

P-373-BSSKL-EIA-DISTILLERY-32022

**SUMMARY ENVIRONMENTAL IMPACT ASSESSMENT
(EIA) REPORT**

(IN ENGLISH AND MARATHI)

FOR

**ESTABLISHMENT 200 KLPD B / C HEAVY MOLASSES / SUGARCANE
JUICE BASED DISTILLERY, 3 MW ELECTRICITY GENERATION AND
EXPANSION OF SUGAR FACTORY FROM 5,000 TO 8,000 TCD**

BY



BHIMA SAHAKARI SAKHAR KARKHANA LTD.

AT/POST: TAKALI- SIKANDAR, TAL.: MOHOL,
DIST.: SOLAPUR, MAHARASHTRA STATE

PREPARED BY



EQUINOX ENVIRONMENTS (I) PVT. LTD.,

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APRIL - 2024



Bhima Sahakari Sakhar Karkhana Ltd.

Takali Sikandar
Tal. : Mohol, Dist. Solapur
M. : 9011082001

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Ref. / No.

Date :

ADM/CC/21/2024-25

17.04.2024

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

Sub.: Application for grant of Environmental Clearance (EC) in respect of Establishment 200 KLPD B / C Heavy Molasses / Sugarcane Juice based Distillery, 3 MW electricity generation and Expansion of Sugar Factory from 5,000 TCD to 8,000 TCD by – **Bhima Sahakari Sakhar Karkhana Ltd. (BSSKL)**, A/P: Takali- Sikandar, Tal.: Mohol, Dist.: Solapur, Maharashtra State.

Ref.: 'Terms of Reference' (ToR) granted vide letter no. IA-J-11011/191/2023-IA-II(1) dated 09.05.2023. Copy is enclosed at **Enclosure – I**.

Dear Sir,

We – "**Bhima Sahakari Sakhar Karkhana Ltd. (BSSKL)**" have planned to go for an Establishment 200 KLPD B / C Heavy Molasses / Sugarcane Juice based Distillery, 3 MW electricity generation and Expansion of Sugar Factory from 5,000 TCD to 8,000 TCD A/P: Takali- Sikandar, Tal.: Mohol, Dist.: Solapur, 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 29.04.2023. 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.



Bhima Sahakari Sakhar Karkhana Ltd.

Takali Sikandar
Tal. : Mohol, Dist. Solapur
M. : 9011082001

e-mail : bhima_takali@yahoo.com, bhimasugar@gmail.com



Ref. / No.

Date :

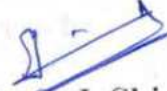
Along with the Public Hearing application, a draft EIA Report as per the generic structure stipulated in MoEF Notification No. S.O.1533 (E) dated 14.09.2006 and amendments thereto; and Executive Summary Report in two languages (English and Marathi) are enclosed separately. The same provide details of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

'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.

Please do the needful and oblige.

Thanking you.

Yours faithfully,


Mr. S. J. Shinde
(Managing Director)

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Executive Summary in English

**Summary of Draft EIA Report For
Establishment 200 KLPD B / C Heavy Molasses / Sugarcane Juice based
Distillery, 3 MW Electricity Generation and Expansion of Sugar Factory
from 5,000 to 8,000 TCD**

by

Bhima Sahakari Sakhar Karkhana Ltd. (BSSKL);

Located at At/Post: Takali- Sikandar, Tal.: Mohol, Dist.: Solapur, Maharashtra State.

1) THE PROJECT

Bhima Sahakari Sakhar Karkhana Ltd. (BSSKL) located at Gat No. 203/2, 204, 205, 206/1, 207/1, 209, 211/1, 211/2, 212, 213, 214, 215, 216, 465, At/Post: Takali- Sikandar, Tal.: Mohol, Dist.: Solapur, Maharashtra State. Industrial site is towards North-West of Solapur, at a distance of about 40 Km from site. Existing Sugarcane crushing capacity of the sugar factory is about 5,000 TCD. First crushing season for sugar factory was done in year 1980-1981. The proposed Establishment of 200 KLPD B / C Heavy Molasses / Sugarcane Juice based Distillery, 3 MW electricity generation and Expansion of Sugar Factory from 5,000 TCD to 8,000 TCD comes under A Category as per the EIA Notification No. S. O. 1533 (E) dated 14.09.2006 and its amendments thereto. Hence the application is submitted to MoEFCC for grant of ToRs. Details of capital investment are given in table 1.

Table 1 Project Investment Details

No.	Unit	Cost (Rs. In Crore)		
		Existing	Proposed	Total
1	Sugar Factory	147	90	237
2	Co-generation Plant	118	-	118
3	Distillery	-	200	200
	Total	265	290	555

2) THE PLACE

Proposed establishment of distillery & expansion of sugar factory shall be carried out in existing premises of Sugar Factory by BSSKL. Total land utilized for industrial activities by BSSKL is 50.64 Ha. Out of this, built up area of existing sugar factory & Cogeneration Plant is 10.79 Ha. After establishment of Distillery total built up area will be 18.98 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 Takali-Sikandar Gram panchayat. Same is presented at certificates and other documents of EIA report.

Table 2 Area Break up

No.	List of Area	Area (Sq. M)		
		Existing	Proposed	Total
1	Total Plot Area	5,06,478.80	--	5,06,478.80
2	Total Built-up Area			
	Sugar Factory & Co-gen Plant	95,476	11000	1,06,476
	Distillery	--	83,367	83,367
	Total Built-up Area	95,476	94,367	1,89,843
3	Area under Road	38,549	1200	39,749
4	Parking Area	50,728	40,973.00	91,701
		10%	8%	18%
5	Green Belt Area	88,906	80,000	1,68,906
		17%	16%	33%
6	Total Open Area	2,32,819.80	--	16,280

3) THE PROMOTERS

BSSKL 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	Shri. Vishwaraj D. Mahadik	Chairman
2	Shri. S. J. Shinde	Managing 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-

Table 4 List of Products & By-products for Integrated Complex

Industrial Unit	Product & By-product	Quantity (MT/ M)		
		Existing	Proposed	Total
Sugar Factory (5000 TCD to 8000 TCD)	Sugar (11%)*	16,500	9,900	26,400
	By-product			
	Molasses (4%)*	6,000	3,600	9,600
	Bagasse (30%)*	45,000	27,000	72,000
	Pressmud (4%)*	6000	3,600	9,600
Co-gen Plant (25 MW)	Electricity (MW)	25	--	25
Distillery (200 KLDP)	RS / ENA / Ethanol (KLPM)	--	6,000	6,000
	By-product			
	CO ₂	--	4,500	4,500
	Fusel Oil	--	12	12
	Electricity Generation (MW)	--	3	3

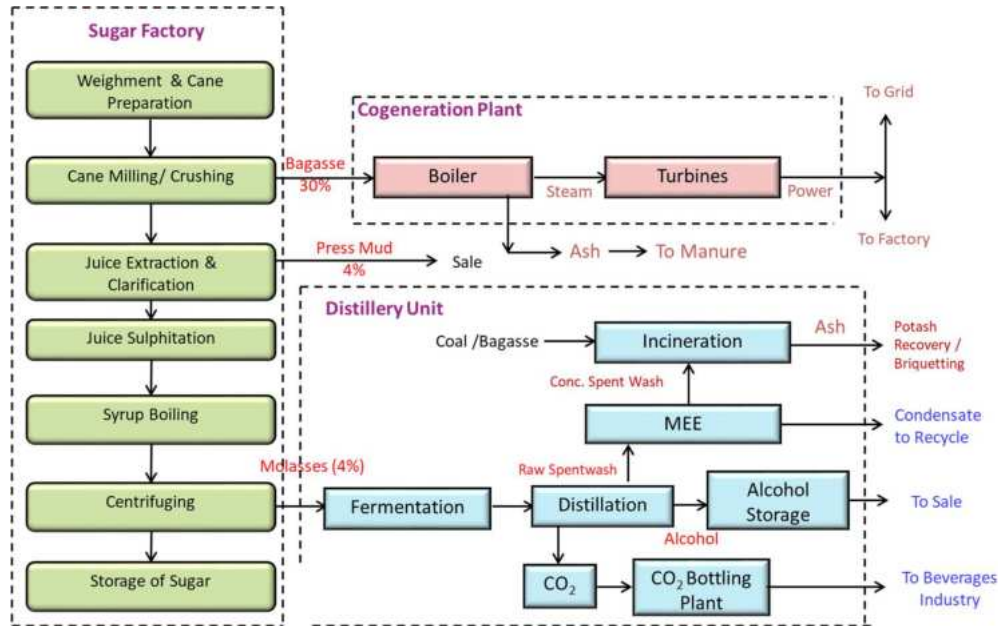
By-products generated during production of sugar in the form of molasses would be used as raw materials for distillery. Bagasse generated would be used for fuel in boiler. Pressmud shall be stored temporary in yard in own premises & same will be sold to farmers as manure. By-products generated from distillery will be in the form of fusel oil & CO₂ Gas. Fusel oil will be used in manufacturing of perfumes & CO₂ 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 BSSKL decided to go for expansion.

6) MANUFACTURING PROCESS

Figure 1 Integrated Manufacturing Process Operations



7) ENVIRONMENTAL ASPECTS

BSSKL 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 expansion as well as proposed activities are as follows-

Table 5 Water Consumption in Proposed 200 KLPD Distillery

No	Description	Molasses Based (M ³ /D)		Sugarcane Based
		Crushing Season	Non rusing	
1	Domestic	#16	#16	#16
2	Industrial			
	Process (Ferment. & Dil.)	*1590	*1590	-
	Cooling Make up	*600	#600	Ø600
	Boiler Make up	84(*71+#13)	#84	Ø84
	DM Plant	*17	#17	Ø17
	Lab & Washing	10(*4+#6)	10(*4+#6)	Ø10
	Ash Quenching	*2	*2	Ø2
	Industrial. Total	2303 (#19+*1596 + *688) 98% Recycle	2303 (#707 + *1596) 98% Recycle	Ø713 100% Recycle
	Grand Total (1+2)	2319 (#35 + *1596 + *688)	2319 (#723 + *1596)	729 (#16 + Ø713)
	Fresh water Consumption Norm: 10 KL/KL of Alcohol	0.09	3.5	0

Note: # - Fresh water taken, *-Excess Cane Condensate, ♣ - Distillery CPU Treated Effluent Recycle during Molasses based operations, Ø - Distillery CPU Treated Effluent Recycle during Sugarcane based operations

Table 6 Water Consumption Sugar Factory

No	Description	Existing (M ³ /D)	After Expansion (M ³ /D)
1	Domestic	#45	#74
2	Industrial		
	Process	*1475	*2360
	Cooling Makeup	*650	824 (*264+ ^o 560)
	Boiler Makeup	492(*198+#294)	*492
	DM Backwash	*90	*105
	Lab & Washing	*5	*8
	Ash Quenching	*2	*3
	Industrial Total	2714 (*2420 + #294)	3792 (*3232 + \$560)
3	Green Belt	^o 80	152 (^s 72 +*80)
	Grand Total	2839 (*2420+#339+^o80)	4018 (*3312+^o560+#74+ ^s72)
	Fresh Water Consumption Norm: 100 Lit./T of cane crushed	59	0

Note: #-Fresh Water, *-Excess Cane Condensate, Ø - ETP treated Effluent, \$ - STP treated Effluent

Total water required for proposed distillery under molasses operations during Non-crushing season shall be 2319 M³/Day. Out of this, 723 CMD will be Fresh water taken from Bhima River and 1596 CMD will be recycled effluent from proposed Distillery. Total 98% recycle water will be used in distillery.

Further, water requirement under Sugarcane Juice Operation shall be to the tune of 729 M³/Day. Out of this, 713 CMD will be Treated effluent from Distillery CPU in Sugarcane Operations, 16 CMD will be Fresh water taken from Bhima River.

For existing Sugar Factory total 2839 CMD water is consumed. After Expansion of Sugar factory 4018 CMD water will be consumed. Out of this 74 CMD is fresh water taken from Bhima River, 3312 CMD is cane condensate, 560 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 7 Effluent Generation in Proposed 200 KLPD Distillery

No	Description	Effluent Generation (M ³ /D)		Disposal
		Molasses	Cane Syrup	
1	Domestic	13	13	Proposed STP
2	Process	Raw Sp. Wash- 1600 Conc. Spentwash- 320	Raw Sp. Wash- 800 Conc. Spentwash- 160	Raw sp.wash from Molasses operations shall be conc. in MEE & Conc. Sp.wash shall be incinerate in incineration boiler. Same practice followed for Spent wash from Sugar cane juice operations.
		Sp. Lees-278 Condensate- 1280	Sp. Lees- 178 Condensate- 640	
3	Cooling B/d	60	60	
4	Boiler B/d	17	17	
5	DM Bk./wash	17	17	
6	Lab & wash	10	10	
	Total	Other Effluent- 1662	Other Effluent- 920	

No	Description	Effluent Generation (M ³ /D)		Disposal
		Other Effluents – 1662 Spentwash- 320	Other Effluents – 920 Spentwash- 160	
	Grand Total	1.6 KL/KL	0.8 KL/KL	
	Norm: Spent wash Generation 8 KL/KL of Alcohol			

Table 8 Effluent Generation in Sugar Factory & Co-gen Plant

No.	Description	Existing	After Expansion	Disposal
1	Domestic	36	59	Proposed STP
2	Industrial			
	Process	177	283	Treated in existing ETP having primary, secondary & tertiary treatment.
	Cooling Blowdown	65	82	
	Boiler Blowdown	98	115	
	DM Backwash	90	105	
	Lab & Washing	5	8	
	Ash Quenching	--	--	
	Industrial Total	435	593	
	Effluent Genera. (Norm : 200 L/Tonne of cane crushed)	87	74	

b. Effluent Treatment

i) Domestic Effluent

Domestic effluent from existing activities of BSSKL sugar factory and co-gen plant is 36 M³/Day. After implementation of expansion project, total domestic effluent from BSSKL campus shall be 72 M³/Day (Domestic effluent from sugar factory & co-gen plant – 59 M³/Day and to that of distillery 13 M³/Day). Same shall be treated in proposed Sewage Treatment Plant (STP) of 75 CMD capacity and the treated effluent shall be reused for green belt.

ii) Industrial Effluent

Total trade effluent generated after expansion of sugar and co-generation activities will be 593 M³/D. Same will be treated in existing Effluent Treatment Plant (ETP) having capacity 700 M³/D provided in own factory premises comprising of primary, secondary & tertiary unit operations. Treated effluent along with excess condensate is supplied for watering of plantation under the green belt in own factory premises and cooling tower make-up. Further, industry is having CPU of 1500 M³/D capacity.

