulated in MoEF Notification No. S.O.1533 (E) dated 14.09.2006 and amendments thereto; and Executive Summary Report in two languages (English and Marathi) are enclosed separately. The same provide details of Pollution Control Facilities, Production Processes and Raw Materials as well as Finished Products and Environmental Management Plan (EMP) etc. regarding the unit.

Olam Global Agri Commodities India Private Limited Regd. Office : 2nd Floor, Tower-A, DLF Building No. 8, DLF Cyber City, Phase II, Gurgaon, Haryana, India, 12 Plant address- Gat No. 76/1, Channehatti, Rajgoli Kh, Tal:Chandgad. Dist :Kolhapur Maharashira- 416508 CIN : U51229HR2021FTC097076 Www.olamgroup.com



'Twenty Sets' of various documents, as mentioned above and equivalent number of soft copies of same have been submitted for your information and necessary further action.

Also, a Demand Draft of Rs. 50,000/- (Rs. Fifty Thousand only) bearing no. 432625 drawn on Kotak Mahindra Bank, Belgaum dated 21.02.2024 towards the Public Hearing charges, as decided by the govt., has been presented herewith.

Please do the needful and oblige.

Thanking you.

Yours faithfully, Common Mr. Bharat Kundal (VP & Business Head- Sugar)

Olam Global Agri Commodities India Private Limited Regd. Office : 2nd Floor, Tower-A, DLF Building No. 8, DLF Cyber City, Phase II, Gurgaon, Haryana, India, 122002 Plant address- Gat No. 76/1, Channehatti, Rajgoli Kh, Tal:Chandgad. Dist :Kolhapur Maharashtra- 416508 CIN : US1229HR2021FTC097076 www.olamproup.com

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**Executive Summary in English** 

#### **Summary of Draft EIA Report For**

## Expansion of Sugar Factory from 4,960 TCD to 10,000 TCD, Cogeneration Plant from 25 MW to 33 MW and Manufacturing of 300 KLPD RS / ENA/ Ethanol from C & B Heavy Molasses / Sugarcane Syrup and RS/ENA from Grains along with 8 MW Power Generation in 300 KLPD Grain Distillery Setup approved under B2 Category for product Ethanol by Olam Global Agri Commodities India Pvt. Ltd. (OGACIPL);

Located at At/Post: Channehatti, Rajgoli (Kh.) Tal: Chandgad, Dist.: Kolhapur, Maharashtra State.

## 1) THE PROJECT

**Olam Global Agri Commodities India Pvt. Ltd. (OGACIPL)** located at Gat No. 76/1, 76/2/1, 76/2/2, 757, At/Post: Channehatti, Rajgoli (Kh.) Tal: Chandgad, Dist.: Kolhapur, Maharashtra State. Industrial site is towards North – West of Kolhapur, at a distance of about 77 Km from site. Existing Sugarcane crushing capacity of the sugar factory is about 4,960 TCD. First crushing season for sugar factory was done in year 2010-11. The proposed Expansion of Sugar Factory from 4,960 TCD to 10,000 TCD, Cogeneration Plant from 25 MW to 33 MW and Manufacturing of 300 KLPD RS / ENA/ Ethanol from C & B Heavy Molasses / Sugarcane Syrup and RS/ENA from Grains along with 8 MW Power Generation in 300 KLPD Grain Distillery Setup approved under B2 Category for product Ethanol.

The above mentioned proposed project attracts the condition of prior Environmental Clearance procurement as per the EIA Notification No. S. O. 1533 (E) dated 14.09.2006 and amendments thereto issued by Ministry of Environment, Forest and Climate Change (MoEFCC); New Delhi. Now, as per the amended "EIA Notification No. S.O. 1599 (E)" dated 25.06.2014; the sugar factory & cogeneration plant comes under Category 'B' activity 5(j), 1(d) respectively. But due to applicability of General Condition i.e. Maharashtra-Karnataka Interstate boundary is located at 0.25 Km on North side and Adjacent on East side of Industry plot, the application is submitted to MoEFCC for grant of ToRs.

Details of capital investment are given in table 1.

No.	Industrial Unit	Capital Investment (Rs. Cr)		
		Existing	Proposed	Total
1	Sugar Factory & Co-gen Plant	372.89	84.54	457.43
2	Distillery	299.10	15.00	314.10
	Total	671.99	99.54	771.53

**Table 1 Project Investment Details** 

#### 2) THE PLACE

Proposed establishment of distillery & expansion of sugar factory shall be carried out in existing premises of Sugar Factory by OGACIPL. Total land utilized for industrial activities by OGACIPL is 55 Ha. Out of this, built up area of existing sugar factory & residential colony is 10.79 Ha. After establishment of Distillery total built up area will be 12.94 Ha. Refer Appendix - A from Draft EIA report for plot layout plan. A No Objection Certificate (NOC) for proposed project has been obtained from the Rajgoli (Kh.) Gram panchayat. Same is presented at certificates and other documents of EIA report.

Table 2 Area Dreak up						
No.	List of Area	Area (Sq. M)				
190.	List of Area	Existing	Proposed	Total		
1	Total Plot Area	5,50,000		5,50,000		
2	Total Built-up Area					
	Sugar Factory & Co-gen Plant	54,433.96	15,681.20	70,115.16		
	Distillery	53,491.07	5,840.94	59,332.01		
	Total Built-up Area	1,07,925.03	21,522.14	1,29,447.17		
3	Area under Road	71,793.86		71,793.86		
4	Parking Area	83,522.02 (15%)		<b>83,522.02</b> (15%)		
5	Green Belt Area	2,57,713.20 (47%)		2,57,713.20 (47%)		
6	Total Open Area			7,523.77		

Table 2 Area Break up

#### **3) THE PROMOTERS**

OGACIPL promoters are well experienced in the field of Sugar Factory and have made a thorough study of entire project planning as well as implementation schedule. The names and designations of the promoters are as under-

**Table.3 List of Promoters** 

No.	Name	Designation
1	Mr. Sanjay Sacheti	Director
2	Mr. Ramarathinam Srinivasrathinam Kuppurathinam	Director
3	Mr. Neelamani Mutukumar	Director

#### 4) THE PRODUCTS

The details of products that are being manufactured under existing sugar factory as well as those to be manufactured under Establishment of Distillery & Expansion of Sugar Factory are represented in following table

Industrial	Duoduot & Dy puoduota	Quantity (MT/M)		
Unit	Product & By-products	Existing	Proposed	Total
Sugar Eastany	Sugar (13.5%)*	19,350	21,150	40,500
Sugar Factory (Expansion from	Molasses (4%)*	5,940	6,060	12,000
4,960 TCD to	Bagasse (30%)*	44,640	45,360	90,000
10,000 TCD)	Pressmud (3%)*	4,500	3,000	7,500
Co-gen (Expansion from 25 MW to 33 MW)	Electricity (MW)	25	8	33
	RS / ENA/ Ethanol from Molasses or Sugarcane Juice (KL/M)		9,000	9,000
	RS/ENA from Grain (KL/M)		9,000	9,000
Distillery (Proposed 300	Ethanol from Grain under B2 Category (KL/M)	9,000		9,000
KLPD)	CO <sub>2</sub> Gas	6,750		6,750
	DDGS	7,500		7,500
	Electricity Generation (MW) on Distillery boiler		8	8

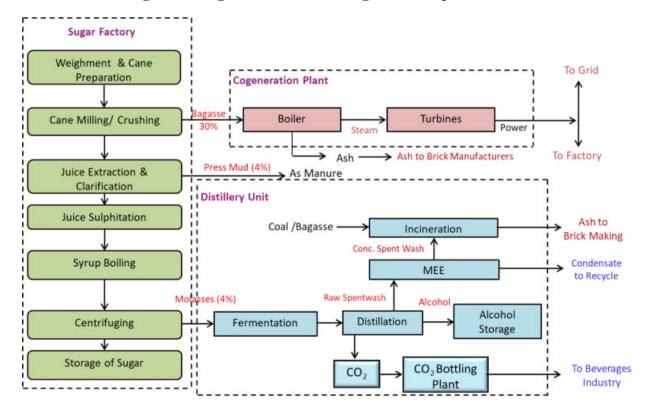
Table 2.6 List of Products & By-products for Integrated Complex

By-products generated during production of sugar in the form of molasses would be used as raw materials for distillery. Bagasse generated would be used for fuel in boiler. Pressmud shall be stored temporary in yard in own premises & same will would be sold to farmers as manure. By-products generated from distillery will be in the form of fusel oil & CO<sub>2</sub> Gas. Fusel oil will be used in manufacturing of perfumes & CO<sub>2</sub> Gas will be compressed, bottled and sold for secondary use.

## 5) THE PURPOSE

Sugarcane potential, agro-climatic conditions, cost of conversion & overheads etc are the major deciding factors for fixing the crushing capacity of sugar factory. Today, sugar factories cannot survive in healthy condition on a single product i.e. sugar. Thus, it is essential to develop sugar factory into an affiliated complex so as to utilize the valuable by-products more profitably. Bagasse based cogeneration of steam and electricity has been practiced since long time in sugar mills. Molasses is also another important by-product of the sugar industry. Alcohol has assumed very important place in the Country's economy. It is a vital raw material for a number of chemicals and a renewable source of energy. It has been a source of a large amount of revenue by way of excise duty levied by the Govt. on alcoholic liquors. It has a potential as fuel in the form of power alcohol for blending with petrol. Also, the fermentation alcohol has great demand in countries like Japan, U.S.A., Canada, Sri Lanka etc., as the synthetic alcohol produced by these countries, from naphtha of petroleum crude, is not useful for beverages. Considering the above facts as well as availability of raw material, management of OGACIPL decided to go for expansion.

## 6) MANUFACTURING PROCESS





## 7) ENVIRONMENTAL ASPECTS

OGACIPL has implemented an effective 'Environmental Management Plan' and various aspects of the same are as follows: -

### A. Water Use, Effluent Generation and its Treatment

#### a. Water Use

The details of water consumption in existing expansion as well as proposed activities are as follows-

No	Description	Molasses Based Distillery			
	_	During Crushing	Non-Crushing		
1	Domestic	#15	#15		
2	Industrial				
	Process	<b>*</b> 2382	<b>*</b> 2382		
	Cooling Makeup	*1044	*1044		
	Boiler Makeup	144 (#103 + *41)	#144		
	DM Plant	#30	#30		
	Lab & Washing	*10	#10		
	Ash quenching	*5	*5		
	Industrial Use	3615 (#133+*2382+*1100)	3615 (#1233+*2382)		
		(96% Recycle)	(66% Recycle)		
	Grand Total	<b>3630</b> (#148+*2382+*1123)	<b>3630 (</b> <sup>#</sup> <b>1248+</b> <sup>★</sup> <b>2382</b> )		
	Norm: Fresh Water @ 10 KL / KL Alcohol.	0.5 KL / KL	4.1 KL / KL		

 Table 2.17 Water Consumption in Proposed 300 KLPD Distillery

No	Description	Cane Syrup Based	Grain Based
1	Domestic	#15	#15
2	Industrial		
	Process		$\frac{1800}{^{\mu}476} + \frac{1800}{^{2}954} + \frac{1800}{^{2}370}$
	Cooling Makeup	<b>*</b> 1044	1044 (*745 + <sup>#</sup> 299)
	Boiler Makeup	<b>*</b> 144	#144
	DM Plant	<b>*</b> 30	#30
	Lab & Washing	<b>*</b> 10	#10
	Ash quenching	<b>*</b> 5	*5
	Industrial Use	*1233	<b>3033</b> (#959 + <b>*</b> 1704 +
		(100% recycle)	<sup>Ω</sup> 370)
			(68% Recycle)
	Grand Total	1248 (#15+*1233)	3048 ( <sup>#</sup> 974 + *1704 + <sup>Ω</sup> 370)
	Norm: Fresh Water @ 10 KL / KL Alcohol.	0 KL/KL	3.2 KL/KL

Note : #- Fresh Water, ♣- CPU Treated Effluent, Ω- Recycled Thin Slope, \* - Excess Condensate.

No.	Description	Existing (M <sup>3</sup> /D)	Proposed (M <sup>3</sup> /D)	Remark			
Α	Domestic	<sup>#</sup> 60	#78	• Fresh Water use			
В	Industrial			(process):			
	Process	*1465	*2950	1. Existing: 0 Lit			
	Cooling	648 (*348 +@300)	850 (*260 +@590)	/MT			
	Makeup			2. Proposed: 0 Lit			
	Boiler Makeup	*264	*432	/MT			
	DM Backwash	*53	*86	• Norm: 100			
	Lab &	*5	*10	Lit/MT of cane			
	Washing			crushed			
	Ash Quenching	*2	*4				
	Industrial Use	2437 (*2137 + <sup>@</sup> 300)	<b>4332</b> (*3742 + <sup>@</sup> 590)				
		(100% Recycle)	(100% Recycle)				
С	Green Belt	230 (*172 + \$58)	230 (*158 + \$72)				
D	Grand Total	2727	4640				
		$(^{\#}60 + *2309 + @300 + $58)$	( <sup>#</sup> 78 + *3900 + <sup>@</sup> 590 + <sup>\$</sup> 72)				

Note: : #- Fresh Water, ♣- CPU Treated Effluent, Ω- Recycled Thin Slope, \* - Excess Condensate

Total water requirement for proposed distillery under molasses based operations during Noncrushing season shall be to the tune of 3630 M<sup>3</sup>/Day. Out of this, 1248 CMD will be Fresh water taken from Tamraparni River and 2382 CMD will be recycled effluent from proposed Distillery CPU in molasses based operations. Total 66% recycle water will be used in distillery.

Further, water requirement under Sugarcane Juice Operation shall be to the tune of 1248 M<sup>3</sup>/Day. Out of this, 1233 CMD will be Treated effluent from Distillery CPU in Sugarcane Operations, 15 CMD will be Fresh water taken from Tamrparni River.

The total water requirement under Grain based distillery shall be to the tune of 3048 M<sup>3</sup>/Day. Out of this 1704 CMD will be Treated effluent from Distillery CPU in Sugarcane Operations, 974 CMD will be Fresh water taken from Tamrparni River,

For existing Sugar Factory total 2727 CMD water is consumed. After Expansion of Sugar factory 4640 CMD water will be consumed. Out of this 78 CMD is fresh water taken from Tamrparni River, 590 CMD is Treated water from ETP & 72 CMD is Treated water from STP. More details about water budget are presented in EIA report at Chapter 2.

Total effluent would be generated from the various operations & processes from existing & expansion activities in the sugar factory and establishment of the distillery. Details of same are presented below-

 Table 2.17 Effluent Generation in Proposed 300 KLPD Distillery

No	Description	Effluent			Disposal
		Molasses based	Cane juice based	Grain based	
1	Domestic	12	12	12	
2	Industrial				
3	Process (Fermentation & Dilution)	Raw Sp. Wash- 2400	Raw Sp. Wash- 1200		• Molasses Operation: Raw Spent wash shall be concentrated in MEE. The concentrated spent wash

	Conc. Spentwash- 480	Conc. Spentwash- 120		<ul> <li>will be directly burnt into incineration boiler.</li> <li>Grain Operation: Thick Slop &amp; Wet Cake- to Drier – DDGS – ZLD.</li> </ul>
	Sp. Lees- 412 MEE Condensate- 1920	Sp. Lees- 264 MEE Condensate- 1080	PRC Lees – 765 Condensate – 913	Other effluent viz. MEE Condensate, spent lees, cooling blow down, boiler blow down, lab & washing shall be forwarded to
Cooling blow down	157	157	157	existing distillery CPU
Boiler blow down	30	30	30	which is duly upgraded
DM Plant Backwash	30	30	30	under expansion. Treated effluent shall be recycled in
Lab & Washing	10	10	10	process to achieve ZLD of process effluent.
Grand Total	Other Effluents – 2559 Spentwash- 480	Other Effluents – 1571 Spentwash- 120	Other Effluents – 1905	
Norm: Spent wash Generation 8 KL/KL of Alcohol.	1.6 KL/KL	0.4 KL/KL		

#### Table 2.17 Effluent Generation in Sugar Factory

No.	Description	Existing	After Expansion	Disposal
1	Domestic	48	63	Proposed STP
2	Industrial			
	Process	147	354	Treated in existing
	Cooling Makeup	65	85	ETP having primary,
	Boiler Makeup	53	87	secondary & tertiary
	DM Backwash	55	86	treatment.
	Lab & Washing	5	10	
	Industrial Total	325	622	
	Effluent Generation	65	62	
	(Norm : 200 L/Tonne			
	of cane crushed)			

#### **b.** Effluent Treatment

#### i) Domestic Effluent

Domestic effluent from existing activities of OGACIPL sugar factory is to the tune of 48  $M^3/D$  same is being treated separately in septic tanks followed by soak pits provided in a decentralized manner. After implementation of new distillery & sugar factory expansion, total domestic effluent from OGACIPL campus shall be 75  $M^3/$  Day (Domestic effluent from sugar factory– 63  $M^3/$  Day and to that of distillery 12  $M^3/$  Day). Same shall be treated in proposed Sewage Treatment Plant (STP) and the treated effluent shall be reused for green belt development in own factory premises.

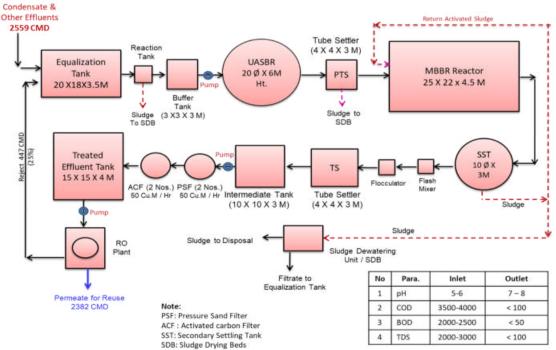
### ii) Industrial Effluent

Total trade effluent generated from existing sugar factory is 325  $M^3/D$  same is treated in existing Effluent Treatment Plant (ETP) having capacity 500  $M^3/D$  provided in own factory premises comprising of primary, secondary & tertiary unit operations. After Expansion of Sugar Factory total trade effluent generated from 622  $M^3/D$  same is treated in existing Effluent Treatment Plant (ETP) which will be upgraded having capacity 500  $M^3/D$ . Figure 2.8 may be referred for same. Further, treated effluent is being used for green belt development in own factory premises.

Effluent generated from Molasses based distillery, total raw spent wash to be generated under Molasses based @ 2400 M<sup>3</sup>/D, would be concentrate in Multiple effect evaporator (MEE) and the conc. spentwash @ 480 M<sup>3</sup>/D (1.6 KL/KL of alcohol) would be burnt in incineration boiler. Other effluents viz. spent lees @ 412 M3/D, MEE condensate @ 1920 M3/D and other effluents @ 227 M3/D will be treated in proposed CPU under distillery unit. Refer figure 2.6 for the same. Treated water from CPU 2382 will be reused in process, thereby achieving Zero Liquid Discharge (ZLD).

Effluent generated from Cane juice based distillery, total raw spent wash to be generated @ 1200 M3/D, would be concentrate in Multiple effect evaporator (MEE) and the conc. spentwash @ 120 MT/D (0.8 KL/KL of alcohol) would be burnt in incineration boiler. Other effluents viz. spent lees @ 264 M3/D, MEE condensate @ 1080 M3/D and other effluents @ 227 M3/D will be treated in proposed CPU under distillery unit. Refer figure 2.6 for the same. Treated water from CPU 1450 will be reused in process, thereby achieving Zero Liquid Discharge (ZLD).

After establishment of grain based distillery, wet cake i.e. Distillers Wet Grains with Soluble (DWGS-60% moisture) @ 482 MT/D will be generated after decantation of spent wash, which will be sold to farmers as cattle feed. This wet cake further dried in dryers will result in to loss of moisture thereby forming Distillers Dry Grains with Soluble (DDGS- 10% moisture) @ 250 MT/D. This DDGS has more shelf life compared to DWGS & sold as cattle feed.



## Figure 2.6 Flow Chart of Proposed Distillery CPU

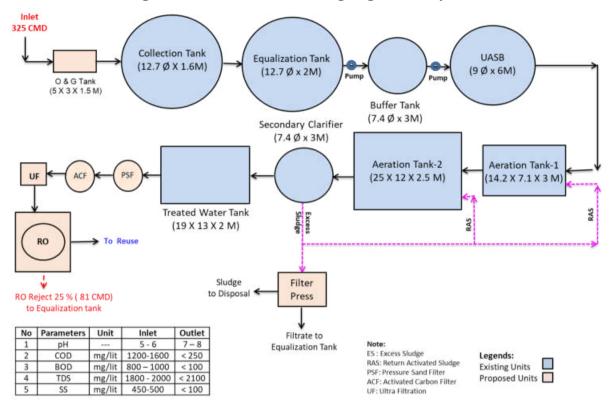
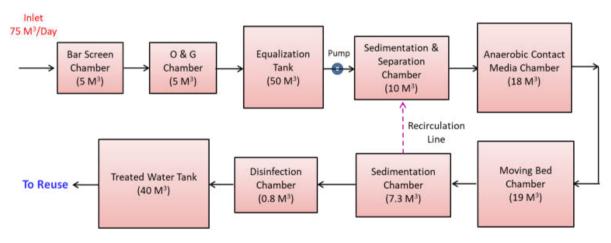
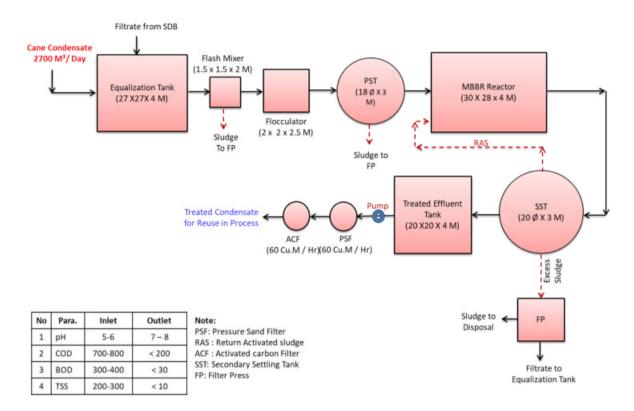


Figure 3 Flow Chart of Existing Sugar Factory ETP

**Figure 4 Flow Chart of Proposed STP** 



No.	Parameter	Unit	Inlet	Outlet
1	pН		6.0 - 8.5	6.0 - 8.5
2	COD	mg/lit	400 - 500	< 50
3	BOD	mg/lit	250 - 300	< 20
4	TSS	mg/lit	150 - 250	< 30
5	0 & G	mg/lit	20 - 30	< 10



### Figure 4 Flow Chart of Proposed Sugar factory CPU

#### **B.** Air Emissions

Air Pollution can be defined as the presence in the outdoor atmosphere, of one or more air contaminants (i.e. dust, fumes, gas, mist, odour, smoke or vapour) in sufficient quantities, of such characteristics and of such duration so as to threaten or to be injurious to human, plant or animal life or to property, or which reasonably interferes with the comfortable enjoyment of life or property. Assignments w.r.t. Air Pollution (AP) and Air Quality (AQ) including modeling were undertaken by in-house FAE of EEIPL. Details of sources of air pollution & control equipment's are presented in Table 2.21. Fuel Storage and ESP's details are presented in Table 2.23 and Table 2.24 respectively. Stack height calculations for proposed distillery boiler is presented at **Appendix - F.** 

Na	Sugar Factory				Distillery
No.	Description	Exist	ing	Proposed	Proposed
	Attached to-	Boiler 1*	DG Sets	Boiler 2	<b>Incineration Boiler</b>
					3*
1	Capacity	130 TPH	725 KVA (2	50 TPH	60 TPH
		(Existing 110	Nos.), 320		
		TPH to be	KVA		
		modified to 130			
		TPH)			
2	Fuel type	Bagasse	HSD	Bagasse	Spentwash +
				-	Bagasse/Coal
3	Fuel Qty.	Existing: 1320			
	(MT/D)	Proposed: 240	200 Ltr.	600	648+695/278
		Total: 1560			

No.	Description	Sugar Factory			Distillery
140.	Description	Exist	ing	Proposed	Proposed
4	MOC	RCC	MS	RCC	RCC
5	Shape	Round	Round	Round	Round
6	Height, AGL	71	14	70	75 M
7	Diameter	2.5	0.6	3	3 M
	(internal)				
8	APC equipment	ESP		ESP	ESP

**Note:** Under B2 Category Grain based Distillery project, the 60 TPH bagasse fired boiler is approved and same boiler will be converted into Incineration Boiler. The approved 60 TPH boiler will be run on Spentwash & Bagasse/Coal during Molasses/ Sugarcane Juice operations and only bagasse will be used as fuel during Grain operations.

Also, the approved Stack height of 60 TPH bagasse fired boiler under B2 category EC is adequate for proposed incineration boiler.

Under Sugar Factory expansion, existing 110 TPH boiler will be modified to 130 TPH and one new additional boiler of capacity 50 TPH will be installed.

#### **C. Noise Pollution Aspect**

#### 1. Sources of Noise

- i. The existing sugar factory and co-gen; noise generating sources are the boiler house, turbine rooms, cane crushing section and mill house, etc.
- ii. In the Distillery, very high noise generating sources would not exist. Expected noise levels in the section would be about 70 dB (A) or so. Adequate noise abatement measures like silencer & maintenance of pumps, motors, and compressors would be carried out and enclosures would be provided to abate noise levels at source. Moreover, enclosures to the machinery would be provided wherever possible.
- iii. Fermentation section & distillation section would be the other minor noise generating sources. The expected noise levels in these sections would be in range of 70 to 80 dB(A).
- iv. Existing sugar factory and co-gen; noise generating sources are the boiler house, turbine rooms, cane crushing section and mill house, etc.
- v. Adequate green would be developed in phase wise manner in and around the industry. So that it would further attenuate the noise levels.

#### 2. Control Measure

Isolation, separation and insulation techniques to be followed, PPEs in the form of earmuffs, earplugs etc. would be provided to workers. D.G. Sets are enclosed in a separate canopy to reduce the noise levels.

#### D. Hazardous Wastes

No any hazardous waste would be generated from Distillery project. Hazardous waste generated from existing sugar factory and their disposal methods is presented in table 8.

No.	Category	Quantity		Disposal
		Existing After		
			Expansion	
1	(5.1) Used / Spent	6 MT/A	10 MT/A	Reuse in own boiler

#### **Table 8 Details of Hazardous Waste**

### E. Solid Wastes

No	Unit	Туре	Quantity (MT/M)		Disposal
			Existing	After	
			_	Expansion	
1	Sugar Factory &	ETP Sludge	9	16	Used as Manure
1	Co-gen Plant	Boiler Ash	1200	1950	Brick
		Boiler Ash	660	4140	manufacturing
2	Distillow	Yeast	1920	1920	Used as Manure
	Distillery	Sludge			
		CPU Sludge	54	75	

Table 9 Solid Waste Generation & Disposal

## F. Odor Pollution

There are number of odour sources in existing sugar factory and proposed distillery, which include molasses handling and storage, fermentation and distillation, secondary effluent treatment, and storage of effluents, stale cane, bad mill sanitation, bacterial growth in interconnecting pipes & unattended drains. Measures adopted under existing unit for controlling same are proper housekeeping, sludge management in biological ETP units, steaming of major pipe lines, regular use of bleaching powder in the drains, efficient handling, prompt & proper disposal of press mud. Under proposed project of distillery, spent wash shall be carried through closed pipeline for spent wash storage and handling activity shall be entirely eliminated.

## G. Compliance with the Norms

All the relevant acts, rules and guidelines with respect to effluent treatment and disposal, solid & hazardous wastes handling and disposal as well as in respect of emission handling and disposal, wherever applicable, as specified by the Maharashtra Pollution Control Board (MPCB) or any other concerned authority are strictly followed in the existing set up. Same practice shall be continued after proposed project activity.

## H. Environmental Management Cell (EMC)

OGACIPL is already having an EMC functioning under its sugar factory. Members of the EMC are well qualified and experienced in their concerned fields. This cell shall be further augmented suitably under proposed establishment of distillery & expansion of sugar factory. EMC members are as under.

No.	Name of Member	Designation
1	Bharat Kundal	Chairman
2	Shashank Shekhar	Member
3	Shankar Managavi	Member
4	William Carvalho	Environmental Manager
5	Arshad Sandi	Chemist
6	Dattu Patil	Chemist
7	Pradeep Dhavale	Chemist
8	Sachin Kamble	Chemist
9	Appaya Belli	Operator
10	Basu Agasgi	Operator
11	Ravi Naik	Operator

 Table 10.Environmental Management Cell of OGACIPL

No.	Name of Member	Designation
12	Iranna Naik	Helper
13	Jotiba Patil	Helper
14	Bajarao Kadam	Helper

Details of capital as well as O & M costs towards environmental aspects under the existing as well as proposed establishment setup are as follows -

		Cost Compone	nt (Rs. Lakhs)
No.	Description	Capital	Annual O & M
Α	Existing		
1	Air Pollution Control: APC Equipment's [ESP for boiler - 1 Nos.	500	65
	(Stack height 71 M), OCMS		
2	Water Pollution Control: Sugar Factory ETP, OCMS	265	10
3	Noise Pollution Control: PPE (Ear plugs, Ear Muff, Insulations,	30	5
	Barriers)		
4	Environmental Monitoring & Management	30	5
5	Occupational Health & Safety: Health checkup, Occupational health	130	25
	center		
6	Green Belt Development	50	10
	(2.7% of Rs. 372.89 Cr; Existing Investment) Total	1,005	120
B	Approved 300 KLPD Grain Distillery Project under B2 Category		
1	Air Pollution: APC Equipment's [ESP for boiler – 1 Nos. (Stack	700	70
	height 75 M)], OCMS, CO <sub>2</sub> bottling Plant, Ash handling system		
2	Water Pollution: Installation of Distillery CPU, Sugar Factory CPU,	2,500	250
	STP, Installation of MEE, Dryer for Grain.		
3	Noise Pollution Control PPE (Ear plugs, Ear Muff, Insulations,	50	5
	Barriers)		
4	Occupational Health & Safety: Health checkup, OHC	100	20
5	Environmental Monitoring	50	5
6	Green Belt Augmentation & Rain Water Harvesting Plan	150	15
7	Afforestation in Parsenahatti village; 1000 Trees X Rs.500/ No.	5	2
8	Coverage of Bagasse Yard	100	10
9	Surfacing of Internal Roads to control fugitive dust and Ash Silo	50	5
	Total; (9% of Capital Investment of Rs. 398.64 Cr)	3,705	382
С	Proposed Expansion Project		
1	Air Pollution: APC Equipment's [ESP for boiler – 1 Nos. (Stack	600	60
	height 70 M)], OCMS, Ash handling system		
2	Environmental Monitoring	30	10
	Total; (6% of Capital Investment of Rs. 99.54 Cr)	630	70
	Grand Total	5,340	572

Table 11.Capital as well as O & M Cost (Existing & Proposed)

### I. Rainwater Harvesting Aspect

Average annual rainfall in the area = 1060 mm
 Table .12 Area Taken for RWH

No.	Description	Area (Sq.M)	Runoff Factors Considered	Average Annual Rain Fall (M)	RWH Quantity (M <sup>3</sup> )		
1	Roof Top Harvesting						
i	Rooftop Area	43,058.15	0.8	1.06	36,513.31		
	Total Rooftop Harvesting 19,665.37						
2	Surface Water Har	rvesting					
i	Green Belt Area	2,57,713.20	0.3	1.06	81,952.73		
ii	Area under Roads	71,793.86	0.5	1.06	38,050.74		
iii	Parking Area	83,522.02	0.5	1.06	44,266.67		
iv	Open Space	7,523.77	0.3	1.06	2,392.55		
	Total Surface Water Harvesting 1,66,662.69						

Hence, the total water becoming available after rooftop and land harvesting would be

Rooftop Harvesting	+	Surface Harvesting	=	Total RWH
36,513.31	+	1,66,662.69	= =	2,03,176 M <sup>3</sup> 203.17 ML

#### J. Green Belt

#### Table .14 Area Details

No.	List of Area	Area (Sq.M)
1	Total Plot Area	5,50,000
2	Existing Green Belt Area (47%)	2,57,713.20
3	Total Open Area	7,523.77

#### Criteria for Green Belt Development Plan

Emission of SPM,  $SO_2$  is the main criteria for consideration of green belt development. Plantation under green belt is provided to abate effects of the above emissions. Moreover, there would also be control on noise from the industry to surrounding localities as considerable attenuation would occur due to the barrier of trees provided in the green belt.

#### **Socio-Economic Development**

Socio economic study was carried within 10 Km radius of the study area was carried out with the help of a structured close ended interview schedule, comprising of 32 questions in Marathi, which was drafted prior to and employed during the survey. Refer Socio – economic profile in Chapter 3 of EIA report for detailed information of socio economic aspect. Observations and conclusions after the socio-economic study are as follows-

- Most of the villages have basic facilities like drinking water, preliminary educational infrastructure, toilets and electricity. Good transportation & satisfactory educational facilities are present.
- A majority of the population within the sample size had a good income which is mostly due to sugarcane cultivation.

- Indirect & direct Job opportunities provided to locals by industry.
- Most villages lacked drainage system, open drainages; scattered solid waste as well as poor sanitation was visible.
- Improper, inadequate and not within close vicinity health facilities is the major problem faced by locals.

## 7) ENVIRONMENTAL MONITORING PROGRAMME

Reconnaissance of the study area was undertaken in the Pre monsoon period. Field monitoring for measuring meteorological conditions, ambient air quality, water quality, and soil quality and noise levels was initiated. Report incorporates the data monitored during the period from November 2021 – December 2021 – January 2022 and secondary data collected from various sources which include Government Departments related to ground water, soil, agriculture, forest etc.

## A. Land Use

Land use study requires data regarding topography, zoning, settlement, industry, forest, roads and traffic etc. Collection of this data was done from various secondary sources viz., Census books, Revenue records, State and Central Government Offices, Survey of India topo sheets as well as high resolution satellite image and through primary field surveys.

### B. Land Use/ Land Cover Categories of Study Area

No.	Classes	Area in Ha.	Percentage
1	Built Up Area	1223	3.70
2	Crop Land	7556	53.30
3	Fallow Land	4360	30.26
4	Barren Land	2347	6.92
5	Water Bodies	570	0.18
6	Grass Land with open Scrub	5986	2.39
7	Forest	9373	3.25
	Total	31415	100.00

Table 15 Land Use/ Land Cover

## C. Meteorology

Methodology adopted for monitoring surface observations is as per the norms laid down by Bureau of Indian Standards (BIS) and the India Meteorology Department (IMD). On-site monitoring was undertaken for various meteorological variables in order to generate the data. Further, certain secondary meteorological data like temperatures, relative humidity, rainfall intensity etc. have been taken from IMD, Aurangabad.

Meteorological parameters were monitored during the period December-2022 January -February-2023. Details of parameters monitored, equipment's used and the frequency of monitoring have been given in Chapter 3 of the EIA report. Hereunder, details of predominant wind directions and wind categories are given.

## **D.** Air Quality

This section describes the selection of sampling locations, includes the methodology of sampling and analytical techniques with frequency of sampling. Presentation of results for **December-2022 January -February-2023** survey is followed by observations. All the requisite monitoring assignments, sampling and analysis was conducted through the laboratory

of Green Envirosafe Engineers & Consultant Pvt. Ltd., Pune which is NABL accredited and MOEFCC; New Delhi approved organization. Further, same has received certifications namely ISO 9001–2015 and OHSAS 18001–2007 from DNV. Ambient air monitoring was conducted in the study area to assess the quality of air for  $PM_{10}$ ,  $PM_{2.5}$ ,  $SO_2$ ,  $NO_x$  and CO. various monitoring stations selected are shown in table 16.

Location	Location Name	Type (Industrial- Rural)	Location Details	Type of Zone (Core- Buffer)	Distance from site (Km)	Directio n w.r.t site	Latitude	Longitude
1	Industrial Site	Industrial	-	Core			16° 1'55.59"N	74°27'32.51"E
2	Vantamuri	Rural	U/w	Buffer	8.03	Е	16° 1'51.11"N	74°32'1.88"E
3	Sutagatti	Rural	U/w	Buffer	5.54	NE	16° 3'8.77"N	74°30'24.43"E
4	Kamewadi	Rural	D/	Core	4.69	W	16° 1'58.34"N	74°24'52.76"E
5	Teurwadi	Rural	D/w	Buffer	8.96	W	16° 1'27.85"N	74°22'33.87"E
6	Gudaganatti	Rural	C/m	Core	4.44	N	16° 4'20.11"N	74°26'52.31"E
7	Kurihala	Rural	C/w	Core	4.75	S	15°59'35.80"N	74°27'2.94"E
8	Shivapur	Nearest Habitat	NH	Core	1.39	Е	16° 2'4.34"N	74°28'18.83"E
Domont							uri & Shivapur) in	

Table 16 Ambient Air Quality Monitoring (AAQM) Locations

**Remark** The Predominant wind direction is East. Accordingly there are two villages (Vantamuri & Shivapur) in east direction as an upwind location. But the village shivapur is nearest to the industrial site & there is no other village in the predominant direction. So we have considered Sutagatti village as upwind location which is in NE direction.

Table 17 Summary of the AAQ Monitoring Results for Season
[December 2022-January - February 2023]

	Location												
		Industrial	Vanta	Sutagatti	Kamewadi	Teurwadi	Gudaganatti	Kurihala	Shivapur				
		Site	muri										
PM10	Max.	64.4	60.9	53.4	60.0	59.3	60.8	59.5	62.3				
μg	Min.	56.4	47.0	48.3	49.7	50.1	47.1	48.0	51.7				
g/M3	Avg.	62.5	50.4	51.2	55.6	54.0	53.2	52.0	57.7				
	98%	64.4	57.8	53.3	59.8	58.7	60.1	59.5	61.9				
PM2.5	Max.	32.1	23.1	21.9	26.8	25.8	24.8	25.2	28.7				
μg/M3	Min.	22.6	17.7	16.3	22.3	20.7	19.7	18.4	22.5				
• -	Avg.	28.1	20.9	19.2	24.7	23.0	22.1	21.6	25.8				
	98%	31.7	23.1	21.7	26.7	25.8	24.6	25.0	28.5				
SO2	Max.	17.8	11.1	11.4	15.7	15.1	14.2	12.5	16.7				
µg/M3	Min.	11.8	5.7	5.3	10.0	10.1	9.4	7.2	10.6				
	Avg.	15.8	9.5	8.6	13.2	12.8	11.9	10.0	14.1				
	98%	17.8	11.0	10.9	15.7	15.1	14.2	12.5	16.1				
NOx	Max.	27.1	19.8	17.9	23.9	22.4	21.3	20.4	23.4				
µg/M3	Min.	22.0	15.5	13.6	18.2	18.8	17.2	15.1	20.5				
	Avg.	24.3	17.9	16.0	21.0	20.9	19.4	18.0	22.3				
	98%	26.5	19.5	17.9	23.7	22.4	21.1	20.3	23.4				
CO	Max.	0.550	0.060	0.030	0.090	0.070	0.090	0.080	0.100				
mg/m3	Min.	0.050	0.040	0.030	0.070	0.050	0.070	0.060	0.080				
	Avg.	0.300	0.043	0.030	0.075	0.054	0.077	0.067	0.089				
	98%	0.550	0.055	0.030	0.090	0.065	0.090	0.080	0.100				

Notes: PM10, PM2.5, SO2 and NOx are computed based on 24 hourly values, CO is computed on hourly values

Zone Station	$PM_{10} \ \mu g/M^3$		$PM_{2.5}\mu g/M^3$		$SO_2  \mu g/M^3$		NOx µg/M <sup>3</sup>		CO mg/M <sup>3</sup>	
Zone Station	24 Hr	A.A.	24 Hr	A.A	24 Hr	A.A.	24 Hr	A.A.	8 Hr	1 Hr
Industrial, Rural & Residential Area	100	60	60	40	80	50	80	40	2	4
Eco-sensitive Area Notified by Govt.	100	60	60	40	80	20	80	30	2	4

 Table 18 National Ambient Air Quality Standards (NAAQS) by CPCB

 (Notification No. S.O.B-29016/20/90/PCI-L by MOEFCC; New Delhi dated 18.11.2009)

Note: A.A. represents Annual Average

#### E. Water Quality

Sampling and analysis of water samples for physical, chemical and heavy metals were also undertaken through the laboratory of Green Enviro Safe Engineers & Consultant Pvt. Ltd Pune. Eight locations for surface water and eight locations for ground water were selected. Same are listed below-

**Table 19 Monitoring Locations for Surface Water** 

Sr. No	Location Name	Sample Code	Type of Water Source	Type of Zone (Core- Buffer)	Distance from site (Km)	Direction w.r.t site	Latitude	Longitude
1	Channehatti	SW1	Pond	Core Zone	0.52	Ν	16° 2'17.18"N	74°27'24.12"E
2	Channehatti	SW2	Nala	Core Zone	1.38	NW	16° 2'22.23"N	74°26'47.02"E
3	Yaratanhatti	SW3	Nala	Core Zone	2.29	NNW	16° 3'7.41"N	74°26'53.18"E
	Kamewadi	SW4	River	Core Zone	3.84	ENE	16° 2'29.80"N	74°25'22.13"E
5	Kamewadi	SW5	River	Core Zone	4.66	NW	16° 3'18.97"N	74°25'13.75"E
6	Yaratanhatti	SW6	River	Core Zone	2.16	NNW	16° 3'8.28"N	74°27'7.33"E
7	Parsenahatti	SW7	River	Core Zone	3.23	NE	16° 3'13.67"N	74°28'46.30"E
8	Dindalkop	SW8	Lake	Core Zone	3.84	SSW	16° 0'20.28"N	74°26'11.41"E

#### **Table 20 Monitoring Locations for Ground Water**

Sr. No.	Sample Code	Location Name	Type (Dug Well- Bore Well)	Type of Zone (Core- Buffer)	Distanc e from site (Km)	Direct ion w.r.t site	Latitude	Longitude
1	GW-1	Rajgoli Bk	Dug Well	Core Zone	1.19	SSW	16° 1'23.90"N	74°27'16.36"E
2	GW-2	Channehatti	Dug Well	Core Zone	0.63	SW	16° 1'50.60"N	74°27'10.01"E
3	GW-3	Parsenahatti	Dug Well	Core Zone	1.04	SSE	16° 1'33.05"N	74°27'47.57"E
4	GW-4	Rajgoli Bk.	Dug Well	Core Zone	1.30	SW	16° 1'36.04"N	74°26'52.76"E
5	GW-5	Rajgoli Bk.	Dug Well	Core Zone	2.08	SSW	16° 1'3.22"N	74°26'50.94"E
6	GW-6	Channehatti	Dug Well	Core Zone	1.47	W	16° 2'6.44"N	74°26'38.63"E

Sr No	<b>L</b>	Location Name	Type (Dug Well- Bore Well)	Type of Zone (Core- Buffer)	Distanc e from site (Km)	Direct ion w.r.t site	Latitude	Longitude
7	GW-7	Parsenahatti	Dug Well	Core Zone	1.86	Е	16° 2'3.89"N	74°28'30.52"E
8	GW-8	Yaratanhatti	Dug Well	Core Zone	1.95	NNW	16° 2'54.06"N	74°26'51.93"E
	Romark							

Remark

Results observed after monitoring ground water and surface water are mentioned in chapter 3 of EIA report.