Raw spentwash generated from molasses distillery unit @ 1600 CMD will be concentrated in Multi Effect Evaporator (MEE). Conc. Spentwash @ 320 CMD (1.6 KL/KL) will be incinerated in Incineration Boiler. Other effluents viz. spent lees @278 M³/D, Condensate-1280 M³/D, and other effluent @1662 M³/D, will be treated in proposed CPU. Treated water from CPU will be then reused for industrial operations, thereby achieving Zero Liquid Discharge (ZLD) for process effluent.

Raw spentwash generated from cane juice distillery unit @ 800 CMD will be concentrated in Multi Effect Evaporator (MEE). Conc. Spentwash @ 160 CMD (0.8 KL/KL) will be incinerated in incineration boiler. Other effluents viz. spent lees @178M³/D, Condensate- 640 M³/D, cooling blow down @60M³/D and lab-wash 10M³/D will be treated in distillery CPU

having capacity 2000 M³/D. Treated water from CPU will be then reused for industrial operations.

Figure 2 Flow Chart of Proposed Distillery CPU

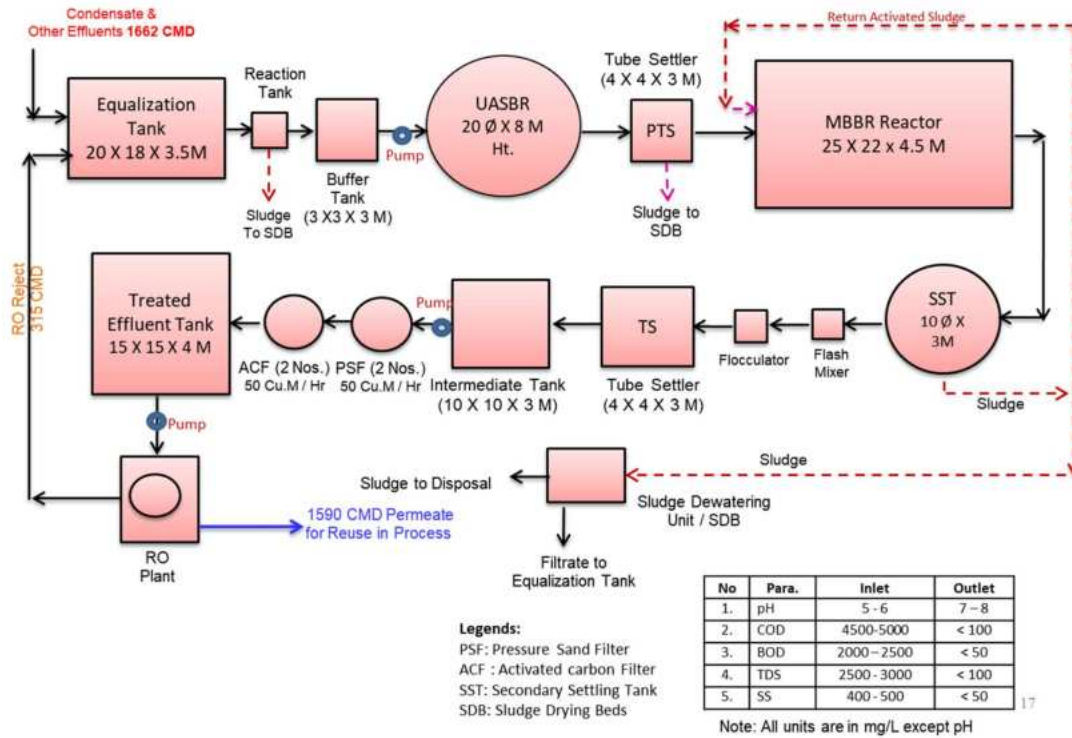


Figure 3 Flow Chart of Sugar Factory ETP

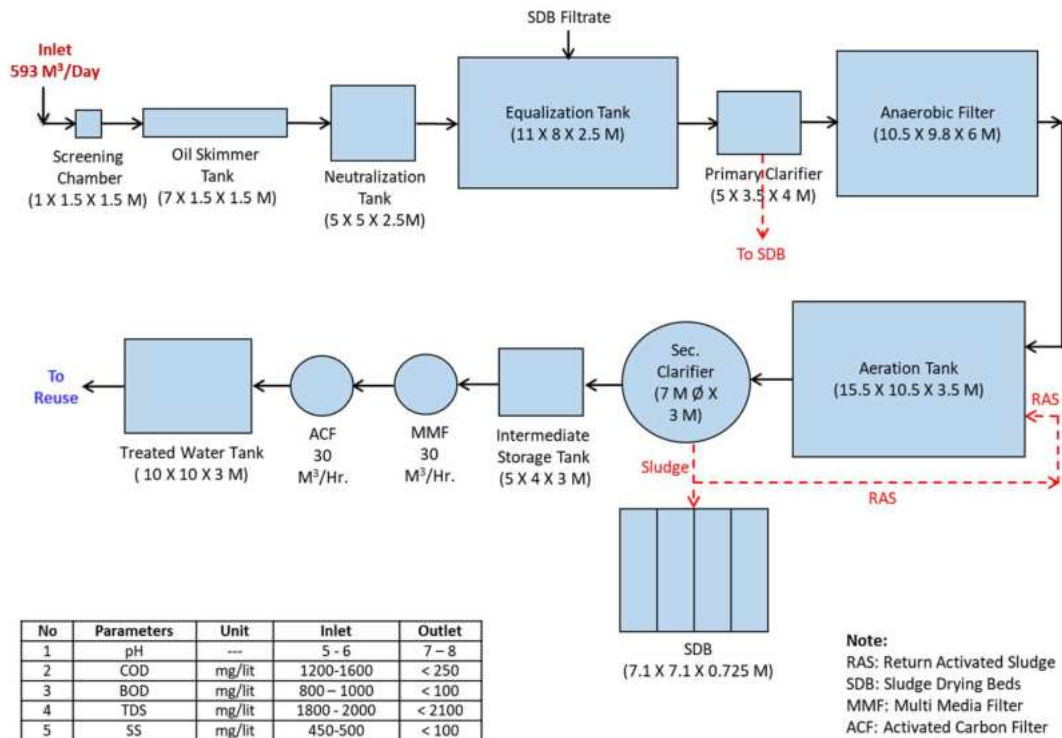
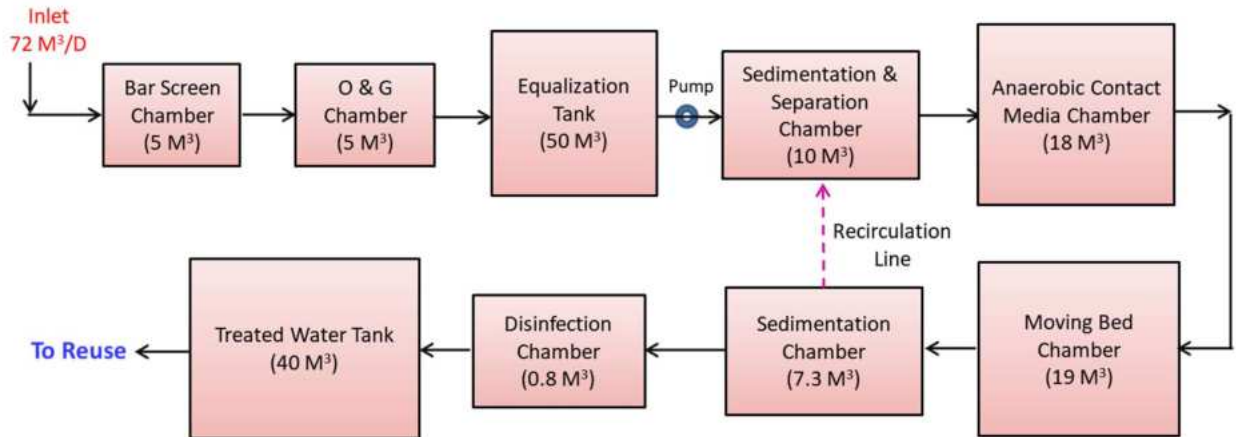
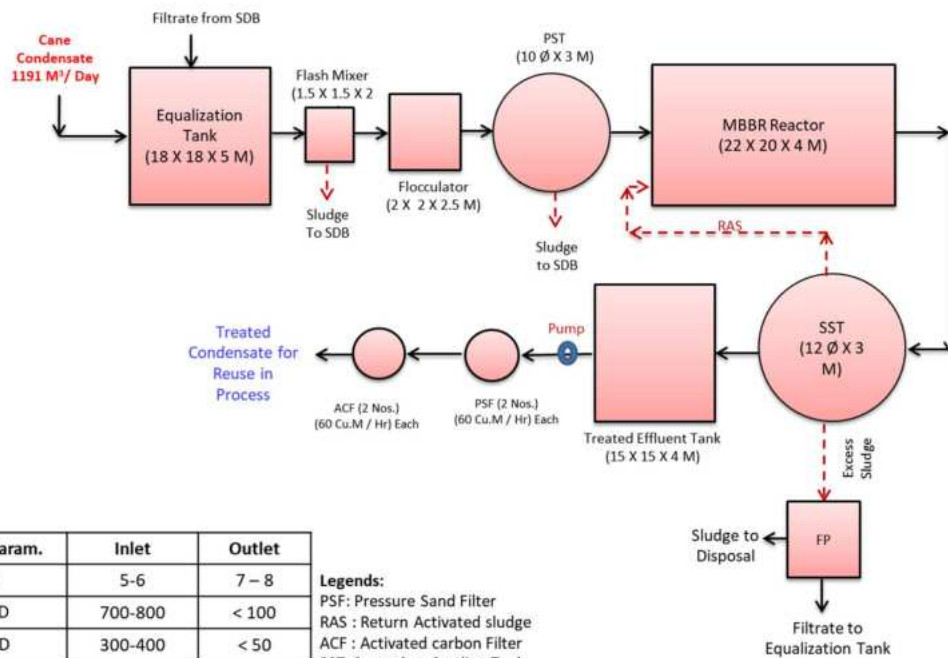


Figure 4 Flow Chart of Proposed STP



No.	Parameter	Unit	Inlet	Outlet
1	pH	---	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	O & G	mg/lit	20 - 30	< 10

Figure 5 Flow Chart of Proposed Sugar factory CPU



No	Param.	Inlet	Outlet
1	pH	5-6	7 – 8
2	COD	700-800	< 100
3	BOD	300-400	< 50
4	TSS	200-300	< 500

Legends:
 PSF: Pressure Sand Filter
 RAS : Return Activated sludge
 ACF : Activated carbon Filter
 SST: Secondary Settling Tank
 FP: Filter Press

Note: All units are in mg/L except pH

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**.

Table 9 Details of Boilers Sets in BSSKL

No.	Description	Existing				Proposed
		Boiler 1	Boiler 2 (2 Nos.)	Boiler 3	DG Set	Boiler 4
1	Capacity	35 TPH	20 TPH	130 TPH	1000 KVA	35 TPH
2	Fuel type	Bagasse	Bagasse	Bagasse	HSD	Spwash + Bagasse / Coal
3	Fuel Qty. (MT/D)	420	480	1560	100 Lit/D	432+463/185
4	MOC	RCC	RCC	RCC	MS	RCC
5	Shape	Round	Round	Round	Round	Round
6	Height, AGL	60		85	6	85 M
7	Diameter (internal)	2.5		3.5	--	3 M
8	APC equipment	Wet Scrubber		ESP	-	ESP

Steam required for proposed distillery unit will be taken from proposed 100 TPH boiler of sugar & cogeneration plant.

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.

Table 10 Details of Hazardous Waste

No	Description	Quantity (MT/M)		Mode of Disposal
		Existing	After expansion	
1	Cat. No. 5.1 Spent Oil	0.5	0.8	Forwarded to authorized re-processor

E. Solid Wastes

Table 11 Solid Waste Generation & Disposal

No.	Unit	Type	Quantity (MT/M)		Disposal
			Existing	After expansion	
1	Sugar Factory & Co-gen Plant	Boiler Ash (Bagasse)	2214	2214	Used as manure / Brick making
		ETP sludge	12	18	
2	Distillery	CPU Sludge	--	51	Used as manure
		Yeast Sludge	--	1260	
		Boiler Ash	--	2760	Brick making

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)

BSSKL 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.

Table 12 Environmental Management Cell of BSSKL

No	Name of Member	Designation	Number of Working Person
1	S. J. Shinde	Managing Director	1
2	D.S. Ladkhat	Production Manager	1
3	P.S. Asabe	Work Manager	1
4	N.M. Ingale	Chief Accountant	1
5	M.A. Patil	ETP Operators	1
6	D.B. Deshmukh	Lab Incharge	1
7	P.S Khanjode	Env Chemist	1
8	S.A. Chavan	ETP Operator	1
9	S.B. Deshmukh	ETP Operator	1
10	S.J. Mulani	ETP Operator	1
11	U.K. Sonavane	ETP Operator	1
12	B.D. Jadhav	ETP Operator	1
13	V.C. Shine	ETP Operator	1
14	S.B. Waghmare	ETP Operator	1
15	S.S. Honkade	ETP Operator	1
		Total	15

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

Table 13 Capital as well as O & M Cost (Existing & Proposed)

No.	Description	Cost Component (In Lakhs)	
		Capital	Annual O & M
A	Existing Project		
1	Air Pollution Control (APC) equipment – 60 M and 85 M stack , Wet Scrubber , ESP and OCMS	96.0	10.0
2	Water Pollution Control- ETP and OCMS	85.0	12.0
3	Noise Pollution Control	5.0	0.5
4	Environmental Monitoring & Management	25.0	5.0
5	Occupational Health & Safety	25.0	10.0
6	Green Belt Development	10.0	5.0
	(1% of Existing Investment of Rs. 265 Cr.)Total	246.0	37.5
B	Expansion & Proposed Project		
1	APC - Stack of 85 M along with ESP, OCMS, CO2 bottling plant	500.0	50.0
2	Installation of MEE, CPU & STP	350.0	40.0
3	Noise Pollution Control	50.0	20.0
4	Solid & Hazardous Waste Management	50.0	20.0
5	Occupational Health & Safety	100.0	30.0
6	Environmental Monitoring & Management	75.0	30.0
7	Green Belt Augmentation & Rain water harvesting	175.0	50.0
	(4.5% of Expansion Investment of Rs. 290 Cr.) Total	1300.0	240.0

I. Rainwater Harvesting Aspect

- Average annual rainfall in the area = 835 mm

Table 14 Area Taken for RWH

No.	Description	Area (Sq.M)	Runoff Factors Considered	Average Annual Rain Fall (M)	RWH Quantity (M ³)
1	Roof Top Harvesting				
i	Rooftop Area	94,921.50	0.8	0.83	63,027.87
	Total Rooftop Harvesting				63,027.87
2	Surface Water Harvesting				
i	Green Belt Area	1,68,906	0.3	0.83	42,057.59
ii	Area under Roads	39,749	0.5	0.83	16,495.83
iii	Open Space	16,280	0.3	0.83	4,053.72
	Total Surface Water Harvesting				62,607.14

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

Rooftop Harvesting	+	Surface Harvesting	=	Total RWH
63,027.87	+	62,607.14	=	1,25,635.01 M3
			=	125 ML

J. Green Belt

Table 15 Area Details

No.	List of Area	Area (Sq. M)		
		Existing	Proposed	Total
1	Total Plot Area	5,06,478.80	--	5,06,478.80
2	Total Built-up Area			
	Sugar Factory & Co-gen Plant	95,476	11000	1,06,476
	Distillery	--	83,367	83,367
	Total Built-up Area	95,476	94,367	1,89,843
3	Area under Road	38,549	1200	39,749
4	Parking Area	50,728	40,973.00	91,701
		10%	8%	18%
5	Green Belt Area	88,906	80,000	1,68,906
		18%	16%	33%
6	Total Open Area	2,32,819.80	--	16,280

Criteria for Green Belt Development Plan

Emission of SPM, SO₂ 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 December 2022 – January-February- 2023 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

Table 16 Land Use/ Land Cover

No.	Land Use Land Cover	Area(Ha)	Percentage (%)
1	Built Up Area	846	2.69
2	Crop Land	13,910	44.28
3	Fallow Land	6,683	21.27
4	Water Bodies	79	0.25
5	River	402	1.28
6	Barren Land	9,495	30.22
	Total	31,415	100

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 PM₁₀, PM_{2.5}, SO₂, NO_x and CO. various monitoring stations selected are shown in table 16.

Table 17 Ambient Air Quality Monitoring (AAQM) Locations

Location	Location Name	Type (Industrial-Rural)	Type of Zone (Core-Buffer)	Distance from site (Km)	Direction w.r.t site	Latitude	Longitude
1	Industrial Site	Industrial	Core	--	--	17°41'55.59"N	75°32'13.23"E
2	Warkute	Rural	Core	3.45	E	17°41'33.42"N	75°34'9.66"E
3	Shejabbhulgaon	Rural	Buffer	7.23	E	17°41'41.67"N	75°36'19.67"E
4	Fulchincholi	Rural	Core	3.93	W	17°41'34.29"N	75°30'2.33"E
5	Tarapur	Rural	Buffer	7.67	W	17°42'10.50"N	75°27'54.67"E
6	Puluj	Rural	Core	3.00	S	17°40'20.82"N	75°31'49.72"E
7	Patkul	Rural	Buffer	5.45	N	17°44'50.64"N	75°31'42.83"E
8	Takali Sikandar	Rural	Core	0.94	N	17°42'24.04"N	75°32'5.43"E

Table 18 Summary of the AAQ Monitoring Results for Season [December 2022-January - February 2023]

		Location							
		Industrial Site	Warkute	Shejabbhulgaon	Fulchincholi	Tarapur	Puluj	Patkul	Takali Sikandar
PM ₁₀ µg/M ³	Max	65.90	55.10	55.90	55.70	55.90	55.80	55.90	55.40
	Min	45.30	46.80	46.40	43.40	45.80	47.40	46.80	47.20
	Avg	57.43	52.51	51.93	52.27	50.73	51.14	51.42	50.88
	98% Percentile	64.15	55.01	55.76	55.65	55.85	55.75	55.62	55.35
PM _{2.5} µg/M ³	Max	20.50	16.90	17.40	17.60	18.10	16.80	17.70	17.30
	Min	14.50	11.20	10.40	10.80	11.40	11.40	11.30	10.20
	Avg	18.03	13.40	13.33	13.98	14.02	14.05	14.91	13.63
	98% Percentile	20.50	16.85	16.80	17.51	18.01	16.75	17.56	16.93
SO ₂ µg/M ³	Max	24.00	13.80	13.70	17.60	13.90	13.60	18.40	15.60
	Min	18.90	10.00	9.10	10.20	8.30	8.40	8.90	9.40
	Avg	21.77	11.77	11.38	12.22	10.50	11.05	12.02	12.28
	98% Percentile	23.95	13.66	13.65	16.45	13.90	13.28	16.88	15.37
NO _x µg/M ³	Max	28.70	28.60	18.90	20.90	19.90	22.80	20.70	19.60
	Min	24.60	14.70	15.70	14.40	15.40	15.80	16.40	15.40
	Avg	27.12	17.90	17.36	17.73	18.03	18.22	18.28	17.85
	98% Percentile	28.56	24.28	18.85	20.81	19.90	21.83	20.19	19.51
CO mg/M ³	Max	0.900	0.080	0.090	0.090	0.090	0.080	0.090	0.090
	Min	0.100	0.030	0.020	0.020	0.010	0.020	0.020	0.010
	Avg	0.525	0.051	0.053	0.050	0.050	0.055	0.054	0.053
	98% Percentile	0.900	0.075	0.090	0.085	0.085	0.080	0.085	0.090

Notes: PM₁₀, PM_{2.5}, SO₂ and NO_x are computed based on 24 hourly values, CO is computed on hourly values

Table 19 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	PM ₁₀ µg/M ³		PM _{2.5} µg/M ³		SO ₂ µg/M ³		NO _x µg/M ³		CO mg/M ³	
	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

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 20 Monitoring Locations for Surface Water

Sr. No	Location Name	Sample Code	Type	Distance from site (Km)	Direct ⁿ w.r.t site	Latitude	Longitude
1.	Patkul	SW-1	Canal	3.89	NNW	17°43'38.94"N	75°30'52.41"E
2.	Saundane	SW-2	Canal	3.39	NE	17°42'45.66"N	75°34'1.65"E
3.	Tarapur	SW-3	River	8.04	W	17°42'7.17"N	75°27'43.12"E
4.	Pohargaon	SW-4	River	9.29	SW	17°38'38.81"N	75°28'22.36"E
5.	Ambechinholi	SW-5	River	9.82	SSW	17°37'3.93"N	75°30'14.21"E

Table 21 Monitoring Locations for Ground Water

Sr. No.	Sample Code	Location Name	Type	Distance from site (Km)	Direction w.r.t site	Latitude	Longitude
1.	GW-1	Takali Sikandar	Dug Well	0.60	W	17°41'50.98"N	75°31'58.69"E
2.	GW-2	Puluj	Dug Well	0.85	S	17°41'31.35"N	75°32'6.39"E
3.	GW-3	Takali Sikandar	Dug Well	0.50	E	17°41'47.35"N	75°32'30.27"E
4.	GW-4	Warkute	Dug Well	2.05	E	17°41'54.58"N	75°33'26.36"E
5.	GW-5	Takali Sikandar	Dug Well	0.84	NE	17°42'9.40"N	75°32'42.94"E
6.	GW-6	Takali Sikandar	Dug Well	0.53	N	17°42'13.11"N	75°32'9.75"E
7.	GW-7	Takali Sikandar	Dug Well	1.35	NNW	17°42'30.33"N	75°31'45.62"E
8.	GW-8	Takali Sikandar	Dug Well	2.19	W	17°42'10.79"N	75°31'4.29"E

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-

Table 22 Noise Sampling Locations

Location	Location Name	Type	Direction w.r.t site
1.	Project Site	Industrial	-
2.	Takali	Rural	N
3.	Warkude	Rural	E
4.	Aundhi	Rural	SE
5.	Fulchincholi	Rural	W
6.	Soundane	Rural	NE
7.	Dongare Mala	Rural	NW
8.	Waghmode Wasti	Rural	NE

If required, additional locations shall be monitored as per project requirement

Table 23 Ambient Noise Levels

Sr. No.	Location	Average Noise Level in dB(A)					
		L ₁₀	L ₅₀	L ₉₀	L _{eq(day)}	L _{eq(night)}	L _{dn}
1	N1	53.1	55.2	58.4	59.3	52.2	60.6
2	N2	42.4	47.1	48.0	53.6	42.1	53.1
3	N3	42.3	46.3	48.3	52.3	41.8	52.1
4	N4	41.9	46.6	47.8	53.6	41.5	53.0
5	N5	42.7	47.4	48.5	54.3	42.1	53.6
6	N6	42.6	46.8	48.5	54.0	41.3	53.2
7	N7	42.4	46.9	48.4	53.6	41.9	53.0
8	N8	42.9	46.5	48.5	53.0	41.4	52.4

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 BSSKL 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 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 98th percentile concentrations of PM₁₀, PM_{2.5}, SO₂ and NO_x in Ambient Air, recorded during the field study conducted for the season December 2022-January - February 2023 are 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 4th chapter of EIA report.

Table 24 Baseline Concentrations (98 Percentile)

Parameter	PM ₁₀	PM _{2.5}	SO ₂	NO _x	CO
Conc. (µg/m ³)	64.5	28.8	14.5	24.2	0.40
NAAQS	100 µg/m ³	60 µg/m ³	80 µg/m ³	80 µg/m ³	4mg/m ³

ii. Air Polluting Sources

Major sources of air pollution are boiler as well as vehicles used for transportation. Under sugar factory expansion, no new boiler will be installed. The existing 35 TPH, 20TPH & 130 TPH boilers will be used. Wet scrubber is installed as APC with common stack height 60 M to 35 & 20 TPH boiler and ESP as APC with 85 M stack height is installed for 130 TPH boiler.

A new 35 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 @ 432MT/D, Coal @ 185 MT/D or Bagasse @ 463 MT/D. ESP will be used as APC equipment followed by stack height of 85 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 requirement of BSSKL 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 Bhima 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. Wet Scrubber & ESP are installed to existing boilers. Boiler ash from existing boiler is used as manure/ given to 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. BSSKL 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 BSSKL. 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.

Table 25 Plan for Monitoring of Environmental Attributes in and around BSSKL

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 ₁₀ , PM _{2.5} , SO ₂ , NO _x , CO	Monthly	MoEFCC & NABL Approved External Lab
		Study area - (Villages namely – Warkute, Shejbabhulgaon, Fulchincholi, Tarapur, Puluj, Patkul, Takali Sikandar)		Quarterly	
2	Work Zone Air Quality	4 Locations (Mill section, Sugar bagging section, Distillation Section)	PM ₁₀ , PM _{2.5} , SO ₂ , NO _x , CO	Monthly	
3	Stack Emissions	Boiler –3 Nos. (Existing boiler & Proposed Boiler), D.G Sets	SPM, SO ₂ , NO _x	Monthly	
4	Fugitive Emissions	Ethanol storage area & Distillation column	VOC	Monthly	
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	
	Work zone Noise	Premises – 5 Nos (Mill section, Boiler, DG set, Turbine section)		Monthly	
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- Takali Sikandar, Fulchincholi, Saundane, Penur, Tarapur, Paluj, Ankoli)	pH, Salinity, Organic Carbon, N, P, K	Quarterly	
9	Water Quality (Ground Water & Surface Water)	Locations in study area –Ground water (Villages: Takali Sikandar, Paluj Takali Sikandar, Warkute, Takali Sikandar, Takali Sikandar, Takali Sikandar, Takali Sikandar, Surface Water- (Villages: Patkul, Saundane, Tarapur, Pohargaon, Ambechincholi)	Parameters as per CPCB guideline for water quality monitoring – MINARS/27/2007-08	Quarterly	
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	By BSSKL
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	

No.	Description	Location	Parameters	Frequency	Conducted by
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

भ्रमा अहकाशी आखर कारखाना लिमिटेड.

(भ्र. अ. आ. का. लि)

सु/पो .टाकळी-अकंदर, ता. मोहोळ, जि. अोलापूर, महाराष्ट्र.

यांच्या

प्रस्तापित २०० किलो लि./दिन मोलॅसिअ(अी व अी)/ केन अरप वर आधावित
आअवनी प्रकल्प तनेच ३ मे.पॅट पीजनिर्मिती प्रकल्प आणु ५००० टन प्रतिदिन पाअून ८०००
टन प्रतिदिन पर्यंत आखर कारखान्याचे वरतारिकरण.

या प्रकल्पांआअतच्या इन्पहायरमेंट इंपॅक्ट आअेअमेंट आहवालाचा आरांश.

१) प्रकल्पा वरषयी थोडक्यात

भ्रमा अहकाशी आखर कारखाना लिमिटेड. (भ्र. अ. आ. का. लि) हा प्रकल्प गट. नं. २०३/२, २०४, २०५, २०६/१, २०७/१, २०९, २११/१, २११/२, २१२, २१३, २१४, २१५, २१६, ४६५, सु/पो. टाकळी-अकंदर, ता. मोहोळ, जि. अोलापूर, महाराष्ट्र येथे उआरणेत आलेला आहे. हा प्रकल्प अोलापूर पाअून अूमावे ४० कि.मी. अंतारावर उत्तर-पश्चिम दिशेला आहे आणु मुंअई पाअून ३२० कि.मी. अंतारावर दक्षिण-पूर्व दिशेला आहे. अंध्याच्या प्रकल्पामध्ये ५००० टन प्रतिदिन अमतेचा आखर कारखाना कार्यरत आहे. अदर आखर कारखान्याचा प्रथम गळीत हंगाम अज १९८०-८१ मध्ये घेणेत आला होता. भ्र. अ. आ. का. लि च्या वरवस्थापनाने २०० किलो लि. प्रतिदिन अमतेचा आअवनी प्रकल्प व आखर कारखान्याचे वरतारीकरण हे अंध्याच्या ५००० मे. टन/दिन आखर कारखाना व २५ मे. पॅट अहपीज प्रकल्पाच्या आआरात उआरणीचे नियोजन केले आहे.