## F. Noise Level Survey

Study area of 10 Km radius with reference to the proposed project site has been covered for noise environment. Four zones viz. Residential, Commercial, Industrial and Silence Zones have been considered for noise monitoring. Some of the major material roads were covered to assess the noise due to traffic. Noise monitoring was undertaken for 24 hours at each location. Details of noise monitoring stations are given in following table-

No	Location Name	Type (Industrial / Rural)	Type of Zone (Core/ Buffer)	Distance from site (Km)	Direct ion w.r.t site	Latitude	Longitude
1	Site	Industrial	Core	-	-	16° 1'55.59"N	74°27'32.51"E
2	Shivapur	Rural	Buffer	1	Е	16° 2'1.34"N	74°28'11.55"E
3	Linganhatti	Rural	Buffer	2.3	SE	16° 0'36.46"N	74°27'40.43"E
4	Diddalkop	Rural	Buffer	4.5	SW	15°59'53.54"N	74°26'4.10''E
5	Rajgoli	Rural	Buffer	3.2	SW	16° 1'18.44"N	74°25'49.39"E
6	Channehatti	Rural	Buffer	3.4	NW	16° 2'38.27"N	74°25'46.58"E
7	Ramawadi	Rural	Buffer	4.1	NW	16° 3'44.27"N	74°26'12.82"E
8	Masti	Rural	Buffer	4.4	NE	16° 4'12.70"N	74°28'22.60"E

**Table 21 Noise Sampling Locations** 

#### **Table 22 Ambient Noise Levels**

Sr. No.	Location		A	verage Noise	e Level in dB	(A)	
SI. NO.	Location	L <sub>10</sub>	L <sub>50</sub>	L <sub>90</sub>	L <sub>eq(day)</sub>	L <sub>eq(night)</sub>	L <sub>dn</sub>
1	N1	52.0	53.2	57.4	56.1	51.5	59.0
2	N2	42.9	46.8	47.5	52.7	41.8	52.3
3	N3	42.8	46.1	47.7	51.0	42.1	51.4
4	N4	42.3	45.8	47.3	51.7	41.2	51.5
5	N5	43.0	47.0	47.7	53.3	41.8	52.8
6	N6	42.7	46.4	47.9	52.2	41.8	52.1
7	N7	42.3	46.4	47.5	51.4	41.6	52.2
8	N8	42.6	45.9	47.6	51.6	41.3	51.5

#### G. Socio-Economic Profile

Socio-economic status of the population is an indicator for the development of the region. Any developmental project of any magnitude will have a bearing on the living conditions and on the economic base of population in particular and the region as a whole. Chapter 3 may be referred for details of this aspects.

## H. Ecology

Ecological survey for establishment of distillery by OGACIPL was carried. Out of the total 32 villages within 10 km radius, 18 villages were selected for Ecology and Biodiversity (EB) studies and for Questionnaire survey, for being representative of the major habitats in the study area i.e., 4 villages within 5 km radius and 3 villages between 5 and 10 km radius. Chapter 3, Section 3.12 may be referred for details of this aspects.

## 8) ADDITIONAL STUDIES & INFORMATION

#### **Risks Assessment**

Risk to human health is inherent. It is safe only when the installation is dismantled at the end of its useful life. The following principles should be used as guidelines for the selection of risk criteria -

- 1. Increase in risk, caused by the presence of the plant to local community (i.e. neighboring public) should be negligible in comparison to the risk they already have in their daily life.
- 2. Work force on the plant should be expected to accept a potentially greater risk than members of the local community since the work force have been trained to protect themselves from the possible hazards and thus reducing the actual risk to themselves.

Risk criteria considered by Green A.G. (1982) are given as below:

- 1. Risk to Plant: This risk is to be given priority only when it is proved beyond doubt that the risk to life is so low that reducing this risk may not be justified. Under this consideration, the risk to economic damage may be considered.
- 2. Risk to Public and Employees: The scale used for risk to employee and public is Fatal Accident Rate (F.A.R.) or more commonly Fatal Accident Frequency Rate. (F.A.F.R.). The F.A.R. and F.A.F.R. is defined as number of deaths from industrial injury expected in a group of 1000 men during their working period. For more details w.r.t. this aspect, Chapter 7 of EIA may be referred.

#### 9) ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

#### A. Impact on Topography

No major topographical changes are envisaged in the acquired area a except some leveling and landscaping. In acquired area, the changes would be due to the manmade structures, like Distillery structure and ancillary units. Industrial activity would invite positive benefits in the form of land leveling and tree plantation in the plant vicinity and other premises.

#### **B.** Impact on Climate

Impact on the climate conditions due to the proposed activity is not envisaged, as emissions to the atmosphere, of flue gases with very high temperatures are not expected

#### C. Impact on Air Quality

A study area of 10 km radius is considered for determination of impacts

#### i. Baseline Ambient Air Concentrations

24 hourly 98<sup>th</sup> percentile concentrations of  $PM_{10}$ ,  $PM_{2.5}$ ,  $SO_2$  and NOx in Ambient Air, recorded during the field study conducted for the season December 2022-January - February 2023are considered as baseline values. They represent impact due to operations of existing nearby industries on this region. Existing baseline concentrations are summarized in following table and the GLC of the same is included in 4<sup>th</sup> chapter of EIA report.

Parameter	PM10	PM <sub>2.5</sub>	$SO_2$	NOx	СО
Conc. (µg/m <sup>3</sup> )	62.5	28.1	15.8	24.3	0.30
NAAQS	$100 \ \mu g/m^3$	60 µg/m <sup>3</sup>	80 μg/m <sup>3</sup>	$80 \ \mu g/m^3$	4mg/m <sup>3</sup>

 Table .23 Baseline Concentrations (98 Percentile)

#### ii. Air Polluting Sources

Major sources of air pollution are boiler as well as vehicles used for transportation. Under sugar factory expansion, the existing 110 TPH Boiler shall be modified to 130 TPH capacity with fuel quantity 1560 MT/D. ESP will be used as APC with stack height 71 M. Also, a new 50 TPH boiler will be installed with fuel 600 MT/D having ESP as APC equipment and 70 M Stack Height.

A new 60 TPH incineration boiler will be installed under proposed distillery unit. Bagasse / Coal + Sp.wash shall be used as fuel. Fuel quantity shall be Spent wash @ 648 MT/D, Coal @ 278 MT/D or Bagasse @ 695 MT/D. ESP will be used as APC equipment followed by stack height of 75 M.

## **D. IMPACT ON WATER RESOURCES**

#### i. Impact on Surface Water Resources& Quality

Surface water along with recycled water will be used to meet water requirment of OGACIPL project complex. Effluent from distillery; Raw Spent wash shall be primarily conc. in Multi Effect Evaporator (MEE). Concentrated spent wash will be incinerate in incineration boiler. Other Effluents viz. spent lees, Boiler blow down, cooling tower, and lab; washing, DM backwash is forwarded to CPU. Treated effluent shall be used in process to achieve ZLD.

Total domestic effluent would be treated in proposed STP. Hence there will not be any impact on surface water resource. More details about water budget are presented at Chapter 2.

#### ii. Impact on Ground Water Resources& Quality

Water required for the industry would be obtained from Tamrparni river. Permissions have been obtained for lifting required amount of water from the river and a copy of the letter is enclosed for reference at Appendix -D. Ground water will not be a source of raw water for the proposed project. Moreover, there will not be any discharge of untreated effluent so there will not be any impact on ground water level and quality.

#### E. IMPACT ON SOIL

Impact on the soil characteristics is usually attributed to air emissions, wastewater discharges and solid waste disposal. Under existing sugar factory as mentioned above, there will not be discharge of any untreated effluent on land. Dust Catcher with Wet Scrubber are installed to existing boilers. Boiler ash from existing boiler is used as manure/ give brick manufacturer. Hence, there will not be any major increase in chemical constituents of soil through deposition of air pollutants/ discharge of waste water. Moreover, there will not be any process emissions worth mentioning, the impact on the soil characteristics will be nil.

#### F. IMPACT ON NOISE LEVELS

Workers could get annoyance and can lose concentration during operation. It can cause disturbance during working. People working near the source need risk criteria for hearing damage while the people who stay near the industry need annoyance and psychological damage as the criteria for noise level impact analysis. OGACIPL is not major noise producing industry. There shall be no any prominent effect due to vibration at the project site.

## G. IMPACT ON LAND USE

Present use of the project land is Industrial wherein the sugar factory have already been established. Proposed project Activity would be implemented in existing premises of OGACIPL. Hence no change in the land use pattern is expected. Therefore the impact on land use is non-significant.

### H. IMPACT ON FLORA AND FAUNA

Discharge of untreated wastewater from the industry in surrounding area can also cause significant environmental impact on the aquatic habitats and affect dependent biodiversity. In case of air pollution, industry is going to contribute in SPM pollution load in nearby area. This may have negative impact particularly on avifauna, surrounding crop yields & local population. Details in respect of impacts on ecology and biodiversity are described in Chapter 3.

## I. IMPACT ON HISTORICAL PLACES

No historical places in study area. No major impact was observed during site visit.

#### **10) SALIENT FEATURES OF EMP**

Following routine monitoring program as detailed in Table 24 shall be implemented at site. Besides to this monitoring, the compliances to all Environmental Clearance conditions and regular permissions from CPCB /MoEFCC shall be monitored and reported periodically.

No.	Description	Location	Parameters	Frequency	Conducted by
1	Ambient Air Quality	Upwind-2, Downwind-2 Crosswind- 2 (Near Cane Yard, Near Main ETP, Near Colony.)	PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NOx, CO	Monthly	
		Study area - (Villages namely – Vantamuri, Sutagatti, Kamewadi, Teurwadi, Gudaganatti, Kurihala, Shivapur)		Quarterly	
2	Work Zone Air Quality	4 Locations (Mill section, Sugar bagging section, Distillation Section)	PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NOx, CO	Monthly	
3	Stack Emissions	Boiler –3 Nos. (Existing boiler & Proposed Boiler), D.G Sets	SPM, SO <sub>2</sub> , NOx	Monthly	
4	Fugitive Emissions	Ethanol storage area & Distillation column	VOC	Monthly	MoEFCC &
5	Ambient Noise	5 Locations (Near main gate, Near ETP, near Sugar godown, Distillation Section)	Spot Noise Level recording; Leq(n), Leq(d), Leq(dn)	Monthly	NABL Approved
	Work zone Noise	Premises – 5 Nos (Mill section, Boiler, DG set, Turbine section)		Monthly	External Lab
6	Effluent	Treated, Untreated	pH, SS, TDS, COD, BOD, Chlorides, Sulphates, Oil & Grease.	Monthly	
7	Drinking water	Factory Residential Colony	Parameters as per drinking water Std IS:10500	Monthly	
8	Soil	8 locations within 5 Km (Villages- Channehatti Yaratanhatti, Rajgoli Kh, Kurihala Bk , New Vantamuri, Bhutramhatti, Dundage, Attihal)	pH, Salinity, Organic Carbon, N, P, K	Quarterly	
9	Water Quality (Ground Water &	Locations in study area –Ground water (Villages: Rajgoli Bk, Channehatti, Parsenahatti, Rajgoli	Parameters as per CPCB guideline for water quality	Quarterly	

Table 24 Plan for Monitoring of Environmental Attributes in and around OGACIPL

No.	Description	Location	Parameters	Frequency	Conducted by
	Surface Water)	Bk, Rajgoli Bk, Channehatti, Parsenahatti, Yaratanhatti) Surface Water- (Villages: Channehatti, Channehatti, Yaratanhatti, Kamewadi, Kamewadi, Yaratanhatti, Parsenahatti, Dindalkop)	monitoring – MINARS/27/2007-08		Ĩ
10	Waste management	Implement waste management plan that Identifies and characterizes every waste associated with proposed activities and which identifies the procedures for collection, handling & disposal of each waste arising.	Records of Solid Waste Generation, Treatment and Disposal shall be maintained	Twice in a year	
11	Emergency Preparedness such as fire fighting	Fire protection and safety measures to take care of fire and explosion hazards, to be assessed and steps taken for their prevention.	On site Emergency Plan, Evacuation Plan, firefighting mock drills	Twice a year	By OGACIPL
12	Health Check up	Employees and migrant labour health check ups	All relevant health checkup parameters as per factories act.	Once in a Year	
13	Green Belt	Within Industry premises as well as nearby villages	Survival rate of planted sapling	In consultation with DFO.	
14	CER	As per activities		Six Monthly	

**Executive Summary in Marathi** 

## ओलम ग्लोखल ब्रॅग्री कमोडीटीज् इंडीया प्रायपेट लिमीटेड.

(ओ.ग्लो.ॲ.क.इं.प्रा.लि)

मु/पो .चेन्नेहदटी, वाजगोळी (खु.), ता.चंढगड, जि. कोल्हापूव, महावाष्ट्र.

यांच्या

भध्याच्या भाखव कावबान्याची गाळप क्षमता ४,९६० टन प्रतिढिन पाभून १०,००० टन

प्रतिढ़िन पर्यंत, सहजीव प्रकल्प २५ मे.पॅट पासून ३३ मे.पॅट पर्यंत विश्ताविकवण आणि B2 अणीधांतर्गत मंजूव ३०० किलो लि./ढिन

धान्य कणांपन्न आधानित आभापनी प्रकल्पांमध्ये मोलॅभिभ (खीं पभी)/ केन भिन्नप यांचा पापन कस्वन ३०० किलो लि./दिन आन्न.एभ/इ.एन.ए./इधेनॉल यांचे उत्पादन प धान्य कणांपासून आन्न.एभ/इ.एन.ए. यांचे उत्पादन तभेच ८ मे.पॅट पीजनिर्मिती प्रकल्प

या प्रकल्पांषाषतच्या इन्प्हायवमेंट इंपॅक्ट अभेभमेंट अहवालाचा भावांश.

#### १)प्रकल्पा विषयी थोडक्यात

ओलम ग्लोखल अँग्री कमोडीटीज् इंडीया प्रायपेट लिमीटेड. (ओ.ग्लो.अॅ.क.इं.प्रा.लि) हा प्रकल्प गट.नं. ७६/१, ७६/२/१, ७६/२/२, ७५७, मु/पो. चेन्नेहटटी, वाजगोळी (खु.), ता.चंढ़गड, जि. कोल्हापूर, महावाष्ट्र येथे उभावणेत आलेला आहे. हा प्रकल्प कोल्हापूर्व पाक्षुन क्रूमावे ७७ कि.मी. अंतवापव उत्तव-पश्चिम ढिशोला आहे आणि मुंखई पाक्षुन ३७६ कि.मी. अंतवापव उत्तव-पश्चिम ढिशोला आहे. काध्याच्या प्रकल्पामध्ये ४९६० टन प्रतिढिन क्षमतेचा काखव काव्यबाना कार्यवत आहे. कार्वेव काव्यबान्याचा प्रथम गळीत हंगाम क्षेत्र २०१०-११ मध्ये घेणेत आला होता. ओ.ग्लो.ऑ.क.इं.प्रा.लि च्या प्यप्रभापनाने ३०० किलो लि. प्रतिढिन क्षमतेचा आखव काव्यबाना प्र के. कार्यवत्त्र काव्यबान्याचे पिक्तावीकवण हे क्षध्याच्या ४९६० मे.टन/ढिन क्षाय्वव्र काव्यबाना प्र २५ मे. पॅट कहपीज प्रकल्पाच्या आपावात उभावणीचे नियोजन केले आहे.

भवस प्रकल्प हा बि. १४.०९.२००६ च्या इन्यायसमेंन्ट इपॅक्ट अभेभमेंन्ट (EIA) नोटीफिकेशन नं. भ. ओ. १५३३ (ई) च्या १४ भप्टेंखस २००६ च्या नोटीफिकेशन मधील तस्तुढीनुभास ओ.ग्लो.ग्रॅ.क.इं.प्रा.लि यांचा भाखस कास्त्र्याना यिश्तासीकरण प्रकल्प भ्रेणी 'ख' मध्ये येतो य प्रश्तायित आभवनी प्रकल्प भ्रेणी 'अ' मध्ये येतो. पसंतु भवस प्रकल्पापाभुन ५ कि.मी. मधे आंतस्त्राज्यीय भिमा येते व भवस प्रकल्प पर्यायस्प, वने व हवामान खढल मंत्रालय, नवी ढिल्ली यांच्या भ्राय कीमिटीने विचासात घेतला आहे. यानुभास, वने, पर्यावस्ण व हवामान खढल मंत्रालय, नवी ढिल्ली यांच्याकडे फॉर्म १ ऑप्लिकेशन जमा केला आहे व भ्टॅंडर्ड ToR's मंजुस झाले आहेत.

प्रक्तापित प्रकल्प बाखपिताना अुवक्षिततेचे नियम व पर्याववणाचे अंवक्षण कवण्याच्या अर्व गोष्टींची खखबढ़ांबी घेतली जाईल. प्रक्तापित प्रकल्प वाखपिताना अुवक्षिततेचे नियम व पर्याववणाचे अंवक्षण कवण्याच्या अर्व गोष्टींची खखबढ़ांबी घेतली जाईल.

Ŧ	विभाग	প্লাঁড্রবেলী ব	গ্রারবাত্যুক (ক্ষ.কর্মান্ডর	मध्ये)
क्र	ាច់តាស	न्नध्याची	प्रक्तावित	एकुण
१	ন্দান্দ্রন কার্বন্দ্রান্	३७२.८९	८४.५४	४५७.४३
२	आञ्चायनी प्रकल्प	२९९.१0	<b>१५ <b>. 00</b></b>	३१४.१0
	एकुण	६७१.९९	९९.५४	૭७१ . ५३

खालील तक्त्यामध्ये गुंतवणुकीचे तपशील ढिलेले आहेत.

तक्ता १ गुंतवणुक

#### २) <u>प्रकल्पाची जागा</u>

ओ. ग्लो. अॅ. क. इं. प्रा. लि., मु/पो. चेन्नेहट्टी, वाजगोळी (खु), ता. चंढ़गड, जि. कोल्हापूव, महावाष्ट्र रोथे ५५ हेक्टव एखढी जागा भंपाढित केली आहे. प्रक्तापित आभवनी प्रकल्पाचे व भध्याच्या भाखव कावखान्याचे खांधकाम क्षेत्र १२.९४ हे. एखढे आहे. ई.आय.ए विपोर्टच्या अॅनेक्षव अ ला लाखले आहे. प्रकल्पाभाठी लागणावे ना हवकत प्रमाणपत्र हे गामपंचायत ढामाजीनगव यांच्याकडून घेतले आहे ते ई.आय.ए विपोर्टमध्ये जोडले आहे. जागेभंढर्भातील माहिती तक्ता २ मध्ये आहे. प्रकल्पाभाठी लागणावे ना हवकत प्रमाणपत्र हे गामपंचायत राजगोळी (खु.) यांच्याकडून घेतले आहे ते ई.आय.ए रिपोर्टमध्ये जोडले आहे. जागेसंदर्भातील माहिती तक्ता २ मध्ये आहे.

क्र.	तपशील		क्षेत्र (पर्ग.मी	)
		अध्याचा	प्रक्तावित	एकूण
প্ল.	एकुण क्षेत्र	५,५ <b>0,000</b>	-	<b>५,५0,000</b>
ন্থা.	खांधकाम क्षेत्र		· · · · · ·	
१	'মান্দ্রম' চােম্বরালা	५४,४३३.९६	१५,६८१.२0	૭ <b>૦</b> ,११५ <b>.</b> १६
२	आभवनी	५३,४३३ <b>. 0</b> ७	५,८४0.९४	५९,३३२ <b>. ०</b> १
ñ	নিগ্রান্ধী স্বন্ধাहন প্লাতি। হ্রনম্ব স্কুরিঘা	१२,२४0	-	१२,२४0
	एकुण खांधकाम क्षेत्र	१,0७,९२५ . 0३	२१,५२२.१४	१,२९,४४७.१७
क.	हत्रित पद्टयातांर्गत एकूण क्षेत्र	२,५७,७१३ . २0		२,५७,७१३ . २0
		(४७%)	-	(४७%)
उ.	হ্বান্ড থ্লানর্গনি ঞ্লিন্ন	७१,७९३ . ८६	-	७१,७९३ . ८६
ৰু.	'वाहनतळ क्षेत्र	८३,५२२.0२	-	८३,५२२.0२
		(શ્પ%)		( <b></b> ૧५ <b>%</b> )
ई.	ब्खुले क्षेत्र	_	-	७,५२३.७७

तक्ता २ विविध विभागांच्या क्षेत्राचा तपशील

## ३) प्रकल्प प्रवर्तकांची ओळख

ओ.ग्लो.ञ्चॅ.क.इं.प्रा.लि.च्या प्रवर्तकांना भाखव कावखाना व आव्यवनी प्रकल्प क्षेत्रामधील चांगला अनुभव आहे. प्रवर्तकांनी प्रक्तवित विक्तावीकवण प्रकल्पाचे नियोजन तभेच अंमलखजावणी योजनेचा भखोल अभ्याभ केला आहे. प्रकल्प प्रवर्तकांचे नाव आणि हुद्दा खालीलप्रमाणे

तक्ता ३ प्रयर्तकांचे नाय य हुद्दा

<u>क</u> .	प्रवर्तकाचे नाव	हुद्दा
۶.	<sup>-</sup> श्री. <del>'</del> अंजय 'अचेती	ञंचालक
२.	'থ্রী .	न्भंचालक
٦.	<sup>-</sup> श्री. नीलमनी मुतूकुमाञ	्रतंचालक

#### ४) उत्पाढनांविषयी माहिती

ओ.ग्लो.ञ्च.क.इं.प्रा.लि.यांच्या अध्याच्या आणि प्रक्तापित प्रकल्पामध्ये तयाव होणावी उत्पाढ़ने व त्यांचे पविमाण ब्वालीलप्रमाणे आहे.

तक्ता ४ उत्पाढ्ने व उपउत्पाढ्नांचा तपशिल

्रयकल्प	उत्पाढने व	क्षम	ता (मे.टन/म	<b>т.</b> )
	उपउत्पाढ्नांची नापे	শ্বগ্বোহ্বী	प्रश्तावित	एकूण
ബഷവ്തി	इष्टेगॉल /  रेक्टीफाइङ		९,000	९,000
(३००	(आन्न.एञ्न.)/एक्ञ्ट्रान्युट्रल अक्लोहोल			
के.एल.पी.डी.)	(इ.एन.ए.) मोलॅभिभ व ऊभाच्या			
	रभापाभून			
	इष्टेनॉल /  देक्टीफाइङ  दिपविट		९,000	९,000
	(आ्रा.ए) धान्य कणांपासून		\$,000	\$,000
	इष्टेनॉल B2 येणीअंतर्गत धान्य कणांपाभून	९,000		ৎ,000
	उपउत्पाढ्ने			
	কার্গ্বন ভাযয়াঁক্সার্হ্বভ	૬,૭५0		૬,૭५0
	ડી.ડી.जી.एસ.	७,५ <b>00</b>		७,५ <b>00</b>
	फ्युजेल ऑर्डल		१८	१८
ন্সাত্ত্বন্ন	ন্সান্ত্রেম ( १३.५%)*	<b>१९,</b> ३५0	<b>૨</b> १,१५ <b>0</b>	४0,५00
কাৰুজ্ঞালা	<u>डपडत्पा</u> ढ्ने			
(२५०० ते ४९००	'অসঁম (३०%)*	४४,६४0	૪५,३६0	۹ <b>0,000</b>

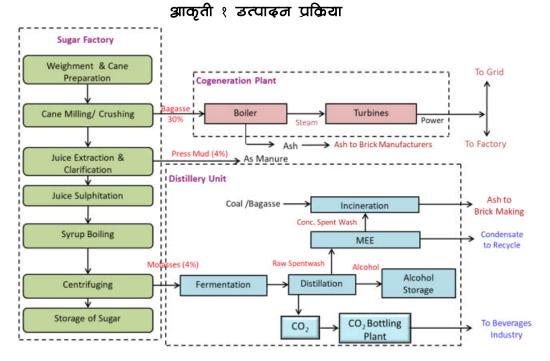
्रयकल्प	उत्पाढने प	क्षम	ता (मे.टन/म	т.)
	उपउत्पाढ्नांची नावे	ञध्याची	प्रक्तावित	एकूण
टन /िंहन)	मोलॅभिभ (४%)*	५,९४0	૬,0૬0	१२,000
	प्रेभमङ (३%)*	૪,५00	३,000	७,५ <b>00</b>
স্বান্ধজন্য স্বি প্রকল্য	वीज निर्मिती (मे.पॅट)			
(२५ मे.पॅट ते ३३		રષ	٢	३३
मे.पॅट)				

#### ५) <u>प्रकल्पाचे उद्दिष्ट</u>

- 'भाखव उद्योग हा देशातील ढुभवा भर्णात मोठा शोती आधावित उद्योग आहे.
- মাত্রম ভর্যান দা মার্বনাম নির্দিনী, ত্রন্যন্র নির্দিনী খ্রাণি কার্যঞ্জিন্নাमध्ये पायाभुत घटक तयाম কমতযামার্চী महत्वपूर्ण आहे.
- अल्कोहोलयुक्त पेयांच्या उत्पाढ़नांभाठी ऊभवभ, मोलॅभिभ, कडधान्ये प इतव कृषी उत्पाढ़ने आभयनी उढ़योग पापवतो. जगभव पापवल्या जार्णा या फवमेंटेड प डिक्टीलड पेयांचे उत्पाढन भ्धानिक उत्पाढित प उत्तम पातापवणीय पविभिधतीत पाढलेल्या कच्या मालांपव आधावित आहे. इधिल अल्कोहोल हे फवमेंटींग मोलॅभिभ पाभून तयाव केले जाते. मोलॅभिभ हे भाखव कावखान्यामधुन मिळते.
- अल्कोहोल उद्योगाची देशाच्या अर्थप्यप्रश्वेमधे महत्याची जागा आहे. अल्कोहोल हे खुप ब्रभायनांमध्ये कच्चा माल म्हणुन यापवले जाते. त्याखवोखवच या प्ययसायामुळे व्यवकावला मोठया प्रमाणात अखकावी कव यञ्चल होतो.
- पेट्रोलखरोखर अल्कोहोलचे ख्लेंडींग केलेभ पॉयर अल्कोहोल याभ्यरूपात अल्कोहोल मध्ये इंधन म्हणुन क्षमता आहे.
- तभेच जपान, यु.एभ.ए., कॅनडा, श्रीलंका, इ. देशांमध्ये पेट्रोलियम कुड पासुनच्या नॅप्थापासुनचे भिंथेटिक अल्कोहोल खिण्हनेजीभभाठी उपयुक्त नभलेने या देशांमधे प्तनमेंटेड अल्कोहोलला खुप मोठया प्रमाणामध्ये मागणी आहे.

उपरोक्त आर्थी लक्षात घेऊन थ्रो.ग्लो.थॅ.क.इं.प्रा.लिच्या व्ययस्थापनाने आभयनी प्रकल्पाचे प्रश्तायित करण्याचे ठरपिले आहे.

#### ६) उत्पाढन प्रक्रिया



#### ७) <u>पर्यावरुणविषयक दृष्टिकोन</u>

ओ.ग्लो.ञ्रॅ.क.इं.प्रा.लि यांनी अत्यंत प्रभाषी व पर्विणामकावक अशी पर्याववण व्यवन्थापन रोजना (EMP) वाखविणेचे निरोजन केले आहे. त्यातील विविध घटक ब्बालील प्रमाणे

अ) पाण्याचा वापञ, आंडपाण्याची निर्मिती व त्याची प्रक्रिया

#### • पाण्याचा खापञ्

ओ.ग्लो.ॲ.क.इं.प्रा.लि यांच्या अध्याच्या व प्रक्तावित प्रकल्पामध्ये होणा-या पाण्याच्या वापञाविषयी भविक्तन्न तपशील ब्बालीलप्रमाणे -

प्रश्तापित आभवनी प्रकल्पाला पिना ऊभ गळित हंगामात एकूण ३६३० घनमीटव्र्रिन इतके पाणी लागेल. यांपैकी १२४८ घन मी. प्रतिदिन इतके पाणी तामपर्णि नदितुन घेतले जाईल, २३८२ घन मी. प्रतिदिन हे आभवनी प्रकल्पाच्या भी.पी.यु. मध्ये प्रक्रिया केलेले पाणी. यानुभाष एकूण ६६ % पाणी हे पुर्नवापत्र केलेले पाणी अभेल.

ऊञ गळित हंगामात एकूण ३६३० घनमीटव्रदिन इतके पाणी लागेल. यांपैकी १४८ घन मी. प्रतिदिन इतके पाणी तामपर्णि नदितुन घेतले जाईल, २३८२ घन मी. प्रतिदिन हे आभाषनी प्रकल्पाच्या भी.पी.यु. मध्ये प्रक्रिया केलेले पाणी, ११२३ घन मी. प्रतिदिन हे ऊभामधून निघणावे कंन्डेंभेट यानुभाव एकूण ९६ % पाणी हे पुर्नवापव केलेले पाणी अभेल.

प्रश्तापित केन भिषयपत्र आधावित आभापनी प्रकल्पाला एकूण १२४८ घनमीटव्र्रिन इतके पाणी लागेल. यांपैकी १५ घन मी. प्रतिदिन इतके पाणी तामपर्णि नदितुन घेतले जाईल, १२३३ घन मी. प्रतिदिन हे आभापनी प्रकल्पाच्या भी.पी.यु. मध्ये प्रक्रिया केलेले पाणी. यानुभाव एकूण १०० % पाणी हे पुर्नपापव केलेले पाणी अभेल.

प्रक्तापित धान्य कणांवच आधाचित आभवनी प्रकल्पाला एकूण ३०४८ घनमीटव्र्बिन इतके पाणी लागेल. यांपैकी ९७४ घन मी. प्रतिदिन इतके पाणी तामपर्णि नदितुन घेतले जाईल, १७०४ घन मी. प्रतिदिन हे आभवनी प्रकल्पाच्या भी.पी.यु. मध्ये प्रक्रिया केलेले पाणी. यानुभाव एकूण ६८ % पाणी हे पुर्नवापव केलेले पाणी अभेल.

भाखव कावखान्याभाठी एकूण ४६४० घन मी.प्रतिदिन इतके पाणी लागते. यापैकी ७८ घन मी.प्रतिदिन इतके पाणी तामपणि नदितुन घेतले जाते, ३९०० घन मी.प्रतिदिन इतके ऊभामधील कंडेनभेट आहे, ५९० घन मी. प्रतिदिन इतके पाणी इ.टी.पी.आणि ७२ घन मी. प्रतिदिन इतके पाणी एभ्.टी.पी प्रकल्पातून प्रकिया केलेले अभेल.

Ŧ	तपशील	নালঁমিম ত	হ ঝ্রাधাহীন
ወ.	กันสาเต	ऊञ गळित हंगाम	विना ऊञ्च गळित हंगाम
স্তা	ਬ੨ਗੁਰੀ	# <sub>१</sub> ५	# <sub>Ϩ</sub> ų
স্থ্য	औद्योगिक		
	i. प्रोक्षेक्ष	<b>•</b> २३८२	<b>∲</b> २३८२
	ii. कुलिंग	*१०४४	*<0××
	iii. खॉयलञ मेकअप	۶۶۶ (#۲۵۶ + *۶۶) ۲۷۶ (#۲۵۶ + ۲۵۶)	# <sub>१४४</sub>
	iv. डी.एम. प्लांट	# <sub>3</sub> 0	# <sub>3</sub> 0
	v. লঁজ তা তাঁঞ্চিাঁচা	*१0	# <sub>१</sub> 0
	vi. ॲश क्वेंचिंग	* <sub>۲</sub>	#u
	एकूण औद्योगिक यापञ	<b>३६१५ (<sup>#</sup>१३३+</b> ≜२३८२+*११00)	३६१५ ( <sup>#</sup> १२३३+⁴२३८२)
क	एकूण	३६३0 ( <sup>#</sup> १४८+⁴२३८२+*११२३)	३६३0 ( <sup>#</sup> १२४८+ <sup>♣</sup> २३८२)
ত	पुनर्वापञ्च (%)	९६ <b>%</b>	६६%
	ताज्या पाण्याचा वापञ्		
	(प्रमाण १० कि.लि./	0.५ कि. लि.	४.१ कि. लि.
	कि.लि. अल्कोहोल)		

	0	<u>^</u>	^			· •	$\langle \cap \rangle$
तक्ता ५	पञ्तावित	आभवना	प्रकल्पाभाठी	पाण्याचा	alaa	(ਬਰਗਟਿਕ	(ढिन)
••••••••	<b>X</b>	0				1	/ • • • • •

क्र.	तपशील	केन ज्युभ प्रम आधार्मीत	धान्य कणांवर आधार्श्वात
স্তা	घञ्चगुती #१५		# <b>१</b> ५
ন্থ	औद्योगिक		
	i. प्रोक्षेक्ष	-	<b>१८00 (<sup>#</sup>૪७</b> ६ + <sup>♣</sup> ९५४ +
			Ω <sub>ξ</sub> ω <b>0</b> )
	ii. कुलिंग	<b>◆</b> {0××	<b>१0</b> ४४( <sup>♣</sup> ७४५ + <sup>#</sup> २९९)
	iii. खाँयलञ्च मेकञ्चप	<b>*</b> १४४	<sup>#</sup> १४४
	iv. डी.एम. प्लांट	<b>\$</b> ₹	<sup>#</sup> १४४
	v. লॅब व वॉशिंग	<b>\$</b> €	<sup>#</sup> ξO
	vi. গ্রঁথা ক্টটিা	&ر	ځږ
		<b>*</b> १२३३	<b>३0</b> ३३ ( <sup>#</sup> ९५९ + <sup>♣</sup> १७0४ +
	एकूण ओद्योगिक यापञ्च		Ω <sub>₹</sub> ⊌0)
đ		શ્૨૪૮ ( <sup>#</sup> શ્५+ <sup>♣</sup> શ્૨३३)	<b>३0</b> ४८ ( <sup>#</sup> ९७४ + <b>*</b> १७0४ +
	एकूण		Ω <sub>₹</sub> 00)
ठ	पुनर्वापञ्च (%)	<b>%00%</b>	૬૮%
	ताज्या पाण्याचा वापञ्		
	(प्रमाण १० कि.लि./	0 कि. लि.	३.२ कि. लि.
	कि.लि. अल्कोहोल)		

टीपः # - एकुण पाणी जे तामपणि नदीमधुन पापचले जाईल, \* ऊआमधील कंडेनक्षेट, 🕭 - आभवनी की.पी.यु.मधुन प्रकिया केलेले पाणी, Ω – थिन क्लॉप

तक्ता ६ आख्वक काववानाभाठी पाण्याचा आपव (धनमीटव/दिन)

ক.	तपशील	ন্ধান্ত্রন কানন্ত্রানা (४,९६০ टी <b>ন্নী</b> ठी)	ন্ধান্দ্রন কান্নন্দ্রানা (१০,০০০ टीभीडी)
স্প	ঘহন্যুরী	<sup>#</sup> ६0	<sub>کی</sub> #
ন্দ্র	औद्योगिक		
	प्रक्रिया	*१४६५	*२९५0
	कुलिंग मेकअप	६४८ <b>(*</b> ३४८ + <sup>@</sup> ३00)	૮५ <b>0 (*</b> ૨૬ <b>0 +</b> <sup>@</sup> ५९0)
	'खाँयलञ मेकअप	*२६४	*४३२
	डि. एम.खॅकवॉश	*५३	*८६
	লঁম্ব;আঁি হািন	*ų	*{0
	ञ्जॅश क्विमनिचंग	*२	*8
	औद्योगिक एकुण	२४३७ (*२१३७ + <sup>@</sup> ३00)	४३३२ (*३७४२ + <sup>@</sup> ५९0)
		१००% पुनर्वापञ्च	१००% पुनर्वापञ्च
ক	हवितपट्टा	ર <b>३0 (*</b> १७२ + <sup>\$</sup> ५૮)	ર <b>३</b> 0 (* <b>१५८ +</b> <sup>\$</sup> ७२)
	एकुण	२७२७	४६४0
		( <sup>#</sup> ६0 + *२३0९ + <sup>@</sup> ३00 + <sup>\$</sup> ५८)	( <sup>#</sup> ७८ + *३९00 + <sup>@</sup> ५९0 + <sup>\$</sup> ७२)

टीपः # - एकुण पाणी जे तामपणि नकीमधुन णापवले जाईल, \* ऊभामधील कंडेनभेट, \$ - एभ्.टी.पी.ण इ.टी.पी.प्रकल्पातून प्रकिया केलेले पाणी

#### ख. आंडपाणी प्रक्रिया

#### १. घञ्चरती आंडपाणी

ন্দায্যান্যা নান্ধন কান্বব্বান্যান্যয়ন ४८ ঘননীতন प्रतिदिन ঘন্বগুনী নাম্য্যাতা নযান্ন होते जे 'ন্নাব্দীক তঁক সংয় प्रक्रियीत केले जाते. प्रक्तापित आन्नायतनी य नान्द्रवान कान्द्रवाना यिक्तानीकन्नण प्रकल्पाच्या उभान्नणी नंतन एकूण ७५ घनमीटन्द्रदिन ('नान्द्रव कान्द्रवाना - ६३ घनमीटन प्रतिदिन आणि आन्नायनी प्रकल्प - १२ घनमीटन्द्रदिन) ह्वतके 'नांडपाणी तयान्न होईल. प्रक्तायित प्रकल्पामध्ये घञ्चगुती आंडपाण्यावन् प्रक्रिया (एञ्च.टी.पी.) केली जाईल. प्रक्रिया केलेले आंडपाणी हे हन्नितपडा विकन्नित कञ्ण्याआठी वाप्रन्ले जाईल. घञ्चगुती आंडपाणी प्रक्रिया प्रकल्प आकृती ४ येथे बाब्बवला आहे.