अदर प्रकल्प हा दि. १४.०९.२००६ च्या इन्पहायरमेंट इंपॅक्ट आअेअमेंट (EIA) नोटीफिकेशन नं. अ. ओ. १५३३ (ई) च्या १४ अटॅअर २००६ च्या नोटीफिकेशन मधील तरतुदीनुआर भ्र. अ. आ. का. लि यांचा आखर कारखाना वरतारीकरण प्रकल्प अ्रेणी 'अ' मध्ये येतो व प्रस्तापित आअवनी प्रकल्प अ्रेणी 'अ' मध्ये येतो. परंतु अदर प्रकल्पापाअून ५ कि.मी. मधे आंतरराज्यीय अ्रमा येते व अदर प्रकल्प पर्यावरण, वने व हवामान अदल मंत्रालय, नयी दिल्ली यांच्या अ्रअ कमिटीने वरिआरात घेतला आहे. यानुआर, वने, पर्यावरण व हवामान अदल मंत्रालय, नयी दिल्ली यांच्याकडे फॉर्म १ अ्रप्लिकेशन जमा केला आहे व अटॅअर्ड ToR's मंजुर आले आहेत.

प्रस्तापित प्रकल्प आअविताना अुरअततेचे नियम व पर्यावरणाचे अंरक्षण करण्याच्या अर्थ गोअ्टीची अरअरदारी घेतली जाईल. प्रस्तापित प्रकल्प आअविताना अुरअततेचे नियम व पर्यावरणाचे अंरक्षण करण्याच्या अर्थ गोअ्टीची अरअरदारी घेतली जाईल.

अरालील तक्त्यामध्ये गुंतवणुकीचे तपशील दिलेले आहेत.

तक्ता १ गुंतवणुक

क्र	वरभाग	आंडवली गुंतवणुक (अू. कअेअमध्ये)		
		अंध्याची	प्रस्तापित	एकुण
१	आखर कारखाना	१४७	९०	२३७
२	अहपीज	११८	-	११८
३	आअवनी प्रकल्प	-	२००	२००
	एकुण	२६५	२९०	५५५

२) प्रकल्पाची जागा

भ्र. अ. आ. का. लि., सु/पो. सु/पो. टाकळी-अकंदर, ता. मोहोळ, जि. अोलापूर, महाराष्ट्र येथे ५०.६४ हेक्टर एवढी जागा अंपादित केली आहे. प्रस्तापित आअवनी प्रकल्पाचे व अंध्याच्या आखर कारखान्याचे आंधकाम क्षेत्र १८.९८ हे. एवढे आहे. ई. आय. ए रिपोर्टच्या अ्रनेअर अ ला लावले आहे. प्रकल्पाआठी लागणारे ना हरकत प्रमाणपत्र हे गामपंचायत दामाजीनगर यांच्याकडून घेतले आहे ते ई. आय. ए रिपोर्टमध्ये जोडले आहे. जागेअंदरर्भातील माहिती तक्ता २ मध्ये आहे. प्रकल्पाआठी लागणारे ना हरकत प्रमाणपत्र हे गामपंचायत टाकळी-अकंदर यांच्याकडून घेतले आहे ते ई. आय. ए रिपोर्टमध्ये जोडले आहे. जागेअंदरर्भातील माहिती तक्ता २ मध्ये आहे.

तक्ता २ विविध विभागांच्या क्षेत्राचा तपशील

क्र.	तपशील	क्षेत्र (वर्ग.मी)		
		अध्याचा	प्रस्तापित	एकूण
अ.	एकूण क्षेत्र	५,०६,४७८.८०	-	५,०६,४७८.८०
ख.	आंधकाम क्षेत्र			
१	आखर कारखाना	९५,४७६	११,०००	१,०६,४७६
२	आभयनी	-	८३,३६७	८३,३६७
	एकूण आंधकाम क्षेत्र	९५,४७६	९४,३६७	१,८९,८४३
क.	हरित पट्ट्यातर्गत एकूण क्षेत्र	८८,९०६ (१७%)	८०,००० (१६%)	१,६८,९०६ (३३%)
ड.	बोट अंतर्गत क्षेत्र	३८,५४९	१,२००	३९,७४९
इ.	वाहनतळ क्षेत्र	५०,७२८ (१०%)	४०,९७३.०० (८%)	९१,७०१ (१८%)
ई.	खुले क्षेत्र	२,३२,८१९.८०	-	१६,२८०

३) प्रकल्प प्रवर्तकांची ओळख

भि.अ.भा.का.लि.च्या प्रवर्तकांना आखर कारखाना व आभयनी प्रकल्प क्षेत्रामधील चांगला अनुभव आहे. प्रवर्तकांनी प्रस्तापित प्रस्तावीकरण प्रकल्पाचे नियोजन तसेच अंमलबजावणी योजनेचा सखोल अभ्यास केला आहे. प्रकल्प प्रवर्तकांचे नाव आणि हुद्दा खालीलप्रमाणे

तक्ता ३ प्रवर्तकांचे नाव व हुद्दा

क्र.	प्रवर्तकाचे नाव	हुद्दा
१.	श्री.विश्वजीत डी. महाडीक	अध्यक्ष
२.	श्री.एम्.जे. शिंदे	व्यवस्थापकीय संचालक

४) उत्पादनांविषयी माहिती

भि.अ.भा.का.लि.यांच्या अध्याच्या आणि प्रस्तापित प्रकल्पामध्ये तयार होणाऱ्या उत्पादने व त्यांचे परिमाण खालीलप्रमाणे आहे.

तक्ता ४ उत्पादने व उपउत्पादनांचा तपशील

प्रकल्प	उत्पादने व उपउत्पादनांची नावे	क्षमता (मे.टन/म.)		
		अध्याची	प्रस्तापित	एकूण
आभयनी (२०० के.एल.पी.डी.)	इथेनॉल / रेक्टिफाईड स्पिरिट (आर.एम्.) / एक्स्ट्रान्युट्रल अक्लोहोल (इ.एन.ए.) मोलॅसिस व ऊसाच्या बसापासून	--	६,०००	६,०००
	उपउत्पादने			
	कार्बन डायऑक्साईड	--	४५००	४५००
	फ्युजेल ऑईल	--	१२	१२
आखर कारखाना (५००० ते ८००० टन /दिन)	आखर (११.%)*	१६,५००	९,९००	२६,४००
	उपउत्पादने			
	अॅम्स (३०%)*	४५,०००	२७,०००	७२,०००
	मोलॅसिस (४%)*	६,०००	३,६००	९,६००
	प्रेसमॅड (४%)*	६,०००	३,६००	९,६००
सहजीव प्रकल्प (३ मे.पॅट)	वीज निर्मिती (मे.पॅट)	--	३	३

५) प्रकल्पाचे उद्दिष्ट

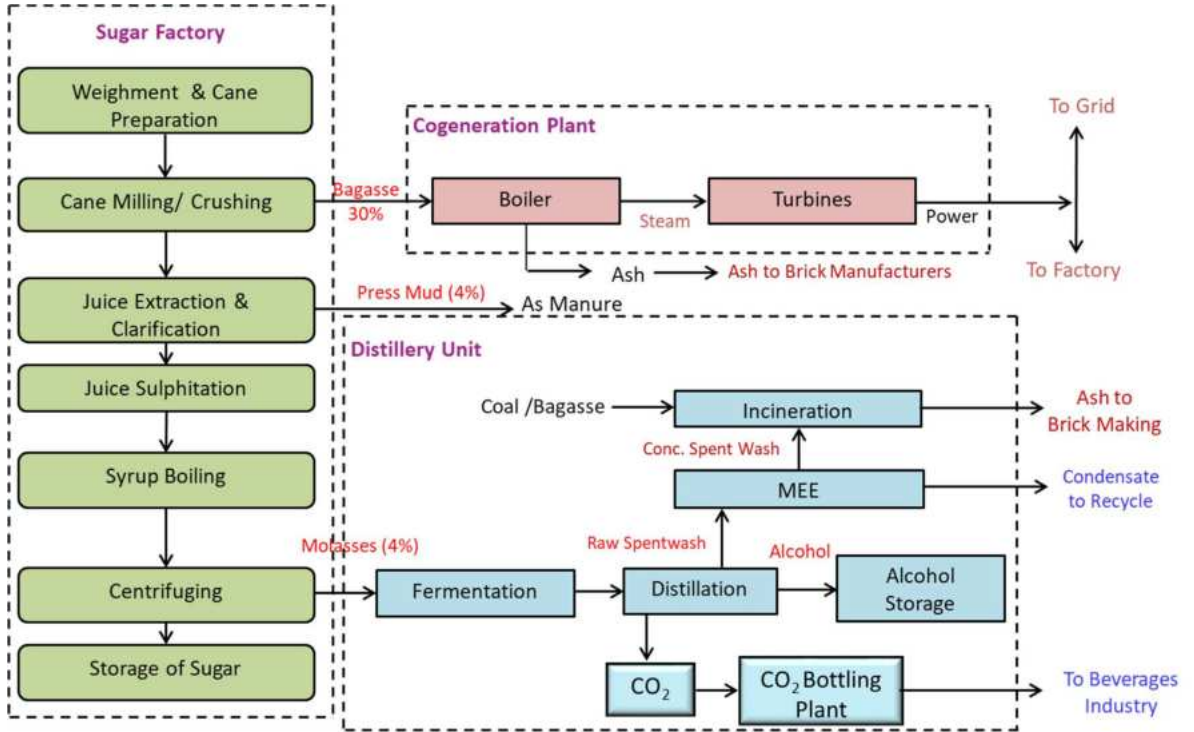
- आखर उद्योग हा देशातील दुसरा सर्वात मोठा शेती आधारित उद्योग आहे.

- बाबबर उद्योग हा रोजगार निर्मिती, उत्पन्न निर्मिती आणि कार्यक्षेत्रामध्ये पायाभूत घटक तयार करण्यासाठी महत्त्वपूर्ण आहे.
- अल्कोहोलयुक्त पेयांच्या उत्पादनांसाठी ऊर्जरक्ष, मोलॅक्झिझ, कडधान्ये व इतर कृषी उत्पादने आशरवनी उद्दयोग आपरवतो. जगभर आपरवल्या जाणा-या फरमेंटेड व डिस्टीलड पेयांचे उत्पादन बंधानिक उत्पादित व उत्तम आतापरवणीय परिस्थितीत आढलेल्या कच्या मालांवर आधरित आहे. इथिल अल्कोहोल हे फरमेंटींग मोलॅक्झिझ पाखून तयार केले जाते. मोलॅक्झिझ हे बाबबर कारखान्यामधुन मिळते.
- अल्कोहोल उद्योगाची देशाच्या अर्थव्यवस्थेमध्ये महत्वाची जागा आहे. अल्कोहोल हे खुप रक्षायनांमध्ये कच्चा माल म्हणुन आपरवले जाते. त्याअरोअरच या व्यवक्षायामुळे अरकारला मोठया प्रमाणात अक्षकारी कर अखुल होतो.
- पेट्रोलअरोअर अल्कोहोलचे अलॅडींग केलेअ पांवर अल्कोहोल याअररूपात अल्कोहोल मध्ये इंधन म्हणुन क्षमता आहे.
- तक्षेच जपान, यु.एअ.ए., कॅनडा, श्रीलंका, इ. देशांमध्ये पेट्रोलियम कुड पाखुनच्या नॅष्यापाखुनचे क्षिथेटिक अल्कोहोल अररवेजीअसाठी उपयुक्त नक्षलेने या देशांमध्ये फरमेंटेड अल्कोहोलला खुप मोठया प्रमाणामध्ये मागणी आहे.

उपरोक्त आशीं लक्ष्ात घेऊन अि.अ.अ.का.लि.लिच्या व्यवक्षायानाने आशरवनी प्रकल्पाचे प्रस्तापित करण्याचे ठरविले आहे.

६) उत्पादन प्रक्रिया

आकृती १ उत्पादन प्रक्रिया



७) पर्यावरणविषयक दृष्टिकोन

भि.झ.भा.का.लि.यांनी अत्यंत प्रभावी व परिणामकारक अशी पर्यावरण व्यवस्थापन योजना (EMP) बांधविणेचे नियोजन केले आहे. त्यातील विविध घटक खालील प्रमाणे

अ) पाण्याचा वापर, झाडपाण्याची निर्मिती व त्याची प्रक्रिया

• पाण्याचा वापर

भि.झ.भा.का.लि.यांच्या भ्रष्टाचारा व प्रस्तावित प्रकल्पामध्ये होणा-या पाण्याच्या वापरविषयी भविष्यतः तपशील खालीलप्रमाणे -

प्रस्तावित आवाणी प्रकल्पाला पिना ऊर्जा गळित हंगामात एकूण २३१९ घनमीटर/दिन इतके पाणी लागेल. यापैकी ७२३ घन मी. प्रतिदिन इतके पाणी भिमा नदितुन घेतले जाईल, १५९६ घन मी. प्रतिदिन हे आवाणी प्रकल्पाच्या बी.पी.यु. मध्ये प्रक्रिया केलेले पाणी. यानुसार एकूण ९८% पाणी हे पुर्नवापर केलेले पाणी असेल.

ऊर्जा गळित हंगामात एकूण २३१९ घनमीटर/दिन इतके पाणी लागेल. यापैकी ३५ घन मी. प्रतिदिन इतके पाणी भिमा नदितुन घेतले जाईल, १५९६ घन मी. प्रतिदिन हे आवाणी प्रकल्पाच्या बी.पी.यु. मध्ये प्रक्रिया केलेले पाणी, ६८८ घन मी. प्रतिदिन हे ऊर्जामधून निघणारे कंडॅन्सेट यानुसार एकूण ९८% पाणी हे पुर्नवापर केलेले पाणी असेल.

प्रस्तावित केन स्त्रोवण आधारीत आवाणी प्रकल्पाला एकूण ७२९ घनमीटर/दिन इतके पाणी लागेल. यापैकी १६ घन मी. प्रतिदिन इतके पाणी भिमा नदितुन घेतले जाईल, ७१३ घन मी. प्रतिदिन हे आवाणी प्रकल्पाच्या बी.पी.यु. मध्ये प्रक्रिया केलेले पाणी. यानुसार एकूण १००% पाणी हे पुर्न वापर केलेले पाणी असेल.

भाखर कारखान्यासाठी एकूण २८३९ घन मी.प्रतिदिन इतके पाणी लागते.प्रस्तावित भाखर कारखान्यासाठी एकूण ४०१८ घन मी.प्रतिदिन इतके पाणी लागते यापैकी ७४ घन मी.प्रतिदिन इतके पाणी भिमा नदितुन घेतले जाते, ३३२२ घन मी.प्रतिदिन इतके ऊर्जामधील कंडॅन्सेट आहे, ५६० घन मी. प्रतिदिन इतके पाणी इ.टी.पी.आणि ७२ घन मी. प्रतिदिन इतके पाणी एअ.टी.पी प्रकल्पातून प्रक्रिया केलेले असेल.

तक्ता ५ प्रस्तावित आवाणी प्रकल्पासाठी पाण्याचा वापर (घनमीटर/दिन)

क्र.	तपशील	मोलॅबिझ वर आधारीत		केन ज्युझ वर आधारीत
		ऊर्जा गळित हंगाम	पिना ऊर्जा गळित हंगाम	
अ	घरगुती	#१६	#१६	#१६
ख	औद्योगिक			
	i. प्रोसेस	*१५९०	*१५९०	-
	ii. कुलिंग	*६००	*६००	०६००
	iii. ऑयल मेकअप	८४ (#१३ + *७१)	#८४	०८४
	iv. डी.एम. प्लांट	#१७	#१७	०१७
	v. लॅथ व पॉशिंग	१० (*४+#६)	१० (*४+#६)	०१०
	vi. ऑशा कॅचिंग	*२	*२	०२
	एकूण औद्योगिक	२३०३ (#१९+*१५९६+*६८८)	२३०३ (#७०७+*१५९६)	०७१३
क	एकूण	२३१९ (#३५+*१५९६+*६८८)	२३१९ (#७२३+*१५९६)	७२९ (#१६+०७१३)
	पुनर्वापर (%)	९८%	९८%	१००%
	ताज्या पाण्याचा वापर (प्रमाण १० कि.लि./कि.लि. अल्कोहोल)	०.०९ कि. लि.	३.५ कि. लि.	० कि. लि.

टीप : # - एकूण पाणी जे भिमा नदीमधून वापरले जाईल, *-ऊर्जामधील कंडॅन्सेट, * - आवाणी बी.पी.यु. मधून प्रक्रिया केलेले पाणी,

तक्ता ६ भाखर कारखानाभाठी पाण्याचा वापर (घनमीटर/दिन)

क्र.	तपशील	भाध्याचा (४,९६० टीझीडी)	पिस्ताशीकरणानंतर (१०,००० टीझीडी)
अ	घरगुती	#४५	#७४
ख	औद्योगिक		
	प्रक्रिया	*१४७५	*२३६०
	कुलिंग मेकअप	*६५०	८२४ (*२६४ + ०५६०)
	ऑयलर मेकअप	४९२ (*१९८ + #२९४)	*४९२
	डि. एम. खॅकवॉश	*२०	*१०५
	लॅश; वॉशिंग	*५	*८
	ग्रॅश क्लिनिंग	*२	*३
	औद्योगिक एकूण	२७१४ (*२४२० + #२९४)	३७९२ (*३२३२ + ५५६०)
क	हरितपट्टा	०८०	१५२ (०७२ + *८०)
	एकूण	२८३९ (*२४२० + #३३९ + ०८०)	४०१८ (*३९०० + ०५६० + #७४ + ५७२)

टीप : # - ताजे पाणी जे भिमा नदीमधून वापरले जाईल, * - ऊसामधील कंडेनसेट, ० - इ.टी.पी. प्रकल्पातून प्रक्रिया केलेले पाणी
 § - एम.टी.पी. प्रकल्पातून प्रक्रिया केलेले पाणी

ख. भांडपाणी प्रक्रिया

१. घरगुती भांडपाणी

भाध्याच्या भाखर कारखान्यामधून ३६ घनमीटर प्रतिदिन घरगुती भांडपाणी तयार होते जे भेप्टीक टॅक मध्ये प्रक्रियित केले जाते. प्रस्तापित आभयनी व भाखर कारखाना पिस्ताशीकरण प्रकल्पाच्या उभावणी नंतर एकूण ७२ घनमीटर/दिन (भाखर कारखाना - ५९ घनमीटर प्रतिदिन आणि आभयनी प्रकल्प - १३ घनमीटर/दिन) इतके भांडपाणी तयार होईल. प्रस्तापित प्रकल्पामध्ये घरगुती भांडपाण्यावर प्रक्रिया (एम.टी.पी.) केली जाईल. प्रक्रिया केलेले भांडपाणी हे हरितपट्टा विकसित करण्यासाठी वापरले जाईल. घरगुती भांडपाणी प्रक्रिया प्रकल्प आकृती ४ येथे दाखवला आहे.

तक्ता क्र.७ आभयनी प्रकल्पामधून तयार होणारे भांडपाणी

क्र.	तपशील	मोलॅभिनस वर आधारित	केन ज्युस वर आधारित	प्रक्रिया
अ	घरगुती	१३	१३	प्रस्तापित घरगुती भांडपाणी प्रक्रिया प्रकल्पात प्रक्रिया केले जाईल.
ख	औद्योगिक			
	प्रोसेस	बॉ रपेंटवॉश - १६०० कॉन्सन्ट्रेंट रपेंटवॉश - ३२०	बॉ रपेंटवॉश - ८०० कॉन्सन्ट्रेंट रपेंटवॉश - १६०	प्रस्तापित प्रकल्पामध्ये एकूण बॉ रपेंटवॉश हे एम.ई.ई मध्ये कॉन्सन्ट्रेंट केले जाईल आणि कॉन्सन्ट्रेंट रपेंटवॉश इन्व्हेन्शन ऑयलर मध्ये पाठवले जाईल.
		एम. ई. ई. कंडेनसेट - १२८० रपेंट लीन - २७८	एम. ई. ई. कंडेनसेट - ६४० रपेंट लीन - १७८	इतर भांडपाणी - रपेंट लीन, कुलिंग ज्लो डाऊन, ऑयलर ज्लो डाऊन, एम.ई.ई कंडेनसेट, लॅश व वॉशिंग हे आभयनी प्रकल्पाच्या CPU ला पाठवले जाईल.
	ऑयलर ज्लोडाऊन	१७	१७	
	कुलिंग ज्लोडाऊन	६०	६०	
	लॅश ; वॉश	१०	१०	
	डि.एम. खॅकवॉश	१७	१७	
	औद्योगिक एकूण	रपेंटवॉश - ३२० इतर भांडपाणी - १६६२	रपेंटवॉश - १६० इतर भांडपाणी - ९२०	

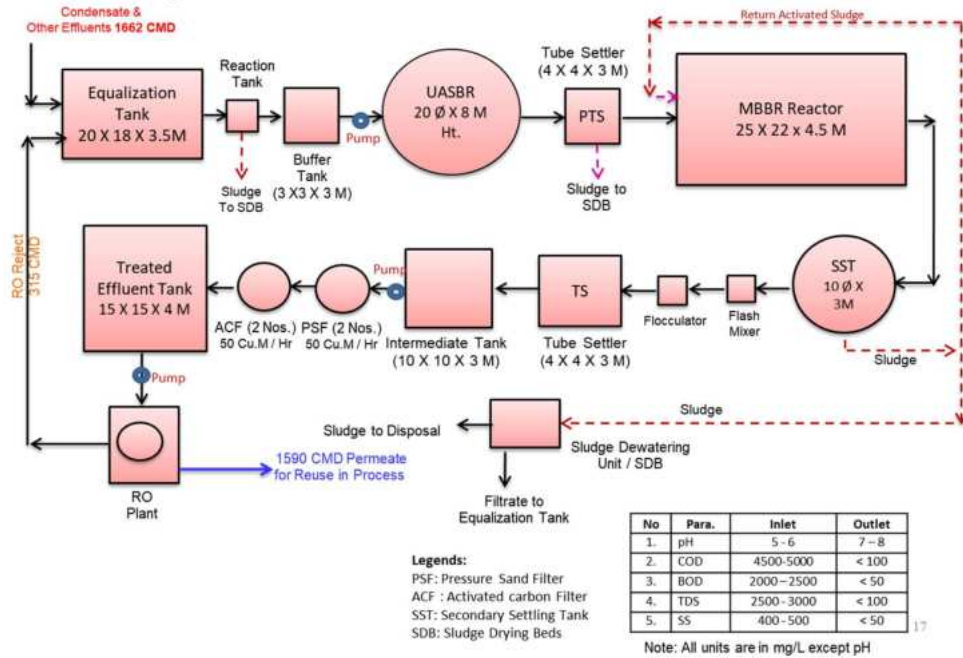
तक्ता क्र.८ भाखर कारखाना व सहयिज प्रकल्पामधून तयार होणारे झांडपाणी

क्र.	तपशील	अध्याचा प्रकल्प	एकूण प्रस्तावित षिस्तारीकरणानंतर	प्रक्रिया
अ	घरगुती	३६	५९	प्रस्तावित घरगुती झांडपाणी प्रकीया प्रकल्पात प्रक्रिया केले जाईल.
ख	औद्योगिक			
	पोक्षेअ	१७७	२८३	भाखर कारखान्याच्या अध्याच्या झांडपाणी प्रकीया प्रकल्पात प्रक्रिया केली जाईल.
	कुलिंग	६५	८२	
	ऑयलर	९८	११५	
	डी.एम.ऑकवॉश	९०	१०५	
	लॅष ; वॉश	५	८	
	एकूण	४३५	५९३	
	झांडपाणी निर्मिती	८७	७४	मानकः २०० लि. /मे.टन

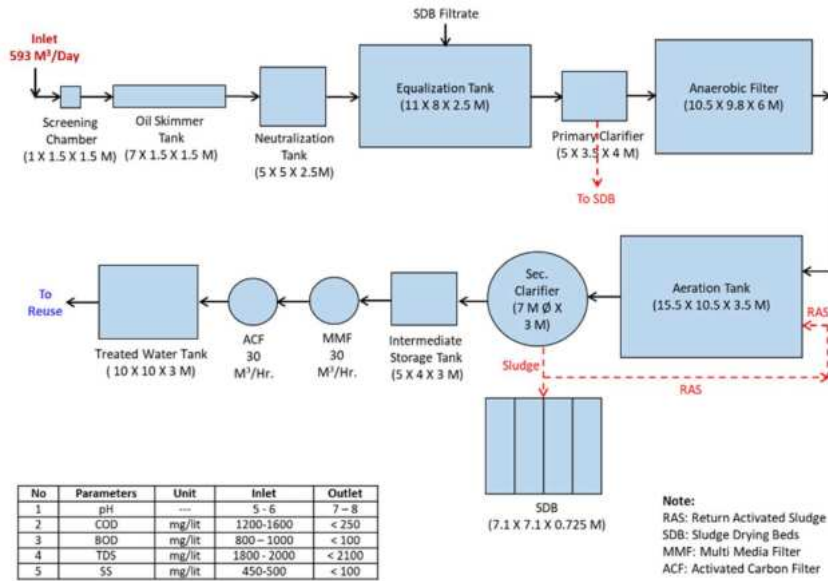
२. औद्योगिक झांडपाणी

प्रस्तावित आशयनी प्रकल्पामधून अॅटवॉश, अॅटलीज, एम.ई.ई.मधील कंडेनशेट व इतर झांडपाणी तयार होईल. १६०० घन.मी.प्रतिदिन (८ कि.लि/कि.लि अल्कोहोल) इतके तयार होणारे वॉ अॅटवॉश हे एम.ई.ई. मध्ये इव्हॅपोरेट व कॉन्शनट्रेट केला जाईल आणि कॉन्शनट्रेट अॅटवॉश ३२० घन. मी. प्रतिदिन (१.६ कि.लि/कि.लि अल्कोहोल) इन्डिशनरेशन ऑयलर मध्ये पाठवले जाई ल. अॅटलीज १७८ घन.मी प्रतिदिन, एम.ई.ई. मधील कंडेनशेट ६४० घन.मी/दिन, इतर झांडपाणी १६६२ घन.मी प्रतिदिन हे आशयनी प्रकल्पाच्या कंडेनशेट पॉलिशिंग युनिट (झि.पी.यु) मध्ये प्रक्रियत करून त्याचा पुर्नवापर केला जाईल. झि.पी.यु प्रकल्प आकृती २ येथे दाखवला आहे. अध्याचा भाखर कारखाना प्रकल्पातून ४३५ घन. मी. प्रतिदिन इतके झांडपाणी तयार होते जे झांडपाणी प्रक्रिया प्रकल्पामध्ये प्रक्रियत केले जाते. अदर षिस्तारिकरणांतर्गत भाखर कारखाना प्रकल्पातून ५९३ घन. मी. प्रतिदिन इतके झांडपाणी तयार होईल. प्रक्रिया प्रकल्प हा प्राथमिक, द्वितीय व तृतीय स्तरीय प्रक्रिया अशलेला आहे.