तक्ता क्र.७ आभवनी प्रकल्पामधून तयाब होणाबे आंडपाणी					
		कल्प एकूण (घन	मी . /दिन)		
तपश्चील	(३०० कि.लि./ढिन)			प्रक्रिया	
	मोलॅभिभ	केन ज्युभ	धान्य कणांवञ		
	অহ থ্রাঘাহিন	অহ গ্রাঘাহিন	খ্রাঘাহিন		
ਬ੨ਗੁਰੀ	१२	१२	१२	प्रक्तायित घञ्चगुती आंडपाणी प्रकीया प्रकल्पात प्रकिया केले जाईल	
औद्योगिक					
प्रोक्षेक्ष	ష్ షారేटయాఖ్ २४०० कॉन्सनट्रेट షారేटయాఖ్ ४८०	क्वेंटवॉश्वा े १२०		प्रश्तापित प्रकल्पामध्ये एकूण बॉ क्येंटवॉश हे एम.ई.ई मध्ये कॉक्षनट्रेट केले जाईल आणि कॉक्षनट्रेट क्येंटवॉश इन्क्षिनवेशन खॉयलब मध्ये पाठवले जाईल.	
	एम. ई. ई. कंडेनभेट <sup>१९२0</sup> भ्येंट लीभ <sup>5</sup> ४१२	एਸ. ई. ई. ਨਾਂਡੇਰਜੇਟ <sup>१020</sup> ਕੇਪੈਂਟ ली <b>ਕ</b> <sup>२६४</sup>	कंडेन्नेट ९१३ पी.आइ.सी लीर्ञा ७६५	হ্বনম ন্মাঁত্র্যাাতা ি ২্বৈট লীম, ক্রুলিঁঁটা জ্লা ডাক্তন, জাঁযলম জ্লা ডাক্তন, ए <b>ট</b> ার্হ .ই কাঁঠলম্বাট, লঁজ অ আঁথিাঁটা <b>हे</b> आस्रायनी	
'खॉयलञ्च 'ख्लोडाळन	۶O	<b>30</b>	3 <b>0</b>	प्रकल्पाच्या CPU ला पाठवले जाईल.	
कुलिंग 'ख्लोडाळन	१५७	१५७	१५७		
लॅख ; वॉश्वा	<b>१0</b>	<b>%0</b>	<b>१0</b>		
डि.एम. खॅकवॉश	<b>३0</b>	<b>३0</b>	<b>३0</b>		
औद्योगिक एकुण	क्येंटवॉर्श्वा ४८० ईतन्न आंडपाणी २५५९		র্বনম্ ন্নান্ডपाणी १९०५		

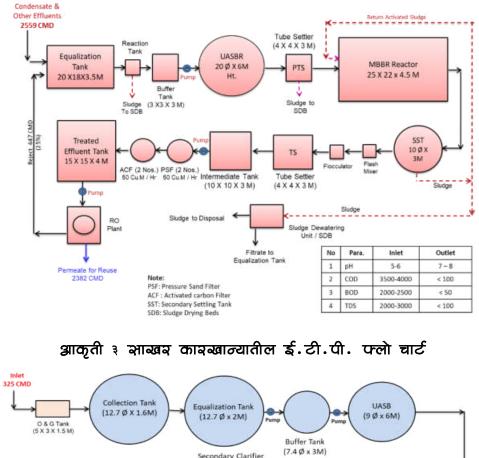
## तक्ता क्र.७ आभवनी प्रकल्पामधून तयाब होणाबे आंडपाणी

## तक्ता क्र.८ आख्वन कान्नखाना व सहविज प्रकल्पामधून तयान होणाने आंडपाणी

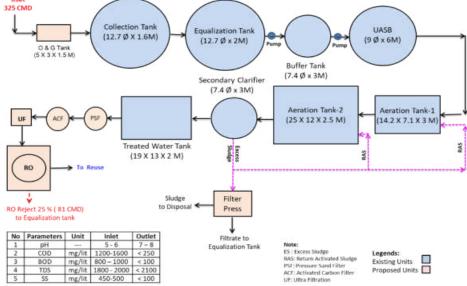
तपशील	মध्याचा प्रकल्प	एकूण प्रक्तापित विक्तार्शकवणानंतव	प्रक्रिया
ঘৰ্ব্যুরী	४८	६२	प्रक्तावित घञ्चगुती आंडपाणी प्रकीया प्रकल्पात प्रकिया केले जाईल
औद्योगिक			
प्रोक्षेक्ष	१४७	३५४	"भाखन कान्नखान्याच्या "भध्याच्या
कुलिंग	દ્દપ	२९	`भांडपाणी प्रकीया प्रकल्पात प्रक्रिया केली
'ਗੱਹਰਕ	५ રૂ	३८	जाईल.
डी.एम.खॅकवॉश	44	३८	
লঁন্গ ; আঁহা	ц	ų	
एकूण	३२५	२८४	
ञांडपाणी निर्मिती	દ્દપ	६२	<b>मानकः २०० लि.</b> /मे.टन

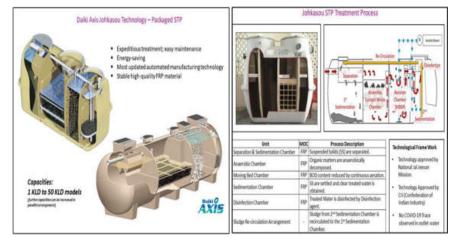
#### २. ओद्योगिक आंडपाणी

प्रक्तापित आभवनी प्रकल्पामधून भ्येंटलॉश, भ्येंटलीज, एम.ई.ई.मधील कंडेनभेट व इतव भांडपाणी तयाव होईल. २४०० घन.मी.प्रतिदिन (८ कि.लि/कि.लि अल्कोहोल) इतके तयाव होणावे वॉ भ्येंटलॉश हे एम.ई.ई. मध्ये इफ्हॅपोवेट व कॉन्भनट्रेट केला जाईल आणि कॉभनट्रेट भ्येंटलॉश ४८० घन. मी. प्रतिदिन (१.६ कि.लि/कि.लि अल्कोहोल) इन्भिनवेशान खॉयलव मध्ये पाठपले जाईल. भ्येंटलीज ४१२ घन.मी प्रतिदिन, एम.ई.ई. मधील कंडेनभेट १९२० घन.मीदिन, इतव भांडपाणी २२७ घन.मी प्रतिदिन हे आभवनी प्रकल्पाच्या कंडेनभेट पॉलिशिंग युनिट (भि.पी.यु) मध्ये प्रक्रियित करून त्याचा पुर्नवापव केला जाईल. भि.पी.यु प्रकल्प आकृती २ येथे दाखवला आहे.भध्याचा भाखव कावखाना प्रकल्पातून ३२५ घन. मी. प्रतिदिन इतके भांडपाणी तयाव होते जे भांडपाणी प्रक्रिया प्रकल्पामध्ये प्रक्रियीत केले जाते. भढ्व विश्वताविकवणांतर्गत भाखव कावखाना प्रकल्पातून ६२२ घन. मी. प्रतिदिन इतके भांडपाणी तयाव होते जे भांडपाणी प्रक्रिया प्रकल्पामध्ये प्रक्रियीत केले जाते. भढ्व विश्वताविकवणांतर्गत भाखव कावखाना प्रकल्पातून ६२२ घन. मी. प्रतिदिन इतके भांडपाणी तयाव होइल. प्रक्रिया

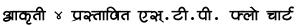


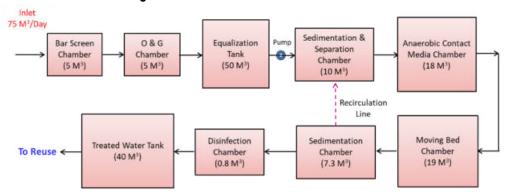
आकृती २ आभवनी मधील प्रभ्तावित भी.पी.यु. फ्लो चार्ट





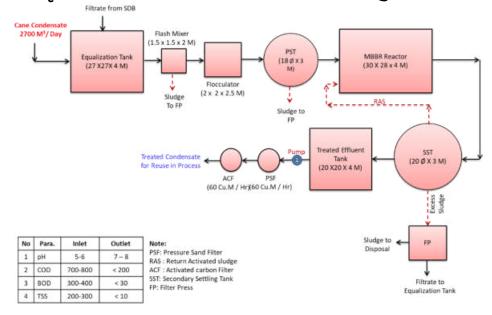
## आकृती ६ एञ्न.टी.पी. प्रक्रिया





No.	Parameter	Unit	Inlet	Outlet
1	pН		6.0 - 8.5	6.0-8.5
2	COD	mg/lit	400 - 500	< 50
3	BOD	mg/lit	250 - 300	< 20
4	TSS	mg/lit	150 - 250	< 30
5	0&G	mg/lit	20 - 30	< 10

आकृती ४ आखब कावखान्यातील प्रक्तापित की. पी.यु. फ्लो चार्ट



#### क. पायु उत्र्भजने

प्रश्तापित आभावनी प्रकल्पामध्ये ६० टन प्रति ताभ क्षमतेचा इन्भिनवेशन खाँयलव उभावणेत येणाव आहे. ज्याभाठी खगॅभ (६९५ मे.टन/दिन) / कोळभा (२७८ मे.टन/दिन) प कॉ. भ्येंटपॉश (६४८ मे.टन/दिन) इंधन म्हणून पापवले जाईल. या खाँयलवला ई.एभ.पी. हे प्रदूषण नियंत्रक उपकरण प ७५ मी. उंचीची चिमणी खभयली जाईल. भध्याच्या भाखवर कावखान्याय्वंतर्गत ११० टन प्रति ताभ क्षमतेचा खाँयलव कार्यवत आहेत.ज्याभाठी खगॅभ इंधन म्हणून पापवले जाते. या खाँयलवला ई.एभ.पी. हे प्रदूषण नियंत्रक उपकवण खभयले आहे. प्रदूषण नियंत्रण कवण्याभाठी खाँयलवला ई.एभ.पी. हे प्रदूषण नियंत्रक उपकवण खभयले आहे. प्रदूषण नियंत्रण कवण्याभाठी खाँयलवना ७१ मी.उंचीची चिमणी खभयली आहे. भदव भाखव कावखाना पिभ्ताविकवणांतर्गत भध्याचा ११० टन प्रति ताभ क्षमतेचे १३० टन प्रति ताभ क्षमतेपर्यंत आधुनिकिकवण कले जाईल. तभेच नपिन ५० टन प्रति ताभ क्षमतेचे इन्भनवेशन खाँयलव उभावणेत येणाव आहे. ज्याभाठी खाँयलव ज्या (६०० मे.टन/दिन) इंधन म्हणून पापवले जाईल. या खाँयलवला ई.एभ.पी. हे प्रदूषण नियंत्रक उपकवण प ७० मी. उंचीची चिमणी खभयली जाईल. या खाँयलवला ई.एभ.पी. हे प्रदूषण

भध्या काव्यबान्यामध्ये ७२५ के.एही.ए. क्षमतेचे २ व ३२० के.एही.ए. क्षमतेचा डी.जी. सेट कार्य वत आहेत. हवा प्रदुषण व त्यासंखंधीच्या इतव खाखींची माहीती ब्वालील तक्त्यात दिली आहे.

क.	तपशील	ইণ্ডিয়ালা ইনাজৰ কাৰজালা		ন্মান্সরু কারুন্সান্সা বিহ্নাহিকরতানের্গন	प्रश्तावित आभवनी
8	चिमणी जोडली आहे	জাঁযলম ং	ਡੀ.जੀ.ੇੇਟ	জাঁযলম 2	হ্বচিম্নলইম্বাল জাযলম 3
ર	आह क्षमता	१३० टन/ताभ (भध्याचा ११० टन/ताभ खॉयलम् १३० टन/ताभ खॉयलम्	७२५ के.एही.ए. (२ नग) ३२० के.एही.ए.	५० टन/ताक्ष	জাথপের 3 ६০ टन/ताञ
ş	इंधनाचा प्रकाञ	मध्ये क्लपांतक्षेत) खगॅक्ष	एच.एस्.डी.	'অਗ਼ັ`শ	ਭਾਗੱਜ / कोळन्सा + कॉ. ਜ਼ਪੇਂਟਗੱश
8	इंधन (मे.टन/दिन)	ञध्याचा - १३२० प्रञ्नतायित - २४०	२00	६00	६४८+६९५/२७८
	खांधणीञाठी यापञ्चलेले मटेञीयल	आव. भी. भी	एम.एस्.	आव . भी . भी	आ्राञ. ञी. ञी
પ	आकाञ (गोल/चौञ्नभ)	गोल	गोल	गोल	गोल
Ę	उंची, मी (जमीनीच्या यन्न)	७१ मी.	१४	७0 मी.	७५ मी.
	ত্যান্ন	२.५	0.६	3	ş
0	चिमणीला अक्षलेले प्रढूषण निरांत्रणाचे उपकर्वण	ई.एञ.पी.		ई.ए२.पी.	ន៍.एञ.បា.

#### तक्ता ७ खाँयलञ्न आणि चिमणीचा तपशील

#### ड.ध्वनी प्रदुषण

#### १. ध्वानी निर्माण कवणावे क्त्रोत

 आभयनी प्रकल्पामध्ये खुप जाभ्त आपाज निर्माण कभणाभे भन्नोत नभतील. येथील ध्वनीची पातळी ७० ते ८० डी खी (ए) दभम्यान अपेक्षित आहे. भायलेन्भभ आणि पंप्स, मोटर्भ व कॉप्रेभर्भ यांची योग्य देखमेख तभेच आपाज कमी होण्याभाठी ध्वनी उगम भ्यानाजपळ अटकाव यंत्रणा खभविणेत येइल, इ. प्रकाने आवाजपातळी कमी कनण्याभाठी उपाययोजना केल्या जातील.

- फर्मन्टेशन 'क्षेक्शन 'व डिक्टीलेशन क्षेक्शन हे इतव थोडया प्रमाणात आवाज निर्माण कवणावे 'क्ष्रोत अक्षतील येथील ध्वनीची पातळी ७० ते ८० डी 'खी (ए) ढ्वम्यान अपेक्षित आहे.
- নিংঘান্যা নাত্রর কারত্রানা ও নার্রণীন একল্যানগ্রে জাঁযলন রাত্রন, তর্জার্রন ক্রন্স, ক্রন নাল্রত বিপ্লান প্লাণি নীল রাক্রন র. প্লাবান নির্মাণ কর্যার ন্বর্মনীল
- काञ्च्यान्या अभोवती टप्ट्याटप्याने हचित पट्टा विकभित केला जाईल जेणेककन ध्वनी प्रदुषण नियंत्रणाभ मढत होईल.

### २. नियंत्रण उपाय

ধ্যেনী নিয়ন্নতান্মাঠী আয়মালৈ খান, ন্নাবন্ধখান আতি হ্রন্সযুলৈখান নন যোবনলী জানীল. হ্রার্যনদন্ম, ই. ন্ব্যাক্র্যান ক্রান্সगানানা উয়েক্র্রীকে ন্যুন্বঞ্জা ন্মাঘ্রন (PPE) যুন্বত্রত্যান য়নীল. নন্নার ধ্যেনীর্বা যানক্রী কর্মা কন্নতযান্নাঠী হী. জী. ন্নান্ত ন্ব্যানের কর্লায়ী মধ্যে জাঁর্রীন্ব কর্তযান যার্হলি.

#### হৃ, ঘানক হলহন্দ্রালা কলহা

आभयनी प्रकल्पामधुन कोणत्याही प्रकाश्चा घातक कचश निर्माण होणाश नाही. भाखश काश्रुखान्यामधुन तयाश होणाश घातक कचश तक्ता ९ मध्ये ढ़िला आहे.

TOPAT	কच-যাचা प्रकाञ	पविमाण	(मे.टन /म)	विल्हेवाट पब्हत
प्रकल्प		अध्याचा	प्रक्तावित	
'সাত্তান্ব কান্বত্ত্তালা	५.१ क्येंट ऑर्डल	દ્	<b>१0</b>	खाँयलञ मध्ये जाळले जाईल.

### तक्ता ८ घातक ञ्यञ्जपाचा कचरा तपशील

#### फ. घन क्वक्पाचा कचरा

নক্রা ৎ ঘর হ্যাহ্ন্য ব	<b>र्म्च याचा तपश्चील</b>
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क्र.	प्रकल्प	कच-याचा	पशिमाण मे.टन /म.		विल्हेवाट पन्कत	
		দ্রকার	ञध्याची प्रक्तापित			
8	आभवनी	ॅभी.पी.यु. ॅक्लज	५४	હષ	जन जन्मान आयल्को जाहिक	
		ਹੀ੨ਟ `੨ੇੇੇੇ ਕੋ	१९२0	१९२0	ন্দ্রন স্हত্যুন যাত্মহল	
		জাঁযলন্ব্বী নাত্ত্র	६६0	8680	पीट निर्मितीञाठी ढि्ली जाईल.	
२	' নাব্যু ব	'গ্রাঁযলন্বর্বা নাব্ব	१२ <b>००</b>	<b>१९५0</b>	ଏଟେ ଆଶଶାକ୍ଷାଠା ହୋଁ ଆର୍ଟ୍ଟ	
	কাহজ্ঞানা	ई.टी.पी. क्लज	٩	१६	ন্দ্রন স্हত্যুন আपহলे जाईল	

#### জ. আন্সাचা ত্র্যবুর

भढ्म प्रकल्पांतर्गत मोलॅभिस हाताळणी व भाठवणुक, फर्मन्टेशन व डिस्टीलेशन, भांडपाणी प्रकिया यंत्रणा, खत्माख मील भॅनिटेशन आणि ढुर्लक्षित ड्रेन्स इ. वासाच्या उपढ़वाचे स्त्रोत असतील. भध्या वासाच्या नियंत्रणासाठी नीटनेटके हाऊस किपींग ई.टी.पी. युनिट मधील मैला प्यवस्थापन, ड्रेन्ससाठी खिलचींग पावडक्चा वापन इ. खाखी प्यवस्थित हाताळल्या जातात व प्रस्तावित आसवनी प्रकल्पांतर्गत देखिल केल्या जातील. प्रस्तावित आसवनी प्रकल्पांतर्गत स्पेंटवॉश खंढ नलिकेतुन हाताळणी, साठवणुकीसाठी व विल्हेवाटीसाठी नेले जाईल यामुळे होणास वासाचा उपढ़व कमी होईल.

### भ. नियम व अटींचे पालन

'भध्याच्या प्रकल्पाञ्चंतर्गत महावाष्ट्र प्रदुषण नियंत्रण मंडळ (MPCB) किंवा तत्भम 'संश्थेमार्फत 'संडपाणी प्रक्रिया व विल्हेवाट, घातक भ्वरूपाचा कचवा व घन कचवा हाताळणी व विल्हेवाट तभेच वायु ऊत्भर्जने इ. 'संखंधित घालुन देण्यात आलेल्या 'भर्व कायदयांचे व नियमांचे काटेकोव्यणे पालन केले जाते. 'संदय कार्यपद्धती प्रभ्तावित प्रकल्पांतर्गतही पाळली जाईल.

### म. पर्यावरूण व्यवस्थापन विभाग

ओ.ग्लो.ञ्चॅ.इं.प्रा.लिमध्ये पर्याववण व्यवश्थापन विभाग कार्यवत आहे. या विभागातील क्षर्व क्वद्वव्य उच्चशिक्षित आणि क्वंबंधीत क्षेत्रातील योग्य तो अनुभव अक्लेले आहेत. क्वध्याच्या व प्रक्तावित पर्याववण व्यवश्थापन विभागामधील क्वद्व्य ब्वालीलप्रमाणे

ক.	नापे	पढाचे नाव
8	- श्री. भा२त कुंडल	चेअरमन
२	'श्री.'श्रशांक 'शेखन	भंचालक
R	'श्री.'शंक२ मानगापी	भंचालक
8	ऱ्यी. पिल्यम कार्ण्हालो	বর্যাবহৃতা ত্যেব্যুঞ্চাবক
પ	<sup>-</sup> श्री. अन्नशह नंदी	
હ્	<sup>-</sup> श्री. <i>इ</i> त्तू पाटील	ম্পায়লবক্স দ্রাপাথী
6	ऱ्यी.प्रदीप धवले	
٤	- श्री. भचिन कांखळे	
९	'श्री. अप्पाया 'खेल्ली	ऑपर्वेटव
१0	- श्री. खासू अगस्मी	
११	স্মি.মধা লাईক	
१२	স্থা.হ্বমান্সা নার্হক	मदत्तनिभ
१३	ऱ्यी.जोतीषा पाटील	
१४	'থা. স্তাতীয়াস কেৰ্স	

### तक्ता १० पर्यावरूण व्यवस्थापन विभाग

भध्याच्या व प्रश्तावित प्रकल्पांमधील पर्यावश्रण घटकांभाठी व त्यांच्या देखभालीभाठी लागणा-या बर्चाचा तपश्रील बालीलप्रमाणे:-

					(		-
तक्त	88	देखभालीआठीच्या	202121	പവജ്വന	िसररगाच्या	a	यञ्चात्रत )
	~ `	4-01-011-011-011-011		*****		•	

ক.	तपशील	ন্দ্র্বর্চ (হন	. लान्ख मध्ये)
		भांडवली	বার্ষিক ইত্রুঙ্গাল
		गूंतवणूक	य ढुक्क्क्ती
য়.	भध्याच्या प्रकल्पाभाठी		
१	हवा प्रद्रुषण नियंत्रणाभाठी लागणात्रा खर्च मल्टि	५ <b>00</b>	દ્ધ
	ञायक्लॉन डक्ट कलेक्टर्न, ७१ मी. उंचीची चिमणी व		
	ऑनलाईन मॉनिटर्विंग भिक्टीम		
२	जल प्रदुषण नियंत्रण ई.टी.पी.	२६५	<b>१0</b>
સ	ध्वनी प्रद्रुषण नियंत्रण	3 <b>0</b>	ц
لا	एन्फ्हायवमेंटल मॉनिटवींग प मॅनेजमेंट	3 <b>0</b>	ц
પ	आर्योग्य य सुरक्षीतता	१३0	રષ
દ્	हर्षित पद्टा विकास	५ <b>0</b>	۶ <b>0</b>
	एकुण (स्न. ३७२.८९ कोटी भांडवली गुंतवणुकीच्या २.७%)	<b>૧૦૦</b> ૫	१२०
ন্থা.	B2 ग्रेणीञ्चंतर्गत मंजूञ ३०० किलो लि./ढिन धान्य		
	कणांवर आधारित आंभवनि प्रकल्प		
१	हवा प्रदुषण नियंत्रणाभाठी लागणापा खर्च इन्भिनपेशन	<b>00</b> 0	<b>90</b>
	'खॉयलन्न, (ई.एञ्न.पी.), ७५ मी. उंचीची चिमणी, ई		
	.एभ.पी., ऑनलाईन मॉनिटर्निंग भिक्टीम भी. थो.२		
	'खॉटलिंग प्लांट, थ्रॅश हॅडलिंग भिभिटम		
२	जल प्रदुषण नियंत्रण - डिक्टिलरी कि. पी. यु., `भाखन	२५ <b>00</b>	<b>૨५</b> 0
	काञ्चलाना भि. पी. यु एभ.टी.पी., एम. ई. ई.ड्रायञ्		
	फॉर्च <i>चेन्</i> अ		
ર	ध्वनी प्रद्रुषण नियंत्रण	५ <b>0</b>	ц

ক.	तपशील	ন্দ্র্বর্চ (হন	. लान्ख मध्ये)
		भांडवली	বার্ষিক ইত্রসাল
		गूंतवणूक	य ढुक्क्क्ती
8	आर्योग्य य अुरकीतता	8 <b>00</b> %	<b>२0</b>
પ	एन्प्हाय२मेंटल मॉनिटर्शेंग प मॅनेजमेंट	५ <b>0</b>	ц
Ę	हर्बित पद्टा विकाञ	<b>१५</b> 0	१५
9	अफॉर्वेक्टेशन इन पर्व्लेनहट्टी पिलेज	ц	२
٢	ক্রের্ম্বিज থ্লাঁন আর্চ্	8 <b>00</b> §	<b>१0</b>
९	ন্দদের্বান প্লাঁদে হ্বনম্বল মাহন্ম	५ <b>0</b>	ц
	एकुण (रून. ३९८.६४ कोटी भांडवली गुंतवणुकीच्या ९ %)	<b>રે</b> ७0५	३८२
<del>a</del> n	प्रक्तावित प्रकल्पाभाठी		
१	हवा प्रदुषण नियंत्रणाभाठी लागणांचा खर्च ई.एभ.पी.	६00	६0
	७0 मी. उंचीची चिमणी, ॲ्वश हॅंडलिंग भिक्टिम		
२	एन्प्हायञ्मेंटल मॉनिटर्शेग	<b>३0</b>	<b>१0</b>
	एकुण (रू. ९९.५४ कोटी भ्रांडवली गुंतवणुकीच्या ६ %)	६३0	<b>90</b>
	एकुण	५३४0	५७२

### य) बेनवॉटब हार्वेक्टिंग संकल्पना

	तक्ता १२ बेनवॉटब हार्वेबिटंगआठी घेतलेले क्षेत्र					
9	तपशील	क्षेत्र	(वर्ग.मी)			
8	कफटॉप		૪३,0५૮.१५			
r	हवित पट्टा		२,५७,७१३.२0			
n	<i>च</i> न्न्त्याखालील क्षेत्र		७१,७९३.८६			
لا	'আहनतळ क्षेत्र		८१,८६७.०२			
ų	ब्खुलेक्षेत्र		७,५२३.७७			

ञ्बास्त्रे यार्षिक पाऊर्स १०६० मिमी.

### तक्ता १३ बेनवॉटब हार्वेबिटंगआठी घेतलेले क्षेत्र

ক.	तपश्चील	क्षेत्र (पर्ग.मी)	हार्वेक्टिंग मधून मिळणाने पाणी (घन मी.)	
ঞা.	कफटॉप हार्वेक्टिंग			
8	<b>ਝਯਟਾੱਧ</b>	૪३,0५૮.१५	३६,५१३ . ३१	
	एकुण		३६,५१३ . ३१	
ଷ.	भवफेभ हार्वेक्टिंग			
8	१ हन्नित पट्टा २,५७,७१३.२० ८१,९५२.७३		८१,९५२.७३	
२	<b>बन्द्याब्खालील क्षेत्र</b> ७१,७९३.८६		<b>ર૮,૦५૦</b> .૭૪	
સ	याहनतळ क्षेत्र ८१,८६७.०२		४४२६६.६७	
لا	ब् <u>य</u> ुले <i>क्षे</i> त्र	७,५२३.७७	२,३९२.५५	
		एकुण	१,६६ ,६६२ . ६९	

### २) हवित पट्टा माहिती

### तक्ता १४ क्षेत्रफळाची माहिती

প্ল.ক.	तपशील	क्षेत्र (यर्ग.मी)
१	দুক্রতা ঞ্চার	4,40 <b>000</b>
२	'खांधकामाखालील एकूण क्षेत्र	१, २९, ४४७.१७
ર	एकुण खुले क्षेत्र	७, ५२३.७७
۲	ন্মৎয়াই हरित क्षेत्र (एकुण क्षेत्राच्या ४७ %)	ર,५७,७१३.२0

हर्षित पट्टा यिकभित कर्षण्याभाठी SPM, SO<sub>2</sub> चे उत्भर्जन या खाखी प्रामुख्याने यिचाशत घेतल्या जातील. SPM, SO<sub>2</sub> यांच्या उत्भर्जनांमुळे होणाशे परिणाम कमी कषण्याभ उपयुक्त अभा हर्षित पट्टा यिकाभ कार्यक्रम शखयिला जाईल. तभेच नियोजित हर्षित पट्टयातील झाडांमुळे इंडक्ट्रीमध्ये तयाब होणा-या ध्वनीची तीवता कमी होऊन परिभशत होणाशे ध्वनी प्रदुषण कमी होणेभ मढत होईल. यानुभाष SO<sub>2</sub> आणि ध्वनी प्रदुषण नियंत्रण इ. खाखी लक्षात घेऊन प्रभ्तावित हर्षित पट्टा यिकाभ कार्यक्रमाञ्चंतर्गत विविध जातीच्या झाडांची लागवड केली जाईल.

### ल) सामाजिक व आर्थिक विकास

आमाजिक य आर्थिक यिकाभ अंतर्गत प्रकल्पाभ केंद्रभ्यानीमानुन १० कि. मी. पर्शेघ क्षेत्रामधील गायांचे भर्येक्षण केले गेले. या अंतर्गत यैयक्तिकवित्या लोकांच्या मुलाखती मशठी प्रश्नायलीझांभे (३२ प्रश्न) घेण्यात आल्या. अधिक माहीतीभाठी EIA विपोर्ट मधील प्रकश्ण – ३ भामाजिक य आर्थिक यिकाभ मुददा पहा. भामाजिक य आर्थिक यिकाभ अभ्याभामधील निशीक्षण आणि निष्कर्ष पुढील प्रमाणे

### ७) <u>पर्यावरणविषयक तपाञ्चणी कार्यक्रम</u>

अभ्यासासाठी निवडलेल्या भागाची पूर्व पाहणी कवण्यात आली होती. प्रस्तावित प्रकल्पाच्या सभोवतालच्या हवामान पविस्थीतीच्या माहितीसाठी हवा, पाणी व माती स्वरूप इ. गोष्टींचा अभ्यास डिसेंबव २०२२ मध्ये सुरू केला गेला होता. या प्रस्तावामध्ये डिसेंबव २०२२ ते फेब्रुवावी २०२३ या दवम्यानच्या कालावधीमध्ये गोळा केलेली माहीती नमूद केली आहे. यासंबंधीची विदतीय स्तवाववील माहिती ही सवकावी विभागांकडून घेण्यात आली आहे ज्यामध्ये भुर्गभीय पाणी, माती, श्रोती आणि वने इ. समावेश आहे.

### ञ्ज. जमीनीचा वापञ

जमीन यापवाच्या अभ्याक्षामध्ये भागाची वचना, कावखाने, जंगल, वक्ते आणि वहढ़ावी इ. गोष्टींचा यिचाव केला जातो. क्षंखंधीत माहिती ही यियिध यिढतीय क्तवांयकन जर्भ की जनगणना पुक्तिका, क्षवकावी कार्यालये, क्षयें ऑफ इंडिया टोपोशीटक्ष, याचखवोखव कॅटेलाईट इमेजीक्ष य जागेयवील प्राथमिक क्षयें इ. मधुन घेण्यात आली आहे.

### ଷ. ଖ୍ରभ्याञ्चाञाठी निवडलेल्या जमीनीचा पापञ्च / ण्यापलेली जमीन

क्र.	जमीनीचावापञ्च / क्यापलेलीजमीन	ঞ্চীন (हेक्टर्च)	टक्केवाभी(%)
१	'खांधकामाखालील जमीन	१२२३	३.७0
२	लागणडीखालील जमीन	હ્યપદ્	५३.३0
ą	पडिक जमीन	४३६0	३0.२६
لا	नापीक जमीन	२३४७	६.९२
ų	जल न्संक्षा	<b>ૡ</b> ૭0	0.१८
ç	गળताळ जमीनीभह ज्युवटी झुडपे	५९८६	२.३९
6	जंगल	९३७३	३.२५
	एकुण	<b></b>	<b></b>

### तक्ता १५ जमीनीचा यापन्न / य्यापलेली जमीन

#### क. हवामान माहिती

भवन पाहणीभाठी ख्यूरो ऑफ इंडियन भ्टॅन्डर्ड (BIS) आणि इंडियन मेट्रोलॉजी डिपार्टमेंट (IMD) यांनी नमूब केलेली मानके पापवली आहेत. हपामान पविविधतीच्या माहितीभाठी पेगपेगळेया हपामान घटकांचा अभ्याभ प्रत्यक्ष जागेपवती केला गेला आहे. याभंखंधीची पिढ़तीय भ्ततभावरील अधिक माहिती ही हपामान पिभाग, कोल्हापूर येथून घेण्यात आली आहे. त्यामध्ये तापमान, आईता, पर्जन्यमान इ. खाषींचा भमापेश आहे.

येगयेगळया हवामान घटकांचा अभ्याभ हा डिसेंखब २०२२ ते जानेवाबी फेख्रुवाबी २०२३ याढवम्यान केला गेला होता. या अभ्याभातील पविमाणे, उपकवणे व वावंवावता यांचा तपशील ड्राफ्ट ई. आय. ए. बिपोर्टच्या प्रकवण ३ मध्ये ढेणेत आला आहे.

### **ड) ह**वेचा ढर्जा

या पिभागामधून नमुने घेतलेल्या ठिकाणांची निषड, नमुना घेण्याची पद्धत, पृथःकवणाची तंत्रे आणि नमुना घेण्याची पावंपावता इ. गोष्टींची माहिती ढिली आहे डिश्नेंखव-२०२२-जानेपावी-फेख्रुपावी-२०२३ या कालापधी मधील निवीक्षणानंतवचे निकाल आढव केले आहेत. भर्प मॉनिटवींग अभाइनमेंटस, नमुने घेणे प त्यांचे पृथःकवण NABL प MoEFCC, New Delhi मान्यता प्राप्त तक्षेच ISO ९००१ – २०१५ प OHSAS १८००१ – २००७ मानांकित मे. ग्रीन एन्पायवोश्वेफ इंजिनीअर्थ अँड कन्शल्टंट्स प्रा. लि., पुणे या प्रयोग शाळेमार्फत केले आहे. अभ्याक्ष क्षेत्रातील हथेच्या गुणपत्तेचे मूल्यमापन कवण्याशाठी PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub>, NO<sub>x</sub> प CO. या घटकांचे पेगप्रेगळया भ्र्यानाकांपव मॉनिटवींग केले नेले.मॉनिटवींगची पेगप्रेगळी भ्र्यानके ब्याली ढिलेल्या तक्त्यामध्ये ढाखपली आहेत.

AAQM केंद्र आणि सांकेतांक	ञ्थानकाचे नाप	भाईटपाभूनचे अंत्र (कि.मी.)	ম্বার্ছटলা প্রন্তুমফন ढ়িश্লা
A1	ন্মার্হুত		
A2	यंतामुत्री	८.0३	E
A3	'सुतगद्टी	५.५४	NE
A4	कामेवाडी	४.६९	W
A5	तेडववाडी	८.९६	W
A6	गुढागगतती	۷.۷۷	Ν
A7	कुर्वीहाला	૪.૭५	S
A8	ঞ্চিাব্যাত্মুর	१.३९	Е

तक्ता १६ हवा पश्चिष्ठाणी स्थानके

### तक्ता १७ Summary of the AAQ Levels for Monitoring Season

पविमाण					ठिव	ποτ			
		A1	A2	A3	A4	A5	A6	A7	A8
<b>PM</b> <sub>10</sub>	Max.	६४.४	६0.९	५३.४	६0.0	५९.३	६0.८	<b>५</b> ९.५	६२.३
μg/M <sup>3</sup>	Min.	५६.४	४७.0	४८.३	४९.७	५0.१	४७.१	۶۲.0	५१.७
	Avg.	६२.५	५ <b>०.</b> ४	५१.२	५५.६	५४ <b>.0</b>	५३.२	५२.0	40.0
	98%	६४.४	40.2	५३.३	५९.८	५८.७	٤ <b>0.</b> १	48.4	६१.९
PM2.5	Max	३२.१	२३.१	२१.९	२६.८	२५.८	२४.८	२५.२	२८.७
μg/M <sup>3</sup>	Min	२२.६	80.0	१६.३	२२.३	२0.७	85.0	१८.४	२२.५
	Avg	२८.१	२0.९	१९.२	२४.७	२३.0	२२.१	२१.६	२५.८
	98 Percentile	३१.७	२३.१	२१.७	२६.७	२५.८	२४.६	२५ <b>.</b> 0	२८.५
SO <sub>2</sub>	Max	१७.८	११.१	११.४	१५.७	१५ . १	१४.२	१२.५	१६.७
μg/M <sup>3</sup>	Min	<u> ۶</u> ۶.۷	4.0	५.३	<b>{0.0</b>	१ <b>0</b> . १	९.४	७.२	१0.६
	Avg	१५.८	९.५	८.६	१३.२	१२.८	११.९	٥ <b>.</b> ٥	१४.१
	98 Percentile	१७.८	<b>११.0</b>	१0.९	१५.७	१५ • १	१४.२	१२.५	१६ . १
NOx	Max	२७.१	१९.८	१७.९	२३.९	२२.४	२१.३	२0.४	२३.४
μg/M <sup>3</sup>	Min	२२.0	१५ • ५	१३.६	१८.२	۶८.८	१७.२	१५ • १	२0.५
	Avg	२४.३	१७.९	१६.0	२१.0	२0.९	१९.४	<b>۶۲.0</b>	२२.३
	98 Percentile	२६.५	१९.५	१७.९	२३.७	२२.४	२१.१	२0.३	२३.४
CO	Max	0.५५0	0.0ξ0	0.030	0.090	0.090	0.090	0.020	0.00
CO mg/M <sup>3</sup>	Min	0.040	0.0%0	0.030	0.090	0.0५0	0.000	0.0ξ0	0.020
mg/M <sup>3</sup>	Avg	0.300	0.0४३	0.030	0.0૭५	0.0 <b>५</b> ४	0.000	0.0६७	0.0८९

[ डिन्नेंखन्न-२०२२-जानेवान्नी-फेख्रुवान्नी-२०२३]

पर्विमाण	ठिकाण							
	A1	A2	A3	A4	A5	A6	A7	A8
98 Percentile	0.440	0.044	0.030	0.090	0.0६५	0.090	0.040	0.800

Note: PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub> are computed based on 24 hourly values. CO is computed based on 8 hourly values. ततन्ता १८ National Ambient Air Quality Standards (NAAQS) by CPCB

(Notification No. S.O.B-29016/20/90/PCI-L by MOEFCC; New Delhi dated 18.11.2009)

Zone Station	PM10 µ	ug/M <sup>3</sup>	PM <sub>2.5</sub> μg	g/M <sup>3</sup>	SO <sub>2</sub> µ	g/M <sup>3</sup>	NOx µ	ug/M <sup>3</sup>	CO n	ng/M <sup>3</sup>
Lone Station	24 Hr	A.A.	24 Hr	A.A	24 Hr	A.A.	24 Hr	A.A.	8 Hr	1 Hr
Industrial, Rural & Residential Area	१ <b>00</b>	<b>६0</b>	૬0	۷0	۷۵	५ <b>0</b>	۷۵	۷۵	۲	لا
Eco-sensitive Area Notified by Govt.	<b>१००</b>	૬0	૬0	۷0	٥٥	२0	۷۵	<b>३0</b>	۲	۷

Note: A.A. represents "Annual Average

### হ্ব) पाण्याची गुणवत्ता

पाण्याच्या भौतिक, बाभायनिक गुणधर्मांची आणि त्यातील जड धातूंची तपाभणी कवण्याभाठी MoEFCC, New Delhi मानांकित मे. ग्रीन एनवायबोभेफ इंजिनीअर्भ आणि कंभलटंटभ् प्रा. लि., पुणे यांच्या मार्फत नमुने घेऊन त्यांच पृथःकवण केले. भूर्गभातील पाण्याच्या नमुना चाचणीभाठी ८ ठिकाणे व भूपृष्ठीय पाण्याच्या नमुना चाचणीभाठी ८ ठिकाणे घेतली होती ती खालील प्रमाणे -तक्ता १९ पृष्ठभागावशील पाण्याभाठी निवडलेली ठिकाणे

ञ्थानक ञांकेतांक	ञ्थानकाचे नाव	ञाईट पाञ्चुनचे अंतञ्व	ञाईट पाञुनची ढ़िशा
SW1	चन्नेहदटी	0.4२	Ν
SW2	चन्नेहदटी	१.३८	NW
SW3	यञ्चातानहट्टी	२.२९	NNW
SW4	कामेवाडी	३.८४	ENE
SW5	कामेवाडी	४.६६	NW
SW6	<b>ਹ</b> ਙੀ ਗੁਰਸ਼ ਹੈ ਕਿ ਇੱਕ	२.१६	NNW
SW7	पर्वभेनाहट्टी	३.२३	NE
SW8	डिंडालकोप	३.८४	SSW

### तक्ता २० भ्रूगभातील पाण्याभाठी निषडलेली ठिकाणे

ञ्थानक ञांकेतांक	ञ्थानकाचे नाव	ञाईट पाञुनचे अंतञ्	ञाईट पाञुनची ढ़िशा
GW1	হাত্যচালি শ্ভু	0.4२	Ν
GW2	चन्नेहदटी	१.१९	SSW
GW3	पर्वभेनाहट्टी	0.६३	SW
GW4	হাত্যচালি শ্ভু	१.0४	SSE
GW5	হাতাগাঁকী শ্ৰু	१.३0	SW
GW6	चन्नेहदटी	२.0८	SSW
GW7	ਧਕभੇਗहਟਟੀ	१.४७	W
GW8	यञ्चतानहट्टी	१.८६	Е

याखढढलची साविस्तन माहिती ई.आय.ए.निपोर्ट मधील प्रकनण ३ मध्ये आहे.

### फ) ध्वनी पातळीचे अर्वेक्षण

ध्यनी पातळीचे अर्थेक्षणआठी कावखाना पविभवाभ केंद्र मानून त्यापाभून १० कि. मी. थ्रांतवाच्या पविधामध्ये येणावा भाग हा अभ्याभ क्षेत्र म्हणून पिचावात घेण्यात आला होता. ध्यनीपातळीचे मॉनिटवींगआठी वहियाभी, प्यायभायिक, औद्योगिक, थांतता पिभाग अभे चाव पिभाग पिचावात घेण्यात आले होते. या अभ्याभामध्ये काही महत्याच्या वभ्त्यांयव पाहतुकीमुळे होणावा आयाजभुद्धा भगापिष्ट केला होता. प्रत्येक ठिकाणी २४ ताभाभाठी ध्वनीपातळीचे मॅनिटर्शेंग कञ्चयात आले. ध्वनीपातळीचे मॅनिटर्शेंगची पेगपेगळी स्थानके खाली ढिलेल्या तक्त्यामध्ये ढाखवली आहेत.