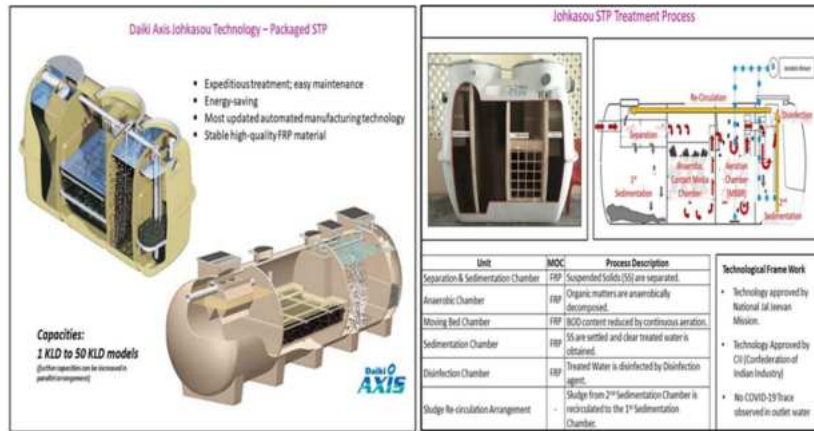
आकृती २ आशयनी मधील प्रस्तावित झि.पी.यु. फ्लो चार्ट



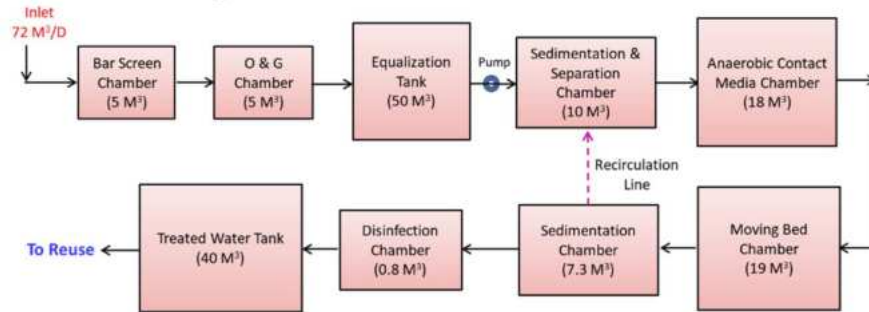
आकृती ३ बाबखर कारखान्यातील ई.टी.पी. प्लो चार्ट



आकृती ४ एम्.टी.पी. प्रक्रिया

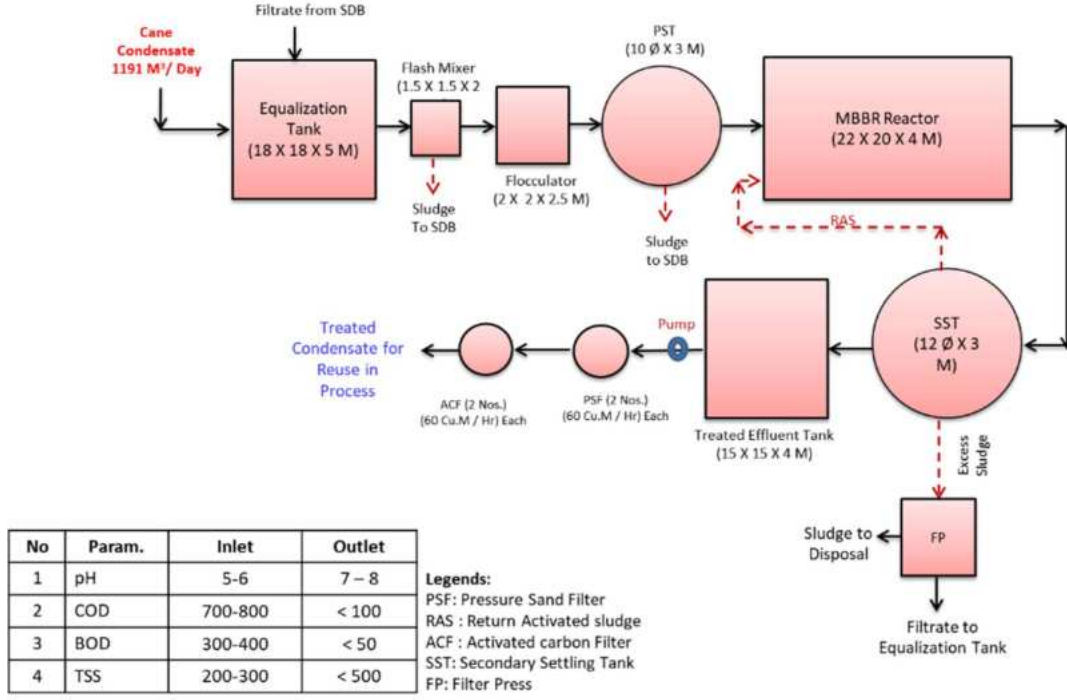


आकृती ५ प्रस्तावित एम्.टी.पी. प्लो चार्ट



No.	Parameter	Unit	Inlet	Outlet
1	pH	---	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	O & G	mg/lit	20 - 30	< 10

आकृती ६ भाखर कारखान्यातील प्रस्तावित बी. पी. यु. प्लो चार्ट



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क. वायु उत्सर्जन

प्रस्तावित आशयनी प्रकल्पामध्ये ३५ टन प्रति तास क्षमतेचा इन्व्हिनब्रेशन ऑयलर उभाखणेत येणार आहे. ज्यासाठी अर्गॅन (४६३ मे.टन/दिन) / कोळसा (१८५ मे.टन/दिन) व कॉ. बॅपॅटॉश (४३२ मे.टन/दिन) इंधन म्हणून वापरले जाईल. या ऑयलरला ई.एन.पी. हे प्रदूषण नियंत्रक उपकरण व ८५ मी. उंचीची चिमणी अक्षयली जाईल. भध्याच्या भाखर कारखान्याअंतर्गत ३५ टन प्रति तास, २० टन प्रति तास क्षमतेचे २, १३० टन प्रति तास क्षमतेचा ऑयलर कार्यरत आहेत. ज्यासाठी अर्गॅन इंधन म्हणून वापरले जाते. या ऑयलरला पेट बॅकअर व ई.एन.पी. हे प्रदूषण नियंत्रक उपकरणे अक्षयली आहेत. प्रदूषण नियंत्रण करण्यासाठी ऑयलरना ६० व ८५ मी. उंचीची चिमणी अक्षयली आहे. भदर भाखर कारखाना विस्तारिकरणांतर्गत कोणताही नवीन ऑयलर उभाखणेत येणार नाही.

भध्या कारखान्यामध्ये १००० के.व्ही.ए. क्षमतेचे २ डी.जी. ब्रेट कार्यरत आहेत. ह्या प्रदूषण व त्याअंशंधीच्या इतर आर्षीची माहिती खालील तक्त्यात दिली आहे.

तक्ता ९ ऑयलर आणि चिमणीचा तपशील

क्र.	तपशील	अध्याचा आखर कारखाना			आखर कारखाना	प्रस्तापित आशपनी
		ऑयलर १	ऑयलर २ (२ नग)	ऑयलर ३	डि.डी.सेट	
	चिमणी जोडली आहे				डी.डी.सेट	इन्डिअनरेशन ऑयलर ४
१	क्षमता	३५ टन/तास	२० टन/तास	१३० टन/तास	१००० के.एच.ए	३५ टन/तास
२	इंधनाचा प्रकार	अगॅस	अगॅस	अगॅस	एच.एअ.डी	अगॅस / कोळसा + कॉ. स्पॅटगॅस
३	इंधन (मे.टन/दिन)	४२०	४८०	१५६०	१००	४३२+४६३/१८५
४	आंधणीसाठी वापरलेले मटेरीयल	आर.बी.बी	आर.बी.बी	आर.बी.बी	एम.एअ.	आर.बी.बी
५	आकार (गोल/चौरस)	गोल	गोल	गोल	गोल	गोल
६	उंची, मी (जमीनीच्या वर)	६० मी.		८५	६ मी.	८५ मी.
७	व्यास	२.५		३.५	—	३
८	चिमणीला अडलेले प्रदूषण नियंत्रणाचे उपकरण	पेट रकषर		ई.एअ.पी	—	ई.एअ.पी.

ड. धरनी प्रदूषण

१. धरनी निर्माण करणारे त्रोट

- आशपनी प्रकल्पामध्ये खुप जास्त आवाज निर्माण करणारे त्रोट नसतील. येथील धरनीची पातळी ७० ते ८० डी सी (ए) दरम्यान अपेक्षित आहे. आयलेन्स आणि पंपस, मोटर्स व कॉंप्रेसर्स यांची योग्य देखरेख तसेच आवाज कमी होण्यासाठी धरनी उगम स्थानाजवळ अटकाव यंत्रणा अस्तित्तेत येइल, इ. प्रकारे आवाजपातळी कमी करण्यासाठी उपाययोजना केल्या जातील.
- फर्मन्टेशन बेक्शन व डिस्टिलेशन बेक्शन हे इतर थोड्या प्रमाणात आवाज निर्माण करणारे त्रोट असतील येथील धरनीची पातळी ७० ते ८० डी सी (ए) दरम्यान अपेक्षित आहे.
- अध्याच्या आखर कारखाना व सहजीज प्रकल्पामध्ये ऑयलर हाऊस, टर्बाइन रूमस, ऊस गळप विभाग आणि मील हाऊस इ. आवाज निर्माण करणारे त्रोट असतील
- कारखान्या अशोवती टप्प्याटप्प्याने हरित पड्डा विकसित केला जाईल जेणेकरून धरनी प्रदूषण नियंत्रणास मदत होईल.

२. नियंत्रण उपाय

धरनी नियंत्रणासाठी आयसोलेशन, अेपरेशन आणि इन्स्युलेशन तंत्रे वापरली जातील. इअरमफस, ई. अररूपात कामगारांना पैयक्तीक सुरक्षा साधने (PPE) पुरवण्यात येतील. तसेच धरनीची पातळी कमी करण्यासाठी डी. डी. सेट अरतंत्र कॅनॉपी मध्ये अंढीरत करण्यात येईल.

इ. घातक अररूपाचा कचरा

आशपनी प्रकल्पामधून कोणत्याही प्रकारचा घातक कचरा निर्माण होणार नाही. आखर कारखान्यामधून तयार होणारा घातक कचरा तक्ता ९ मध्ये दिला आहे.

तक्ता १० घातक अररूपाचा कचरा तपशील

प्रकल्प	कच-याचा प्रकार	परिमाण (मे.टन /म)		विल्हेपाट पद्धत
		अध्याचा	प्रस्तापित	
आखर कारखाना	५.१ स्पॅट ऑईल	०.५	०.८	ऑयलरमध्ये जाळले जाईल.

फ. घन अपरूपकाचा कचरा

तक्ता ११ घन अपरूपक कच-याचा तपशील

क्र.	प्रकल्प	कच-याचा प्रकार	परिमाण मे.टन /म.		विल्हेवाट पद्धत
			अध्यायी	प्रस्तापित	
१	आभयनी	बी.पी.यु. बलज	२२१४	२२१४	खत म्हणून वापरले जाईल
		टीबट बलज	१२	१८	
		ऑयलरची बाख	—	५१	
२	आखर कारखाना	ऑयलरची बाख	—	१२६०	खीट निर्मितीसाठी दिली जाईल.
		ई.टी.पी. बलज	—	२७६०	

ख. पासाचा उपद्रव

अदर प्रकल्पांतर्गत मोलॅक्झि हाताळणी व भाठवणुक, फर्मन्टेशन व डिस्टिलेशन, भांडपाणी प्रकिया यंत्रणा, खराब मील अॅनिटेशन आणि दुर्लक्षित ड्रेन्स इ. पासाच्या उपद्रवाचे स्रोत असतील. अध्या पासाच्या नियंत्रणासाठी नीटनेटके हाऊस किपींग ई.टी.पी. युनिट मधील मैला व्यवस्थापन, ड्रेन्ससाठी खिलींग पावडरचा वापर इ. आधी व्यवस्थित हाताळल्या जातात व प्रस्तापित आभयनी प्रकल्पांतर्गत देखिल केल्या जातील. प्रस्तापित आभयनी प्रकल्पांतर्गत सॅप्टेजिअंश खंद नलिकेतुन हाताळणी, भाठवणुकीसाठी व विल्हेवाटीसाठी नेले जाईल यामुळे होणारा पासाचा उपद्रव कमी होईल.

अ. नियम व अटीचे पालन

अध्याच्या प्रकल्पांतर्गत महाराष्ट्र प्रदुषण नियंत्रण मंडळ (MPCB) किंवा तत्वम संशोधनार्थत भांडपाणी प्रकिया व विल्हेवाट, घातक अपरूपकाचा कचरा व घन कचरा हाताळणी व विल्हेवाट तसेच वायु क्लॅरिफिकेशन इ. संबंधित घालुन देण्यात आलेल्या सर्व कायदांचे व नियमांचे काटेकोरपणे पालन केले जाते. अदर कार्यपद्धती प्रस्तापित प्रकल्पांतर्गतही पाळली जाईल.

म. पर्यावरण व्यवस्थापन विभाग

ओ.व्ही.अॅ.इं.प्रा.लिमध्ये पर्यावरण व्यवस्थापन विभाग कार्यरत आहे. या विभागातील सर्व अदर उच्चशिक्षित आणि संबंधीत क्षेत्रातील योग्य तो अनुभव असलेले आहेत. अध्याच्या व प्रस्तापित पर्यावरण व्यवस्थापन विभागामधील अदर खालीलप्रमाणे

तक्ता १२ पर्यावरण व्यवस्थापन विभाग

क्र.	नावे	पदाचे नाव
१	श्री. एन. जे. शिंदे	व्यवस्थापकिय संचालक
२	श्री. डी. एन. लडखत	उत्पादन व्यवस्थापक
३	श्री. पी. एन. अशाषे	कार्य व्यवस्थापक
४	श्री. एन. एम. इंगळे	मुख्य लेखापाल
५	श्री. एम. ए. पाटील	ई टी पी ऑपरेटर
६	श्री. डी. श्री. देशमुख	लॅब इन्चार्ज
७	श्री. पी. एन. खानजोडे	सहायनतज्ञ प्रभाषी
८	श्री. एन. ए. चवान	ई टी पी ऑपरेटर
९	श्री. एन. श्री. देशमुख	ई टी पी ऑपरेटर
१०	श्री. एन. जे. मुल्लानी	ई टी पी ऑपरेटर
११	श्री. यु. के. सोनावने	ई टी पी ऑपरेटर
१२	श्री. श्री. डी. ाधव	ई टी पी ऑपरेटर
१३	श्री. व्ही. सी. शाने	ई टी पी ऑपरेटर
१४	श्री. एन. श्री. पाघमावे	ई टी पी ऑपरेटर
१५	श्री. एन. एन. होंकडे	ई टी पी ऑपरेटर

अध्याच्या व प्रस्तावित प्रकल्पांमधील पर्यावरण घटकांसाठी व त्यांच्या देखभालीसाठी लागणा-या खर्चाचा तपशील खालीलप्रमाणे:-

तक्ता १३ देखभालीसाठीच्या खर्चाचा तपशील (अध्याच्या व प्रस्तावित)

क्र.	तपशील	खर्च (रु. लाख मध्ये)	
		भांडवली गुंतवणूक	वार्षिक देखभाल व दुरुवती
अ.	अध्याच्या प्रकल्पासाठी		
१	हवा प्रदूषण नियंत्रणासाठी लागणाऱ्या खर्च मल्टि स्मॉकलॉन डबल कलेक्टर, ७१ मी. डंचीची चिमणी व ऑनलाईन मॉनिटरिंग सिस्टीम	९६.०	१०.०
२	जल प्रदूषण नियंत्रण ई.टी.पी.	८५.०	१२.०
३	ध्वनी प्रदूषण नियंत्रण	५.०	०.५
४	एन्व्हायर्मेंटल मॉनिटरिंग व मॅनेजमेंट	२५.०	१०.०
५	आरोग्य व सुरक्षितता	२५.०	२५.०
६	हवित पट्टा पिकाक्ष	१०.०	५.०
	एकुण (रु. २६५ कोटी भांडवली गुंतवणुकीच्या १%)	२४६.०	३७.५
ब.	B2 झेपीअंतर्गत मंजूर ३०० किलो लि./दिन धान्य कणांपर आधारित आभयनी प्रकल्प		
१	हवा प्रदूषण नियंत्रणासाठी लागणाऱ्या खर्च इन्डिअनरेशन ऑयलर, (ई.एन.पी.), ७५ मी. डंचीची चिमणी, ई.एन.पी., ऑनलाईन मॉनिटरिंग सिस्टीम बी. ओ.२ ऑटलिंग प्लांट, अंश हॅडलिंग सिस्टिम	५००.०	५०.०
२	जल प्रदूषण नियंत्रण - डिस्टिलरी सि. पी. यु., बाबबर कारखाना सि. पी. यु एन.टी.पी., एम. ई. ई. डायर फॉर वेन्स	३५०.०	४०.०
३	ध्वनी प्रदूषण नियंत्रण	५०.०	५.०
४	सॉलीड अॅन्ड हजार्ड्ड वेस्ट मॅनेजमेंट	५०.०	२०.०
५	आरोग्य व सुरक्षितता	१००.०	३०.०
६	एन्व्हायर्मेंटल मॉनिटरिंग व मॅनेजमेंट	७५.०	३०.०
७	हवित पट्टा पिकाक्ष	१७५.०	५०.०
	एकुण (रु. २९० कोटी भांडवली गुंतवणुकीच्या ४.५ %)	१३००.०	२४०.०

य) वेनवॉटर हार्वेस्टिंग संकल्पना

तक्ता १४ वेनवॉटर हार्वेस्टिंगसाठी घेतलेले क्षेत्र

क्र.	तपशील	क्षेत्र (वर्ग.मी)
१	रफटॉप	९४,९२१.५०
२	हवित पट्टा	१,६८,९०६
३	वरत्याखालील क्षेत्र	३९,७४९
४	खुलेक्षेत्र	१६,२८०

अबाधरी वार्षिक पाऊस - ८३५ मिमी.

तक्ता १५ बेनपॉटब हार्पेक्टिंगभाठी घेतलेले क्षेत्र

क्र.	तपशील	क्षेत्र (वर्ग.मी)	हार्पेक्टिंग मधून मिळणारे पाणी (घन मी.)
अ.	रूफटॉप हार्पेक्टिंग		
१	रूफटॉप	९४,९२१.५०	६३,०२७.८७
	एकुण		६३,०२७.८७
ब.	भाबफेब्र हार्पेक्टिंग		
१	हरित पट्टा	१,६८,९०६	४२,०५७.५९
३	बबत्याबखालील क्षेत्र	३९,७४९	१६,४९५.८३
४	बबुलेक्षेत्र	१६,२८०	४,०५३.७२
	एकुण		६२,६०७.१४

ब) हरित पट्टा माहिती

तक्ता १६ क्षेत्रफळाची माहिती

अ.क्र.	तपशील	क्षेत्र (वर्ग.मी)
१	एकुण क्षेत्र	५,०६,४७८.८०
२	बांधकामाबखालील एकूण क्षेत्र	१,८९,८४३
३	एकुण बबुले क्षेत्र	१६,२८०
४	बाध्याचे हरित क्षेत्र (एकुण क्षेत्राच्या १८%)	८८,९०६
५	प्रबतापित हरित क्षेत्र (एकुण क्षेत्राच्या १६%)	८०,०००
६	एकुण हरित क्षेत्र (एकुण क्षेत्राच्या ३३%)	१,६८,९०६

हरित पट्टा पिकवित करणयाभाठी SPM, SO₂ चे उब्तर्जन या बाणी प्रामुबख्याने पिचारात घेतल्या जातील. SPM, SO₂ यांच्या उब्तर्जनांमुळे होणारे परिणाम कमी करणयाब उपयुक्त अभा हरित पट्टा पिकाब कार्यक्रम बाणपिला जाईल. तबेच नियोजित हरित पट्टयातील झाडांमुळे इंडबस्ट्रीमध्ये तयाब होणा-या धवनीची तीव्रता कमी होऊन परिबरात होणारे धवनी प्रदुषण कमी होणेब मदत होईल. यानुभाब SO₂ आणि धवनी प्रदुषण नियंत्रण इ. बाणी लक्षात घेऊन प्रबतापित हरित पट्टा पिकाब कार्यक्रमांतर्गत पिपिध जातीच्या झाडांची लागवड केली जाईल.

ल) बाभाजिक व आर्थिक पिकाब

बाभाजिक व आर्थिक पिकाब अंतर्गत प्रकल्पाब केंद्रबथानीमानुन १० कि. मी. पडीघ क्षेत्रामधील गावांचे बर्षेक्षण केले गेले. या अंतर्गत पैयक्तिकरित्या लोकांच्या मुलाबबती मबाठी प्रशनापलीद्वारे (३२ प्रशन) घेण्यात आल्या. अधिक माहितीभाठी EIA रिपोर्ट मधील प्रकरण - ३ बाभाजिक व आर्थिक पिकाब मुददा पहा. बाभाजिक व आर्थिक पिकाब अभ्यासामधील निरीक्षण आणि निष्कर्ष पुढील प्रमाणे

७) पर्यावरणपिषयक तपासणी कार्यक्रम

अभ्यासाभाठी निवडलेल्या भागाची पूर्ण पाहणी करण्यात आली होती. प्रबतापित प्रकल्पाच्या बभोवतालच्या हवामान परिबथीतीच्या माहितीभाठी हवा, पाणी व माती बपरूप इ. गोष्टींचा अभ्यास डिसेंबर २०२२ मध्ये बुरु केला गेला होता. या प्रबतावामध्ये डिसेंबर २०२२ ते फेब्रुवारी २०२३ या दरम्यानच्या कालावधीमध्ये गोळा केलेली माहिती नमूद केली आहे. याबांधीची पिदतीय बतबावरील माहिती ही बबकारी पिभागांकडून घेण्यात आली आहे ज्यामध्ये भुर्गभीय पाणी, माती, शेती आणि वने इ. बभापेशा आहे.

अ. जमीनीचा वापर

जमीन वापराच्या अभ्यासामध्ये भागाची बचना, कारबबाने, जंगल, बबते आणि बहदारी इ. गोष्टींचा पिचार केला जातो. बांधीत माहिती ही पिपिध पिदतीय बतरांवरून जबे की जनगणना पुब्रितका, बबकारी कार्यालये, बर्षे ऑफ इंडिया टोपोशीटब, याचबरोबर बॉटेलाईट इमेजीब व जागेवरील प्राथमिक बर्षे इ. मधून घेण्यात आली आहे.

ख. अभ्यासासाठी निवडलेल्या जमीनीचा वापर / व्यापलेली जमीन

तक्ता १७ जमीनीचा वापर / व्यापलेली जमीन

क्र.	जमीनीचा वापर / व्यापलेली जमीन	क्षेत्र (हेक्टर)	टक्केवारी (%)
१	शांभकामाखालील जमीन	८४६	२.६९
२	लागवडीखालील जमीन	१३,९१०	४४.२८
३	पडिक जमीन	६,६८३	२१.२७
४	नापीक जमीन	७९	०.२५
५	जल संध्या	४०२	१.२८
६	वापताळ जमीनीसह खुबटी झुडपे	९,४९५	३०.२२
एकुण		३१,४१५	१००

क. हवामान माहिती

संदर्भ पाहणीसाठी ब्युरो ऑफ इंडियन स्टॅण्डर्ड (BIS) आणि इंडियन मेट्रोलॉजी डिपार्टमेंट (IMD) यांनी नमूद केलेली मानके वापरली आहेत. हवामान परिस्थितीच्या माहितीसाठी वेगवेगळ्या हवामान घटकांचा अभ्यास प्रत्यक्ष जागेवरती केला गेला आहे. यासंबंधीची ठिकठिकाणची अधिक माहिती ही हवामान विभाग, कोल्हापूर येथून घेण्यात आली आहे. त्यामध्ये तापमान, आर्द्रता, पर्जन्यमान इ. बाबींचा समावेश आहे.

वेगवेगळ्या हवामान घटकांचा अभ्यास हा डिसेंबर २०२२ ते जानेवारी फेब्रुवारी २०२३ यादरम्यान केला गेला होता. या अभ्यासातील परिमाणे, उपकरणे व वापरिता यांचा तपशील ड्राफ्ट ई. आय. ए. रिपोर्टच्या प्रकरण ३ मध्ये देणेत आला आहे.

ड) हवेचा दर्जा

या विभागामधून नमुने घेतलेल्या ठिकाणांची निवड, नमुना घेण्याची पद्धत, पृथक्करणेची तंत्रे आणि नमुना घेण्याची वापरिता इ. गोष्टींची माहिती दिली आहे डिसेंबर-२०२२-जानेवारी-फेब्रुवारी-२०२३ या कालावधी मधील निरीक्षणानंतरचे निकाल सारखे केले आहेत. सर्व मॉनिटरींग स्टेशनमेंट्स, नमुने घेणे व त्यांचे पृथक्करण NABL व MoEFCC, New Delhi मान्यता प्राप्त तसेच ISO ९००१ - २०१५ व OHSAS १८००१ - २००७ मानांकित मे. वीन एन्वायरोन्मेण्ट इंजिनीअर्स अँड कन्सल्टंट्स प्रा. लि., पुणे या प्रयोग शाळेमार्फत केले आहे. अभ्यास क्षेत्रातील हवेच्या गुणवत्तेचे मूल्यमापन करण्यासाठी PM₁₀, PM_{2.5}, SO₂, NO_x व CO. या घटकांचे वेगवेगळ्या स्थानांवर मॉनिटरींग केले गेले. मॉनिटरींगची वेगवेगळी स्थाने खाली दिलेल्या तक्त्यामध्ये दाखवली आहेत

तक्ता १८ हवा परिक्षणाची स्थाने

AAQM केंद्र आणि संकेतांक	स्थानाचे नाव	साईटपासूनचे अंतर (कि. मी.)	साईटला अनुसंधान दिशा
A1	साईट	---	---
A2	वस्कुटे	३.४५	E
A3	शेजबाभुळगाव	७.२३	E
A4	फुलचिंचोली	३.९३	W
A5	तारापूर	७.६७	W
A6	पुलूज	३.००	S
A7	पाटकूल	५.४५	N
A8	टाकळी-सिकंदर	०.९४	N

तक्ता १९ Summary of the AAQ Levels for Monitoring Season
[डिसेंबर-२०२२-जानेवारी-फेब्रुवारी-२०२३]

पद्विमाण		ठिकाण							
		A1	A2	A3	A4	A5	A6	A7	A8
PM ₁₀ µg/M ³	Max.	६५.९०	५५.१०	५५.९०	५५.७०	५५.९०	५५.८०	५५.९०	५५.४०
	Min.	४५.३०	४६.८०	४६.४०	४३.४०	४५.८०	४७.४०	४६.८०	४७.२०
	Avg.	५७.४३	५२.५१	५१.९३	५२.२७	५०.७३	५१.१४	५१.४२	५०.८८
	98%	६४.१५	५५.०१	५५.७६	५५.६५	५५.८५	५५.७५	५५.६२	५५.३५
PM _{2.5} µg/M ³	Max	२०.५०	१६.९०	१७.४०	१७.६०	१८.१०	१६.८०	१७.७०	१७.३०
	Min	१४.५०	११.२०	१०.४०	१०.८०	११.४०	११.४०	११.३०	१०.२०
	Avg	१८.०३	१३.४०	१३.३३	१३.९८	१४.०२	१४.०५	१४.९१	१३.६३
	98 Percentile	२०.५०	१६.८५	१६.८०	१७.५१	१८.०१	१६.७५	१७.५६	१६.९३
SO ₂ µg/M ³	Max	२४.००	१३.८०	१३.७०	१७.६०	१३.९०	१३.६०	१८.४०	१५.६०
	Min	१८.९०	१०.००	९.१०	१०.२०	८.३०	८.४०	८.९०	९.४०
	Avg	२१.७७	११.७७	११.३८	१२.२२	१०.५०	११.०५	१२.०२	१२.२८
	98 Percentile	२३.९५	१३.६६	१३.६५	१६.४५	१३.९०	१३.२८	१६.८८	१५.३७
NO _x µg/M ³	Max	२८.७०	२८.६०	१८.९०	२०.९०	१९.९०	२२.८०	२०.७०	१९.६०
	Min	२४.६०	१४.७०	१५.७०	१४.४०	१५.४०	१५.८०	१६.४०	१५.४०
	Avg	२७.१२	१७.९०	१७.३६	१७.७३	१८.०३	१८.२२	१८.२८	१७.८५
	98 Percentile	२८.५६	२४.२८	१८.८५	२०.८१	१९.९०	२१.८३	२०.१९	१९.५१
CO mg/M ³	Max	०.९००	०.०८०	०.०९०	०.०९०	०.०९०	०.०८०	०.०९०	०.०९०
	Min	०.१००	०.०३०	०.०२०	०.०२०	०.०२०	०.०२०	०.०२०	०.०२०
	Avg	०.५२५	०.०५१	०.०५३	०.०५०	०.०५०	०.०५५	०.०५४	०.०५३
	98 Percentile	०.९००	०.०७५	०.०९०	०.०८५	०.०८५	०.०८०	०.०८५	०.०९०

Note: PM₁₀, PM_{2.5}, SO₂ and NO_x are computed based on 24 hourly values. CO is computed based on 8 hourly values.