ञ्थानक भांकेतांक	ञ्थानकाचे नाप	ञाईट पाञ्चुनचे अंतर्भ	ञ्लाईट पाञुनची ढिशा
N1	' সার্হ্ব	-	-
N2	প্লিযোত্মুর	8	E
N3	लिंगानहदटी	२.३	SE
N4	डिंडालकोप	४.५	SW
N5	ञाजगोळी	३.२	SW
N6	चन्नेहट्टी	३.४	NW
N7	बामावाडी	۲.۶	NW
N8	माञ्ती	۷.۷	NE

### तक्ता २१ ध्वनी नमुना ठिकाणे

#### तक्ता २२ ध्वानी पातळी

ठिकाणे	କ୍ଷକ୍ଟକାନ୍ଥ ଅନ୍ତର୍ଯ୍ୟ ପାର୍ମ (ବ୍ରିକିଷାଡ)								
1000101	L <sub>10</sub>	L <sub>50</sub>	L <sub>90</sub>	L <sub>eq(day)</sub>	Leq(night)	L <sub>dn</sub>			
N1	५२.0	५२.२	५७.४	4٤.?	48 <b>.</b> 4	५९.0			
N2	४२.९	४६.८	४७.५	५२.७	٧१.८	५२.२			
N3	४२.८	४६.१	४७.७	५१ <b>.0</b>	४२.१	५१.४			
N4	४२.३	४५.८	४७.३	५१.७	४१.२	48.4			
N5	४३.0	<b>४७.0</b>	४७.७	५३.३	४१.८	५२.८			
N6	४२.७	४६.४	४७.९	५२.२	४१.८	५२.१			
N7	४२.३	४६.४	૪७.५	५१.४	४१.६	५२.२			
N8	४२.६	४५.९	४७.६	48.&	४१.३	48.4			

### ग) भामाजिक आर्थिक भचना

भामाजिक व आर्थिक भ्तन्नावरून त्याभागातील प्रगती दर्शनाभ येते. कोणत्याही प्रकानच्या विकाभ प्रकल्पामुळे कार्यक्षेत्रात नहणा-या लोकांच्या नहणीमानावन, भामाजिक व आर्थिक भ्तनावन प्रभाव पडतो. याबददलची भविभ्तन माहिती ई.आय.ए. निपोर्ट मधील प्रकन्नण ३ मध्ये आहे.

### ম) বর্যাবহৃতা

प्रक्तावित आभवनी प्रकल्पाच्या प्रश्नावलीचा वाप्र करून पर्यावरण व जैवविविधिता अभ्याभाभाठी भर्वेक्षण केले गेले. प्रकल्पाच्या १० कि.मी. परिघातील १८ गावे पर्यावरण व जैवविविधिता अभ्याभाभाठी अनुकुल आढळली जी अभ्याभक्षेत्रातील खहुतांश वभतीभ्थानांचे प्रतिनिधित्व कर्ततात. ५ कि.मी. परिघातील ४ गावे व १० कि.मी. परिघातील ३ गावे. याखढढलची भविभ्तत्र माहिती ई .आय.ए. रिपोर्ट मधील प्रकरण ३ मध्ये आहे.

### ८) <u>इतन्न अभ्याञ</u>

### आपत्ती व्यवश्यापन

आपत्ती प्ययन्थापन कन्नताना, खालील खाखींचा विचान केला जातो.

- १. प्रकल्पाच्या श्रोजाञी चाहणा-या लोकानां प्रकल्पामुळे कमीत कमी धोका अभावा.
- २. प्रकल्पामध्ये काम कवणा-या कामगावांना श्रोजावी वाहणा-या लोकांपेक्षा जाक्त धोका अपेक्षित आहे, यामुळे प्रकल्पामध्ये काम कवणा-या कामगावाना वांभाष्य धोक्यापावाून वक्षणाचे ट्रेनिंग दिले गेले पाहिजे जेणे कव्वन वांभाष्य धोके कमी होतील.

ग्रीन ए. जी. (१९८२) यांनी आपत्ती प्ययत्रथापन कवताना विचावात घेतलेल्या खाखी -

- १. प्रकल्पाभ धोका ः जेव्हा जिवीताभ कमीत कमी धोका अभतो व तो धोका पुढे कमी करणे शकय होत नाही यावेळी हराधोक्याभ प्राथमिकता ढिली गेली पाहिजे. राभ्रांतीगत भांभावित वित्तीय नुकभानीच्या धोक्याचा विचार केला जातो.
- २. कामगाञ्च य जनतेञ्च धोका : फेटल ॲंक्लिओडेंट वेट (एफ. ए. आञ्च) किंया फेटल ॲंक्लिओडेंट फिक्येंन्ब्ली वेट (एफ. ए. एफ. आञ्च) याचा यापञ्च कामगाञ्च य जनतेञ्च धोके यांचा अभ्याञ्च कञ्चताना यापञ्च केला जातो. एफ. ए. आञ्च य एफ. ए. एफ. आञ्च म्हणजेच औद्दोगिक अपघातांमध्ये १००० लोकांमागे होणा-या अपेक्षित मृतांची ञंख्या होय.

याञंखंधीची अधिक माहिती इ. आय. ए. विपोर्ट मधील प्रकवण ७ येथे जोडली आहे.

### ९) पर्यावरुणावर होणारे परिणाम आणि त्याभाठीच्या उपाय योजना

### अ. भौगोलिक वचनेवव पविणाम

এন্নাথিন आभयनी प्रकल्पाच्या उभावणीमुळे भंपाढ़ित जागेच्या भौगोलिक ञ्चनेवञ्च जाभ्ता परिणाम अपेक्षित नाही. भंपाढित जागेमध्ये खढल जभे की, आभयनी प्रकल्प उभावणी अपेक्षित आहे. भढ़व औढ़येगिक प्रकल्पामुळे काही भकावात्मक फायढ़े जभे की जमिन विकभिकवण, व झाडे लावणे अपेक्षित आहे.

### ख. वातावञ्गावञ्चील पश्चिणाम

प्रक्तावित प्रकल्पामुळे हवामानावन्न पन्निणाम अपेक्षित नाही कान्नण जान्न्त तापमान अभर्णा या वायुंचे उत्भर्जन अपेक्षित नाही.

### हवेच्या ढर्जाववील पविणाम

प्रक्तापित प्रकल्पामुळे होर्णा या परिणामांची छाननी कवण्यासाठी कावखाना पविसवास केंद्र मानून त्यापासून १० कि.मी. अंतवाच्या पविघामध्ये येणावा भाग पिचावात घेतला गेला आहे.

#### १. मुलभूत ॲम्खिएंट यायू प्रमाणके

डिर्भेष २०२२ जानेवार्श्व फेख्रुवार्श २०२३ मध्ये करण्यात आलेल्या क्षेत्र अभ्यासाढ्रम्यान नोंढ़ करण्यात आलेली २४ तासामधील ९८ पर्सेंटाईल प्रमाणके आणि PM10, PM2.5 , SO2 व NOx यांची सभोवतालच्या हवेमधील ससासरी यानुसास मिळालेल्या प्रमाणांना मुलभूत प्रमाणके मानण्यात आली आहेत. सढ्र प्रमाणके परिसंसामध्ये होणास परिणाम ढर्शवतात. सध्याची मुलभूत प्रमाणके ई. आय. ए. सिपोर्ट मधील प्रकरण ४ तसेच पुढील तक्त्यामध्ये मांडण्यात आली आहेत.

तपशील	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO
98 percentile	દર.५ μg/m³	२८ <b>.</b> १ µg/m³	શ્ <b>५</b> .૮ μg/m³	२४ <b>.</b> ३ μg/m³	0.30 mg/m <sup>3</sup>
NAAQS	٥٥٥ μg/m <sup>3</sup>	<b>ξ0 μg/m<sup>3</sup></b>	20 μg/m <sup>3</sup>	20 μg/m <sup>3</sup>	× mg/m <sup>3</sup>

#### तक्ता २३ मुलभूत प्रमाणके

#### २. हवा प्रदुषण क्त्रोत

एक्तापित आक्षाजी प्रकल्पामध्ये ६० टन प्रति ताक्ष क्षमतेचा इन्किनवेशन खाँयलव खक्षपिण्यात रोईल. क्षध्याच्या प्रकल्पामध्ये १३० टन प्रति ताक्ष क्षमतेचा खाँयलव (क्षध्याचा ११० टन/ताक्ष खाँयलव १३० टन/ताक्ष खाँयलव मध्ये कप्पांतवीत) खक्षप्रिण्यात आले आहेत. क्षढव काख्वव काव्य्खाना पिक्ताविकवणांतर्गत नपीन ५० टन प्रति ताक्ष क्षमतेचा खाँयलवचे क्षमते पर्यंत अष्टुनिकिकवण केले जाईल.

भाष्या कावव्यान्यामध्ये ७२५ के.एही.ए. क्षमतेचे २ व ३२० के.एही.ए. क्षमतेचा डी.जी. सेट कार्य वत आहेत.

### ङ. जलक्त्रोताववील पविणाम

### १. भ्रुपृष्ठीय जलक्त्रोताववील पविणाम

ओ. ग्लो. अॅ. क. इं. प्रा. लि. ची पाण्याची गञ्चज भुपृष्ठीय जलक्त्रोतामधून व पुर्नवापञ्च केलेल्या पाण्यामधून भागवली जाईल. आक्षवनी मधुन निघणाने वॉ क्येंटवॉशा MEE मध्ये कॉक्षनट्रेट केले जाईल आणि कॉक्षनट्रेट क्येंटवॉशा इन्शिननेश्रान खॉयलच्च मध्ये जाळले जाईल. क्येंटलीज, एम. ई .ई. मधील कंडेनकेट, इतच क्षांडपाणी हे आक्षवनी प्रकल्पाच्या क्षि. पी. यु मध्ये प्रक्रियित कक्ष्न त्याचा पुर्नवापच केला जाईल. क्षाब्बच कावब्बान्यातून निघणाने क्षांडपाणी हे औढ्योगिक क्षांडपाणी प्रक्रिया केंढ्रात प्रक्रियीत कक्ष्न त्याचा पुर्नवापच केला जाईल.

ओ.ग्लो.ञ्रॅ.क.इं.प्रा.लि मध्ये तयाब होणाबे घवगुती आंडपाणी हे प्रक्तापित घवगुती आंडपाणी प्रकल्पामध्ये (एञ.टी.पी.) प्रक्रिया कब्बन त्याचा पुर्नपापब केला जाईल.

### २. भ्रूगर्भिय पाण्याच्या गुणवत्तेवन्न होणाना पनिणाम

प्रकल्पांभाठी लागणांभे जरूभी पाणी हे तामपर्णि नदीमधुन घेण्यात येईल. प्रभ्तापित प्रकल्पाभ्रांतर्ग त भूजलाचा यापभ होणाभ नाही. या अधिक, काभब्धान्यामधुन कोणत्याही प्रकाभचे अप्रक्रियीत भांडपाणी पिभर्जीत होणाभ नाही त्यामुळे भूजल पाणी पातळीयभ य गुणयत्तेयभ कोणताही पशिणाम होणाभ नाही.

### इ. माती वन्न होणाने पनिणाम

मातीच्या गुणधर्मायत्र होणात्रे पत्रिणाम हे आधारणपणे पायू उत्क्षर्जन, आंडपाण्याचे आणि घनकचत्रा यिनियोग यांमुळे होत अक्षतात. यत्र उल्लेख केल्याप्रमाणे कोणत्याही प्रकात्रे अप्रक्रियित आंडपाणी जमिनीयत्र ओडण्यात येणात्र नाही. यागु उत्क्षर्जन त्रोखण्याक्षाठी ई.एक्ष.पी. हे यागु प्रदुषणनियंत्रक उपकर्वण पुत्रयिले आहे. यामुळे कोणत्याही प्रकात्रे प्रक्रिया उत्क्षर्जन होणात्र नाही म्हणून मातीतील घटकांयत्र होणात्रा पत्रिणाम शुन्य अक्षेल.खॉयलत्रची त्राख, क्षी. पी. यु. क्लज हे खत म्हणून यापत्रले जाईल. त्यामूळे यागु प्रदूषके अधया आंडपाण्यामुळे जमिनीच्या त्राक्षयनिक घटकांमध्ये कोणताही मोठा खढल होणात्र नाही.

### फ. ध्वनी मर्यादेवन होणाना पनिणाम

अतिध्वनी निर्माण कवर्णा या यंत्रावव काम कवीत अभणा-या कामगावांचे संतुलन खिघडुन कामावव पविणाम होण्याची शाक्यता अभते. ध्वनी निर्माण कवणाऱ्या स्त्रोताजवळ अभणाऱ्या लोकांची ऐकण्याची क्षमता कमी होऊ शकते. सब्ब प्रकल्पामध्ये मुख्यतः साखव कावखान्यातील मील, कॉम्प्रेभव, खॉयलव, टर्खाइन व डि. जी. सेट हे ध्वनी प्रदूषणाचे मुख्य स्त्रोत ठवतील. सदब प्रकल्प हा ध्वनीप्रदुषण कवणावा नभणाव आहे.

### ग. जमीन वापवावव होणावा पविणाम

থ্রो.ठलो.थ्रॅ.क.इं.प्र.लि यांच्या अध्याच्या जागेमध्ये `साख्वत्र काव्रखाना उभावण्यात थ्राला थ्राहे. प्रक्तापित थ्राभयनी प्रकल्प य 'साखव काव्रखाना यिक्तावीकवण 'सध्याच्या थ्रो.ग्लो.थ्रॅ.क.इं.प्र.लि काव्रखान्याच्या थ्रायावात उभावण्यात येईल. यामुळे जमीन यापवामध्ये खढल थ्रापेक्षित नाही.

### ष. জ্বাভাঁত্রন ত प्राण्यांত্রন होणाना पनिणाम

प्रक्रिया न केलेले आंडपाणी कावम्बान्याच्या अभोवताली विभर्जित केल्याभ पाणी भंक्या व त्यावव अवलंबून अभलेली जैवविविधतेवव पविणाम भंभोवतो. वायु प्रदुषणा भंदर्भात कावम्बाना SPM च्या भवम्वपति प्रदुषण योगदान देऊ शकतो. याचा विपवीत पविणाम अंशतः पक्षी, भभोवतालची पीके आणि भ्यानिक लोकांवव होऊ शकतो. झाडांवव व प्राण्यांवव होणावा पविणामांची माहिती ई. आय. ए. विपोर्ट मधील प्रकवण ३ मध्ये देण्यात आलेली आहे.

### **ब. ऐतिहाक्षिक ठिकाणायव होणावा पविणाम**

प्रकल्पाच्या १० कि.मी क्षेत्रात कोणतेही ऐतिहाभिक ठिकाण येत नभलेने ऐतिहाभिक ठिकाणायम कोणताही पर्िणाम अपेक्षित नाही.

### १०)पर्यापर्वणीय निर्नाक्षण आवाब्बडयाची ठळक वैशिष्टये

तक्ता २३ मध्ये ढ़िलेला विश्तृत पर्यावरूणीय निर्नाक्षण आश्राखडयाची अंमलखजावणी केली जाईल. पर्यावरणीय निर्नाक्षणाव्यतिविक्त पर्यावरणीय मंजुत्रीमध्ये ढ़िलेल्या अर्टीची पुर्तता तक्षेच CPCB/ MoEFCC/ MPCB यांच्याकडील नियमित पञ्चवानग्या आणि विपोर्टञ्च पुढील ञ्चंढर्भाञाठी ञुक्षि्थतीत ठेवली जातील.

क.	तपशील	ठिकाण	पश्चिमाणे	वाञंवाञ्चता	तपाभणी
8	हःखेची गुणवत्ता	अपयिंड २, डाडनयिंड २ कॉभयिंड २ (केन यार्ड, मेन गेट जयळ, (ई.टी.पी. जयळ), यभाहती जयळ)	PM10, PM2.5, SO2, NOX, CO	माक्षिक	
		अभ्यासं क्षेत्र गावे वंतामुर्सी, सुतागदटी, कामेवाडी, तेउत्तवाडी, गुढागगत्ती, कुत्तीहाला, शिवापूर्स	,	त्रैमाभिक	
२	कामाच्या ठिकाणाची हपेची गुणवत्ता	४ ठिकाणी (मील पिभाग, `भाव्यवयोती भवणा पिभाग, आभवनी पिभाग)	PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> , NOx, CO	माक्षिक	
R <sup>2</sup>	चिमणीतुन होणावे उत्भर्जन	लॉयलञ्च्या २ चिमण्या, डी.जी. ंभेटची चिमणी	SPM, SO <sub>2</sub> , NOx	माभिक	M FEGG
8	कामाच्या	मील विभाग,	Spot Noise Level	माभिक	MoEFCC
	ठिकाणाची ध्व्रनि	' ਯੱਧਕਾਕ, ਠੀ. जੀ. ' ਜੇਟ, ਟ ਯਂ ਡਿਰ ਧਿ ਸਾਰ	recording; Leq(n), Leq(d), Leq(dn)	माक्षिक	approved Laboratory मधुन
	ध्वनि गुणवत्ता	मेनगेट जपळ, ई. टी. पी. जपळ, 'भाखन्न गोढ़ाम़ , टर्षाइन पिभाग, 'लॉयलन्न			
4	`ञ्सांडपाणी	• प्रक्रिया न केलेले • प्रक्रिया केलेले	pH, SS, TDS, COD, BOD, Chlorides, Sulphates, Oil & Grease.	माशिक	
ų,	पिण्याचे पाणी	काञ्चखान्याची 'यञ्चाहत	Parameters as drinking water standards.	माक्षिक	
y	जमीन	५ किमी मधील ८ ठिकाणे मंगळपेढा, नालि, ओझेवाडी, मल्लेवाडी, खम्हपुरी, अर्धनाञी	PH, Salinity, Organic Carbon, N.P.K.	मासिक	

### तक्ता २४ पर्यावरूणीय निर्नाक्षण आवाखडयाची ठळक वैशिष्टिये (ऑनभाईट)

क.	तपश्चील	ठिकाण	पश्चिमाणे	वार्चवाञ्चता	तपाञ्नणी
۷	पाण्याची गुणवत्ता	अभ्याभ क्षेत्रामधील ८ ठिकाणे चन्नेहट्टी , चन्नेहट्टी , यभातानहट्टी , कामेपाडी , यभातानहट्टी , यभभेनाहट्टी , डिंडालकोप ,	Parameters as per CPCB guideline for water quality monitoring – MINARS/27/2007- 08	<b>क्वे</b> माक्षिक	
٩	কল্বন্বা অ্যেয়েম্থায়েন	प्रक्षापित कृतीतून तयात्र होर्णा या कर्च याचे पैशिष्टे आणि कपानुआत्र प्ययक्षापन केले जाईल.	आणि विल्हेवाट	'पर्षातून दोनदा	ुओ.ग्रेलो.ॲ.क.इं .प्रा.लि यांचेकडून
۶ <b>0</b>	आपातकालीन तयात्री जन्ने की आग प्ययन्थापन	प्रतिखंधात्मक उपाय म्हणून आमीच्या व ञ्क्पोट होणाऱ्या ठिकाणी आमीपाञ्चून ञ्तंत्रक्षण आणि जुत्तक्षिततेची काळजी घेतली जाईल.	`ञंकटकालीन 'खाहेञ	माक्षिक	
88	आ्रोग्य	काञ्च्खान्याचे कामगाञ्च आणि ञ्थलांतञ्चीत कामगाञ्चांशाठी आञ्चोग्य शिष्ठीञाचे आयोजन	`মর্অ ঝ্রাহ্নান্সন্য বিষয়ক चाचण्या	' <b>টার্ডি</b> ক	
१२	ন্ট্র্যান ঘ্রন্থা	काञ्चखान्याच्या पञ्चीञ्चञामध्ये आणि श्रोजाञ्चील नाावांमध्ये	হ্বার্ড जगण्याचा दृञ्	जिल्हा 'यज अधिकावी यांच्या 'सल्ल्यानुसाब	
१३	ন্ধী.ई.आर्.	निर्देशाप्रमाणे		`भहाँ महिन्यातुन	

## **Enclosure - I ToRs Letter**



Dated 12/02/2024

File No.: IA-J-11011/244/2023-IA-II(I) Government of India Ministry of Environment, Forest and Climate Change IA Division \*\*\*





To,					
	Mr Bharat Kundal M/s. OLAM GLOBAL AGRI COMMODITIES IN Gut No. 76, Channehatti, Post: Rajgoli (Kh), Tal.: Channehatti, Post: Rajgoli (Kh), KOLHAPUR, M. bharat.kundal@olamnet.com	Chandgad, dist.: Kolhapur, Maharashtra, At			
Subject:	Grant of Standard Terms of Reference (ToR) to the proposed Project under the EIA Notification 2006- and as amended thereof-regarding.				
Sir/Mada <mark>m,</mark>		submitted to MoEF&CC vide proposal number grant of Terms of Reference (ToR) to the project and as amended thereof.			
	2. The particulars of the proposal are as below :				
	(i) ToR Identification No.	TO23A2501MH5727216N			
	(ii) File No.	IA-J-11011/244/2023-IA-II(I)			
	(iii) Clearance Type	Fresh ToR			
	(iv) Category	A			
	(v) Project/Activity Included Schedule No.	5(g) Distilleries,1(d) Thermal Power Plants,5(j) Sugar Industry			
	(vi) Sector	Industrial Projects - 2			
	(vii) Name of Project	Expansion of Sugar Factory from 4,960 TCD to 10,000 TCD, Cogeneration Plant from 25 MW to 33 MW and Manufacturing of 300 KLPD RS / ENA/ Ethanol from C & B Heavy Molasses / Sugarcane Syrup and RS/ENA from Grains along with 8 MW Power Generation in the existing 300 KLPD Grain Distillery Setup approved under B2 Category for product Ethanol by Olam Global Agri Commodities India Pvt. Ltd (OGACIPL), At/Post: Channehatti, Rajgoli (Kh.) Tal: Chandgad, Dist.:			

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Kolhapur, Maharashtra State.

(viii) Name of Company/Organization	OLAM GLOBAL AGRI COMMODITIES INDIA
(()) - ()	PRIVATE LIMITED
(ix) Location of Project (District, State)	KOLHAPUR, MAHARASHTRA
(x) Issuing Authority	MoEF&CC
(xii) Applicability of General Conditions	YES

- 1. The MoEF&CC has examined the proposal in accordance with the Environment Impact Assessment (EIA) Notification, 2006 & further amendments thereto and after detailed examination hereby decided to grant Standard Terms of Reference to the instant proposal of M/s. OLAM GLOBAL AGRI COMMODITIES INDIA PRIVATE LIMITED under the provisions of the aforementioned Notification.
- 2. Standard Terms of Reference are annexed to this letter as Annexure (1). The brief about products and by-products as submitted by the Project proponent in Form-1 (Part A, B) are annexed to this letter as Annexure (2).
- 3. As per SO S.O. 751(E) dated 17th February, 2020 the validity of ToR shall be four years. The Ministry reserves the right to stipulate additional TORs, if found necessary.
- 4. The Standard Terms of Reference (ToR) to the aforementioned project is under provisions of EIA Notification, 2006 and as amended thereof. It does not tantamount to approvals/consent/permissions etc required to be obtained under any other Act/Rule/regulation. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes, as applicable, to the project.
- 5. The granted letter, all the documents submitted as a part of application viz. Form-1 Part A and Part B are available on PARIVESH portal which can be accessed by scanning the QR Code above.

### Copy To

- 1. The Secretary, Department of Environment, Government of Maharashtra, Mumbai 400 032
- 2. The Regional Officer, Ministry of Env., Forest and Climate Change, Integrated Regional Office, Ground Floor, East Wing, New Secretariat Building, Civil Lines, Nagpur- 440001 Maharashtra
- 3. The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi -32
- 4. The Member Secretary, Maharashtra Pollution Control Board, Kalpataru Point, 3rd and 4th floor, Opp. Cine Planet, Sion Circle, Mumbai 22
- 5. Compliance and Monitoring Division, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi
- 6. The District Collector, Kolhapur District, Maharashtra
- 7. Guard File/Monitoring File/Parivesh portal/Record File

Annexure 1

Standard Terms of Reference for conducting Environment Impact Assessment Study for Thermal Power Plants and information to be included in EIA/EMP report

**1. Executive Summary** 

Sr. No.	Terms of Reference
1.1	Executive Summary

### 2. Introduction

Sr. No.	Terms of Reference
2.1	Details of the EIA Consultant including NABET accreditation
2.2	Information about the project proponent

### 3. Project Description

Sr. No.	Terms of Reference
3.1	Cost of project and time of completion.
3.2	Products with capacities for the proposed project. If expansion project, details of existing products with capacities and whether adequate land is available for expansion, reference of earlier EC if any.
3.3	List of raw materials required and their source along with mode of transportation.
3.4	Other chemicals and materials required with quantities and storage capacities
3.5	Details of Emission, effluents, hazardous waste generation and their management. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract)
3.6	Process description along with major equipments and machineries, process flow sheet (quantitative) from raw material to products to be provided.
3.7	Hazard identification and details of proposed safety systems.
3.8	<ul> <li>Expansion/modernization proposals:</li> <li>a. Copy of all the Environmental Clearance(s) including Amendments thereto obtained for the project from MOEF/SEIAA shall be attached as an Annexure. A certified copy of the latest Monitoring Report of the Regional Office of the Ministry of Environment and Forests as per circular dated 08th June, 2022 on the status of compliance of conditions stipulated in all the existing environmental clearances including Amendments shall be provided. In addition, status of compliance of Consent to Operate for the ongoing /existing operation of the project from SPCB shall be attached with the EIA-EMP report.</li> <li>b. In case the existing project has not obtained environmental clearance, reasons for not taking EC under the provisions of the EIA Notification 1994 and/or EIA Notification 2006 shall be provided. Copies of Consent to Establish/No Objection Certificate and Consent to Operate (in case of units operating prior to EIA Notification 2006, CTE and CTO of FY 2005-2006) obtained from the SPCB shall be submitted.</li> </ul>

4. Site Details

Sr. No.	Terms of Reference
4.1	Location of the project site covering village, Taluka/Tehsil, District and State, Justification forselecting the site, whether other sites were considered.
4.2	A toposheet of the study area of radius of 10 km and site location on 1:50,000/1:25,000 scale on an A3/A2 sheet. (including all eco-sensitive areas and environmentally sensitive places)
4.3	Co-ordinates (lat-long) of all four corners of the site. Google map-Earth downloaded of the project site. Layout maps indicating existing unit as well as proposed unit indicating storage area, plant area, greenbelt area, utilities etc. If located within an Industrial area/Estate/Complex, layout of Industrial Area indicating location of unit within the Industrial area/Estate.
4.4	Photographs of the proposed and existing (if applicable) plant site. If existing, show photographs of plantation/greenbelt, in particular.
4.5	Land use break-up of total land of the project site (identified and acquired), government/ private - agricultural, forest, wasteland, water bodies, settlements, etc shall be included. (not required for industrial area).
4.6	A list of major industries with name and type within study area (10km radius) shall be incorporated.
4.7	Details of Drainage of the project up to 5km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided.
4.8	Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.
4.9	R&R details in respect of land in line with state Government policy.

# 5. Forest and wildlife related issues (if applicable):

Sr. No.	Terms of Reference
5.1	Permission and approval for the use of forest land (forestry clearance), if any, and recommendations of the State Forest Department. (if applicable)
5.2	Land use map based on High resolution satellite imagery (GPS) of the proposed site delineating the forestland (in case of projects involving forest land more than 40 ha).
5.3	Status of Application submitted for obtaining the stage I forestry clearance along with latest status shall be submitted.
5.4	The projects to be located within 10 km of the National Parks, Sanctuaries, Biosphere Reserves, Migratory Corridors of Wild Animals, the project proponent shall submit the map duly authenticated by Chief Wildlife Warden showing these features vis-à-vis the project location and the recommendations or comments of the Chief Wildlife Warden-thereon
5.5	Wildlife Conservation Plan duly authenticated by the Chief Wildlife Warden of the State Government for

Sr. No.	Terms of Reference
	conservation of Schedule I fauna, if any exists in the study area
5.6	Copy of application submitted for clearance under the Wildlife (Protection) Act, 1972, to the Standing Committee of the National Board for Wildlife.

### 6. Environmental Status

Sr. No.	Terms of Reference
6.1	Determination of atmospheric inversion level at the project site and site-specific micrometeorological data using temperature, relative humidity, hourly wind speed and direction and rainfall.
6.2	AAQ data (except monsoon) at 8 locations for PM10, PM2.5, SO2, NOX, CO and other parameters relevant to the project shall be collected. The monitoring stations shall be based CPCB guidelines and take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests.
6.3	Raw data of all AAQ measurement for 12 weeks of all stations as per frequency given in the NAQQM Notification of Nov. 2009 along with - min., max., average and 98% values for each of the AAQ parameters from data of all AAQ stations should be provided as an annexure to the EIA Report.
6.4	Surface water quality of nearby River (100m upstream and downstream of discharge point) and other surface drains at eight locations as per CPCB/MoEF&CC guidelines.
6.5	Whether the site falls near to polluted stretch of river identified by the CPCB/MoEF&CC, if yes give details.
6.6	Ground water monitoring at minimum at 8 locations shall be included.
6.7	Noise levels monitoring at 8 locations within the study area.
6.8	Soil Characteristic as per CPCB guidelines.
6.9	Traffic study of the area, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc. Impact due to increased traffic shall be assessed and incorporated in environmental management plan. Buffer zone of 50.0 m from centre of state highway shall be maintained.
6.10	Detailed description of flora and fauna (terrestrial and aquatic) existing in the study area shall be given with special reference to rare, endemic and endangered species. If Schedule- I fauna are found within the study area, a Wildlife Conservation Plan shall be prepared and furnished.
6.11	Socio-economic status of the study area.

### 7. Impact and Environment Management Plan

Sr. No.	Terms of Reference
7.1	Assessment of ground level concentration of pollutants from the stack emission based on site specific

Sr. No.	Terms of Reference
	meteorological features. In case the project is located on a hilly terrain, the AQIP Modeling shall be done using inputs of the specific terrain characteristics for determining the potential impacts of the project on the AAQ. Cumulative impact of all sources of emissions (including transportation) on the AAQ of the area shall be assessed. Details of the model used and the input data used for modeling shall also be provided. The air quality contours shall be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any.
7.2	Water Quality modeling - in case of discharge in water body
7.3	Impact of the transport of the raw materials and end products on the surrounding environment shall be assessed and provided. In this regard, options for transport of raw materials and finished products and wastes (large quantities) by rail or rail-cum road transport or conveyor cum- rail transport shall be examined.
7.4	A note on treatment of wastewater from different plant operations, extent recycled and reused for different purposes shall be included. Complete scheme of effluent treatment. Characteristics of untreated and treated effluent to meet the prescribed standards of discharge under E(P) Rules.
7.5	Details of stack emission and action plan for control of emissions to meet standards.
7.6	Measures for fugitive emission control
7.7	Details of hazardous waste generation and their storage, utilization and management. Copies of MOU regarding utilization of solid and hazardous waste in cement plant shall also be included. EMP shall include the concept of waste-minimization, recycle/reuse/recover techniques, Energy conservation, and natural resource conservation.
7.8	Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 2009. A detailed plan of action shall be provided.
7.9	Action plan for the green belt development plan in 33 % area i.e., land with not less than 2,500 trees per ha. mentioning details of species, width of plantation, planning schedule, density of the plantation etc. shall be included. At least 20 varieties of species shall be proposed as part of greenbelt. No invasive or alien or non-native tree species shall be selected for plantation. The green belt shall be around the project periphery and a scheme for greening of the roads used for the project shall also be incorporated.
7.10	Action plan for rainwater harvesting measures at plant site shall be submitted to harvest rainwater from the roof tops and storm water drains to recharge the ground water and also to use for the various activities at the project site to conserve fresh water and reduce the water requirement from other sources. Industry shall construct a rain water storage pond and the accumulated water to be used as fresh water thereby reducing fresh water consumption. Dimensions of rain water storage pond/tank proposed shall be given.

### 8. Occupational health

Sr. No.	Terms of Reference
8.1	Plan and fund allocation to ensure the occupational health & safety of all contract and casual workers.
8.2	Details of exposure specific health status evaluation of worker. If the workers' health is being evaluated by pre designed format, chest x rays, Audiometry, Spirometry, Vision testing (Far & Near vision, colour

Sr. No.	Terms of Reference
	vision and any other ocular defect) ECG, during pre placement and periodical examinations give the details of the same. Details regarding last month analyzed data of above mentioned parameters as per age, sex, duration of exposure and department wise.
8.3	Details of existing Occupational & Safety Hazards. What are the exposure levels of hazards and whether they are within Permissible Exposure level (PEL). If these are not within PEL, what measures the company has adopted to keep them within PEL so that health of the workers can be preserved.
8.4	Annual report of heath status of workers with special reference to Occupational Health and Safety.

### 9. Corporate Environment Policy

Sr. No.	Terms of Reference
9.1	Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.
9.2	What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions? Details of this system may be given.
9.3	Does the company have system of reporting of non compliances / violations of environmental norms to the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism shall be detailed in the EIA report.

10. Details regarding infrastructure facilities such as sanitation, fuel, restroom etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase.

Sr. No.	Terms of Reference
10.1	undefined

### 11. Enterprise Social Committment (ESC)

Sr. No.	Terms of Reference
11.1	As per Ministry's OM No. 22-65/2017-IA.III dated 30.09.2020 PP shall address Public Hearing issues and submit item-wise details along with time bound action plan which shall be included in the Environmental Management Plan in lieu of Corporate Environment Responsibility. Socio-economic development activities need to be elaborated upon.
11.2	Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details there of and compliance/ATR to the notice(s) and present status of the case.
11.3	A tabular chart with index for point wise compliance of above TOR.

### 12. Specific Conditions

Sr. No.	Terms of Reference
12.1	List of existing distillery units in the study area along with their capacity and sourcing of raw material.
12.2	Number of working days of the distillery unit.
12.3	Details of raw materials such as molasses/grains, their source with availability.
12.4	Details of the use of steam from the boiler.
12.5	Surface and Ground water quality around proposed spent wash storage lagoon, and compost yard.
12.6	Plan to reduce spent wash generation within 6-8 KL/KL of alcohol produced.
12.7	Proposed Effluent treatment system for molasses/grain based distillery (spent wash, spent lees, condensate and utilities) as well as domestic sewage and scheme for achieving zero water conservation.
12.8	Proposed action to restrict fresh water consumption within 10 KL/KL of alcohol production.
12.9	Details about capacity of spent wash holding tank, material used, design consideration. No. of peizometers to be proposed around spent wash holding tank.
12.10	Details of solid waste management including management of boiler ash, yeast, etc. Details of incinerated spent wash ash generation and its disposal.
12.11	Details of bio-composting yard (if applicable).
12.12	Action plan to control odour pollution.
12.13	Arrangements for installation of continuous online monitoring system (24x7 monitoringdevice)
12.14	PP shall utilize treated effluent from the sugar unit in the distillery instead of using fresh water in order to reduce fresh water requirement in the distillery unit. Provision of ETP for treating distillery effluent and CPU for sugar unit shall be made. Filter press shall be provided for sludge management.

### Standard Terms of Reference for conducting Environment Impact Assessment Study for Sugar Industry and information to be included in EIA/EMP report

### 1. Statutory compliance

Sr. No.	Terms of Reference
1.1	The proposed project shall be given a unique name in consonance with the name submitted to other Government Departments etc. for its better identification and reference.
1.2	Vision document specifying prospective long term plan of the project shall be formulated and submitted.

Sr. No	Terms of Reference
1.3	Latest compliance report duly certified by the Regional Office of MoEF&CC for the conditions stipulated in the environmental and CRZ clearances of the previous phase(s) for the expansion projects shall be submitted.

### 2. Details of the Project and Site

Sr. No.	Terms of Reference
2.1	The project proponent needs to identify minimum three potential sites based on environmental, ecological and economic considerations, and choose one appropriate site having minimum impacts on ecology and environment. A detailed comparison of the sites in this regard shall be submitted.
2.2	Executive summary of the project indicating relevant details along with recent photographs of the proposed site (s) shall be provided. Response to the issues raised during Public Hearing and the written representations (if any), along with a time bound Action Plan and budgetary allocations to address the same, shall be provided in a tabular form, against each action proposed.
2.3	Harnessing solar power within the premises of the plant particularly at available roof tops and other available areas shall be formulated and for expansion projects, status of implementation shall also be submitted.
2.4	The geographical coordinates (WGS 84) of the proposed site (plant boundary), including location of ash pond along with topo sheet (1:50,000 scale) and IRS satellite map of the area, shall be submitted. Elevation of plant site and ash pond with respect to HFL of water body/nallah/River and high tide level from the sea shall be specified, if the site is located in proximity to them.
2.5	Layout plan indicating break-up of plant area, ash pond, green belt, infrastructure, roads etc. shall be provided.
2.6	Land requirement for the project shall be optimized and in any case not more than what has been specified by CEA from time to time. Item wise break up of land requirement shall be provided.
2.7	Present land use (including land class/kism) as per the revenue records and State Govt. records of the proposed site shall be furnished. Information on land to be acquired including coal transportation system, laying of pipeline, ROW, transmission lines etc. shall be specifically submitted. Status of land acquisition and litigation, if any, should be provided.
2.8	If the project involves forest land, details of application, including date of application, area applied for, and application registration number, for diversion under FCA and its status should be provided along with copies of relevant documents.

Sr. No.	Terms of Reference
2.9	The land acquisition and R&R scheme with a time bound Action Plan should be formulated and addressed in the EIA report.
2.10	Satellite imagery and authenticated topo sheet indicating drainage, cropping pattern, water bodies (wetland, river system, stream, nallahs, ponds etc.), location of nearest habitations (villages), creeks, mangroves, rivers, reservoirs etc. in the study area shall be provided.
2.11	Topography of the study area supported by toposheet on 1:50,000 scale of Survey of India, along with a large scale map preferably of 1:25,000 scale and the specific information whether the site requires any filling shall be provided. In that case, details of filling, quantity of required fill material; its source, transportation etc. shall be submitted.

### **3.** Ecology biodiversity and Environment

Sr. No.	Terms of Reference
3.1	A detailed study on land use pattern in the study area shall be carried out including identification of common property resources (such as grazing and community land, water resources etc.) available and Action Plan for its protection and management shall be formulated. If acquisition of grazing land is involved, it shall be ensured that an equal area of grazing land be acquired and developed and detailed plan submitted.
3.2	Location of any National Park, Sanctuary, Elephant/Tiger Reserve (existing as well as proposed), migratory routes / wildlife corridor, if any, within 10 km of the project site shall be specified and marked on the map duly authenticated by the Chief Wildlife Warden of the State or an officer authorized by him.
3.3	A mineralogical map of the proposed site (including soil type) and information (if available) that the site is not located on potentially mineable mineral deposit shall be submitted.
3.4	The water requirement shall be optimized (by adopting measures such as dry fly ash and dry bottom ash disposal system, air cooled condenser, concept of zero discharge) and in any case not more than that stipulated by CEA from time to time, to be submitted along with details of source of water and water balance diagram. Details of water balance calculated shall take into account reuse and re- circulation of effluents.
3.5	Water body/Nallah (if any) passing across the site should not be disturbed as far as possible. In case any Nallah / drain is proposed to be diverted, it shall be ensured that the diversion does not disturb the natural drainage pattern of the area. Details of proposed diversion shall be furnished duly approved by the concerned Department of the State.
3.6	It shall also be ensured that a minimum of 500 m distance of plant boundary is kept from the HFL of river system / streams etc. and the boundary of site should also be located 500 m away from railway track and National Highways.

Sr. No.	Terms of Reference
3.7	Hydro-geological study of the area shall be carried out through an institute/ organization of repute to assess the impact on ground and surface water regimes. Specific mitigation measures shall be spelt out and time bound Action Plan for its implementation shall be submitted
3.8	Detailed Studies on the impacts of the ecology including fisheries of the River/Estuary/Sea due to the proposed withdrawal of water / discharge of treated wastewater into the River/Sea etc shall be carried out and submitted along with the EIA Report. In case of requirement of marine impact assessment study, the location of intake and outfall shall be clearly specified along with depth of water drawl and discharge into open sea.
3.9	Source of water and its sustainability even in lean season shall be provided along with details of ecological impacts arising out of withdrawal of water and taking into account inter-state shares (if any). Information on other competing sources downstream of the proposed project and commitment regarding availability of requisite quantity of water from the Competent Authority shall be provided along with letter / document stating firm allocation of water.
3.10	Detailed plan for rainwater harvesting and its proposed utilization in the plant shall be furnished.In addition, wherever ground water is drawn, PP shall submit detailed plan of Water charging activity to be undertaken.
3.11	Feasibility of near zero discharge concept shall be critically examined and its details submitted.
3.12	Optimization of Cycles of Concentration (COC) along with other water conservation measures in the project shall be specified.
3.13	Plan for recirculation of ash pond water and its implementation shall be submitted.
3.14	Detailed plan for conducting monitoring of water quality regularly with proper maintenance of records shall be formulated. Detail of methodology and identification of monitoring points (between the plant and drainage in the direction of flow of surface / ground water) shall be submitted. It shall be ensured that parameter to be monitored also include heavy metals. A provision for long-term monitoring of ground water table using Piezometer shall be incorporated in EIA, particularly from the study area.
3.15	Hazards Characterization: Past incidents of hazard events within 10km radius of project area with detailed analysis of causes and probability of reoccurrence

### 4. Environmental Baseline study and mitigation measures

	Sr. No.	Terms of Reference
4	4.1	One complete season (critical season) site specific meteorological and AAQ data (except monsoon season) as per latest MoEF&CC Notification shall be collected along with past three year's meteorological data for that particular season for wins speed analysisand the dates of

Sr. No.	Terms of Reference
	monitoring shall be recorded. The parameters to be covered for AAQ shall include PM10, PM2.5, SO2, NOx, CO and Hg. The location of the monitoring stations should be so decided so as to take into consideration the upwind direction, pre-dominant downwind direction, other dominant directions, habitation and sensitive receptors. There should be at least one monitoring station each in the upwind and in the pre - dominant downwind direction at a location where maximum ground level concentration is likely to occur.
4.2	In case of expansion project, air quality monitoring data of 104 observations a year for relevant parameters at air quality monitoring stations as identified/stipulated shall be submitted to assess for compliance of AAQ Standards (annual average as well as 24 hrs).
4.3	A list of industries existing and proposed in the study area shall be furnished.
4.4	Cumulative impacts of all sources of emissions including handling and transportation of existing and proposed projects on the environment of the area shall be assessed in detail. Details of the Model used and the input data used for modelling shall also be provided. The air quality contours should be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any. The windrose and isopleths should also be shown on the location map. The cumulative study should also include impacts on water, soil and socio-economics.
4.5	Radio activity and heavy metal contents of coal to be sourced shall be examined and submitted along with laboratory reports.
4.6	Fuel analysis shall be provided. Details of auxiliary fuel, if any, including its quantity, quality, storage etc should also be furnished.
4.7	Quantity of fuel required, its source and characteristics and documentary evidence to substantiate confirmed fuel linkage shall be furnished. The Ministry's Notification dated 02.01.2014 regarding ash content in coal shall be complied. For the expansion projects, the compliance of the existing units to the said Notification shall also be submitted
4.8	Details of transportation of fuel from the source (including port handling) to the proposed plant and its impact on ambient AAQ shall be suitably assessed and submitted. If transportation entails a long distance it shall be ensured that rail transportation to the site shall be first assessed. Wagon loading at source shall preferably be through silo/conveyor belt.
4.9	For proposals based on imported coal, inland transportation and port handling and rail movement shall be examined and details furnished. The approval of the Port and Rail Authorities shall be submitted.
4.10	Details regarding infrastructure facilities such as sanitation, fuel, restrooms, medical facilities, safety during construction phase etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase should be adequately catered for and details furnished.

### 5. Environmental Management Plan

Sr. No.	Terms of Reference
5.1	EMP to mitigate the adverse impacts due to the project along with item - wise cost of its implementation in a time bound manner shall be specified.
5.2	A Disaster Management Plan (DMP) along with risk assessment study including fire and explosion issues due to storage and use of fuel should be prepared. It should take into account the maximum inventory of storage at site at any point of time. The risk contours should be plotted on the plant layout map clearly showing which of the proposed activities would be affected in case of an accident taking place. Based on the same, proposed safeguard measures should be provided. Measures to guard against fire hazards should also be invariably provided. Provision for mock drills shall be suitably incorporated to check the efficiency of the plans drawn.
5.3	The DMP so formulated shall include measures against likely Fires/Tsunami/Cyclones/Storm Surges/Earthquakes etc, as applicable. It shall be ensured that DMP consists of both On-site and Off-site plans, complete with details of containing likely disaster and shall specifically mention personnel identified for the task. Smaller version of the plan for different possible disasters shall be prepared both in English and local languages and circulated widely.
5.4	Details of fly ash utilization plan as per the latest fly ash Utilization Notification of GOI along with firm agreements / MoU with contracting parties including other usages etc. shall be submitted. The plan shall also include disposal method / mechanism of bottom ash along with monitoring mechanism.

### 6. Green belt development

Sr. No.	Terms of Reference						
6.1	Detailed scheme for raising green belt of native species of appropriate width (50 to 100 m) and consisting of at least 3 tiers around plant boundary not less than 2000 tree per ha with survival rate of more than 85% shall be submitted. Photographic evidence must be created and submitted periodically including NRSA reports in case of expansion projects. A shrub layer beneath tree layer would serve as an effective sieve for dust and sink for CO2 and other gaseous pollutants and hence a stratified green belt should be developed.						
6.2	Over and above the green belt, as carbon sink, plan for additional plantation shall be drawn by identifying blocks of degraded forests, in close consultation with the District Forests Department. In pursuance to this the project proponent shall formulate time bound Action Plans along with financial allocation and shall submit status of implementation to the Ministry every six months						

### 7. Socio-economic activities

Sr. No.	Terms of Reference							
7.1	Socio-economic study of the study area comprising of 10 km from the plant site shall be carried out through a reputed institute / agency which shall consist of detail assessment of the impact on livelihood of the local communities.							
7.2	Action Plan for identification of local employable youth for training in skills, relevant to the project, for eventual employment in the project itself shall be formulated and numbers specified during construction & operation phases of the Project.							
7.3	If the area has tribal population, it shall be ensured that the rights of tribals are well protected. The project proponent shall accordingly identify tribal issues under various provisions of the law of the land.							
7.4	A detailed CER plan along with activities wise break up of financial commitment shall be prepared in terms of the provisions OM No. 22-65/2017-IA.III dated 30.09.2020.CER component shall be identified considering need based assessment study and Public Hearing issues. Sustainable income generating measures which can help in upliftment of affected section of society, which is consistent with the traditional skills of the people shall be identified.							
7.5	While formulating CER schemes it shall be ensured that an in-built monitoring mechanism for the schemes identified are in place and mechanism for conducting annual social audit from the nearest government institute of repute in the region shall be prepared. The project proponent shall also provide Action Plan for the status of implementation of the scheme from time to time and dovetail the same with any Govt. scheme(s). CERdetails done in the past should be clearly spelt out in case of expansion projects.							
7.6	R&R plan, as applicable, shall be formulated wherein mechanism for protecting the rights and livelihood of the people in the region who are likely to be impacted, is taken into consideration. R&R plan shall be formulated after a detailed census of population based on socio economic surveys who were dependent on land falling in the project, as well as, population who were dependent on land not owned by them.							
7.7	Assessment of occupational health and endemic diseases of environmental origin in the study area shall be carried out and Action Plan to mitigate the same shall be prepared.							
7.8	Occupational health and safety measures for the workers including identification of work related health hazards shall be formulated. The company shall engage full time qualified doctors who are trained in occupational health. Health monitoring of the workers shall be conducted at periodic intervals and health records maintained. Awareness programme for workers due to likely adverse impact on their health due to working in non-conducive environment shall be carried out and precautionary measures like use of personal equipments etc. shall be provided. Review of impact of various health measures undertaken at intervals of two to three years shall be conducted with an excellent follow up plan of action wherever required.							

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### 8. Corporate Environment Policy

Sr. No.	Terms of Reference						
8.1	Does the company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.						
8.2	Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA.						
8.3	What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions. Details of this system may be given.						
8.4	Does the company has compliance management system in place wherein compliance status along with compliances / violations of environmental norms are reported to the CMD and the Board of Directors of the company and / or shareholders or stakeholders at large? This reporting mechanism should be detailed in the EIA report.						

### 9. Miscellaneous

Sr. No.	Terms of Reference
9.1	All the above details should be adequately brought out in the EIA report and in the presentation to the Committee.
9.2	Details of litigation pending or otherwise with respect to project in any Court, Tribunal etc. shall invariably be furnished.
9.3	In case any dismantling of old plants are envisaged, the planned land use & land reclamation of dismantled area to be furnished.

### **10. Additional TOR for Coastal Based Thermal Power Plants Projects (TPPs)**

Sr. No.	Terms of Reference
10.1	Low lying areas fulfilling the definition wetland as per Ramsar Convention shall be identified and clearly demarcated w.r.t the proposed site.
10.2	If the site includes or is located close to marshy areas and backwaters, these areas must be excluded from the site and the project boundary should be away from the CRZ line. Authenticated CRZ map from any of the authorized agencies shall be submitted.
10.3	The soil levelling should be minimum with no or minimal disturbance to the natural drainage of the area. If the minor canals (if any) have to be diverted, the design for diversion should be such that the diverted canals not only drains the plant area but also collect the volume of flood water from the surrounding areas and discharge into marshy areas/major canals that enter into creek. Major canals should not be altered but their embankments should be strengthened and

Sr. No.	Terms of Reference								
	desilted.								
10.4	Additional soil required for levelling of the sites should as far as possible be generated within the site itself in such a manner that the natural drainage system of the area is protected and improved.								
10.5	Marshy areas which hold large quantities of flood water to be identified and shall not be disturbed.								
10.6	No waste should be discharged into Creek, Canal systems, Backwaters, Marshy areas and seas without appropriate treatment. Wherever feasible, the outfall should be first treated in a Guard Pond and then only discharged into deep sea (10 to 15 m depth). Similarly, the Intake should be from deep sea to avoid aggregation of fish and in no case shall be from the estuarine zone. The brine that comes out from Desalinization Plants (if any) should not be discharged into sea without adequate dilution.								
10.7	Mangrove conservation and regeneration plan shall be formulated and Action Plan with details of time bound implementation shall be specified, if mangroves are present in Study Area.								
10.8	A common Green Endowment Fund should be created by the project proponents out of EMP budgets. The interest earned out of it should be used for the development and management of green cover of the area.								
10.9	Impact on fisheries at various socio economic level shall be assessed.								
10.10	An endowment Fishermen Welfare Fund should be created out of CER grants not only to enhance their quality of life by creation of facilities for Fish Landing Platforms / Fishing Harbour / cold storage, but also to provide relief in case of emergency situations such as missing of fishermen on duty due to rough seas, tropical cyclones and storms etc.								
10.11	Tsunami Emergency Management Plan shall be prepared wherever applicable and Plan submitted prior to the commencement of construction work.								
10.12	There should not be any contamination of soil, ground and surface waters (canals & village pond) with sea water in and around the project sites. In other words necessary preventive measures for spillage from pipelines, such as lining of Guard Pond used for the treatment of outfall before discharging into the sea and surface RCC channels along the pipelines of outfall and intake should be adopted. This is just because the areas around the projects boundaries could be fertile agricultural land used for paddy cultivation.								

# Standard Terms of Reference for conducting Environment Impact Assessment Study for Distilleries and information to be included in EIA/EMP report

### 1. Environmental Status

Sr. N	To. Terms of Reference
1.1	iii. Raw data of all AAQ measurement for 12 weeks of all stations as per frequency given in the NAQQM Notification of Nov. 2009 along with - min., max., average and 98% values for each of the AAQ parameters from data of all AAQ stations should be provided as an annexure to the EIA Report.

### 2. Specific Conditions

Sr. No.	Terms of Reference							
2.1	Complete process flow diagram describing each unit, its processes and operations in production of sugar, along with material and energy inputs and outputs (material and energy balance).							
2.2	Details on water balance including quantity of effluent generated, recycled & reused. Efforts to minimize effluent discharge and to maintain quality of receiving water body.							
2.3	Details of effluent treatment plant, inlet and treated water quality with specific efficiency of each treatment unit in reduction in respect to fall concerned / regulated environmental parameters.							
2.4	Number of working days of the sugar production unit.							
2.5	Details of proposed source-specific pollution control schemes and equipments to meet the national standards.							
2.6	Collection, storage, handling and transportation of molasses.							
2.7	Collection, storage and handling of bagasse and press mud.							
2.8	Fly ash management plan for coal based and bagasse and action plan							
2.9	Details on water quality parameters such as Temperature, Colour, pH, BOD, COD, Total Kjeldhal Nitrogen, Phosphates, Oil & Grease, Total Suspended Solids, Total Coli form bacteria etc.							
2.10	Details on existing ambient air quality and expected, stack and fugitive emissions for PM10, PM2.5, SO2*, NOx*, etc., and evaluation of the adequacy of the proposed pollution control devices to meet standards for point sources and to meet AAQ standards. (*-As applicable)							

### **Additional Terms of Reference**

1. Risk assessment study shall be carried out of hazardous chemical storage. Location of alcohol bulk storage tanks shall be placed in such a way that in the event of any fire, accident, explosion or any unforeseen conditions the impact of such event should not go beyond the boundary of the plant i.e., the risk should be tolerable (acceptable) at the boundary.

2. Industry shall determine the distance of fire hydrant while finalizing its location from ethanol storage

tanks or any other hazardous storage substance shall be based on dispersion of Thermal Radiation so that during any unforeseen situation fire hydrant is always available to operate manually.

3. Total Fresh water requirement during off season shall not exceed 4 kL per kL of alcohol produced which will be met from ground water for non crushing season. During the Sugar crushing season, entire treated water from the Sugar unit shall be utilized in the Distillery, reducing the fresh water demand to zero. No ground water recharge shall be permitted within the premises.

4. Air cooled condensers shall be provided with sugar unit. PP shall provide the details of source for feed stock i.e., sugarcane juice/ molasses and also provide availability of sufficient feed stock for operating the proposed plant.

5. EIA/EMP report shall include details such as (i) Details of advertisements for Public Hearing (ii) Copy of forwarding letter of SPCB to MoEF&CC (iii) Legible copy of public hearing proceedings duly signed by the presiding officer (iv) Attendance sheets (v) Action plan to address the issues raised during public along with budget allocation and time line. (vi) Copy of written grievances/submissions if any. If the Public Hearing is in the regional language, an authenticated English Translation of the same should be provided.

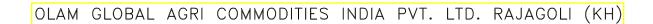
### Annexure 2

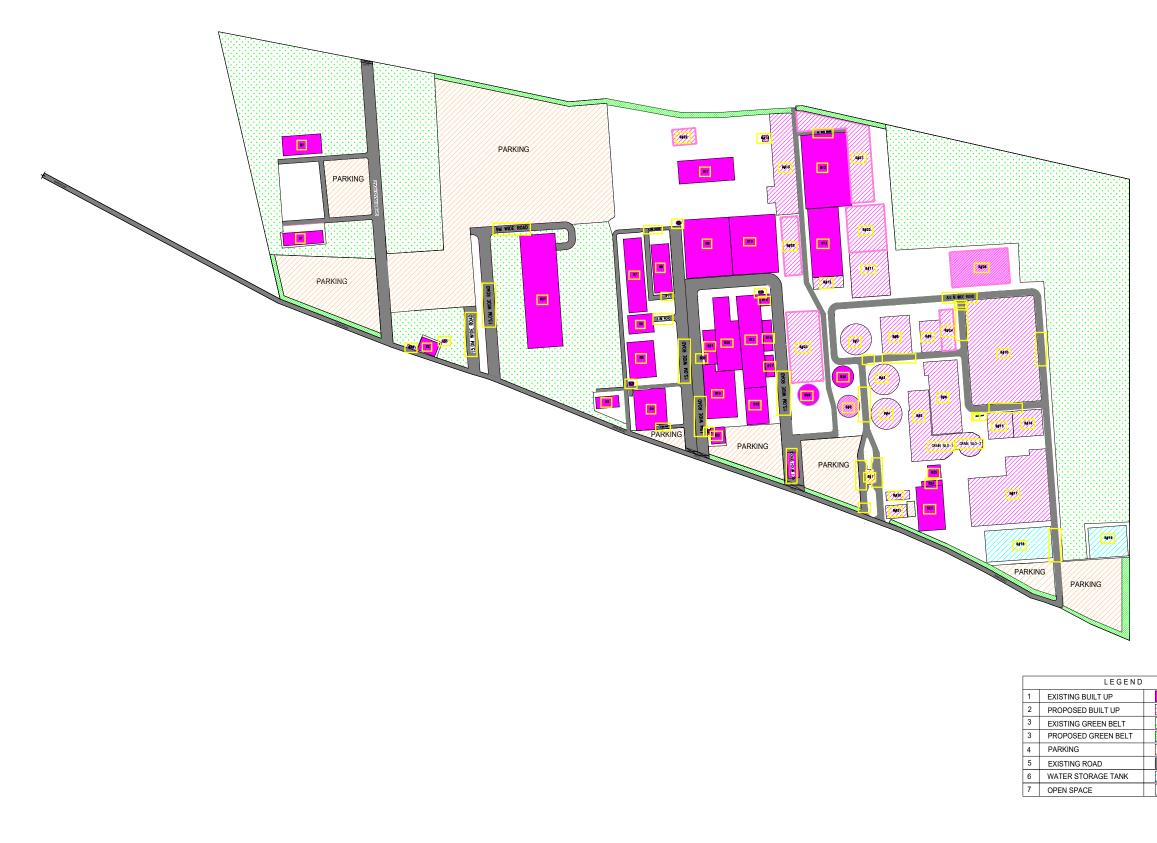
Name of the product /By- product	Product / By- product	Existing	gProposed	Total	Unit	Mode of Transport / Transmission	Remarks (eg. CAS number)	
Sugar 🛛 🛁	Product	19350	21150	40500	MT/M	Road	NA	
Molasses	By-Product	5940	6 <mark>060</mark>	12000	MT/M	Road	Molasses will be used in own proposed Distillery Unit	
Bagasse	By-Product	44640	45360	90000	MT/M	Conveyor Belt	Bagasse is used in own boiler as fuel	
Pressmud	By-Product	4500	3000	7500	MT/M	Road	NA	
Electricity	Product	25	8	33	Mega Watt (MW)	Transmission Lines	NA	
RS / ENA/ Ethanol from Molasses or Sugarcane Juice	Product	0	9000	9000	KL/M	Road	NA	
RS/ENA from Grain	Product	0	9000	9000	KL/M	Road	NA	
Ethanol from Grain under B2 Category	Product	9000	0	9000	KL/M	Road	NA	
CO2 Gas	By-Product	6750	0	6750	MT/M	Cleaned, Compressed, Bottled and Sold	NA	
DDGS	By-Product	7500	0	7500	MT/M	Road	NA	
Electricity Generation on Distillery boiler	By-Product	0	8	8	Mega Watt (MW)	Transmission Lines	NA	

### **Details of Products & By-products**

Send Approval Copy To (In case of multiple use comma as separator)







# **Appendix A - Plot Layout**

#### AREA STATEMENT

DISCRIPTION	AREA
TOTAL PLOT AREA	550000
TOTAL BUILT UP AREA	129447.15
TOTAL GREEN BELT AREA	257713.2
TOTAL PARKING AREA	83522.02
AREA UNDER ROAD	71793.86
OPEN SPACE	7523.77
	TOTAL PLOT AREA TOTAL BUILT UP AREA TOTAL GREEN BELT AREA TOTAL PARKING AREA AREA UNDER ROAD

	GROUND COVERAGE AREA STATEME	
_	DESCRIPTION	SQM
	B1 RESIDENTIAL COLONY	2142.9675
_	B2 ADMIN.BUILDING	437.3835
_	B3 CANTEEN	450
-	B4 WATER TREATMENT PEANT	2093.6611
-	B5 COGEN CDOUNC TOWER	1648,7015
-	B6 TG BUILLYING	795.0232
-	B7 BOILER	2281.4273
_	B8 COGEN CONTROL ROOM	1454.8216
-+	89 SUGAR GODOWN-1	4622.7656
	B10 SUGAR GODOWN 2	4585.4581
-+	B11 BAGASSE STORAGE	2163.6349
12	B12 SUGAR/LTP	5792.6754
-+	B13 SUGAR GODOWN-3	3600
14	B14 WORK SHOP	188.8792
15	B15 MILL HOUSE	3592,1014
16	B16 PANLEROOM	479.8358
17	B17STORE	308.0591
15	B18 CANL CARRIER	1392.5581
19	B19 EVAPORATION STATION	2637.5157
20	B20 BOILING & SUGAR HOUSE	2720.581
21	BZ1 PANEL ROOM	720.0758
22	B22 CODIING TOWER	384,9564
23	BZ3 RAW WATER TANK	Z021.7619
24	B24 PUMP HOUSE	179.8333
25	B25 MCC ROOM	Z9L2/133
28	B26 MOLASSES STORAGE TANK	629.0175
27	B27 SWITCHYARD	6308
ŀ	TOTAL	54433.9582
28	B#1 WEIGH BRIDGE	250.35
29	B#2 MOLASSES STORAGE TANK	663.07
30	8/3 DISTILLERY MOLASSES TANK 3	1294.71
31	8#4DISTILLERY MOLASSES TA NK-2	1312.92
32	8/5 CLEANING GRAIN SILD 1,2	4377.46
33	8#6 HQUEFACTION & FERMENTATION SECTION	3796.36
34	8#7 DISTILLERY MOLASSES FANIC 1	1312.92
	8#8 DRYER & EVAP SECTION	1923.93
36	8/9 DISTILLATION SECTION	1108.8
37	B#10 AA/TA STORACE SCHON	12561.94
38	B#11 DOILING HOUSE	2963.23
39	B#12 DDCS GODOWN	600
	B#13 DOILLR SECTION	4105.28
41	B#14ASH SILO	64.7
42	B/15 FLRM LN TATION CODEING TOWER	1133.93
43	B#16 DISTILLATION COOLING TOWER	L330.33
44	B#17 ARLA FOR CPU	8045.21
_	B#18 RAW WATER RESERVOIR	3835.59
46	8/19 RAIN WATER HARVESTING DUND	2000
_	B#20 WORK SHOP	313.51
45	8/21 ADMIN BUILDING	465.83
_	B#22 CLOSED COAL SHED	627.01
50	8/23 MILL HOUSE	6743.42
~~	B#24 EVAPORATION SECTION	953.2
	B#25 PAN HOUSE	3000
-+	B#26 TG. BLILDING	1724.63
	8#27 SUGAR FTP EXPANSION	4964.58
	B#28 BAW SPENT WASH TANK	3/189.3
		1
-	TOTAL	75013.2



**Appendix B - Certificate of Incorporation** 



### GOVERNMENT OF INDIA MINISTRY OF CORPORATE AFFAIRS

Central Registration Centre

# **Certificate of Incorporation**

[Pursuant to sub-section (2) of section 7 and sub-section (1) of section 8 of the Companies Act, 2013 (18 of 2013) and rule 18 of the Companies (Incorporation) Rules, 2014]

I hereby certify that OLAM GLOBAL AGRI COMMODITIES INDIA PRIVATE LIMITED is incorporated on this Seventeenth day of August Two thousand twenty-one under the Companies Act, 2013 (18 of 2013) and that the company is limited by shares.

The Corporate Identity Number of the company is U51229HR2021FTC097076.

The Permanent Account Number (PAN) of the company is AADCO5437H

The Tax Deduction and Collection Account Number (TAN) of the company is **RTKO02920B** 

Given under my hand at Manesar this Seventeenth day of August Two thousand twenty-one .

DS MINISTRY OF CORPORATE AFFAIRS 6

Digital Signature Certificate KAMAL HARJANI

For and on behalf of the Jurisdictional Registrar of Companies

**Registrar of Companies** 

Central Registration Centre

Disclaimer: This certificate only evidences incorporation of the company on the basis of documents and declarations of the applicant(s). This certificate is neither a license nor permission to conduct business or solicit deposits or funds from public. Permission of sector regulator is necessary wherever required. Registration status and other details of the company can be verified on <u>www.mca.gov.in</u>

Mailing Address as per record available in Registrar of Companies office:

OLAM GLOBAL AGRI COMMODITIES INDIA PRIVATE LIMITED 2nd Floor, Tower-A, DLF Building No. 8, DLF Cyber City, Phase II,, Gurugram, Gurgaon, Haryana, India, 122002



\* as issued by the Income Tax Department

## **Appendix C - Land Documents**



### Government of Maharastra

Village Abstract No.7 (Right record & register) [Maharastra Land & Revenue right record & register (Preparation and Maintenance) Rules 1971,rules 3,5,6&7]

Land survey no.	Division	Type of land	Khata No.	Owner Name	Area	Charge	Mutation No.	Other Rights
76/1 0	Class 1		540	Olam Global Agri		12.31	(447)	Non-Agriculture use
Land survey No. Local Name Unit Of Area	Hector	R		Commodities India Pvt. Ltd		According to the order dated 12.10.2006 of		
A) Cultivable Area Arable Land Irrigate Land	52	80.00						Hon.Tahasildarso Chandigad, eligible for the condition 1 to 22 are classified under non-
	1						1	agriculture (197)
Total Cultivated	52	80.00						
Land B. Barren Land Class (A)	0	00.00						Pending Mutation: No Earlier Mutation No.447 Dated ~
Class (B) Total Barren Land	Rupees	Paisa		8				18/04/2022
Tot Charges	al <sup>12</sup>	31		/				
	12	31						

### Village Abstract No.12 (Right record & register)

[Maharastra Land & Revenue right record & register (Preparation and Maintenance) Rules 1971, rules 29]

Village name: -Channehatti Gut No.76/1

Taluka Chandgad.

Dist.- Kolhapur

Year	Seasons	ö			crop to	otal area		Barren Land		ž
		Khata No.	Type Of Crop	Crop Name	Irrigated	Non- Water irrigate	Source of Irrigation	Type	Area	Remark
1	2	3	4 .	5	6	7	8	9	10	11
2022	Total Year	540	8					Use for Industrial	52.80.00	
		1		2						

S. A. CHACHADI ISA Advocate B.Sc., LL.M. Area Belagavi (Rev) K Karnataka Reg No. 8307 CHLICHA DI B.Sc., LL.B. (Spl.) LL B. Notary (Govt of India) REI AGAV: xp. on 21-9-202 1 3 MAY 2023

ULPIN : :	35647171649	हही ( ५६८१३) गट क	गाव नमुना स ट्र जमीन महसुल अधिकार अमिलेख आणि नोंदवद्या ७) तालुका :- गांक व उपविभाग ७६/९	(तयार करणे व	भगिलेख पत्रक पुरिधतीत ठेवणे	) नियम १९१		म ३,५,६ आणि ७] जिल्हा : कोल्हापूर	1447 1449 1447 1449 1447 171649
भुधारणा पद्धः	an a samere	टादार वर्ग - १				activation and	ानीक नाव :		
क्षेत्र, एकक	व आकारणी हे.आर.चौ.मी	खाते क.	भोगवटादाराचे नाव ( खोलम ॲग्रो इंडिया लिमिटेज.	होत्र	आकार	पो.ख. ]	फेरफार क (४०९)	मुळ, खंड व कुळाचे नाव व खंड	इतर अधिकार
अ) लागवड		४७८ ५२७	् आलम अंग्रे इंडिया प्रालि. 	<u>42.40.00</u>			(854)	गुळाव गाव य खड इत्तर अधिकार प्रकृषिक वापर - औद्योगि	क (गावठाणा बाहेरील)
गगायत कुण जा.यो. क्षेत्र	- 47.८०.००	480	ओलम ग्लोबल ऍग्री कमोडीटीज इंडीया प्रा लि ————	47.८०.००	97.39		(880)	मा.तहसिलदारसो चंदगज १२/१०/२००६ चे आदेशा राहून बिगरशेती कडे वर्ग [ <u>नवीन अविमाज्य आर्त ]</u> [ <u>नवीन अविमाज्य आर्त ]</u>	इ यांचे दिनांक नुसार १ ते २२ अटीस प ( १९७ ) ४३४ )
ब) पोटखराब (लागवड वर्ग (अ) वर्ग (ब)	2020/C12							(नवान खावमाज्य झत.) 	838)
एकुण पो.ख.क्षेत्र								शेवटचा फेरफार क्रमांक १८/०४/२०२२	: ४४७ व दिनांक :
एकुण क्षेत्र (अ+ब) 	42.20.00  92.39								
जुडी किंवा आकारणी	বিহাঁষ								
			(343) (806) (838)					सीमा आणि भुमापन चिन	•



वापरावा.

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हा गाद नमूना क्रमांक ७ दिनांक २३/०६/२०२२:१२:३७:२१ PM रोजी डिजिटल खाक्षरीत केला आहे व गाव नमूना क्रमांक १२ चा डेटा स्वयंप्रमाणित असल्यामुळे ७/१२ अभिलेखावर घर पृष्ठ क्र. १/२ कोणत्याही सही शिकस्यायी आवश्यकता नाही.

७/१२ डाउनलोड दि. : १०/०५/२०२३ : ११:०१:४५ AM. वैधता पडताळणीसाठी https://digialsalbara.mahabhumi.gov.in/dah/ या संकेत स्थळावर जाऊन 3412180001175075 हा कमांक

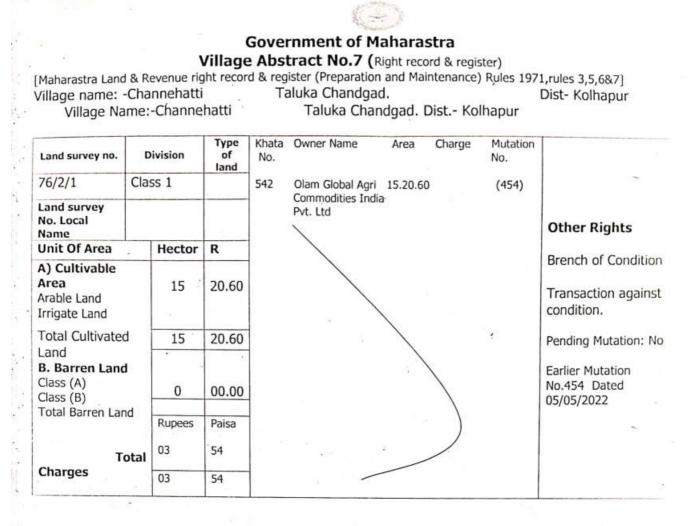


1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -	गाव नमुना बारा ( पिकांची नोंदवही )
[ महाराष्ट्र जमीन महस्	ल अधिकार अमिलेख आणि नोंदवद्या (तयार) करणे व सुस्थितीत ठेवणे ) नियम १९७१ यातील नियम २९ ]

(99)

τ	ाव :- <b>चन्नेह</b>	ही ( ५६८१३७)				तालुका :-	चंदगड		जिल्हा :-	कोल्हापूर
गट	क्रमांक व उप	वेभाग	196/9							
				f	काखालील क्षे	त्राचा तपशील		लागवडीसाठी उपलग	घ नसलेली जमीन	शेरा
वर्ष	हंगाम	खाते क्रमांक	पिकाचा प्रकार	पिकांचे नाव	जल सिंचित	अजल सिंचित	जल सिंचनाचे साघन	स्वरूप	क्षेत्र	
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2098	खरीप							घरपड	42.2000	
२०२१	संपूर्ण वर्ष	480						औद्योगिक क्षेत्र पड	47.2000	

टीप : \*\* सदरची नॉद मोबाइल ॲप द्वारें घेणेत आलेली आहे



### Village Abstract No.12 (Right record & register)

[Maharastra Land & Revenue right record & register (Preparation and Maintenance) Rules 1971, rules 29]

Village name: -Channehatti 3.4 Gut No.76/2/1

Taluka Chandgad.

Dist.- Kolhapur

13 MAY 2023

Year	suc	ö			crop to	otal area		Barren Land		ž
	Seasons	Khata No.	Type Of Crop	Crop Name	Irrigated	Non- Water irrigate	Source of Irrigation	Type	Area	Remark
1	2	3	4	5	6	7	8	9	10	11
022	Kharip	N. A.						Grass Field	15.20.60	
		210		. Stars		1	S	CHACHADI LCHACHADI Mocrus, ESC. U Mocrus, ESC. U Belsgavi (R Karnatcha Karnatcha		TTESTED

		[ महार	गाव नमुना ष्ट्र जमीन महमुल अधिकार अमिलेख आणि नोंदवड	महाराष्ट्र जास- सात ( अधिकार ज्ञा (तयार करने व			९१ यातील निय	ল ३.५.६ আখি ৮]
		हही ( ५६८ १		⊱ चंदगढ				जिल्हा कोल्हापुर
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ধ্ৰীৰ, एকক ব 3	आकारणी	खाते क.	भोगवटादासावे नाव	<b>होत्र</b>	आकार	पो.ख.	फेरफार क	कुळ, खंड व इतर अधिकार
वित्रचे एकक है,	आर.ची.मी	894	वोलम वेणे इंदिया लिमिनेड	94 20 50	345	1	(806)	कुळाचे नाव व खंड
अ) लागवड यो जेरायत <b>१५</b>	ग्य क्षेत्र .२०.६०	428	[ कोलम केंग्रे इंडिया या जि.			3	(४०९)	इतर अधिकार शर्तमग
तमायत - कुण		480	ओलम ग्लोबल ऍप्री कमोडीटीज इंडीया प्रा लि	94.20.60	3.48		( 1719)	गती विरुद्ध व्यवहार ( २०७ ) [ <u>जतीन अधिमाज्य गर्त )</u> ४५६ )
ता वो. होत्र 📲 								[तदीन अविसाज्य गर्त ] ४५६)  प्रलंबित फेरफार : नाही.
(লাশবঙ্ক জা শ (জ) -	योग्य)							जेवटचा फेरफार कमांक : <b>४५६</b> व दिनांक :
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100

हा गाव नमूना क्रमांक ७ दिनांक ३२/०३/२०२२:२२२३९.५४ PM रोजी क्रिजिटल स्वाशरीत केला आहे व गाव नमूना क्रमांक १२ था ढेटा स्वयंप्रनाणित जसल्यामुळे ७/१२ अभिलेखावर वर पृष्ठ क्व. ९/२ कोणायाही स्थी जिल्ल्याची आवश्यकता नाही.

१४/१२ व्याजनतीत थि. : १०/०५/२०२३ : १९:९१.२३ Ам. केस्ता पठतावणीसाठी neps//dynametara nanatzure gov x/dar/ या शर्कत स्थातावर जाऊन 3412100081166293 हा कमाक वापरावा.

		[ <b>म</b>	हाराष्ट्र जमीन	1 महसूल अधिक	गाव ार अमिलेख आ	। नमुना बारा ( णि नॉदवद्या (तय	( पिकांची नोंदवही ) गर करणे व सुस्थितीत ठे	वर्णे ) नियम १९७१ यातील	नेयम २९ ]			
	गव :- <b>चन्नेह</b> र् क्रमांक व उपरि	री ( ५६८१३७) देभाग	65/9		तालुका :- चंदगढ							
				R	काखालील के	त्राचा तपशील		लागवडीसाठी उपलब	य नसलेली जमीन	शेरा		
दर्ष	हंगाम	खाते क्रमांक	पिकाचा प्रकार	पिकांचे नाव	जल सिंचित	अजल सिंथित	जल सिंचनाचे साघन	स्वरूप	क्षेत्र			
(9)	(२)	(3)	(%)	(4)	(Ę)	(U)	(८)	(9)	(90)	(99)		
2098	खरीप						annan d	घरपड	42.2000			
२०२१	संपूर्ण वर्ष	480						औद्योगिक क्षेत्र पड	42.2000			

टीप :\*\* सदरची नोंद मोबाइल ॲप द्वारें घेणेत आलेली आहे





# **Government of Maharastra**

Village Abstract No.7 (Right record & register) - [Maharastra Land & Revenue right record & register (Preparation and Maintenance) Rules 1971,rules 3,5,6&7]

Village name: -0	Channehatti		Ta	aluka Chandgad			' Dist Kolhapur		
Land survey no.	Division	Type of land	Khata No.	Owner Name	Area	Charge	Mutation No.	Other Rights	
76/2/2	Class 1		543	Olam Global Agri	12.46.00	)	(454)	Branch of Condition	
Land survey		-	1	Commodities India Pvt. Ltd				Brench of Condition	
No. Local Name				× .				Transaction against	
Unit Of Area	Hector	R	1					condition [207]	
A) Cultivable Area Arable Land Irrigate Land	12	46.00						Other The land used for agriculture. Not for any other purpose	
Total Cultivated	12	46.00			$\backslash$			without prior permission [455]	
Land B. Barren Land Class (A) Class (B)	· 0	00.00			/	$\backslash$	•	Pending Mutation: No	
Total Barren Land	Rupees	Paisa			i.	)		Earlier Mutation No.454 Dated 05/05/2022	
Tot	tal 02	90						~	
Charges	02	90	1						

Village Abstract No.12 (Right record & register) [Maharastra Land & Revenue right record & register (Preparation and Maintenance) Rules 1971,rules 29]

Village name: -Channehatti Gut No.76/2/2

Taluka Chandgad.

Dist.- Kolhapur

Khata No.     Khata No.       seasons     Crop       Irrigated     Name       kirrigated     Name       s     Seasons       Irrigated     Name	Type	Remark
	9 10	11
2022 Kharip	Grass Field 12.46.00	

1 TED avi (Ros 2.5 Bela alaka Rc9 No. 8307 DI 21.9-202 B.Sc.11 9.75 fGov 3 MAY 2023

गाव :	हडी ( ५६८१३	ष्ट्र जमीन महसुल अधिकार अमिलेख आणि नौववडा	भगगाषु स्वसन सारा ( अधिकार क त (तथार करणे व र ा चंदराळ	मिलेख पत्रक ) [स्थितीत तेवने	) ) नियम १९१	भ यातील निम	n s.v., anfere]
गुधरणा पद्धती भोगव	टावार वर्ग - १				जेताचे रण	ानीक नाव :	
क्षेत्र, एकक व आकारणी	खाते क.	भौगनटादाराचे गान	<b>हो</b> ज	MIPPLY	પી શ્વ.	फेरफार क	मुळ, खंड व इतर अधिकार
तेलाने एकक <b>हे.आर.ची.</b> मी	NOC	adam stad stan fasta .	33 ML 00	3.80	1	(804)	कुळाचे ताव व खंड
अ) लागवड योग्य होत्र जिरायत १२.४६.००	470	[ कोळम.ॲप्रो इंदिया पा छि.			1	(804)	इतर अधिकार अत्रेग
बागायल - एक्हण	чио	ओलम ग्लोबल ऐंधी कमोबीटीज इंबीया प्रा लि	12.84.00	<b>7,</b> 90		( 6769)	stalla out manter ( 2005) Ludin salamon sul k 8751)
न) पोटखराब क्षेत्र (लागवढ अयोग्य) वर्ग (अ) – वर्ग (ब) –							इतर अगिनीचा गापर होतीकढे करणेचा आहे. पूर्व परवाननी खेरीज होती व्यतिरिक्त अन्य कारणाक वापर करणेचा नाही. (४४४)
एकुण पो.स.क्षेत्र ०,००,००							प्रलंबित फेरफार : <b>नाही.</b>
एकुण क्षेत्र १२.४६.०० (अ+ब)							डोवटचा फेरफार क्रमोक : ४५५ व दिनांक : ३१/०३/२०२२ 
आकारणी <b>२.९०</b>							
ত্ত্ততী কিন্বা বিহীষ আকাरणी 							
जुने फेरफार क्र : (१) (२०७)	(390) (334)	(343) (K30) (K44)					सीमा आणि भुमापन चिन्हे



हा गाव नमूना क्रमांक ७ दिनांक ३५०३/२०२२:२२:३६:९६ PM रोजी डिजिटल स्वाक्षरीत केला आहे व गाव नमूना क्रमांक १२ था ढेटा स्वयंघ्रमाणित असल्यामुळे ७/१२ अभिलेखावर वर पृष्ठ क्र. ५/२ कोणत्याही सही जिक्वयाची आवश्यकता नाही.

७/१२ डाउनलोठ दि. : १०/०५/२०२३ : ११:१२:५१ АМ. वैचता पडताळणीरााठी ।५११ж://dgfalsatara ाष्ट्राव्यावरामाः १९०७ अ/dm/ या संकेत स्थळावर जाऊन 3412109001166291 हा क्रमांक वापरावा.



		<b>[</b> म	हाराष्ट्र जमीन	ন महसूल अधिक	गाव तर अमिलेख आ	ा <b>नमुना बारा</b> णि नोंदवद्या (तय	( पिकांची नोंदवही ) गर करणे व सुस्थितीत ठेव	णे ) नियम १९७१ यातीत	त नियम २९ ]	
	गव :- <b>चन्नेहरू</b> क्रमांक व उपन्ति	ही ( ५६८१३७ )	<b>6</b> 8/2/2			तालुका :- '			जिल्हा :-	कोल्हापूर
•10	print 4 Gain			f	काखालील क्षेत्र	त्राचा तपशील		लागवडीसाठी उपत	तब्ध नसलेली जमीन	<b>को</b> रा
वर्षे	हंगाम	खाते क्रमांक	पिकाचा प्रकार	पिकांचे नाव	जल सिंचित	अजल सिंचित	जल सिंचनाचे साघन	स्वरूप	क्षेत्र	
(9)	(7)	(३)	(8)	സ്ര	(६)	(U)	(८)	(9)	(90)	(99)
२०१९	खरीप							पडळ	97.8600	
2020	खरीप							गवत्त पड	92.8500	
2029	संपूर्ण वर्ष	483	-					गवत पड	92.0000	
omina(1).			निर्मेळ	नाचणी		0.8800				

टीप : \*\* सदरची नोंद मोबाइल ॲप द्वारें घेणेत आलेली आहे

1.1					
10.0		-		1.0	
	100		100		

### **Government of Maharastra**

Village Abstract No.7 (Right record & register) [Maharashtra Land & Revenue right record & register (Preparation and Maintenance) Rules 1971,rules 3,5,6&7]

Village name: -Rajgoli Bk (568136)

Taluka Chandgad.

Dist.- Kolhapur

Land survey no.	Division	Type of land	Khata Owner Name No.	Area Char	ge M	lutation No.	Other Rights
757	Class 1						Loan- Co-operation society e-karar
Land survey No. Local Name	×.		541 Olam Global Agri Commodities India Pvt. Ltd	1.20	0.24	, (1646)	Declared Loan Rs.50,000/- (586)
Unit Of Area	Hector	R	630 Sushila Mahadev Patil Sunanda Gundu Patil Ramchandra Mahadev Pat Shivaji Mahadev Patil Basavant Mahadev Patil		0.94	(1609)	Loan- Co-operation society e-karar
A) Cultivabl	e	- R.	9558 Anand Jakkappa Patil	3.014.30	0.63	(1552)	Mortgage-Bank Of Maharastara -
Area			9748 Atharv Kallappa Patil Kallapa Patil -Gradian	1.27.30	0.25	(927)	Rs.3,00,000/- Ananda (758)
Arable Land	15	31.00	9749 Shrivardhn Rajesh Patil	1.27.60	0.25	(927)	
Irrigate Land			Rajesh Patil-Gradian				Pending Mutation: No
				1.27.50	0.25	(927)	
			Kallappa Patil- Gradian 9751 Santaram Ningappa Patil	0.88.00	0.18	(946)	Earlier Mutation No:
Total Cultiva Land	ted 15	31.00	10027 Anil Kallappa Patil	1.56.00 (		(1551)	1646, Dtd.29/04/202
B. Barren La	and4	33.00	10028 Dinesh Yashawant Patil	0.78.00	0.16	(1552)	~
Total (A+B)	19	64.00	Ganesh Yashawant Patil Yashavant Pati-Gradian			(/	
c i		κ.					
Charges	-						
5	Rupees	Paisa					
	3	06					
	3	06				1	

Village Abstract No.12 (Right record & register) [Maharastra Land & Revenue right record & register (Preparation and Maintenance) Rules 1971,rules 29]

Village name: -Channehatti

Taluka Chandgad.

Dist.- Kolhapur



					•						
E.	suo	ġ		-	crop to	tal area		Barre	n Land	ž	
Year	Seasons	Khata No.	Type Of Crop	Crop Name	Irrigated	Non- Water irrigate	Source of Irrigation	Type	Area	Remark	
1	2	3	4	5	6	7	8	9	10	11	
2022	Kharip				NON!	S.A. CHACHA	AND AND AND	Kinass Kinid	15.31.00	ATTESTED	
		- 101			*	Ara Belaga Ara Kumat Reg Ho Exp. on 2	OF	13		R. A. CHACHADI Brocate & Notary (Govt of India) PEI AGAVE	

अत्यान दिनांक : 06/05/2022



#### महाराष्ट्र शासन

गाव नमुना सात ( अधिकार अभिलेख पत्रक )

| nenny mille nenne afumm afumm arife alenen ( num min a aftudie buit ) feun, that unter feun 1/0,4 arte a )

faret :- mirerige गाव :- राजगोळी बुहक ( 568136 ) ताल्का :- घेदगह

गट क्रमांक व उपविधाग : 757

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भू-धारणा पच्तती ; भो	गवरातार	वर्ग -1		शेताचे रव	गनिक नाव	19		
शेव, एकक व आकारणी	माने क.	भोगवटादारांचे नांव	क्षत्र	आस्तार	पो.ख.	<b>T.</b>	कुळ, मंड व इनर अधिकार	
तंत्राच एकक ह.आर.ची.ची	541	भोलन ग्लाबल हिंगे कमाहोटीत हंदीया था लि	1.20.00	0.24		(1646)	4.Mtd 2.4 4 44	
सारच एकक ह. आर. थी, ती अ) स्वायल गांव सेव आपना 15.31.00 विवन	541 630 [0449] 9558 [0575] 9748 9749 9750 9751 [0005] 10027	-सहारेत-आयादी-स्टाटीज गुरिला महारेव गाटील गुरेला महारेव गाटील गुरेला मुंद पाटील स्वयंत्र सहारेव गाटील स्वयंत्र सहारेव गाटील 	4.70.30 4.70.30	0.24 0.94 0.94 0.63 0.25 0.25 0.25 0.18 0.31	ı ı	(1646) (1609) (120) (1907) (927) (927) (927) (927) (927) (927) (1646) (1646) (1646) (1647) (1627) (1925) (1925) (1925) (1925) (1925) (1925) (1925) (1925) (1927) (1927) (1927) (1927) (1927) (1927) (1925) (1	दूसराव त्या व साह प्रता स्वरिक्ष वे सा - सारवारी सोसावटी हवरण हि सोपा - एरवली सोसावटी हवरण सारमा गहरम के और सराजपुर लाखा कोवाह र त 3.00.000/- ( 758 ) प्रावरिक देरावार : वोही, नेपरका देरावार इ.वॉही,	
	10028	दिनेग वगर्षत पाटील अ पा क वगर्षत जकाण्या पाटील	0.78.00	0.16		(1552)		
		गणेज वजवेन पाटील 	0.78.00	0.16		(1552)		

खालील नमूद टीप हि गाव नमुना सात बारा चा भाग नाही .

टीप :- या ७/१२ वरील नमूद एकूण क्षेत्रफळ व भोगवटदारांच्या नावासमोर नमूद क्षेत्रफळांची एकूण बेरीज सकृतदर्शनी मेळात नाही. याबाबत संबंधितांनी क्षेत्राची खात्री करून पुढील व्यवहार करावा.

गाव नमुना यारा ( पिकांची नोंदवही ) | महागद्र बधीर पहसून अधिकार अभिलेख आणि नोंदवहा ( तयार करणे व मुस्कितीन ठेवणे ) निषय, १९०१ वातील निषम २९ | गाव :- राजगोळी बुहुक ( 568136 ) तालुका :- चंदगड जिल्हा :- कोल्हापुर

गट क्रमांक व उपविभाग : 757

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			Т				पिकाखा	लील क्षेत्राच	॥ तपशील	n		लागवडीस	ाठी उपलब्ध	जल सिचनाचे	शेरा
			F		-	मिश्र पिका	खालील क्षेत्र		निभळ	पिकाखालील	क्षेत्र	नसलेल	र्ती जमीन	साधन	
				-		घटक पिके	व प्रत्येकाखाल	तील क्षेत्र	1						
वर्ष	हंगाम	खाता क्रमांक			Π	पिकाचे नाव	जल सिंचित	अजल सिंचित	पिकाचे नाव	जल सिंचित	अजल सिंचित	स्वरूप	क्षेत्र		
(१)	(?)	(३)	•¥	•4	• 4	(७)	(८)	(?)	(१०)	(??)	(\$?)	(१३)	(१४)	(१५)	(25)
			T	T	Π		हे.आर. चौ.मी	हे,आर. चौ.मी		हे.आर. चौ.मी	हे.आर. चौ.मी		हे.आए. चौ.मी		
2019-20	रहरांच	T	T	Π	T							पहल	15.3100	III	
2020-21	खरोप				H							रस्तापड	1.0000		1
			П		Н							गवन पड	3.3300		
-					H							गतत पह	15.3100		
2021-22	खराप		Г		H							गवत पड	15.3100		Protect in

टीप : \*४ - विश्वणाचा संकेत क्रमांक, \*५ - बल सिंचित, \*६ - अबल सिचित

"या प्रमाणित प्रतीमाटी की म्हणून १५/- हपवे मिळाले." feates :- 06/05/2022 माकेतिक इत्यांक :- 2734001204290900005202213



वाचले :-

- तहसिलदार कार्यालय, चंदगड दिनांक :- ०१/१**१**/२०११
- मा. सहाय्यक संचालक, नगर रचना कोल्हापूर यांचेकडील जा.क्रं. रेखांकन अं.मं/चनहट्टी/ता.चंदगड/ग.नं. ७६ पै/ससं-को/२९७७/दि. २९/९/२०११.
- २) इकडील आदेश क्रं/बिनशेती एसआर /१६/२००६ दि. १२/१०/२००६.

### -: अंतिम रेखांकन मंजूरी आदेश :-

मौजे चन्नेहट्टी, ता. चंदगड येथल गट नं. ७६/१ पैकी हे ५२.८० आर क्षेत्राचे औद्योगिक वापराचे सुधारित रेखांकनास अंतिम मंजूरीबाबत मे. हेमरस टेक्नॉलॉजिस लि. चन्नेहट्टी यानी इकडील कार्यलयाकडे प्रस्ताव दाखल केला होता. त्याप्रमणे इकडील क्रं./जमिन/कावि/३१४/२०११ दि. १३/०७/२०११ ने मा. सहाय्यक संचालक नगररचना कोल्हापूर यांचेकडे अंतिम रेखांकन मंजूरीसाठी सदरचा प्रस्ताव सादर केला होता. त्यास अनुसरुन वाचले क्रं. १ नुसार मा. सहा. संचालक नगररचना कोल्हापूर यांनी सदर रेखांकनास अंतिम मंजूरी देणेत आलेबाबत रेखांकन प्रतिसह इकडे कळविले आहे.

वरील वाचले क्रं. १ नुसार मा. सहा. संचालक नगररचना कोल्हापूर यांनी दिले सदर रेखांकनाच्या अंतिम मंजूरी मधील अ.नं. १ ते ११ अटी व शर्ती तसेच खाली नमूद केले अ.नं. १ ते २३ अटीस अधिन राहून महाराष्ट्र जमीन महसूल अधिनियम १९६६ चे कलम ४४ अन्वये प्रधान केले अधिकारास अनुसरुन मी तहसिलदार चंदगड सदर अंतिम रेखांकनास मंजूरी देत आहे.

## अटी व शर्ती :-

- शर्जदार यांनी सदर आदेश मिळाले पासून एक वर्षाच्या आत मंजूर अराखडयाप्रमाणे मुदतीत वापर केला पाहिजे.
- २) रेखांकनातील भुखंडामध्ये फक्त औद्योगीक कारणासाठी वापर अनुज्ञेय राहील अन्य कारणासाठी वापर करणेचा झालेस त्यासाठी इकडील आगावू परवानगी घेतली पाहिजे.
- ३) सदर जमिनीवरील बिनशेती सारा दर चौरस मिटर ०.०५ पै. या प्रमाणे व त्यावरील उपकर येणे आवश्यक आहे.
- रेखांकनातील जागेची मोजणी तालुका निरीक्षक भुमि अभिलेख चंदगड यांचेकडून करुन घेणे आवश्यक आहे.
- ५) मोजणी वेळी निदर्शनास आलेल्या क्षेत्रानुसार आकार बदलण्यास पात्र राहील.
- ६) प्रस्तावित रेखांकनातील रस्ते अस्तित्वात रस्त्याशी तसेच लगतच्या मंजूर रेखांकनातील रस्त्याशी जुळवून घेणे अर्जदार यांचे वर बंधनकारक राहील.
- ७) रेखांकनातील रस्ते रस्त्याकडेच्या गटारी अर्जदार यांनी स्वखर्चाने योग्य प्रकारे विकसीत करुन ती १ रु. नाममात्र किंमतीस स्थानिक ग्रामपंचायत कडे हस्तांतरीत करणे अर्जदारावर बंधनकारक राहील.
- ८) रेखांकनातील भुखंडामध्ये बांधकाम अथवा विकास करण्यापुर्वी स्थानिक प्राधिकाऱ्यांची मंजूरी घेणे आवश्यक आहे.
- रेखांकनातील कोणत्याही भुखंडाचे पुर्व परवानगी शिवाय विभाजन करता येणार नाही.
- १०) रेखांकनातील रस्ते सार्वजनिक कारणासाठी खुले राहतील.
- ११) विषयांकित जागेच्या मालको व हद्दी बाबत भविष्यात कांही वाद उत्पन्न झाल्यास त्यास, सर्वस्वी अर्जदार जबाबदार रहील.
- १२) अर्जदारांनी पुरविलेली कोणतीही माहिती / कागदपत्रे चुकीची अथवा दिशाभूल करणारी आढळल्यास मंजूरीची शिफारस रद्द समजणेत यावी.
- १३) जमिनीचा बिगरशेतीकडे वापर केले पासून शासन /जिल्हाधिकारी यांनी निश्चित केलेल्या दराप्रमाणे अकृषिक सारा व स्थानिक उपकर सरकार जमा करणेचा आहे. हमी मुदती नंतर अकृषिक आकारणी बदलण्यास पात्र राहील.

- १४) जमिनीचा वापर बिनशेतीकडे चालू केले पासून एक महिनेचे आत तहसिलदार चंदगड व गा. का. तलाठी मौजे चन्नेहट्टी ता. चंदगड यांना कळविणे बंधनकारक राहील. त्यामध्ये कसूर झालेस जमिनीचे वापरात बदल व अकृषिक आकारणी महाराष्ट्र जमिन महसूल अधिनियम १९६६ चे कलम ४६ अन्वये कारवाईस पात्र राहील.
- १५) अकृषिक साऱ्याचा दर दिनांक ३१/०७/२०१२ पर्यंत राहील व त्यानुसार बदलण्यास पात्र राहील.
- १६) औद्योगीक कारणासाठी नियोजीत इमारतीची उंची रस्त्याच्या भुपृष्ठभागापासून १३ मिटर पेक्षा जास्त नसावी.
- १७) नियोजीत इमारत बांधकामामध्ये कांही फेरफार करणेचे झालेस खात्याची पुर्व परवानगी घेणेची जबाबदारी संबंधिताची राहील.
- १८) प्रस्तावित जमिनीमध्ये जाणे-येणे साठी जोड रस्त्याची आवश्यकता असेल तर इमारत बांधकाम करणेपुर्वी या खात्याकडे स्वतंत्रपणे अर्ज करुन जोड रस्त्यास लेखी परवानगी घ्यावी.
- १९) रेखांकनात मोकळी दाखविलेल्या रस्त्यावर कोणतेही बांधकाम न करता कायम स्वरुपात मोकळी ठेवावी व ते विनामोबदला स्थानिक प्राधिकरणाकडे हस्तांतरण करणेचे आहे.
- २०) मा. सहाय्यक संचालक नगररचना कोल्हापूर यांनी दिलेल्या रेखांकन मंजूरीतील भुखंडा व्यतिरिक्त भूखंडाचे पोट भाग (तुकडे) करण्यास परवानगी देण्यात येणार नाही.
- २१) लगतच्या जमिनीचे रेखांकन जेव्हा तयार करण्यात येईल तेंव्हा उपरोक्त रेखाकंन (लेआऊट) मधील रस्त्याच्या लगतच्या जमिन मालकाकडून प्रवेश म्हणून वापर करण्यात येईल.
- २२) वरील पैकी कोणत्याही अटीचा संबंधिताकडून भंग झालेस तसेच सदर प्रकरणी हजर केलेले कागदपत्रे खोटी असलेचे निदर्शनास आल्यास बिगरशेतीकडे केलेली शिफारस रद्द करणेचे अधिकार खात्याने राखून ठेवले आहेत.
- २३) सदर रेखांकन मंजूरी आदेश दर दहा वर्षानी बदलास पात्र राहील.

सदरील बिनशेती आदेशावेळी अस्तित्वात असलेल्या इतर कोणत्याही कायद्यातील योग्य तरतुदी लागू राहतील आणि त्या कायद्यातील बदला नुसार पात्र राहील. म्हणजेच कु. का. क. १९४८ महाराष्ट्र ग्राम पंचायत कायदा वैमेरेची सर्व कायदे अर्जदार यांना लागू राहतील.



प्रति. हमरस टेक्नॉलॉजिस लि. चन्नेहट्टी, ता. चंदगड यांना, मूळ मंजूर अंतिम रेखांकन प्रतिसह रवाना.

प्रत,

- १) उपअधिक्षक भूमिअभिलेख चंदगड यांना पुर्द्शल योग्य त्या कार्यवाहीसाठी.
- २) गा. का. तलाठी चन्नेहट्टी यांना पुढील योग्य त्या कार्यवाहीसाठी.

No. Binseti/SR/13/2011. Office of the Tehsildar, Chandgad Date : 1/12/2011

 Letter outward no. rekhankan a.m./channhatti/tal.chandagad/ g.n.76p/ss-ko/2977 dt. 29/9/2011
 Our order No. Binsehti S.R./16/2006 dt. 12.10.2006

### FINAL ORDER FOR SANCTION OF PLANS

A proposal was submitted by Hemarus Technologies Ltd; Rajgoli Khurd, hannehatti, Tal. Chandgad for sanction of layout plans for industrial use of 52.80 hector land out of at G.No. 76/1 and vide our letter jamin/KV/314/2011 dt. 13.7.2011 it was submitted to Director, Town Planning, Kolhaur for final permission. As per the No.1), the Director, Town Planning has informed to give final sanction for the layout plans.

As per-No.1) and as per the terms and conditions 1 to 11 as mentioned as under and as per the terms and conditions 1 to 23 of Section 44 of Maharashtra Land Revenue Act 1966, 1, Tehsildar, Chandagad is giving final sanction of the layout plans:

Terms and conditions:

Read :

- The applicant has to use the premises within one year as per the sanction layout plan.
- The said land is to be used only for industrial purpose and if it is required for other purpose, prior permission should be taken.
- Land revenue Rs. 0.05 per sq meter and other taxes for the NA land should be paid.
- 4) It is binding on the applicant to survey the land from Inspector, Land Survey Dept, Chandgad.
- 5) The land tax can be changed after the survey of the actual land.
- It is binding on the applicant to take into account the existing roads and nearby proposed roads on the land as per the sanction layout plan.
- 7) It is binding on the applicant to get developed the gutters and open space as mentioned in the plan and transfer it to local Gram Panchyat@Rs. 1/- nominal charge.
- It is necessary to take permission from the local officials before construction or development as per the layout plan.
- 9) No land of the sanction layout plan is to be divided without taking prior approval.
- 10) The roads and open space mentioned in the layout plan is open for public use

- 13) The land revenue and local taxes haves to be paid as per the rates fixed by the Gov/District Collector for the NA land. The rate for change in NA tax would be applicable afterwards.
- 14) It is binding to inform The Talathi/Tehisldar, Chandgad use of NA land within one month from the date of NA failing action would be taken under Section 44 of Land Revenue Act, 1966.
- 15) The rate for land revenue tax for Non-agricultural will be up to 31/7/2012 and it will be eligible to change afterwards.
- 15) The height of the proposed building for the purpose of industrial use, should not be 13 Mirs, and above.
- 17) If any changes are required to be done in the proposed layout plans, it is necessary to obtain permission from the ennounced.
- If connecting roads are required for movement of men and materials, it is necessory to take written prior permission from the concerned dopartments by separate applications.
- 19) The empty places shown in the sanctioned layout plan is to be kept empty and no construction is to be done on the same and the same should be transforred to the authorities without any amount.
- 20) No divisions or sub divisions should be made of the sanctioned layout plans, which has been sanctioned by the Director, Town Planning, Kolhapur,
- 21) When the adjoining land owner go for layout out plans for his land, he will be allowed to use the roads for his entrance.
- 22) If the above terms & conditions violated or if it is found that wrong documents have been submitted then the permission would be cancelled and further rights will be reserved with the department.
- 23) In every 10 years, there will be change in the sanction layout plans.

The existing provisions as and when amended will be applicable under the act of NA order. Therefore, as per the K.K.K. 1948 Act, Maharashtra Gram Panchyal Rules, etc. will also be applicable.

Sd/-Tehsildar, Chandgad

Hemarus Technologies Ltd

Τo.

CC : 1) Dy. Suptd. Land Survey Dept. Chandgad – For further necessary action 2) Talathi, Channehatti





# **Appendix D - Statutory Permission**



Dated 08/12/2023

File No: IA-J-11011/244/2023-IA-II(I) Government of India Ministry of Environment, Forest and Climate Change IA Division \*\*\*





To,		
Subject:	Factory & 25 MW Co-generation Plant locate	Chandgad, dist.: Kolhapur, Maharashtra, AHARASHTRA, 416508 lery in the existing premises of 4,960 TCD Sugar ed at: Gat No. 76/1, 76/2/1, 76/2/2, 757, At/Post: ist.: Kolhapur, Maharashtra State by M/s. Olam
Sir/Madam,		
	2006-regarding in respect of project Establishment Agri Commodities India Pvt. Ltd (OGACIPL),	of EC under the provision of the EIA Notification of 300 KLPD Grain based Distillery by Olam Global At/Post: Channehatti, Rajgoli (Kh.) Tal: Chandgad, nitted to Ministry vide proposal number 2023.
	(i) EC Identification No.	EC23C2505MH5700867N
	(ii) File No.	IA-J-11011/244/2023-IA-II(I)
	(iii) Clearance Type	EC
	(iv) Category	B2
	(v) Project/Activity Included Schedule No.	5(g) Distilleries
	(vi) Sector	Industrial Projects - 2
	(vii) Name of Project	Establishment of 300 KLPD Grain based Distillery by Olam Global Agri Commodities India Pvt. Ltd (OGACIPL), At/Post: Channehatti, Rajgoli (Kh.) Tal: Chandgad, Dist.: Kolhapur, Maharashtra State
	(viii) Name of Company/Organization	OLAM GLOBAL AGRI COMMODITIES INDIA PRIVATE LIMITED

IA/MH/IND2/434419/2023

(ix) Location of Project (District, State)	KOLHAPUR, MAHARASHTRA	
(x) Issuing Authority	MoEF&CC	
(xii) Applicability of General Conditions	yes	
(xiii) Applicability of Specific Conditions	no	

**3.**The Ministry of Environment, Forest and Climate Change has examined the proposal seeking environmental clearance for establishment of 300 KLPD Grain based distillery in the existing premises of 4,960 TCD Sugar Factory & 25 MW Cogeneration Plant located at: Gat No. 76/1, 76/2/1, 76/2/2, 757, At/Post: Channehatti, Rajgoli (Kh.) Tal: Chandgad, Dist.: Kolhapur, Maharashtra State by M/s. Olam Global Agri Commodities India Pvt. Ltd.

**4.** As per the MoEF&CC Notification S.O. 2339(E), dated 16<sup>th</sup> June, 2021, a special provision in the EIA Notification, 2006-(Schedule 5 (ga), Category B2) is made, wherein for all applications made for Grain based distilleries with Zero Liquid Discharge producing ethanol; solely to be used for Ethanol Blended Petrol Programme of the Government of India shall be considered under B2 Category and appraised at Central Level by Expert Appraisal Committee (EAC) with condition that the project proponent shall file a notarized affidavit that ethanol produced from proposed project shall be used completely for EBP Programme.

5. The details of products and capacity are placed at Annexure-II.

6. Ministry has issued Environmental Clearance for 50 KLPD Molasses Distillery Unit and 25 MW Cogeneration Plant vide File No. F. No. J-11011/412/2006-IA-II (I) dated 06.07.2007. But 50 KLPD Distillery Unit is not implemented on site and same is certified by IRO; Nagpur. Certified Compliance report of existing EC has been obtained from Integrated Regional Office, MoEFCC, Nagpur vide File No- EC-2195/RON/2023-NGP/12182 dated 15.09.2023.

There is a non-compliance regarding submission of six monthly compliance report, partial compliance related to spent wash generation and advertisement of existing EC granted in 2007. Further, there is a general observation regarding implementation of green belt development plan & CSR/CER/EMP works with 30% funds. PP has submitted Action Taken report to IRO, MOEFCC; Nagpur on 16.09.2023 through email informing that industry uploaded six monthly compliances, monitoring reports, on Industry website and copy of advertisements done in 2007 were not traceable. Industry has not complied with spent wash generation and it's disposal practice as distillery unit was not established on site. Further, Industry has submitted action plan for densification of greenbelt by February, 2024. EAC found the compliance status satisfactory but warned PP that Industry should ensure that six monthly compliance reports are submitted regularly. Existing 4,960 TCD Sugar Factory is operational on the basis of Consent to Operate as Environmental Clearance is not applicable since threshold limit for applicability of EC is 5000 TCD. Latest CTO (Air and Water) has been issued on

02.02.2023 and is valid till 31.07.2024. Certified CTO compliance report has been issued dated 12.07.2023 from MPCB; Kolhapur.

**7.**Standard ToR and Public Hearing is not applicable as the project falls under category B2 as per OM dated 16<sup>th</sup> June, 2021. It was informed that there is no litigation pending against the project.

**8.**Total land area required is 55 hectares. Greenbelt will be developed in total area of 25.77 hectares i.e., 47% of total project area. The estimated project cost is Rs. 299.10 Crores. Capital cost of EMP would be Rs. 37.05 Crores and recurring cost for EMP would be Rs. 3.82 Crores per annum. Industry proposes to allocate Rs. 4.5 Crores towards Extended EMP (Corporate Environment Responsibility). Total Employment will be 478 persons as direct & indirect.

**9.**There is no presence of National Parks, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors etc. within 10 km distance. Suthgatti Reserved Forest is at 0.5 Km; East, Daddi Reserved Forest is at 1.6 Km; North, Chinchani Reserved Forest is at 4.7 Km; East, Managutti Reserved forest is at 5.36 Km; NE, Kataballi Reserved forest is at 5.7 Km; NE, Benkanholli Reserved Forest is at 7.3 Km; NE from project site. Water bodies: Ghatprabha River is at a distance of 1.6 Km from site flows in North direction and Tamraparni River is at a distance of 3.5 Km from site flows in West direction of project site.

**10.** AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed project would be 0.011  $\mu$ g/m<sup>3</sup>, 0.003  $\mu$ g/m<sup>3</sup>, 0.92  $\mu$ g/m<sup>3</sup> and 0.055  $\mu$ g/m<sup>3</sup> with respect to PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>2</sub> and NOx.

The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

**11.**Total fresh water requirement will be  $831 \text{ m}^3$  /day which will be met from Tamraparni River. NOC has been obtained by Kolhapur Irrigation division (South) vide letter no. KOPAVI(D)/Prasha-4/bisin/4758/2018 dated 20.11.2018 and valid for next 6 years. Effluent (Condensate/spent lees/blowdown etc.) of  $1882 \text{ m}^3$  /day quantity will be treated through Condensate Polishing Unit of capacity 2300 m<sup>3</sup> /day. Raw stillage (1545 T/D: quantity of raw spent wash from distillation) will be sent to decanter followed by MEE and dryer to produce DDGS. STP of capacity 70 KLPD will be installed to treat sewage generated from factory premises. The plant will be based on Zero Liquid discharge system and no effluent/treated water will be discharged outside factory premises.

**12.**Power requirement will be 6 MW and will be met from existing 25 MW Cogeneration Plant. 60 TPH Bagasse fired boiler will be installed. APCE ESP with a stack height of 75 M will be installed for controlling the particulate matter emissions within the statutory limit of 50 mg/Nm<sup>3</sup> or 30 mg/Nm<sup>3</sup> for the proposed boiler. Existing 725 kVA (2 Nos.) & 320 KVA DG sets are used as standby during power failure and stack height (14 m) will be provided as per CPCB norms to the proposed DG set.

### 13.Details of Process emissions generation and its management:

- APCE ESP with a stack height of 75 meters will be installed with the 60TPH boiler for controlling the particulate matter emissions.
- Online Continuous Emission Monitoring System will be installed with the stack and data will be transmitted to CPCB/SPCB servers.
- CO<sub>2</sub> (225 TPD) generated during the fermentation process will be collected by utilizing CO<sub>2</sub> scrubbers and it shall be collected in bottling plant.

### 14.Details of solid waste/Hazardous waste generation and its management:

- DDGS (Distilled Dried Grains Stillage) (250 TPD) will be sold as cattle feed.
- Boiler ash (22 TPD) will be used for proposed brick manufacturing unit.
- CPU sludge (1.8 TPD) and STP sludge (0.06 TPD) will be used as manure.

**15.** Asper Notification S.O 2339(E), dated 16<sup>th</sup> June,2021, PP has submitted selfcertification in the form of notarized affidavit declaring that the proposed capacity of 300 KLPD will be used for manufacturing fuel ethanol only.

**16.**Total land of 98 Hectares (area in 2007 EC is 98 Ha) is under possession of the company and land use conversion has been completed vide letter no. Binseti/SR/13/2011 dated 01.12.2011. EAC found the information satisfactory.

**17.**The proposal was considered by the EAC (Meeting ID: EC/AGENDA/EAC/886758/10/2023) held on 30<sup>th</sup> October, 2023 in the Ministry, wherein the project proponent and the accredited Consultant M/s. Equinox Environments (I) Pvt. Ltd. (NABET certificate no. NABET/EIA/2124/SA 0177 and validity 10.10.2024), presented the case. The Committee **recommended** the project for grant of environmental clearance.

**18.**The EAC, constituted under the provision of the EIA Notification, 2006 and comprising of Experts Members/domain experts in various fields, have examined the proposal submitted by the Project Proponent in desired form along with the EMP report prepared and submitted by the Consultant accredited by the QCI/ NABET on behalf of the Project Proponent. The EAC noted that the Project Proponent has given undertaking that the data and information given in the application and enclosures are true to the best of his knowledge and belief and no information has been suppressed in the report. If any part of data/information submitted is found to be false/ misleading at any stage, the project will be rejected and Environmental Clearance given, if any, will be revoked at the risk and cost of the project proponent.

**19.**The Committee noted that the EMP report is in compliance of the PFR. The Committee deliberated on the CER plan and found to be addressing the issues in the study area. The EAC has deliberated the proposal and has made due diligence in the process as notified under the provisions of the EIA Notification, 2006, as amended from time to time and accordingly made the recommendations to the proposal. The Experts Members of the EAC have found the proposal in order and have **recommended** for grant of environmental clearance.

**20.** The environmental clearance granted to the project/activity is strictly under the provisions of the EIA Notification 2006 and its amendments. It does not tantamount/construe to approvals/consent/ permissions etc. required to be obtained or standards/conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project. The project proponent shall obtain necessary permission as mandated under the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981, as applicable from time to time, from the State Pollution Control Board, prior to construction & operation of the project.

21.Based on the proposal submitted by the project proponent and recommendations of the EAC (Industry-2), Ministry of Environment, Forest and Climate Change hereby accords environmental clearance for establishment of 300 KLPD Grain based distillery in the existing premises of 4,960 TCD Sugar Factory & 25 MW Co-generation Plant located at: Gat No. 76/1, 76/2/1, 76/2/2, 757, At/Post: Channehatti, Rajgoli (Kh.) Tal: Chandgad, Dist.: Kolhapur, Maharashtra State by M/s. Olam Global Agri Commodities India Pvt. Ltd, under the provisions of the EIA Notification, 2006, and the amendments therein, subject to compliance of the terms and conditions.

**22.**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.

**23.**Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.

**24.** Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

**25.**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 Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 read with subsequent amendments therein.

26. This issues with the approval of the competent authority.

### <u>Copy To</u>

- 1. The Secretary, Department of Environment, Government of Maharashtra, Mumbai 400 032
- 2. The Regional Officer, Ministry of Env., Forest and Climate Change, Integrated Regional Office, Ground Floor, East Wing, New Secretariat Building, Civil Lines, Nagpur- 440001 Maharashtra
- 3. The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi -32
- 4. The Member Secretary, Maharashtra Pollution Control Board, Kalpataru Point, 3rd and 4th floor, Opp. Cine Planet, Sion Circle, Mumbai 22
- 5. Monitoring Cell, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi

- 6. The District Collector, District Kolhapur, Maharashtra
- 7. Guard File/Monitoring File/Parivesh portal/Record File

### Annexure 1

#### Specific EC Conditions for (Distilleries)

### **1. Specific Condition**

S. No		EC Conditions
		<ul> <li>1.As per the Notification S.O. 2339(E), dated 16<sup>th</sup> June, 2021, project falls in category B2 and the proposed capacity of 300 KLPD shall only be used for fuel ethanol manufacturing as per self-certification in form of a notarized affidavit by the Project Proponent. Provided that subsequently if it is found that the ethanol, produced based on the EC granted as per this dispensation, is not being used completely for EBP Programme, or if ethanol is not being produced, or if the said distillery is not fulfilling the requirements based on which the project has been appraised as category B2 project, the EC shall stand cancelled.</li> <li>2.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, and risk mitigation measures relating to the project shall be implemented (Annexure –III).</li> <li>3.EC granted for a project on the basis of the submitted documents shall become invalid in case the actual land for the project site turns out to be different from the land considered at the time of appraisal of project. Conversion of land use (CLU) certificate shall be obtained before start of construction activities.</li> </ul>
1.1		4.NOC from the Concerned Local authority shall be obtained before start of the construction of plant and drawing water from Surface Water (Tamrapani river). State Pollution Control Board shall not issue the Consent to Operate (CTO) under Air (Prevention and Control of Pollution) Act and Water (Prevention and Control of Pollution) Act till the project proponent obtains such permission. Ground water shall not be used for plant operations.
		5.Total Fresh water requirement shall not exceed 831 m <sup>3</sup> /day which will be met from Tamrapani river. No ground water recharge shall be permitted within the premises. Industry shall construct a rain water storage pond of 60 days capacity and the accumulated water to be used as fresh water thereby reducing fresh water consumption.
		6.Spent Wash/stillage shall be sent to the decanter followed by the Multiple Effect Evaporator and dryer to form DDGS. DDGS to be used as cattle feed. The MEE & Drier condensate, spent lees, WTP Rejects, Boiler & Cooling tower blowdowns, washings etc., shall be treated in the 'Condensate Polishing Unit' (CPU). STP shall be installed to treat domestic wastewater. The plant will be based on 'Zero Liquid Discharge' system and no effluent/treated water will be discharged outside factory premises.
		7. APCE- ESP with a stack height of 75 m will be installed for controlling the particulate matter emissions within the statutory limit of 50 mg/Nm <sup>3</sup> from the proposed 60 TPH Bagasse fired boiler and the existing 110 TPH bagasse fired boiler. Coal shall not be used as fuel in the boiler. At no time, the emission levels shall exceed the prescribed standards. In the event of failure of any pollution control system adopted by the unit, the respective unit shall not be restarted until the

S. No	EC Conditions
	control measures are rectified to achieve the desired efficiency. Performance assessment of pollution control devices/ systems will be conducted annually.
	8.Boiler ash (22 TPD) shall be used in proposed brick manufacturing unit. PP shall install 15% of the total power requirement in the form of solar power inside plant premises/adjacent/nearby areas.
	9.CO <sub>2</sub> (225 TPD) generated during the fermentation process will be collected by utilizing CO <sub>2</sub> scrubbers and it shall be sold to authorized vendors/ collected in proposed bottling plant.
	10. PP shall allocate at least Rs. 1.0 Crore/annum for Occupational Health Safety. Occupational Health Centre for surveillance of the worker's health shall be set up. The health data shall be used in deploying the duties of the workers. All workers & employees shall be provided with required safety kits/mask for personal protection.
	11. Training shall be imparted to all employees on safety and health aspects of chemicals handling. Safety and visual reality training shall be provided to employees.
	12. The unit shall make arrangement for prevention of possible fire hazards during manufacturing process in material handling. Firefighting system shall be as per the norms. PESO certificate shall be obtained. Location of ethanol storage tanks shall be placed in such a way that in the event of any fire, accident, explosion or any unforeseen conditions the impact of such event should not go beyond the boundary of the plant i.e. the risk should be tolerable (acceptable) at the boundary.
	13. Company shall maintain an Emergency Response Decision support system in such a way so that identification of the detector's network for the location of the leak source and the probable leaked quantity in real-time, followed by modelling of the dispersion of the plume and consequences as forecast is done in advance and thus, no leak accident may go unattended. Accordingly, Risk Mitigation plan shall be in place.
	14.Company shall determine the distance of fire hydrant while finalizing its location from ethanol storage tanks or any other hazardous storage substance shall be based on dispersion of Thermal Radiation so that during any unforeseen situation fire hydrant is always available to operate manually.
	15.Process organic residue and spent carbon, if any, shall be sent to Cement and other suitable industries for its incinerations. ETP sludge, process inorganic & evaporation salt shall be disposed of to the TSDF.
	16. The company shall undertake waste minimization measures as below (a) Metering and control of quantities of active ingredients to minimize waste; (b) Reuse of by-products from the process as raw materials or as raw material substitutes in other processes. (c) Use of automated filling to minimize spillage. (d) Use of Close Feed system into batch reactors. (e) Venting equipment through vapour recovery system. (f) Use of high pressure hoses for equipment clearing to reduce wastewater generation.
	17. The existing green belt of at least 5-10 m width developed in 25.77 hectares i.e., 47 % of the total project area shall be densified @ 2500 trees per hectares, mainly along the plant periphery by February, 2024 as committed by the project proponent. Indigenous species shall only be developed as part of greenbelt and non-indigenous / alien species shall be replaced with native species. No invasive or alien or non-native tree species shall be selected for plantation. PP shall develop at least 20 variety of species as a part of greenbelt. Saplings 4-6 feet high shall be planted. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department

S. No	EC Conditions
	and native species shall be developed. Records of tree canopy shall be monitored through remote sensing map. No tree shall be cut or translocated for the present plant expansion.
	18.PP proposed to allocate Rs. 4.5 Crores towards Extended EMP (CER) which shall be spent as submitted in CER plan ( <b>Annexure –IV</b> ). Further, all the proposed activities under CER shall be completed before the commissioning of the plant in consultation with District Administration.
	19.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. Out of the total project area, 15% shall be allotted solely for parking purposes with facilities like rest rooms etc. PP shall strengthen and maintain the road connecting the plant and the State Highway. The entry and exit to and from the highway shall through slip roads only.
20.Storage of raw materials shall be either in silos or in covered areas to prevent dust other fugitive emissions. All stockpiles should be constructed over impervious soil drains with catch pits to trap runoff material shall be provided. Biomass shall be store sheds and wind breaking walls/curtains shall be provided around biomass storage area suspension during high wind speed. All Internal roads shall be paved. Industrial val shall be provided to sweep the internal roads. The Air Pollution Control System shall be with process plant/machinery for shutdown in case of operational failure of Air Pollu Equipment.	
	21.Continuous online (24x7) monitoring system for stack emissions/effluent 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.
	22.A separate Environmental Management Cell (having qualified person with Environmental Science/Environmental Engineering/specialization in the project area) equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions. EMC head shall report directly to Head of Organization/ Director/CEO as per company hierarchy.
	23.PP shall sensitize and create awareness among the people working within the project area as well as its surrounding area on the ban of Single Use Plastic in order to ensure the compliance of Notification published by MOEFCC on 12 <sup>th</sup> August, 2021. A report along with photographs on the measures taken shall also be included in the six-monthly compliance report being submitted to concerned authority.

### Standard EC Conditions for (Distilleries)

### 1. General Conditions

S. No	EC Conditions		
1.1	No further expansion or modifications in the plant, other than mentioned in the EIA Notification, 2006 and its amendments, shall be carried out without prior approval of the Ministry of Environment, Forest and Climate Change/SEIAA, as applicable. 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/SEIAA, as applicable, to assess the adequacy of conditions imposed and to		

S. No	EC Conditions	
	add additional environmental protection measures required, if any.	
1.2	The energy source for lighting purpose shall be preferably LED based, or advanced having preference in energy conservation and environment betterment.	
1.3	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 the Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).	
1.4	The company shall undertake all relevant measures for improving the socio-economic conditions of the surrounding area. CER activities shall be undertaken by involving local villages and administration and shall be implemented. The company shall undertake eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.	
1.5	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.	
1.6	A copy of the clearance letter shall be sent by the project proponent to concerned Panchayat, Zilla Parishad/Municipal Corporation, Urban local Body and the local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal.	
1.7	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.	
1.8	The environmental statement for each financial year ending 31st 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.	
1.9	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 and at https://parivesh.nic.in/. 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.	
1.10	The project authorities shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.	

S. No	EC Conditions
1.11	This Environmental clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, if any, as may be applicable to this project.

### **Additional EC Conditions**

N/A

### Annexure 2

### Details of Products & By-products

Name of the product /By- product	Product / By- product	Quantity		Mode of Transport / Transmission	Remarks (eg. CAS number)
Ethanol	Ethanol	300	Kilo Litre per Day (KLD)	Road	
DDGS	DDGS	250	MT/D	Road	
Carbon D <mark>ioxide</mark>	Carbon Dioxide	225	MT/D	Compressed and Bottled	



## The details of products and capacity as under:

S. No.	Name of unit	Name of the product/by- product	Existing Capacity	Proposed Expansion capacity	Total capacity
1	Distillery	Ethanol	0	300 KLPD	300 KLPD
2	DWGS dryer	DDGS	0	250 TPD	250 TPD
3	Fermentation unit	Carbon di- oxide	0	225 TPD	225 TPD
4	Cane Crushing Unit	Sugar	4960 TPD	0	4960 TPD
5	Cogeneration Power Plant	Power	25 MW	0	25 MW

### Annexure -III

### Capital cost and recurring cost of EMP are given below:

No.	Description	Cost Component (Rs. Lakhs)	
	Description	Capital	Annual O & M
1	<b>Air Pollution</b> : APC Equipment's [ESP for boiler – 1 Nos. (Stack height 75 M), OCMS, CO <sub>2</sub> bottling Plant, Ash Collection system	Rs. 700	<b>R</b> s. 70
2	Water Pollution: Installation of CPU, Sugar Factory CPU, STP, MEE, OCMS and Dryer for Grain	Rs. 2,500	<b>Rs</b> . 250
3	Noise Pollution Control: PPE (Ear plugs, Ear Muff, Insulations, Barriers)	Rs. 50	Rs. 5
4	Occupational Health & Safety: Annual Health checkup, Occupational health center	Rs. 100	Rs. 20
5	<b>Environmental</b> disposal (storage Yeast Sludge Monitoring: Solid waste and disposal), Ash & CPU,	Rs. 50	Rs. 5
6	Green Belt Augmentation & Rain Water Harvesting Plan	Rs. 150	Rs. 15
7	Afforestation in Parsenahatti village; 1000 Trees X Rs.500/ No.	Rs. 5	Rs. 2
8	Coverage of Bagasse Yard	Rs. 100	Rs. 10
9	Surfacing of Internal Roads to control fugitive dust and Ash Silo	Rs. 50	Rs. 5
	Total; (12% of Capital Investment of Rs. 299.10 Cr.)	Rs. 3,705	Rs. 382

# Details of extended EMP (CER) with proposed activities and budgetary allocation:

No	CER Activities	Amount
1	Non-ConventionalEnergyPromotions(10Villages:Channehatti,Tiramal,Edalhond,Ganeshwadi,Rajgoli(Kh.),Rajewadi,Parsenahatti,Rajgoli(Bk.),Ninganhatti,Shivapur):Provision ofSolar Street Lightswith Gadget - 1MSPole,18-20WLEDLamp,Battery,SolarPanel,Wiringetc.10VillagesX50Nos./Village=300SolarStreetLightsXRs.30,000/-perNo.=Rs.90Lakhs	Lakhs
2	Solar Photovoltaic System (10 Villages: Ganeshwadi, Rajewadi, Tiramal, Rajgoli (Bk.), Rajgoli (Kh.), Channehatti, Edalhond, Parsenahatti, Ninganhatti, Shivapur) - <b>150 KW</b> @ Rs. 0.5 Lakh/KW at Grampanchayat / ZP School Building. 150 KW X Rs.50,000/- = <b>Rs. 75 Lakh</b>	Rs. 75 Lakhs
3	Drinking Water Supply Infrastructure (5 Villages: Ganeshwadi, Edalhond, Shivapur, Rajewadi, Channehatti) - Safe Drinking Water Units with Filtration, RO Module & Storage Tank (2 Unit/ Village @ 500 Lit/Hr) – 10 Units X Rs. 3 Lakhs = Rs. 30 Lakhs & maintenance for 3 years @ Rs. 10 Lakhs lump sum. Total – Rs. 40 Lakhs	Rs.40 Lakhs
4	Water Conservation: Promotion & Supply of "Drip Irrigation" system infrastructure to bring 25 Ha of land belonging to farmers under command within 3 years.	Rs. 40 Lakhs
5	Afforestation: (10 Villages: Rajewadi, Channehatti, Ganeshwadi, Rajgoli (Kh.), Rajewadi, Parsenahatti, Rajgoli (Bk.), Ninganhatti, Shivapur, Edalhond): Plantation of Trees in 10 Villages including supplying plants, their cultivation and maintenance for 2 years. 200 Trees / Village X 10 Villages X Rs. 500/ Tree= Rs.100 Lakh & Maintenance @ Rs.12.5 Lakhs/Yr X 2 YR = Rs. 25 Lakhs, Total – Rs.125Lakhs	Lakhs
6	<b>Educational infrastructure &amp; facilities</b> (4 Villages: Rajgoli (Kh.), Rajgoli (Bk.), Shivapur, Suthgatti): Assistance to local ZP & other school for library, laboratories, computers, digital literacy, wifi & online learning facilities etc.	Rs. 20 Lakhs

No	CER Activities	
	(1.5% of Capital Investment Rs. 299.10 Cr.) <b>Total</b>	Rs.450 Lakhs



# Signature Not Verified

Digitally Signed by Dr Vi nal Kumar Hatwal Member Secretary, MeEFCC (EC) Date: 08/12/2023



File No:J-11011/412/2006-IA II (I) Government of India Ministry of Environment, Forest and Climate Change IA Division \*\*\*



Dated 20/11/2023



To,

Sh. Bharat Kundal Gut No. 76, Channehatti, Post: Rajgoli (Kh), Tal.: Chandgad, dist.: Kolhapur, Maharashtra, Channehatti, Post: Rajgoli (Kh), KOLHAPUR, MAHARASHTRA, 416508 bharat.kundal@olamnet.com

Subject:

50 KLD molasses based distillery unit along with 25 MW co-generation power plant at Chanatti, Rajgoli Khurd, Chandgad Kolhapur in Maharashtra by M/s. Hemarus Technologies Limited -Transfer of Environment Clearance regarding.

### Sir/Madam,

This is in reference to your application submitted to MoEF&CC vide proposal number IA/MH/IND2/446513/2023 dated 30<sup>th</sup> September, 2023 for grant of transfer of Environmental Clearance (EC) to the project under the provision of para 11 of the EIA Notification 2006-and as amended thereof.

2. The particulars of the proposal are as below :

(i) EC Identification No.	EC23A2501MH5115324T				
(ii) File No.	J-11011/412/2006-IA II (I)				
(iii) Clearance Type	Transfer of EC				
(iv) Category	A				
(v) Project/Activity Included Schedule No.	5(g) Distilleries, 1(d) Thermal Power Plants				
(vi) Sector	Industrial Projects - 2				
(vii) Name of Project	50 KLD molasses based distillery unit along with 25 MW co-generation power plant at Chanatti, Rajgoli Khurd, Chandgad Kolhapur in Maharashtra by M/s. Hemarus Technologies Limited				
(viii) Name of Company/Organization					
(ix) Location of Project (District, State)	KOLHAPUR, MAHARASHTRA				
(x) Issuing Authority	MoEF&CC				
(xi) EC Date	06/07/2007				
(xiii) Details of Transferee	Gut No. 76, Channehatti, Post: Rajgoli (Kh), Tal.:				

IA/MH/IND2/446513/2023

	Chandgad, dist.: Kolhapur,
	Maharashtra, Channehatti, Rajgoli
	(Kh.),480,27,416508
(viv) Details of Transform	Hemarus Technologies Ltd., Gat No.
(xiv) Details of Transferor	76,Channehatti, Rajgoli (Kh.),480,27,416508

**3.**This has reference to your online proposal vide No. IA/MH/IND2/446513/2023 dated 30<sup>th</sup> September, 2023 regarding transfer of environmental clearance to the above project, from M/s. Hemarus Technologies Limited to M/s. Olam Global Agri Commodities India Private Limited.

**4.** Ministry of Environment, Forests and Climate Change issued environmental clearance vide letter No. J-11011/412/2006-IA II (I) dated 06<sup>th</sup> July, 2007 to M/s. Hemarus Technologies Limited for 50 KLD molasses based distillery unit along with 25 MW co-generation power plant at Chanatti, Rajgoli Khurd, Chandgad Kolhapur in Maharashtra.

5. Now, the name of the company has changed from M/s. Hemarus Technologies Limited to M/s. Olam Global Agri Commodities India Private Limited with change of ownership. Registrar of Companies certificate is submitted which mentions CIN number U51229HR2021FTC097076 of M/s. Olam Global Agri Commodities India Private Limited & CIN number U85110AP2006PLC048909 of M/s. Hemarus Technologies Limited respectively.

6. M/s. Olam Global Agri Commodities India Private Limited (Formerly Known as M/s. Hemarus Technologies Limited) has submitted a copy of NOC given by VP & Business head-Sugar (Mr. Bharat Kundal) to transfer the above EC in the name of new company. Copy of undertaking signed by VP & Business head-Sugar (Mr. Bharat Kundal) of M/s. Olam Global Agri Commodities India Private Limited has been submitted to abide by the terms and conditions prescribed in the environmental clearance dated 06<sup>th</sup> July, 2007.

7.As per the relevant provisions of the EIA Notification, 2006, the environmental clearance for 50 KLD molasses based distillery unit along with 25 MW co-generation power plant at Chanatti, Rajgoli Khurd, Chandgad Kolhapur in Maharashtra granted by this Ministry vide letter No. J-11011/412/2006-IA II (I) dated 06<sup>th</sup> July, 2007 is hereby transferred from M/s. Hemarus Technologies Limited to M/s. Olam Global Agri Commodities India Private Limited only for transferring the implmented part within EC validity period i.e. 25 MW Cogeneration Power Plant on the same terms and conditions under which the prior environmental clearance was initially granted, and for the same validity period.

8. This issues with approval of the competent authority.

### <u>Copy To</u>

1. The Secretary, Department of Environment, Government of Maharashtra, Mumbai 400 032

2. The Regional Officer, Ministry of Env., Forest and Climate Change, Integrated Regional Office, Ground Floor, East Wing, New Secretariat Building, Civil Lines, Nagpur- 440001 Maharashtra

3. The Chairman, Central Pollution Control Board Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi -32

4. The Member Secretary, Maharashtra Pollution Control Board, Kalpataru Point, 3rd and 4th floor, Opp. Cine Planet, Sion Circle, Mumbai – 22

5. Monitoring Cell, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi

6. The District Collector, District Kolhapur, Maharashtra

7. Guard File/Monitoring File/Parivesh portal/Record File

### Additional EC Conditions

N/A

### भारत सरकार

### पयविरण एवं वन मंत्रालय GOVERNMENT OF INDIA BY SPEED POST MINISTRY OF ENVIRONMENT & FORESTSTelefax: 011-24360488 File No.J-11011/412/2006-IA II (I) E-mail: sansomj@gmail.com sansom, 2859@yahoo.co.in

Date: 6th July 2007

Shri Vasu Rao A.N. Vice President Hemarus Technologies Limited Channatti, Rajgoli Khurd Chandgad, Kohlapur Maharashtra

Subject: 50 KLD Molasses Based Distillery Unit along with 25 MW Cogeneration Power Plant at Chanatti, Rajgoli Khurd, Chandgad Kolhapur in Maharashtra by M/s Hemarus Technologies Ltd.- Environmental Clearance Regarding.

Sir,

Kindly refer to your application No. HTL/ENVCLR/Ministry of Environment and Forest/2006/11/110 dated 10<sup>th</sup> November 2006 regarding the subject mentioned above

The Ministry of Environment and Forests has examined the proposal. It is noted 2. that the proposal is to set up a new 50 KLD Molasses Based Distillery along with 25 MW Cogeneration Power Plant Unit. The cost of the project is Rs. 86.63 Crores, out of which Rs.12.315 Crores will be earmarked for environmental protection measures. The Distillery will operate only for 240 days per year. The distillery and power plant will be located in the sugar complex for which total land area is 98.00 ha out of which 25.0 ha will be reserved for distillery and 33 ha has been earmarked for green belt development. No ecologically sensitive area exists in 7 km periphery of the project site. The project does not involve any R& R. Distillery will have Semi Continuous Fermentation Process. The project will also have a Bagasse fired Boilers where 900 TPD of Bagasse shall be used as fuel. Power requirement of 1000 KWH would be met from the CPP of Sugar Unit. Water requirement of 2260 KLD would be met from the Tambraparni River. No ground water shall be used. The spent wash generated will be Bio-composted after Biomethanation. Public Hearing of the project was held on 29.09.2006.

3. The project activity is covered in 5 (g) under the EIA Notification, 2006 and is of 'A' category. The project was considered as per EIA Notification, 1994 in accordance with Para 2.2.1 (i) (a) of Interim Operational Guidelines of the Ministry dated 13th October, 2006 as the EIA/EMP were prepared and Public Hearing was already held.



4. Based on the information submitted by you, the Ministry of Environment and Forests hereby accords environmental clearance to above project under the provisions of EIA Notification, 2006 subject to the compliance of the following Specific and General conditions:

### A. SPECIFIC CONDITIONS:

- (i) Necessary Clearance from National Board for Wildlife or State Chief Wildlife Warden may be obtained if there is any wildlife sanctuary or eco-sensitive zone exists within 10 km radius of the project.
- (ii) The Distillery Unit shall operate only for 240 days and shall not operate during rainy season. Permission from the Ministry may be obtained for any increase in the working days. The unit will not operate during rainy season.
- (iii) Revised Guidelines of 2006 issued by CPCB for Distilleries shall be followed. Wherever the limits are different, as stipulated here, the revised limits of CPCB will prevail.
- (iv) The industry shall ensure that the treated effluent and stack emissions from the unit are within the norms stipulated under the EPA rules or SPCB whichever is more stringent. In case of process disturbances/failure of pollution control equipment adopted by the unit, the respective unit shall be shut down and shall not be restarted until the control measures are rectified to achieve the desired efficiency.
- (v) For control of air emissions from 80 TPH and 110 TPH boilers, Electrostatic Precipitator of efficiency 99.998% would be installed to limit the particulate emissions within permissible limits. Boilers would be provided with stacks of 65 m and 71.0 m height for dispersion of particulates.
- (vi) Noise levels will be limited within 60 65 dBA.
- (vii) The company shall adopt Semi Continuous Fermentation Technology. Spent wash generation and domestic effluent generation shall nor exceed 445 m3/d and 22.0 respectively. For treatment of spent wash the unit shall adopt Biomethanation followed by Bio- Composting. It will be ensured that the spent wash generation shall not exceed 9 KI/KI of alcohol produced. Press mud requirement will be 35,600 MTA and will be available from their Sugar Unit of 3,500 TCD. Spent lees and other water discharges will be treated in the ETP. Requirement of Press mud will be 26900 MTA and compost produced will be 26000 MTA. 3600 MT of Boiler Ash and Bagacillo will be used for complete composting.

There will be no discharge of wastewater from the distillery and zero discharge shall be strictly followed. Also separate Effluent treatment plant should be provided for the treatment of 326 m3/d effluent generating from 25 MW Power Plant. The capacity of Lagoon will be for 30 days storage as per CPCB Guidelines.

- (viii) Land and other requirements for treatment of spent wash with press mud shall be as per the CPCB guidelines. The company shall earmark an area of 20 Acres for bio-composting, storage of finished products etc. The compost yard shall be made impervious as per the CPCB guidelines.
- (ix) Water requirement shall not exceed 1170 KLD which will be met from the Tambraparni River. A copy of the water withdrawal permission shall be submitted to the Ministry.
- (x) The spent wash shall be stored in impervious pucca lagoons. The spent wash lagoons shall have proper lining with HDPE and shall be kept in proper condition to prevent ground water pollution. Storage shall be as per the revised guidelines of CPCB.
- (xi) Adequate numbers of ground water quality monitoring stations shall be set up around the compost plant and the project area. These monitoring stations will be provided with piezometers. Sampling and trend analysis monitoring must be made on monthly a basis and report submitted to SPCB and this Ministry. The company shall carry out regular analysis of compost, leachate for BOD and pH.
- (i) Fly ash generated from 25 MW power plant shall be utilized as per guidelines issued by Ministry of Environment & Forests.
- (ii) 33 Ha of land area will be developed as green belt all around the plant and compost yard to mitigate the effects of fugitive emissions. The green belt will be as per the CPCB guidelines in consultation with the local DFO.
- (iii) Company shall adopt rainwater-harvesting measures to recharge the ground water.
- (iv) Occupational health surveillance programme shall be undertaken as regular exercise for all the employees. The first aid facilities in the occupational health center shall be strengthened and the medical records of each employee shall be maintained separately.

### B. GENERAL CONDITIONS:

(i) No further expansion or modifications in the plant shall be carried out

without prior approval of the Ministry of Environment and Forests.

- (ii) Ambient Air Quality Monitoring Stations shall be set up in consultation with the State Pollution Control Board in the down wind direction as well as where maximum ground level concentration of SPM, SO<sub>2</sub>, NO<sub>x</sub> and RSPM are anticipated. RSPM will also be monitored regularly.
- (iii) 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 should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).
- (iv) The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA /EMP report.
- (v) A separate environmental management cell equipped with full fledged laboratory facilities must be set up to carry out the environmental management and monitoring functions.
- (vi) The project authorities shall provide funds of Rs. 12.315 Crores as capital cost for the environment protection measures. Separate funds for recurring expenditure to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government shall be kept. Also, the implementation schedule for all the conditions stipulated herein shall be submitted. The funds so provided shall not be diverted for any other purpose.
- (vii) The implementation of the project vis-à-vis environmental action plans will be monitored by the concerned Regional Office of the Ministry /State Pollution Control Board/Central Pollution Control Board. A six monthly compliance status report along with the monitored data shall be submitted to the monitoring agencies and shall be posted on the Website of the Proponent.
- (viii) 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 State Pollution Control Board/ Committee and may also be seen at Website of the Ministry of Environment and Forests at http://envfor.nic.in. 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 Regional office.

(ix) The Project Authorities shall inform the Ministry and its concerned Regional Office about date of financial closure and final approval of the project by the concerned authorities and the date of start of land development work.

5. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

6. The Ministry reserves the right to stipulate additional conditions if found necessary. The company will implement these conditions in a time bound manner.

7. The above conditions will be enforced along with the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules hereunder.

(Sanchita Jindal) Additional Director

Copy to:

- The Secretary, Department of Environment & Energy, Government of Maharashtra, Room No. 403, 4<sup>th</sup> Floor, Mantralaya, Mumbai-400 032, Maharashtra.
- Chief Conservator of Forests, Ministry of Environment & Forests, Regional Office (WZ), E-5, Arera Colony, Link Road-3, Bhopal: 462 016, Madhya Pradesh.
- The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD-cum-Office Complex, East Arjun Nagar, Delhi-110032.
- The Chairman, Maharashtra Pollution Control Board, Kalpataru Point, 3<sup>rd</sup> and 4<sup>th</sup> Floor, Matunga Scheme Road, Road No. 6, Opp. Cine Planet, Circle Sion (E), Mumbai -400022, Maharashtra.
- JS (CCI-I), Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi - 110003.
- Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, New Delhi- 110003.
- 7. Guard File/Monitoring File/Record File

(Sanchita Jindal) Additional Director

# MAHARASHTRA POLLUTION CONTROL BOARD

Tel: 24010706/24010437 Fax: 24023516 Website: http://mpcb.gov.in Email: cac-cell@mpcb.gov.in



Kalpataru Point, 2nd and 4th floor, Opp. Cine Planet Cinema, Near Sion Circle, Sion (E), Mumbai-400022

Date: 05/11/2023

RED/L.S.I (R60) No:- Format1.0/CAC/UAN No.MPCB-CONSENT-0000174836/CE/2311000375

Τo,

M/s. Olam Global Agri Commodities India Pvt Ltd Gat No. 76/1, 76/2/1, 76/2/2, 757 ,At/Po.: Channehatti, Village: Rajgoli (Kh), Tal.: Chandgad, Dist.: Kolhapur,



### Sub: Consent to Establish for Grain base distillery of capacity 300 KLPD

- Ref: 1. Existing Renewal Sugar Format1.0/CAC/UAN No.MPCB-CONSENT-0000140108/CR-2302000106 dtd. 02.02.2023 valid up to 31.07.2024
  - 2. Minutes of CAC Meeting dtd. 26.09.2023.

Your application No.MPCB-CONSENT-0000174836 Dated 27.06.2023

For: Consent to Establish under Section 25 of the Water (Prevention & Control of Pollution) Act, 1974 & under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 and Authorization under Rule 6 of the Hazardous & Other Wastes (Management & Transboundary Movement) Rules 2016 is considered and the consent is hereby granted subject to the following terms and conditions and as detailed in the schedule I, II, III & IV annexed to this order:

- 1. The consent to establish is granted for a period up to commissioning of the unit or up to 5 year whichever is earlier.
- 2. The capital investment of the project is Rs.299.1 Crs. (As per C.A Certificate submitted by industry )
- 3. Consent is valid for the manufacture of:

Sr No	Product Maximum Quantity		UOM
Prod	ucts		
1	Ethanol 300		KL/D
2	DDGS 250		MT/Day
3	C02	225	MT/Day

### 4. Conditions under Water (P&CP), 1974 Act for discharge of effluent:

Sr No	Description	Permitted (in CMD)	Standards to	Disposal Path
1.	Trade effluent	866	As per Schedule-I	MEE & Dryer to achieve ZLD
		1882	As per Schedule-I	CPU & recycled

Sr No	Description Permitted		Standards to		Disposal	
2.	2. Domestic effluent 12		As per Schedule-I		On land for irrigation.	
Conditions under Air (P& CP) Act, 1981 for air emissions:						
Sr	Stack Description of stack			nck /	Number of	Standards to be

Sr	Stack	Description of stack /	Number of	Standards to be
No.	No.	source	Stack	achieved
1	1	Boiler (60 TPH)	1	

### 6. Non-Hazardous Wastes:

5.

Sr No	Type of Waste	Quantity	UoM	Treatment	Disposal
1	CPU Sludge	54	MT/M		Use as manure
2	Boiler Ash	660	MT/M		Used as Manure / Sold to brick manufacturer.

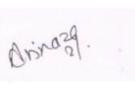
7. Conditions under Hazardous & Other Wastes (M & T M) Rules 2016 for Collection, Segregation, Storage, Transportation, Treatment and Disposal of hazardous waste:

Sr No	Category No./ Type	Quantity	UoM	Treatment	Disposal
	NA				

8. The Board reserves the right to review, amend, suspend, revoke this consent and the same shall be binding on the industry.

- 9. This consent should not be construed as exemption from obtaining necessary NOC/ permission from any other Government authorities.
- 10. The applicant should not take any effective steps for implementation of the project before obtaining Environmental Clearance as per EIA Notification 2006 and amendments thereto. As per Para 2 of EIA notification dated- 14.09.2006, the effective steps include starting of any construction work or preparation of land by the project management. However as clarified by the MoEF vide office memorandum no. J-1103/41/2006-IA.II(I); Dated- 19/08/2010, fencing of the site to protect it from getting encroached and construction of temporary shed(s) for the guard(s) & acquisition of land not be treated as an effective step.
- 11. This consent is issued pursuant to the decision of the Consent Appraisal Committee Meeting held on 26.09.2023.
- 12. Industry shall install online continuous monitoring system as per CPCB guidelines & data to be transmitted directly from Data Logger to Board server .
- 13. Industry shall submit BG of Rs. 25 lakh towards compliance of consent & EC conditions
- 14. The applicant shall obtain Consent to Operate from Maharashtra Pollution Control Board before actual commencement of the Unit/Activity. (Establish)





e56484e2 9d38d5bb 6e9f3c58 £13e13b7 89503086 62ff5543 3e56d8c 57ca6e

Signed by: Dr.Avinash Dhakne Member Secretary For and on behalf of, Maharashtra Pollution Control Board ms@mpcb.gov.in 2023-11-05 12:24:44 IST

### Received Consent fee of -

Sr.No	Amount(Rs.)	mount(Rs.) Transaction/DR.No.		Transaction Type
1	598200.00	MPCB-DR-19958	30/06/2023	RTGS

### Copy to:

- 1. Regional Officer, MPCB, Kolhapur and Sub-Regional Officer, MPCB, Kolhapur
- They are directed to ensure the compliance of the consent conditions.
- 2. Chief Accounts Officer, MPCB, Sion, Mumbai
- 3. CC/CAC Desk for record & website updation purposes.



### SCHEDULE-I

### Terms & conditions for compliance of Water Pollution Control:

### **1.**Conditions for Trade effluent:

- A] As per your application, you have proposed to provide MEE & Dryer for process effluent and CPU for treatment of condensate, spent lees, boiler blow down etc. the treated effluent is recycled in process to achieve ZLD.
- B] Industry shall provide CPU for recycle/reuse of treated effluent.
- C] Zero Liquid discharge shall be ensured, and no wastewater/treated water shall be discharged outside the premises.
- D] Industry shall install Continuous Emission Monitoring System (OCEMS) before 1st Operate and shall transmit Online Continuous Emission Monitoring System (OCEMS) data to Board's Server directly from data logger without any intermediate server.

### 2.Conditions for Sewage/ Domestic effluent:

- i. You shall provide sewage treatment plant for the treatment of 12 CMD sewage generation due to expansion and provide including disinfection facility.
- ii. The industry shall operate sewage treatment system to treat the sewage/ domestic effluent so as to achieve the standards as prescribed by the board/under EP Act, 1986 and rules made thereunder from time to time whichever is stringent.

Sr.No	Parameter	Concentration not to exceed(in mg/l except for pH
1.	рН	6.5-9.0
2.	BOD	30
3.	TSS	100

- iii. Treated sewage shall be used on land for gardening/ irrigation by achieving above prescribed standards.
- 3. The industry shall have bilateral agreement with farmers on whose land the treated effluent is used for irrigation purposes and copy of the agreements with validity shall be submitted to the Regional/Sub-Regional office of the board.
- 5. The Applicant shall comply with the provisions of the Water (Prevention & Control of Pollution) Act, 1974 and as amended, by installing water meters and other provisions as contained in the said act:

Sr. No.	Purpose for water consumed	Water consumption quantity (CMD)		
1.	Industrial Cooling, spraying in mine pits or boiler feed	1080.00		
2.	Domestic purpose	15.00		
3.	Processing whereby water gets polluted & pollutants are easily biodegradable	1800.00		
4.	Processing whereby water gets polluted & pollutants are not easily biodegradable and are toxic	0.00		
5.	Gardening	0		

6. The Applicant shall provide Specific Water Pollution control system as per the conditions of EP Act, 1986 and rule made there under from time to time/ Environmental Clearance.

### SCHEDULE-II

### Terms & conditions for compliance of Air Pollution Control:

1. As per your application, you have proposed to provide the Air pollution control (APC) system and also to erect following stack (s) to observe the following fuel pattern:

Stack No.	Stack Attached To	APC System	Height in Mtrs.	Type of Fuel	Quantity & UoM	<b>5</b> %	<b>SO</b> <sub>2</sub>
1	Boiler (60 TPH)	ESP	60	Bagasse	30000 Kg/Hr	0.04	360.00

- 2. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- 3. The Applicant shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or replacement/alteration well before its life come to an end or erection of new pollution control equipment.
- 4. The Board reserves its rights to vary all or any of the condition in the consent, if due to any technological improvement or otherwise such variation (including the change of any control equipment, other in whole or in part is necessary).
- 5. The applicant shall operate and maintain above mentioned air pollution control system, so as to achieve the level of pollutants to the following standards:

Particulate matter	Not to exceed	150 mg/Nm3	
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- 6. Storage of raw materials, coal etc. shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- 7. The industry shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office MPCB.
- 8. The Board reserves its rights to vary all or any of the condition in the consent, if due to any technological improvement or otherwise such variation (including the change of any control equipment, other in whole or in part is necessary).
- 9. Industry shall provide Online Continuous Emission Monitoring System (OCEMS) i.e. flow meter and night vision camera to ensure the Zero Liquid Discharge (ZLD) of spent wash and OCEMS for Boiler stack for PM parameter.

### SCHEDULE-III Details of Bank Guarantees:

Sr. No	Consent (C2E/ C2O /C2R)	Amt of BG Imposed	Submission Period	Purpose of BG	Compliance Period	Validity Date
1	C to E	25 lakh	Submit in 15 days	For compliance of consent & EC conditions	COU	up to 1st operate

Srno.	Consent (C2E/C2O/C2R)	Amount of BG imposed	Submission Period	Purpose of BG	BG	<sup>F</sup> Reason of BG Forfeiture
			NA			
•		В	G Return det	ails		
Srno.	Consent (C2E/C	20/C2R)	BG imposed	Purpose BG		unt of BG eturned
			NA			
			CHEDULE-IV eral Condition			
Tho End	ergy source for ligh				sod	
The PP recharg	shall harvest rain ge the ground wate	water from	roof tops of th	e buildings	and storm w	
the plant Conditions for D.G. Set						
	se from the D.G. Se ting the room acou		controlled by p	roviding an a	acoustic encl	osure or by
acou or fo exha of in	Istry should provide ustic treatment of t or meeting the amb aust muffler with in isertion loss will be losure/room and th	he room sho pient noise s sertion loss done at dif	ould be designe standards, which of 25 dB (A) sh ferent points at	d for minim never is on h all also be p	um 25 dB (A) higher side. A rovided. The	insertion loss suitable measuremen
	istry should make e nises, within ambie					
	allation of DG Set n nufacturer.	nust be s <mark>tri</mark> c	tly in compliant	ce with reco	mmendation	s of DG Set
follo	oper routine and p wed in consultation ls of DG set from d	n with the D	G manufacture			
f) D.G.	. Set shall be opera	ted only in	case of power fa	ailure.		
	applicant should n	ot cause an	v puicanco in th	o curroundi	ng area due t	o operation o
	. Set.		y nuisance in th	e surrounui		
h) The (Pro	• •	nply with th nendment R	e notification of ules vide GSR 3	MoEFCC, In 71(E) dated	17.05.2002	nment
h) The (Pro ame	. Set. applicant shall con tection) second Am	nply with th nendment R g noise limit	e notification of ules vide GSR 3 for generator s	MoEFCC, In 71(E) dated	17.05.2002	nment
h) The (Pro ame The app The nor of sciet	. Set. applicant shall con tection) second Am endments regarding	nply with th nendment R g noise limit in good hou vaste arisin ot to cause	e notification of ules vide GSR 3 for generator s usekeeping. g in the factory any nuisance	MoEFCC, In 71(E) dated ets run with premises, s / pollution	17.05.2002 a diesel. sweepings, et . The applic	nment and its c. be dispose
h) The (Pro- ame The app The nor of scien necessa The ap temper equipm	Set. applicant shall con tection) second Am endments regarding olicant shall mainta n-hazardous solid w ntifically so as no ary permissions fro oplicant shall not ature or the mo- tents provided for w ry out any activity,	nply with th nendment R g noise limit in good hou vaste arisin ot to cause om civic au change or de of the without prev	e notification of ules vide GSR 3 for generator s usekeeping. g in the factory any nuisance thorities for dis alter the qua effluent/emissi vious written pe	MoEFCC, In 71(E) dated ets run with premises, s / pollution sposal of so ntity, quali ons or haz rmission of	17.05.2002 a diesel. weepings, et . The applic blid waste. ty, the rate ardous wast the Board. Th	nment and its c. be dispose ant shall tak of discharge ces or contr ne industry w

- 8. The industry shall submit quarterly statement in respect of industries obligation towards consent and pollution control compliance's duly supported with documentary evidences (format can downloaded from MPCB official site).
- 9. The industry shall submit official e-mail address and any change will be duly informed to the MPCB.
- 10. The industry shall achieve the National Ambient Air Quality standards prescribed vide Government of India, Notification No. B-29016/20/90/PCI-L dated. 18.11.2009 as amended.
- 11. This consent should not be construed as exemption from obtaining necessary NOC/ permission from any other Government authorities.
- 12. The industry shall ensure replacement of pollution control system or its parts after expiry of its expected life as defined by manufacturer so as to ensure the compliance of standards and safety of the operation thereof.
- 13. You shall operate OCEMS installed for source emission round 'O' clock and transmit data online to CPCB and MPCB server. You shall also monitor effluent quality, stack emissions and ambient air quality monthly/quarterly. You shall conduct Dioxin Furan monitoring by third party NABL Accredited agency once in year and submit report to Sub Regional Officer.
- 14. You shall ensure collection, and segregation of BMW regularly to treat and dispose Off within 48 hrs from generation.
- 15. Whenever due to any accident or other unforeseen act or even, such emissions occur or is apprehended to occur in excess of standards laid down, such information shall be forthwith Reported to Board, concerned Police Station, office of Directorate of Health Services, Department of Explosives, Inspectorate of Factories and Local Body. In case of failure of pollution control equipments, the production process connected to it shall be stopped.
- 16. The applicant shall provide an alternate electric power source sufficient to operate all pollution control facilities installed to maintain compliance with the terms and conditions of the consent. In the absence, the applicant shall stop, reduce or otherwise, control production to abide by terms and conditions of this consent.
- 17. The industry shall recycle/reprocess/reuse/recover Hazardous Waste as per the provision contain in the Hazardous and Other Wastes (M & TM) Rules 2016, which can be recycled /processed /reused /recovered and only waste which has to be incinerated shall go to incineration and waste which can be used for land filling and cannot be recycled/reprocessed etc. should go for that purpose, in order to reduce load on incineration and landfill site/environment.
- 18. An inspection book shall be opened and made available to the Board's officers during their visit to the applicant.
- 19. You shall not Rent, Lend, Sell, Transfer or Close Down the facility or otherwise transport the Bio Medical waste for any other purpose without obtaining prior written permission of the MPC Board.
- 20. Separate drainage system shall be provided for collection of trade and sewage effluents. Terminal manholes shall be provided at the end of the collection system with arrangement for measuring the flow. No effluent shall be admitted in the pipes/sewers downstream of the terminal manholes. No effluent shall find its way other than in designed and provided collection system.
- 21. Neither storm water nor discharge from other premises shall be allowed to mix with the effluents from the factory.
- 22. The industry should not cause any nuisance in surrounding area.

- 23. The industry shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standard in respect of noise to less than 75 dB (A) during day time and 70 dB (A) during night time. Day time is reckoned in between 6 a.m. and 10 p.m. and night time is reckoned between 10 p.m. and 6 a.m.
- 24. You shall ensure that fugitive emissions from the activity are controlled so as to maintain clean and safe environment in and around the facility premises.
- 25. The applicant shall provide ports in the chimney/(s) and facilities such as ladder, platform etc. for monitoring the air emissions and the same shall be open for inspection to/and for use of the Board's Staff. The chimney(s) vents attached to various sources of emission shall be designated by numbers such as S-1, S-2, etc. and these shall be painted/ displayed to facilitate identification.
- 26. The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of waterworks for the purification thereof & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions. The Applicant shall obtain prior consent of the Board to take steps to establish the unit or establish any treatment and disposal system or an extension or addition thereto
- 27. The applicant shall install a separate meter showing the consumption of energy for operation of domestic and industrial effluent treatment plants and air pollution control system. A register showing consumption of chemicals used for treatment shall be maintained.
- 28. The applicant shall bring minimum 33% of the available open land under green coverage/ plantation. The applicant shall submit a yearly statement by 30th September every year on available open plot area, number of trees surviving as on 31st March of the year and number of trees planted by September end.
- 29. The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of waterworks for the purification thereof & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions.
- 30. The firm shall submit to this office, the 30th day of September every year, the Environment Statement Report for the financial year ending 31st March in the prescribed FORM-V as per the provisions of Rule 14 of the Environment (Protection) (second Amendment) Rules, 1992.
- 31. You should monitor effluent quality, stack emissions and ambient air quality monthly/quarterly. You shall conduct Dioxin Furan monitoring by third party NABL Accredited agency once in every year and submit report to Sub Regional Officer.
- 32. The Board reserves its rights to vary all or any of the condition in the consent, if due to any technological improvement or otherwise such variation (including the change of any control equipment, other in whole or in part is necessary).
- 33. The applicant shall provide facility for collection of environmental samples and samples of trade and sewage effluents, air emissions and hazardous waste to the Board staff at the terminal or designated points and shall pay to the Board for the services rendered in this behalf.
- 34. You shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or shall ensure replacement of pollution control system or its parts after expiry of its expected life as defined by manufacturer so as to ensure the compliance of standards and safety of the operation thereof.

- 35. You shall strictly comply with the Water (P&CP) Act, 1974, Air (P&CP) Act, 1981 and Environmental Protection Act, 1986 and industry specific standard under EP Rules 1986 which are available on MPCB website (www.mpcb.gov.in).
- 36. You shall create the Environmental Cell by appointing an Environmental Engineer and Chemist for looking after day-to-day activities related to compliance of CCA.
- 37. You should comply with the Hazardous and Other Wastes (M & TM) Rules, 2016, Bio Medical Waste Management Rules,2016 and submit the Annual Returns as per Rule 6(5) & 20(2) of Hazardous and Other Wastes (M & TM) Rules, 2016 for the preceding year in Form-IV by 30th June of every year
- 38. You should comply with the Hazardous and Other Wastes (M & TM) Rules, 2016, Bio Medical Waste Management Rules,2016 and submit the Annual Returns as per Rule 6(5) & 20(2) of Hazardous and Other Wastes (M & TM) Rules, 2016 for the preceding year in Form-IV by 30th June of every year

This certificate is digitally & electronically signed.



### **MAHARASHTRA POLLUTION CONTROL BOARD**

Tel: 24010706/24010437 Fax: 24023516 Website: http://mpcb.gov.in Email: cac-cell@mpcb.gov.in



Kalpataru Point, 2nd and 4th floor, Opp. Cine Planet Cinema, Near Sion Circle, Sion (E), Mumbai-400022

No:- Format1.0/CAC/UAN No.MPCB-CONSENT-0000140108/CR/2302000106

Date: 02/02/2023



M/s. Olam Global Agri Commodities India Pvt. Ltd., (Previouesly known as Olam Agro India Pvt Ltd.,) Gut No.76, Chennetti, Village Rajgoli Khurd., Tal. Chandgad, Dist. Kolhapur.



- Sub: Renewal of Consent for 4960 TCD sugar unit & 25 MW Co-generation unit.
- Ref: 1. Renewal of Consent granted by the Board vide No. Format 1.0 CAC/UAN No. MPCB-CONSENT-0000092670/CR-2012001338, dated 30.12.2020, valid up to 31/07/2022.
  - 2. Minutes of CAC Meeting dtd. 30.08.2022.

Your application No.MPCB-CONSENT-0000140108 Dated 04.07.2022

For: grant of Consent to Renewal under Section 26 of the Water (Prevention & Control of Pollution) Act, 1974 & under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 and Authorization under Rule 6 of the Hazardous & Other Wastes (Management & Transboundary Movement) Rules 2016 is considered and the consent is hereby granted subject to the following terms and conditions and as detailed in the schedule I, II, III & IV annexed to this order:

- 1. The Consent to Renewal is granted upto: **31.07.2024**
- 2. The capital investment of the industry is Rs. 372.89 Crs. (As per C.A Certificate submitted by industry).
- 3. Consent is valid for the manufacture of:

Sr No	Product	Maximum Quantity	UOM
1	Sugar	19433	MT/M
2	Bagasse	46080	MT/M
3	Pressmud	5007	MT/M
4	Molasses	6857	MT/M
5	Electric Power (Co-generation)	25	MW

- 3. (The cane crushing capcity of Sugar Industry shall not exceed 4960 TCD.)
- 4. Conditions under Water (P&CP) Act, 1974 for discharge of effluent:

Sr No	Description	Permitted in CMD	Standards to	Disposal
1.	Trade effluent	871		392 CMD recycle & 479 CMD on land for irrigation.
2.	Domestic effluent	119	As per Schedule - I	



#### 5. Conditions under the Air (P& CP) Act, 1981 for air emissions:

Stack No.	Description of stack / source	Number of Stack	Standards to be achieved
1	Boiler (110 TPH)	1	As per Schedule -II
2	D. G Set (725 KVA X 2)	1	As per Schedule -II
3	D.G. Set (320 KVA)	1	As per Schedule -II

#### 6. Conditions about Non Hazardous Wastes:

Sr No	Type of Waste	Quantity	UoM	Treatment	Disposal
1	Metal,Wood,Paper,Scrap	25	MT/A	NA	Sale/Reuse/Recycle
2	Fly Ash	2116	MT/M	NA	Sale
3	ETP Sludge	0.50	MT/M	NA	Manure

# 7. Conditions under Hazardous & Other Wastes (M & T M) Rules 2008 for treatment and disposal of hazardous waste:

Sr No	Type of Waste	HW Category.	Quantity & UoM	Treatment	Disposal
1	5.1 Used or spent oil	5.1	6 MT/A	IRECVCIE	Sale to Authorized recycler.

The applicant shall ensure disposal to the Actual user having permissions under Rule 9 of Hazardous and other Waste (M & TM) Rules, 2016.

a. The applicant shall properly collect, transport & regularly dispose of the hazardous waste to CHWTSDF, in compliance of the Hazardous & Other Wastes (Management & Transboundry Movement) Rules, 2016 and keep proper manifest thereof.

- 8. The Board reserves the right to review, amend, suspend, revoke etc. this consent and the same shall be binding on the industry.
- 9. This consent should not be construed as exemption from obtaining necessary NOC/permission from any other Government authorities.
- 10. Industry shall connect online CMS data as per CPCB guidelines to CPCB & MPCB Servers.
- 11. Industry shall install CPU within period of 6 Months.
- 12. This consent is issued as per the Consent Appraisal Committee meeting dated 30.08.2022.
- 13. The applicant shall make an application for renewal of the consent at least 60 days before the date of the expiry of the consent.

This consent is issued as per communication letter dated 03/11/2022 which is approved by competent authority of the board.

#### **Received Consent fee of -**

Sr.No	Amount(Rs.)	Transaction/DR.No.	Date	Transaction Type
1	846600.00	MPCB-DR-12561	04/07/2022	NEFT
2	644960.00	MPCB-DR-16859	23/01/2023	RTGS

#### Copy to:

- 1. Regional Officer, MPCB, Kolhapur and Sub-Regional Officer, MPCB, Kolhapur
- They are directed to ensure the compliance of the consent conditions.
- -
- 2. Chief Accounts Officer, MPCB, Sion, Mumbai
- 3. CC/CAC desk for record & website updation purposes.



#### SCHEDULE-I

Terms & conditions for compliance of Water Pollution Control:

- A] As per your application, you have Provided Effluent Treatment Plant (ETP) consisting of Primary, Secondary, Tertiary for the treatment of industrial effluent.
  - **B]** Industry shall provide CPU for recycle/reuse of treated effluent.
  - C] The Applicant shall operate the effluent treatment plant (ETP) to treat the trade effluent so as to achieve the following standards prescribed by the Board or under EP Act, 1986 and Rules made there under from time to time, whichever is stringent.

Sr. No.	Parameters	Limiting concentration not to exceed in mg/l, except for pH
(1)	рН	5.5-9.0
(2)	Oil & Grease	10
(3)	BOD (3 days 27°°	100
(4)	Sulphate	1000
(5)	Suspended Solids	100
(6)	COD	250
(7)	Chloride	600
(8)	Total Dissolved Solids	2100

- D] The treated effluent 479.00 CMD shall be disposed on land for irrigation on 31.00 hectares of own land /as per the bilateral agreement with farmers. In no any case treated/untreated effluent shall find its way outside the factory premises directly or indirectly.
- E] Industry shall operate Online Continuous Emission Monitoring System (OCEMS) and shall transmit Online Continuous Emission Monitoring System (OCEMS) data to Board's server directly through the data logger without any intermediate server.
- F] Trade effluent of 392.00 CMD generated from Co-gen shall be 100% recycle in process.

#### **G] CREP conditions for Sugar Factory**

- i. Operation of ETP shall be started at least one month before starting of cane crushing to achieve desired MLSS. So as to meet prescribed standards from day one the operation of mill.
- ii. Waste water generation shall be reduced to 100 liters per tone of cane crushed.
- iii. Industry shall achieve zero discharge into in land surface water bodies.
- iv. 15 days' storage capacity tank shall be provided for treated effluent to take care during no demand for irrigation.
- H] Industry to make necessary arrangement to cover the effluent collection system and to avoid the ingress of Bagasse and other material.

- I] The unit shall operate ETP even after completion of the crushing season so that any effluent generated during washing & maintenance activity is to be discharged after proper treatment.
- J] The unit shall optimize water use in industrial process & maintain records.
- <sup>2)</sup> A] As per your application, you have provided septic tank and soak pit for the treatment of 119.00 CMD sewage.
  - B] The applicant shall operate sewage treatment system to treat sewage so as to achieve the following standards/ prescribed under EP Act 1986 and rules made under time to time, whichever is stringent.

1	Suspended Solids	Not to exceed	100 mg/l
2	BOD 3 days (27°C)	Not to exceed	100 mg/l

C] The treated sewage shall be 100% reused/recycled for gardening purpose within premise. In no any case, sewage shall find its way outside Company's premises.

- 3) The industry shall have bilateral agreement with the farmers on whose land the treated effluent is used for irrigation purposes and a copy of the agreements with validity shall be submitted to the Regional/Sub- Regional Office of the Board.
- 4) The industry shall create Environmental Cell by appointing an Environmental Engineer, Chemist and Agriculture expert for looking after day to day activities related to Environment and irrigation field where treated effluent is used for irrigation.
- 5) CONDITIONS FOR MOLASSES STORAGE:
- (i) The molasses shall be properly collected and stored in steel tanks which shall be leak proof. At no stage of handling of molasses, there shall be leakage or spillage.
- (ii) The capacity of tanks for storage of molasses shall be such that it will take care of bumper production of sugar, non-lifting of molasses etc.
- (iii) All the area on which molasses are stored and handled should be provided with drain for diverting the spills to the treatment plant/ molasses tank. Suitable arrangements for accidental discharges of molasses from the tanks shall be provided to contain the same within factory premises.
- (iv) Destruction of molasses and its disposal shall not be done without specific permission in writing from the authorized officer of the Board. Intimation of intention to destroy or dispose of the molasses shall be given to the Board at least 15 (fifteen) days in advance by registered post under intimation to the Sub-Regional officer and Regional officer of the Board under whose jurisdiction the factory is situated.
- (v) The storage tanks shall be kept in good conditions all the year round with adequate maintenance. The tanks size and capacity per cm, height, total capacity in tonnes shall be displayed prominently near /on the tank.
- (vi) The above conditions shall be in addition to and not in derogation of the provisions contained in the "Bombay Molasses Rules, 1955? and "Maharashtra Molasses Storage and Supply Regulation, 1965?.
- 6) The Applicant shall provide Specific Water Pollution control system as per the conditions of EP Act, 1986 and rule made there under from time to time/ Environmental Clearance / CREP guidelines if applicable.

- 7) The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of waterworks for the purification there of & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions. The Applicant shall obtain prior consent of the Board to take steps to establish the unit or establish any treatment and disposal system or an extension or addition thereto.
- 8) The industry shall ensure replacement of pollution control system or its parts after expiry of its expected life as defined by manufacturer so as to ensure the compliance of standards and safety of the operation thereof.
- 9) The Applicant shall comply with the provisions of the Water (Prevention & Control of Pollution) Act, 1974 and as amended, by installing water meters, and other provisions as contained in the said act:

Sr. No.	Purpose for water consumed	Water consumption quantity (CMD)
1.	Industrial Cooling, spraying in mine pits or boiler feed	1672.00
2.	Domestic purpose	202.00
3.	Processing whereby water gets polluted & pollutants are easily biodegradable	852.00
4.	Processing whereby water gets polluted & pollutants are not easily biodegradable and are toxic	0.00
5.	Grandening	0

10) The Applicant shall provide Specific Water Pollution control system as per the conditions of EP Act, 1986 and rule made there under from time to time/ Environmental Clearance/ CREP guidelines.

#### SCHEDULE-II

#### Terms & conditions for compliance of Air Pollution Control:

1) As per your application, you have provided the Air pollution control (APC) system and erected following stack(s) and observe the following fuel pattern-

Stack No.	Stack Attached To	APC System	Height in Mtrs.	Type of Fuel	Quantity & UoM	<b>s</b> %	<b>SO</b> <sub>2</sub>
1	Boiler	ESP	71	Bagasse or Coal 500 MT/Day	1176 MT/Day	0.20	4704.00
2	D. G Set (725 KVA X 2)	Acoustic Enclosure	6	HSD	150 Lit/Day	1.00	3.00
3	D.G. Set (320 KVA)	Accoustic Enclosure	6	HSD	50 Lit/Day	1.00	1.00

- 2) The Applicant shall provide Specific Air Pollution control equipments as per the conditions of EP Act, 1986 and rule made there under from time to time/ Environmental Clearance / CREP guidelines.
  - 1 The Applicant shall provide ESP/ Bag filter/ Wet scrubber to the Bagasse fired boiler and Dust Collector to Sugar bagging section as an Air Pollution control equipments OR as per the conditions of EP Act, 1986 and rule made there under from time to time / Environmental Clearance / CREP guidelines.

2 The applicant shall operate and maintain above mentioned air pollution con	trol
system, so as to achieve the level of pollutants to the following standards:	

Total Particulate matter	Not to exceed	150 mg/Nm3
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- 3 The Applicant shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or replacement/alteration well before its life come to an end or erection of new pollution control equipment.
- 4 The Board reserves its rights to vary all or any of the condition in the consent, if due to any technological improvement or otherwise such variation (including the change of any control equipment, other in whole or in part is necessary).
- 5 Industry should not use auxiliary fuel more than 15 % (as per amendment in EIA Notification 2009, power plant upto 15 MW based on Bio-mass and using auxiliary fuel as coal upto 15% are exempt.) as co-gen capacity is below 15 MW.
- 3) The Applicant shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or replacement/alteration well before its life come to an end or erection of new pollution control equipment.
- 4) The Board reserves its rights to vary all or any of the condition in the consent, if due to any technological improvement or otherwise such variation (including the change of any control equipment, other in whole or in part is necessary).

Sr. No	Consent(C2E/C 20/C2R)	Amt of BG Imposed	Submission Period	Purpose of BG	Compliance Period	Validity Date
1	C to R	25 Lakh	15 Days/ Extend	Towards compliance of Consent conditions & O & M of PCS.	31.07.2024	28.02.2025

#### SCHEDULE-III Details of Bank Guarantees:

#### **BG Forfeiture History**

Srno.	Consent (C2E/C2O/C2R)	Amount of BG imposed	Submission Period	Purpose of BG	BG	Reason of BG Forfeiture
			NA			

#### SCHEDULE-IV

#### **General Conditions:**

- 1 The applicant shall provide facility for collection of environmental samples and samples of trade and sewage effluents, air emissions and hazardous waste to the Board staff at the terminal or designated points and shall pay to the Board for the services rendered in this behalf.
- 2 The applicant shall provide ports in the chimney/(s) and facilities such as ladder, platform etc. for monitoring the air emissions and the same shall be open for inspection to/and for use of the Board's Staff. The chimney(s) vents attached to various sources of emission shall be designated by numbers such as S-1, S-2, etc. and these shall be painted/ displayed to facilitate identification.

- 3 Whenever due to any accident or other unforeseen act or even, such emissions occur or is apprehended to occur in excess of standards laid down, such information shall be forthwith Reported to Board, concerned Police Station, office of Directorate of Health Services, Department of Explosives, Inspectorate of Factories and Local Body. In case of failure of pollution control equipment, the production process connected to it shall be stopped.
- 4 The applicant shall provide an alternate electric power source sufficient to operate all pollution control facilities installed to maintain compliance with the terms and conditions of the consent. In the absence, the applicant shall stop, reduce or otherwise, control production to abide by terms and conditions of this consent.
- 5 The firm shall submit to this office, the 30th day of September every year, the Environmental Statement Report for the financial year ending 31st March in the prescribed Form-V as per the provisions of rule 14 of the Environment (Protection) (Second Amendment) Rules, 1992.
- 6 The industry should comply with the Hazardous & Other Wastes (M & TM) Rules, 2016 and submit the Annual Returns as per Rule 6(5) & 20(2) of Hazardous & Other Wastes (M & TM) Rules, 2016 for the preceding year April to March in Form-IV by 30th June of every year.
- 7 An inspection book shall be opened and made available to the Board's officers during their visit to the applicant.
- 8 The industry shall constitute an Environmental cell with qualified staff/personnel/agency to see the day to day compliance of consent condition towards Environment Protection.
- 9 The applicant shall install a separate meter showing the consumption of energy for operation of domestic and industrial effluent treatment plants and air pollution control system. A register showing consumption of chemicals used for treatment shall be maintained.
- 10 The applicant shall bring minimum 33% of the available open land under green coverage/ plantation. The applicant shall submit a yearly statement by 30th September every year on available open plot area, number of trees surviving as on 31st March of the year and number of trees planted by September end.
- 11 The industry shall submit official e-mail address and any change will be duly informed to the MPCB.
- 12 Industry should monitor effluent quality, stack emissions and ambient air quality monthly/quarterly.
- 13 The industry shall recycle/reprocess/reuse/recover Hazardous Waste as per the provision contain in the H&OW(M&TM) Rules 2016, which can be recycled/processed/ reused/ recovered and only waste which has to be incinerated shall go to incineration and waste which can be used for land filling and cannot be recycled/ reprocessed etc. should go for that purpose, in order to reduce load on incineration and landfill site/environment.
- 14 Industry shall strictly comply with the Water (P&CP) Act, 1974, Air (P&CP) Act,1981 and Environmental Protection Act,1986 and industry specific standard under EP Rules 1986 which are available on MPCB website(www.mpcb.gov.in).
- 15 Separate drainage system shall be provided for collection of trade and sewage effluents. Terminal manholes shall be provided at the end of the collection system with arrangement for measuring the flow. No effluent shall be admitted in the pipes/sewers downstream of the terminal manholes. No effluent shall find its way other than in designed and provided collection system.
- 16 Neither storm water nor discharge from other premises shall be allowed to mix with the effluents from the factory.
- 17. Conditions for D.G. Set
  - a) Noise from the D.G. Set should be controlled by providing an acoustic enclosure or by treating the room acoustically.

- b) Industry should provide acoustic enclosure for control of noise. The acoustic enclosure/ acoustic treatment of the room should be designed for minimum 25 dB (A) insertion loss or for meeting the ambient noise standards, whichever is on higher side. A suitable exhaust muffler with insertion loss of 25 dB (A) shall also be provided. The measurement of insertion loss will be done at different points at 0.5 meters from acoustic enclosure/room and then average.
- c) Industry should make efforts to bring down noise level due to DG set, outside industrial premises, within ambient noise requirements by proper sitting and control measures.
- d) Installation of DG Set must be strictly in compliance with recommendations of DG Set manufacturer.
- e) A proper routine and preventive maintenance procedure for DG set should be set and followed in consultation with the DG manufacturer which would help to prevent noise levels of DG set from deteriorating with use.
- f) D.G. Set shall be operated only in case of power failure.
- g) The applicant should not cause any nuisance in the surrounding area due to operation of D.G. Set.
- h) The applicant shall comply with the notification of MoEFCC, India on Environment (Protection) second Amendment Rules vide GSR 371(E) dated 17.05.2002 and its amendments regarding noise limit for generator sets run with diesel.
- 18 The industry should not cause any nuisance in surrounding area.
- 19 The industry shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standard in respect of noise to less than 75 dB (A) during day time and 70 dB (A) during night time. Day time is reckoned in between 6 a.m. and 10 p.m. and night time is reckoned between 10 p.m. and 6 a.m.
- 20 The applicant shall maintain good housekeeping.
- 21 The non-hazardous solid waste arising in the factory premises, sweepings, etc. be disposed of scientifically so as not to cause any nuisance / pollution. The applicant shall take necessary permissions from civic authorities for disposal of solid waste.
- 22 The applicant shall not change or alter the quantity, quality, the rate of discharge, temperature or the mode of the effluent/emissions or hazardous wastes or control equipment provided for without previous written permission of the Board. The industry will not carry out any activity, for which this consent has not been granted/without prior consent of the Board.
- 23 The industry shall ensure that fugitive emissions from the activity are controlled so as to maintain clean and safe environment in and around the factory premises.
- 24 The industry shall achieve the National Ambient Air Quality standards prescribed vide Government of India, Notification dtd. 16.11.2009 as amended.

This certificate is digitally & electronically signed.

### **Appendix E - Water Lifting Permission**

#### EXECUTIVE ENGINEER, KOLHAPUR IRRIGATION DIVISION (SOUTH) Sinchan Bhayan, Tarabai Park, Kolhapur-416503, Land line no.0231-2650263 E-mail: eckidsouthklp@gmail.com

Out word no. KOPAVI(D)/Prosha 4/b sin/4758/2018 Date: 20/11/2018
--

#### Τo.

Vice President Olam Agro India Pvi Ltd C/o- Heinarus Technologies Ltd, Channehatti Rajgoli Kluord, Tal-Chandgad, Dist, Kolhaput

Sub -- Reservation of water quota for 2018 to 2024 period for non-irrigation

- Ref 1) Letter dt 4/10/2015 of Chief Engineer, Water Resources Dept, Pune
  - Your letter dt 14/7/2018

3) Letter of Dy Divisional Officer, Chandgad Irrigation Sub Div. dt 16/10/2018.

With reference to the above, a permission has been given to the factory of Olam Agro-India Pvt Ltd; Rajgoli Khurd, Tal-Chandgad for drawing water of 0.9504 million cubic meter for industrial purpose and 0.0744 million cubic meter for drinking purpose, total 1.0248 million cubic meter from Kamedadi weir of Tamrapami River through langmhatti Medium Water Project, as per the letter referred 1 as above

The earlier agreement for utilization of 1.0248 million cubic meter water has been expired on 31/10/2018 and therefore a new agreement for 6 years (2018 to 2024) is being sont herewith duly stamped and signed

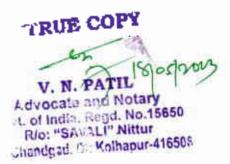
The validity of the agreement will be from 1/11/2018 to 30/6/2014 which please be noted and terms and conditions mentioned therein may be strictly implemented.

Signature Dy Executive Engineer Kolhapur Irrigation Division (South) Kolhapur

Encl- Agreement - 1 copy -

CC - Dy Divisional Officer, Chandgad Irrigation Sub Division





## कार्यकारी अभियंता, कोल्हापूर पाटबंधारे विभाग (दक्षिण), सिंचन भवन, ताराबाई पार्क, कोल्हापूर-४१६००३

🕿 ०२३१-२६५०२६३ E-mail : eekidsouthklp@gmail.com

जा.क्र.कोपावि(द)/प्रशा-४/बिसिं,	1869CRORC	दि.	20/99/2096
प्रति,	()		

काईस प्रेसिडेंट.

ओलम ॲग्रो इंडिया प्रायकेट लि., ढारा- हेमरस टेक्नॉलॉजी लि. चर्नेहट्टी, राजगोळी खुर्द ता. चंदगड, जि.कोल्हापूर.

विषय:- सन २०१८-१९ या वर्षाकरीता बिगर सिंचन पाण्याचा कोटा आरक्षित करणेबाबत.

संदर्भ:- १) मा. मुख्य अभियंता, जलसंपदा विभाग, पुणे यांचे पत्र जा.क्र. मुअ/काअ-२/ मुदका/७१७१/ ६७१२ दि. ०४/१०/२००५

२) आपले कार्या. पत्र ओलम ॲग्रो/ पाणी परवाना/१३८ दि. १४/०७/२०१८

३) उपविभागीय अधिकारी, चंदगड पाटबंधारे उपविभाग, चंदगड यांचे पत्र जा.क्र. चंपाउविचं/ बि सिं /८५९ दि. १६/१०/२०१८

उपरोक्त विषयास अनुसरून जंगमहट्टी मध्यम प्रकल्पांतगंत ताम्रपर्णी नदीतून कामेवाडी को प बंधा-यामधून ओलम ॲग्रो इंडिया प्रायवहेट लि., राजगोळी खुर्द ता. चंदगड, जि. कोल्हापूर कारखान्यास औद्योगिक पाणी वापरासाठी ०.९५०४ द.ल.घ.मी. व पिण्यासाठी ०.०७४४ द.ल.घ.मी. अशा एकूण १.०२४८ द.ल.घ.मी. पाणी आरक्षणास प्रदेश कार्यालयाचे संदर्भ १ अन्वये कायमस्वरूपी पाणी घेणेस मान्यता देणेत आली आहे.

वरीलप्रमाणे १.०२४८ द.ल.घ.मी. पाणी वापरासाठी या पूर्वीच्या कराराची मुदत दि. ३१/१०/२०१८ अखेर संपलेने सदर करारनाम्याचे पुढील सहा वर्षाकरीता (सन २०१८ ते २०२४) करारनामा साक्षांकित करून एक प्रत सोबत पाठवणेत येत आहे.

सदर करारनाम्याची मुदत दि. १/११/२०१८ ते ३०/६/२०२४ अखेर राहील याची कृपया नोंद घ्यावी. करारनाम्यात नमूद केलेल्या अटी व शर्ती यांची काटेकोर अंमलबजावणी करणेत यावी.

स्थळ प्रत का.अ.यांना मान्य. सोबत- करारनामा - १ प्रत.

#### rowcyceche

उप कार्यकारी अभियंता, कोल्हापूर पाटबंधारे विभाग (दक्षिण), कोल्हापूर.

प्रत:- उपविभागीय अधिकारी, चंदगड पाटबंधारे उपविभाग, चंदगड यांना माहितीसाठी व कार्यवाहीसाठी प्रत:- सिंचन शाखा, विभागीय कार्यालय.

DIA **FIVE HUNDRED** 5.500RUPEES-पाँचः सौ रुपये Rs. 500-सरमंगित जराते **SINDIA NON JUDICIAL** 0 2017 0 AE 260361 महाराष्ट्र MAHARASHTRA ्द्रांक विकत्याचे नांव :-महादेव धोंडीबा भोसले अनमाताता यत्ता :-धर नंधर चंदम ह Sub Treasury 0.5 १ रागलीय परवाना :: :२६०५००९ Office Chandgad acin मिकी कर्यक : 9986 दिनांक :AUI UI91 आग्ण : औसीमेर tic's 3 0 JCH 2018 ्रक्त विकत शेणा-याचे नांय > रक्तम रूपये :- 9,001-Sub Treasury Officer मुद्दीक विकेरवाची समी :-Chandriad RAJGOLI प्रदांक विकल घेणाःयाची

#### APPLICABLE TO Private Bodies only)

AGREEMENT (For non-Irrigation water Supply)

An agreement made on the 1 day of October Two Thousand Eighteen between OLAM AGRO INDIA PRIVATE LIMITED the users such as Private Company (Which expression herein – after referred to as "The Company", shall, unless excluded by or it be repugnant to the context or meaning there of be deemed to include its successors and assigns) registered under the Indian Companies Act 1913 (VII of 1913) the companies Act 1956 (I of 1956) and having its registered office at Ground Floor, Building No.8, Tower A, DLF Cyber City, Phase II, Gurgaon 122002, Haryana. Here in after referred to as "The Company" of the one part and the Governor of Maharashtra here in after referred to as "The Government" (which shall, unless exclude its successors and assigns) of the other part.

For OLAM AGRO INDIA PVT. LTD.

BHARAT KUNDAL

1.1 PIΔ FIVE HUNDRED হ. 500 RUPEES Rs. 500 याँचः सौ. रुपये संसामेव जयते INDIA NON JUDICIAL AE 260360 महाराष्ट्र MAHARASHTRA O 2017 O बुहान विकत्याचे नांव .महादेव घोडीज भोसले वासमाताचा चला आर ने,६१९ चेंद्रमड Sub Treasury **Office** DOODOJS : IFTER IN INTERNET Chandgad विनांक :90/0197 hein Man name : 9486 117m - 50 3 A JUN 2019 विकल तला.याचे गाँध :-IND tiqu Sub Treasur (THEFH HERE : 1001-Officer RAJGOLI Chandgad नुद्रांक विकत्याचा सही :-गुदांक विकल घेणा-यायी सही.

Whereas the Company has constructed a pumping station on the company's land at Gat No.76, Channehatti, Po.:Rajgoli (KH). Tal: Chandgad, Dist: Kolhapur-416508 for drawing water from the source Tamraparni River (hereinafter referred to as "The Said Source") for the use by the Company's Sugar, Co-Generation, Distillery Plant (here in after referred to as

"the Said Plant") and laying underground and surface pipes and drains for discharge of the factory effluent.

For OLAM AGRO INDIA PVT. LTD.

BHARAT KUNDAL VICE PRESIDENT AND where as the company has applied to the Government for permission to draw 1.0248 M. Cu.M. of water per year from said source.

AND whereas the company has paid Rs. ---- to the Government towards the proportional cost of capital outlay of the project.

AND whereas the Government has agreed to grant the aforesaid permission to the company on the terms and conditions hereafter appearing.

AND WHEREAS UNDER the said terms and conditions the company has deposited with the Executive Engineer Kolhapur Division to the Government a sum of Rs.15,50,892/-(Industrial and domestic use) as security equivalent to 2 months company's probable annual water charges <u>based on yearly sanctioned and as communicated</u> in cash or in form of <u>fixed deposit receipt or a</u> bank guarantee issued by a scheduled/ nationalized bank having its main branch office situated locally for the due observance and performance by the company of the terms and conditions of this agreement AND WHEREAS the company has accordingly prior to the execution of these project deposited with the Government Rs. ----as security for the due observance and performance by the company of the terms and condition herein contained AND WHEREAS it has been agreed that the said amount will not carry any interest if deposited in cash.

#### Definition:

4.1

Quota: Quota means yearly demand sectioned and communicated to Olam Agro India Pvt. Ltd. by the Executive Engineer.

#### Corporation:

Corporation means the River basin corporation like Maharashtra Krishna Valley Development Corporation (MKVDC), Godavari Marathwada Jrrigation Development Corporation (GMIDC), Tapi Irrigation Development Corporation (TIDC), Konkan Irrigation Development Corporation (KIDC) and Vidharba Irrigation Development (VIDC) Municipal Corporation Municipalities etc.

MIDC: MIDC means Maharashtra Industrial Development Corporation.

MJP: MJP means Maharashtra Jeevan Pradhikaran.

Yearly Applicable Demand: Yearly Applicable Demand means the water demand communicated by the USER for the period from 1<sup>st</sup> July to 30<sup>st</sup> June to the Executive Engineer and sanctioned by Irrigation department every year in the month of September along with its bifurcation for Industrial, Domestic and Agricultural use.

USER: User means water using agency like individual companies User / Industry, Entrepreneur.

### NOW THIS AGREMENT WITNESETH AS FOLLOWS:

 a) In consideration of the company making payment to the Government as hereinafter specified and observing and performing the connivance and conditions herein contained Government do here by grants to the company permission to draw the following quota of water for the specified purpose.

Sr. No.	Description / Use	Quantity (Mcum) per year}
1.	Total sanctioned quota	1.0248
1.1	For Industry using potable water bottling plant	
1.2	For other than water as raw material Industrial use	0.9504
1.3	For Domestic use.	0.0744
1.4	For Agriculturist use (nursery/gardening) within the company's premises)	

And use the same for the purpose of the company's said plant or project for supply to residential colonies and for agricultural use (nursery/ gardening) for a term of one years commencing from 1<sup>st</sup> day of November 2018 on the following terms conditions.

(b) The quota assigned for domestic use and for agricultural use shall not exceed 110% each of the individual water demand. In the case wherein the water used for domestic and agricultural use exceeds 10% in each case the excess use shall be charged at industrial applicable rate specified in clause 11 of this agreement.

(c) The Industrial water requirement, the domestic water requirement and agricultural (nursery/ gardening) water requirement of the company as demanded deemed to be separate and independent for the sole purpose and water charges assessment shall be accordingly separate and independent for other clauses of this agreement.

2) The permission hereby granted shall be subject to the provisions of the Maharashtra Irrigation Act 1976 and the Bombay Canal Rules 1934 and subsequent revision, if any, in force and any executive orders issued in this behalf by Government and any statutory amendment thereof from time to time and for the time being in force.

1.5

1

Nothing herein contained shall be deemed to imply any guarantee on
 Part of the Government as to the availability or otherwise of any specific quantity of water and Government shall not be responsible for the non-supply or in adequate supply of water on any account whatsoever.
 However in case of inadequate or non-supply due to shortage of water or reason

beyond the control of the department, bill shall be charges as per actual of water <u>lifted / supplied</u> during such period.

- 4) The company shall use the water drawn from the said river for purposes of the company's said plant and for supply to the residential colonies constructed by the company within the area of the said plant for providing housing to its employees and workers (hereinafter referred to as "the said residential colonies"). The company shall not sell the water from the said river to any other person, firm or company, corporation or other body. In the event of the company selling water drawn from the said river then the Government without prejudice to its right will forth with revoke the license. Government shall be entitled to recover from the company the proceeds of any such sale made by the company.
- 5) Government shall be entitled to utilize water of the said river available after meeting the reasonable requirements of the company as to each matter the decision of the Government shall be final and binding on the company, for such purpose as Government deems fit.
- 6) The permission here by granted shall not in any manner prejudicially affect the existing water rights vested in the upstream riparian owners nor shall it in any way, prejudice Government right to hereafter launch or implement in public interest any new scheme or schemes on its own subject however to the safeguarding of its reasonable demand referred to in clause (5) above.

- The company shall not construct the pickup weir in the Tamraparni river bed of the said river unless the proposals, plans, drawing, specifications, estimates and all other details thereof or previously submitted to and approved in writing by an officer authorized in that behalf by the Government and while granting its approval to the construction of the pickup weir Government may impose such conditions as it may in its discretion think fit.
- 8) (a) For ascertaining the quantity of water drawn by the company, the company shall forthwith at its own cost and after obtaining prior approval in writing thereto of the Executive Engineer, install independent pipelines fitted with separate electronic water measuring devices for use of water of the said independent intention (hereinafter referred to as the said electronics devices) at such places as is indicated by the Executive Engineer. All the pipe line layout <u>showing location of the metering equipment from the said sources for different purposes shall be got jointly verified and got approved from Executive Engineer Irrigation Department. Layout from the said sources shall be made with the prior written approval from the Executive Engineer. In the event of the company failing to install and keep in proper working order the said electronics measuring devices for use of water for</u>

the said plant and supply to the said residential colonies as aforesaid the company shall be liable to pay for the full sanctioned water quota <u>as mentioned in clause 8 (d)</u> <u>I and II</u>. During such period 125% of the <u>proportionate sanctioned</u> quantity will be charged at the prevailing rates for the said plant. The said electronics measuring devices shall always be kept under the lock and seal of the Executive engineer. The company shall at all times, during the substance of this agreement at its own cost maintain the said electronics measuring devices in proper working order and condition.

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(b) Reading for the water so drawn by the company will be taken on the said electronic measuring devices on the each day of each month/ at agreed times, jointly by the authorized representatives of the Executive Engineer and of the company.

(c) If at any time in the opinion of the Executive Engineer the said electronic measuring devices are found defective the same shall be tested for its accuracy and cost of such testing shall be borne and paid by the said company. If on such testing

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the said electronic measuring devices are found to be defective the company shall forthwith get the same repaired and set right at its own cost and in the event of the company failing to do so within 30 (thirty) days thereafter the Executive Engineer may proceed to do so and account at the cost of the company.

(d) In the event of said electronic measuring devices gone out of the order and becoming defective the quantity of water drawn by the company during the period when the meter was defective and not working shall be curtained in the following manner.

- (i) If the said electronic measuring devices remain out of order for a period of less than 30 days then the quantity of water deemed to be drawn by the <u>USER</u> during the said period shall be taken 100% of the yearly sanctioned demand as communicated in <u>clause no. 11</u> or average for the last six months whichever is higher.
- (ii) If the said electronic measuring devices remain out of order for a period of exceeding 30 days then the quantity of water deemed to be drawn by the <u>USER</u> during the said period shall be taken 110% of the yearly sanctioned demand as communicated in <u>clause no. 11</u> or average for the last six months whichever is higher. This will be made applicable for the period during which the measuring devices remained out of order.

The aforesaid provisions will also apply when the quantity of water drawn by the company cannot be measured on account of removal the electronic measuring devices for repairs for the same in the opinion of the Executive Engineer not working properly.

(iii) If electronic meter meant for domestic or for agricultural use in not fitted or remains out of order or is removed the water charges will be levied as per the rates specified for the industrial use for the total quota as referred in clause (19a) of this agreement.



- 9) Billing should be done on bi-monthly basis. The bill for the water drawn by the company during the previous calendar month shall be sent in duplicate / triplicate by the Executive Engineer to the office of the company within 15 days after the end of the water consumption month / the company shall thereafter duly pay the same by a demand draft drawn in the name of Executive Engineer, Kolhapur Irrigation Division(south), Kolhapur for and on behalf of the Government within a fortnight from the date of receipt of the bill and shall not allow the same to fall in arrears. If the company fails to pay the amount within this stipulated time (15 days from the date of receipt of bill and shall not allow the same to fall in arrears. If the company fails to pay the amount within this stipulated time (15 days from the date of receipt of the bill that is before the end of current month) extra 10% per annum of the amount due will be charged. If the delay in the payment of water charges exceeds 6 months, the irrigation department reserves right to terminate the water supply with a notice of 15 days in advance.
- 10) The cost of all works in connection with arrangement for water supply including the cost of measuring devices and its installation and maintenance, shall be borne by the company.
- 11) Subject to the provisions of clause (8) here of the company shall pay to the Government at the time and in the manner specified in clause (12) here of water charges for the quantity of water drawn by the company from said river as measured by said electronic devices as following rates namely.

Here rates which are going to applied to the company with mention of purpose or use of water, sanctioned quota and present rate (subject to its revision may be specified). The water lifted by the USER during rainy season from the river where Irrigation department has not released the water concessional rate as decided by the Irrigation department shall be charged.

(i) Provided however that after expiry of two years from date of company starts

hereof or for average of the quantity of water drawn by the company during the period of previous three months including the month in question whichever is greater.

- (ii) For any unforeseen reason, if the company / agency would like to reduce increase the demand of water made earlier / entered in the agreement they will be required to make the revised annual demand before commencement of the year that is 1<sup>st</sup> day of November. On acceptance of such revised demand the company will be charged as per changed demand for the period specified other condition remaining same. A <u>supplementary</u> agreement on hundred rupees stamp paper for this changed quantity <u>which will form part of main agreement</u>.
- (iii)No penal rate will be levied for the quantity limited 15% excess of the sanctioned one. For quantity used in excess of this 15 % without prior sanction a penal rate of 50 % will be charged over the basic rate. The delay in payment on account of this also will be governed by clause (9) above.
- (iv)For any unforeseen reason (such as sudden closure of this units or sudden rise in production etc.). There could be abrupt fluctuation in the demand on the both side such cases will be decided at Government level only by giving due consideration to the availability of water in the particulars sub-basin and so on.
- (v) In addition to the payment of water charges referred to above the company shall also pay to the Government local fund cess at the rate of 20 paisa per every rupee of basic water charges.



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(vi) Water bills : The bi-monthly bills for the period from November to August (for 10 months) shall be prepared on the basis of actual quantity of water lifted at the prevailing rate. The bill for the months of September and October (11<sup>th</sup> & 12<sup>th</sup> month) shall be prepared by taking review of annual sanctioned demand and the terms and conditions of the agreement and then shall be adjusted and paid accordingly. While adjusting so it shall be considered that the 90% of annual sanctioned demand has been lifted / used.

The water lifted in excess up to 10% of sanctioned demand shall be charged at single rate and excess above 10% (without prior permission) will be charged at penal rate of 1.25 times of the normal rate as mentioned in the relevant clause. However the local cess shall be charged on single rate only.

12)

(a) The company shall pay to the Executive Engineer, water rates and local fund cess either in advance every alternate month on the basis of anticipated quantum of water to be drawn by it from the said source during the best two months or on monthly basis within fifteen (15) days from the date of receipt of the bimonthly demands by the USER from the Executive Engineer. On default of the USER to pay the water rate or local funds cess as aforesaid vide clause 9 and 11 Government shall without prejudice to its any other rights and remedies be entitled to terminate this agreement forth with <u>as per clause no. 9</u>

(b) In the case of disputes regarding quantity of water billed or rate at which the bill is prepared the company / firm / individual water user shall first pay the complete amount of the bill and then claim for the refund of any excess bill charges giving the reason / justification or wrong billing. However the decision of Superintending Engineer Irrigation in this regards shall be final and binding on the company.

- 13) Government hereby reserves to itself the right to revise from time to time the water rates and local funds cess and company shall pay the revised water rates and local fund cess as may be fixed by the Government from time to time.
- 14) The USER shall not discharge the effluent in any Nalla or River and shall not pollute directly or indirectly any portion of the said Nala / River even by septic tank effluents. If any water sources are polluted by any industry as identified by Irrigation / Pollution Control Board / MIDC / MJP the company shall be charged 2 times the scheduled rate with a penalty of rupees 5,000/- per such incident per day till its rectified. The opinion of Maharashtra Pollution / Control Board in respect of degree of pollution will be binding on the company.

The company shall recycle the effluent water for the use such as gardening, recreation, cooling, cleaning, washing and manufacturing process etc. So that at least 50% reductions in consumption of fresh water is achieved.

15) The effluent disposal arrangement made by the company / Industry shall be got approved by the company from the Maharashtra Pollution Control Board / Environment Department of the Government prior to commencing the operation pumping / drawing water from the source.

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- 16) The company shall at all times allow an officer of Irrigation Department of the Government authorized in the behalf to inspect the said works as well as the account and copies taken of entries from the records maintained by the company.
- 17) Any notice or other documents to be given to or served upon the company may be given or served on behalf of the Government by the Executive Engineer, Kolhapur and any such notice or document shall be deemed to have been duly given to or served upon the company or sent by registered post to the registered company if it is delivered at the registered office of the company or sent by registered post to the registered address for the time being of the company.
  - The said sum of Rs. 15, 50,892/- (Rupees Fifteen lakh fifty thousand eight hundred ninety two only) deposit in the form of cash by the company with the Executive Engineer, Kolhapur Division to the Government as aforesaid shall be held by the Government as security for the due observance and performance by the company of the covenants, terms and conditions herein contained. In case of default in the part of the company to perform and observe any of the said covenants terms and conditions it shall be lawful for the Government in its absolute direction to forfeit the whole of the security deposit or any part thereof without prejudice nevertheless to any rights and remedies which the

Government may have against the company under these presents for such breach and the company under these presents for such breach & the company as shall forthwith pay up the amount so forfeited and shall always maintain the original amount of deposit throughout the period of

this agreement. On the expiry of the terms of this agreement. The said security deposit of Rs. 15,50,892/- (Rupees Fifteen lakh fifty thousand eight hundred ninety two only) or such part thereof shall not have been appropriated as aforesaid shall be refunded to the company.

19) All amounts due to the Government by the company under this agreement shall be deemed to be arrears of land revenue and may without prejudice to any other rights and remedies of the Government be recovered from the company as arrears of land revenue.

- 20) On the expiry of the terms of this agreement, Government may renew this agreement within 90 days for such further period and on such terms and condition as Government may at its absolute discretion deem fit.
- 21) The costs incurred in the execution of the incidental charges for this agreement including stamp duty shall be borne and paid by the company.
- 22) Permission for extra water over and above the sanctioned quota will be granted only when the written permission for expansion etc. is produced by the company from the industrial department.
- 23) The agreement supersedes all the previous agreements entered into by the USER with the Government in connection with supply of water from Tamraparni River.

The company should submit their water indent for every rotation to Executive Engineer, Kolhapur irrigation Division (South), Kolhapur on or before starting the rotation where the source is located on canal. The company should also furnish exact quantity of water actually drawn in each rotation after completion of the rotation.



24)

The company will have to make an arrangement at its own cost for adequate storage (balancing Tank) of not less than two months requirement of water in case of perennial canal, five months requirement in case of 8 monthly canal system, four months requirement in case of water source from seasonal river/nalla and one month water requirement in case of perennial water source of viver / nalla so as to take care of the closure period. But if unexpectedly the

closure period is increased by more than the specified period stipulated herein the company will have to make an alternative arrangement for its water requirement at its own cost.

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IF THE COMPANY COMMITS A BREACH OF ANY OF THE TERMS AND CONDITIONS THEREOF GOVERNMENT SHALL BE ENTITLED TO CANCEL THIS PERMISSION ANDDISCONTINUE THE SUPPLY OF WATER WITHOUT PAYMENT ANY COMPENSATION WHATSOEVER OF THE COMPANY.

27) The Govt. hereby reserves to itself its rights to change/ amend/ modify/ cancel/ revise any of the terms and conditions, rules and regulations of water management and Maharashtra Irrigation Act and rules laid under them which shall be applicable for this agreement.

The user shall not discharge the effluent of quality below the standards specified by the Maharashtra state Pollution Control board such certificate of quality standard from Maharashtra State Pollution Control Board is required to be produced by the user and submit to water resources department every three months. In absence of such certificate, consumption of water quality will be charged at penalty rate vide G. R. No. Marathi  $4149 \cdot 2033/3 \cdot 3 \cdot 5 \cdot 5 \in 2/2003/21$  Or. (2123, 0) -121053  $\cdot 3 \cdot 5$ 

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IN WITNESS WHERE OF THE Common Seal of the Olam Agro India limited as hereunto affixed and the Executive Engineer Kolhapur Division has for and on behalf of Governor of Maharashtra hereto set his hand and affixed the seal of his office the day and year first herein above written. THE COMMON SEAL OF

Was pursuant to a resolution Of the Board of Directors of The company dated the \_\_\_\_\_ Hereto affixed in the presence of \_\_\_

For OLAM AGRO INDIA PVT. LTD.

BHARAT KUNDAL VICE PRESIDENT

Hemarus Ind. Ltd

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Two directors of the company who in token thereof have here to set their respective hands in the presence of:-

1) William. J.C.

1. B.D. Patole

SIGNED SEALED AND DELIVERED by Executive Engineer Kolhapur Division for and on behalf of the Governor of Maharashtra in the presence of

Executive Engineer, Kolhapur Irrigation Division (South), Colhaput