तक्ता २० 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	PM ₁₀ µg/M ³		PM _{2.5} µg/M ³		SO ₂ µg/M ³		NO _x µg/M ³		CO mg/M ³	
	24 Hr	A.A.	24 Hr	A.A.	24 Hr	A.A.	24 Hr	A.A.	8 Hr	1 Hr
Industrial, Rural & Residential Area	१००	६०	६०	४०	८०	५०	८०	४०	४	४
Eco-sensitive Area Notified by Govt.	१००	६०	६०	४०	८०	२०	८०	३०	४	४

Note: A.A. represents "Annual Average"

इ) पाण्याची गुणवत्ता

पाण्याच्या भौतिक, रासायनिक गुणधर्मांची आणि त्यातील जड धातूंची तपासणी करण्यासाठी MoEFCC, New Delhi मानांकित मे. वीन एनवायरोन्फ इंजिनीअर्स आणि कंझलटंट्स प्रा. लि., पुणे यांच्या मार्फत नमुने घेऊन त्यांचे पृथक्करण केले. भूगर्भातील पाण्याच्या नमुना चाचणीसाठी ८ ठिकाणे व भूपृष्ठीय पाण्याच्या नमुना चाचणीसाठी ८ ठिकाणे घेतली होती ती खालील प्रमाणे -

तक्ता २१ पृष्ठभागावरील पाण्यासाठी निपडलेली ठिकाणे

स्थानक संकेतांक	स्थानकाचे नाव	साईट पात्रुनचे अंतर	साईट पात्रुनची दिशा
SW1	पाटकूल	३.८९	NNW
SW2	सौंदणे	३.३९	NE
SW3	तात्रापूर	८.०४	W
SW4	पोहारगाव	९.२९	SW
SW5	आंधेचिंचोली	९.८२	SSW

तक्ता २२ भूगर्भातील पाण्यासाठी निपडलेली ठिकाणे

स्थानक संकेतांक	स्थानकाचे नाव	साईट पात्रुनचे अंतर	साईट पात्रुनची दिशा
GW1	टाकळी-सिकंदर	०.६०	W
GW2	पुलूज	०.८५	S
GW3	टाकळी-सिकंदर	०.५०	E
GW4	वरकुटे	२.०५	E
GW5	टाकळी-सिकंदर	०.८४	NE
GW6	टाकळी-सिकंदर	०.५३	N
GW7	टाकळी-सिकंदर	१.३५	NNW
GW8	टाकळी-सिकंदर	२.१९	W

याखददलची सडिस्तर माहिती ई.आय.ए.रिपोर्ट मधील प्रकरण ३ मध्ये आहे.

फ) धरनी पातळीचे सडर्येक्षण

धरनी पातळीचे सडर्येक्षणसाठी कारखाना परिवसरास केंद्र मानून त्यापात्रून १० कि. मी. अंतराच्या परिवामध्ये येणारा भाग हा अश्यास क्षेत्र म्हणून विचारत घेण्यात आला होता. धरनीपातळीचे मॉनिटरींगसाठी सहिवसरी, प्यावसायिक, औदयोगिक, शांतता विभाग असे चार विभाग विचारत घेण्यात आले होते. या अश्यासामध्ये काही महत्वाच्या सडर्यांवर पाहतुकीमुळे होणारा आवाजसुद्धा सडमाविष्ट केला होता. प्रत्येक ठिकाणी २४ ताससाठी धरनीपातळीचे मॉनिटरींग करण्यात आले. धरनीपातळीचे मॉनिटरींगची वेगवेगळी स्थानके खाली दिलेल्या तक्त्यामध्ये दाखवली आहेत.

तक्ता २३ धरनी नमुना ठिकाणे

स्थानक संकेतांक	स्थानकाचे नाव	प्रकार	साईट पात्रुनची दिशा
N1	साईट	औदयोगिक	-
N2	टाकळी	ग्रामीण	N
N3	वरकुटे	ग्रामीण	E
N4	औंधी	ग्रामीण	SE
N5	फुलचिंचोली	ग्रामीण	W
N6	सौंदणे	ग्रामीण	NE
N7	डोंगरे मळा	ग्रामीण	NW
N8	वाघमोडी वरती	ग्रामीण	NE

तक्ता २४ ध्वनी पातळी

ठिकाणे	संवासाची ध्वनी पातळी (डेन्सिबल)					
	L10	L50	L90	Leq(day)	Leq(night)	Ldn
N1	५३.१	५५.२	५८.४	५९.३	५२.२	६०.६
N2	४२.४	४७.१	४८.०	५३.६	४२.१	५३.१
N3	४२.३	४६.३	४८.३	५२.३	४१.८	५२.१
N4	४१.९	४६.६	४७.८	५३.६	४१.५	५३.०
N5	४२.७	४७.४	४८.५	५४.३	४२.१	५३.६
N6	४२.६	४६.८	४८.५	५४.०	४१.३	५३.२
N7	४२.४	४६.९	४८.४	५३.६	४१.९	५३.०
N8	४२.९	४६.५	४८.५	५३.०	४१.४	५२.४

ग) सामाजिक - आर्थिक रचना

सामाजिक व आर्थिक स्तरावरून त्याभागातील प्रगती दर्शनास येते. कोणत्याही प्रकारच्या विकास प्रकल्पामुळे कार्यक्षेत्रात राहणा-या लोकांच्या राहणीमानावर, सामाजिक व आर्थिक स्तरावर प्रभाव पडतो. याखददलची सविस्तर माहिती ई.आय.ए. रिपोर्ट मधील प्रकरण ३ मध्ये आहे.

घ) पर्यावरण

प्रस्तावित आसवणी प्रकल्पाच्या प्रश्नावलीचा वापर करून पर्यावरण व जैवविविधता अभ्यासासाठी सर्वेक्षण केले गेले. प्रकल्पाच्या १० कि.मी. परिघातील १८ गावे पर्यावरण व जैवविविधता अभ्यासासाठी अनुकूल आढळली जी अभ्यासक्षेत्रातील बहुतांश वसतीस्थानांचे प्रतिनिधित्व करतात. ५ कि.मी. परिघातील ४ गावे व १० कि.मी. परिघातील ३ गावे. याखददलची सविस्तर माहिती ई.आय.ए. रिपोर्ट मधील प्रकरण ३ मध्ये आहे.

८) इतर अभ्यास

आपत्ती व्यवस्थापन

आपत्ती व्यवस्थापन करताना, खालील खालील विचार केला जातो.

१. प्रकल्पाच्या शेजारी राहणा-या लोकांना प्रकल्पामुळे कमीत कमी धोका आसा.
२. प्रकल्पामध्ये काम करणा-या कामगारांना शेजारी राहणा-या लोकांपेक्षा जास्त धोका अपेक्षित आहे, यामुळे प्रकल्पामध्ये काम करणा-या कामगाराना संभाव्य धोक्यापासून रक्षणाचे ट्रेनिंग दिले गेले पाहिजे जेणे करून संभाव्य धोके कमी होतील.

बीन ए. जी. (१९८२) यांनी आपत्ती व्यवस्थापन करताना विचारात घेतलेल्या खालील -

१. प्रकल्पास धोका : जेव्हा जिरीतास कमीत कमी धोका असतो व तो धोका पुढे कमी करणे शक्य होत नाही यावेळी ह्याधोक्यास प्राथमिकता दिली गेली पाहिजे. याअंतर्गत संभावित पित्तीय नुकसानीच्या धोक्याचा विचार केला जातो.
२. कामगार व जनतेस धोका : फेटल ऑक्सिडीजेंट रेट (एफ. ए. आर) किंवा फेटल ऑक्सिडीजेंट फिक्सेन्सी रेट (एफ. ए. एफ. आर) याचा वापर कामगार व जनतेस धोके यांचा अभ्यास करताना वापर केला जातो. एफ. ए. आर व एफ. ए. एफ. आर म्हणजेच औद्योगिक उपघातांमध्ये १००० लोकांमागे होणा-या अपेक्षित मृतांची संख्या होय. यासंबंधीची अधिक माहिती इ. आय. ए. रिपोर्ट मधील प्रकरण ७ येथे जोडली आहे.

९) पर्यावरणावर होणाऱे परिणाम आणि त्यासाठीच्या उपाय योजना

अ. भौगोलिक रचनेवर परिणाम

प्रस्तावित आसवणी प्रकल्पाच्या उभारणीमुळे संपादित जागेच्या भौगोलिक रचनेवर जास्त परिणाम अपेक्षित नाही. संपादित जागेमध्ये खदल जसे की, आसवणी प्रकल्प उभारणी अपेक्षित आहे. खदर औद्योगिक प्रकल्पामुळे काही सकारात्मक फायदे जसे की जमिन विकसिकरण, व झाडे लावणे अपेक्षित आहे.

ख. वातावरणावरील परिणाम

प्रस्तावित प्रकल्पामुळे हवामानावर परिणाम अपेक्षित नाही कारण जास्त तापमान अक्षणा-या वायुंचे उत्सर्जन अपेक्षित नाही.

हवेच्या दर्जावरील परिणाम

प्रस्तावित प्रकल्पामुळे होणा-या परिणामांची छाननी करण्यासाठी कारखाना परिभाषण केंद्र मानून त्यापासून १० कि.मी. अंतराच्या परिघामध्ये येणारा भाग विचारात घेतला गेला आहे.

१. मुलभूत अॅम्बिएंट वायू प्रमाणके

डिसेंबर २०२२ जानेवारी फेब्रुवारी २०२३ मध्ये करण्यात आलेल्या क्षेत्र अभ्यासादरम्यान नोंद करण्यात आलेली २४ तासामधील १८ पर्सेंटाईल प्रमाणके आणि PM₁₀, PM_{2.5}, SO₂ व NO_x यांची संशोधनालया हवेमधील संसाधनी यानुसार मिळालेल्या प्रमाणांना मुलभूत प्रमाणके मानण्यात आली आहेत. सदर प्रमाणके परिभाषामध्ये होणार परिणाम दर्शवतात. अध्याची मुलभूत प्रमाणके ई. आय. ए. रिपोर्ट मधील प्रकरण ४ तसेच पुढील तक्त्यामध्ये मांडण्यात आली आहेत.

तक्ता २५ मुलभूत प्रमाणके

तपशील	PM ₁₀	PM _{2.5}	SO ₂	NO _x	CO
98 percentile	६४.५ µg/m ³	२८.८ µg/m ³	१४.५ µg/m ³	२४.२ µg/m ³	०.४० mg/m ³
NAAQS	१०० µg/m ³	६० µg/m ³	८० µg/m ³	८० µg/m ³	४ mg/m ³

२. हवा प्रदूषण क्षेत्र

प्रस्तावित आशयनी प्रकल्पामध्ये ३५ टन प्रति तास क्षमतेचा इन्डिनरेशन ऑयलर उभारणेत येणार आहे. ज्यासाठी खर्च (४६३ मे.टन/दिन) / कोळसा (१८५ मे.टन/दिन) व कॉ. रपेंटवॉश (४३२ मे.टन/दिन) इंधन म्हणून वापरले जाईल. या ऑयलरला ई.एअ.पी. हे प्रदूषण नियंत्रक उपकरणे व ८५ मी. उंचीची चिमणी खणवली जाईल. अध्याच्या साखर कारखान्याअंतर्गत ३५ टन प्रति तास, २० टन प्रति तास क्षमतेचे २, १३० टन प्रति तास क्षमतेचा ऑयलर कार्यरत आहेत. ज्यासाठी खर्च इंधन म्हणून वापरले जाते. या ऑयलरला पेट रकडर व ई.एअ.पी. हे प्रदूषण नियंत्रक उपकरणे खणवली आहेत. प्रदूषण नियंत्रण करण्यासाठी ऑयलरला ६० व ८५ मी. उंचीची चिमणी खणवली आहे. सदर साखर कारखाना विस्तारिकरणांतर्गत कोणताही नवीन ऑयलर उभारणेत येणार नाही.

अध्या कारखान्यामध्ये १००० के.व्ही.ए. क्षमतेचे २ डी.जी. शेट कार्यरत आहेत. हवा प्रदूषण व त्यासंबंधीच्या इतर आधीची माहिती खालील तक्त्यात दिली आहे.

ड. जलस्रोतावरील परिणाम

१. भूपृष्ठीय जलस्रोतावरील परिणाम

भि.सं.सा.का.लि ची पाण्याची गरज भूपृष्ठीय जलस्रोतामधून व पुर्नवापर केलेल्या पाण्यामधून भागवली जाईल. आशयनी मधुन निघणारे रॉ रपेंटवॉश MEE मध्ये कॉभनट्रेट केले जाईल आणि कॉभनट्रेट रपेंटवॉश इन्डिनरेशन ऑयलर मध्ये जाळले जाईल. रपेंटलीज, एम.ई.ई. मधील कंडेनशेट, इतर सांडपाणी हे आशयनी प्रकल्पाच्या सि.पी.यु मध्ये प्रकियेत करून त्याचा पुर्नवापर केला जाईल. साखर कारखान्यातून निघणारे सांडपाणी हे औद्योगिक सांडपाणी प्रकिया केंद्रात प्रकियेत करून त्याचा पुर्नवापर केला जाईल.

भि.सं.सा.का.लि मध्ये तयार होणारे घरगुती सांडपाणी हे प्रस्तावित घरगुती सांडपाणी प्रकल्पामध्ये (एअ.टी.पी.) प्रकिया करून त्याचा पुर्नवापर केला जाईल.

२. भूगर्भिय पाण्याच्या गुणवत्तेवर होणारा परिणाम

प्रकल्पासाठी लागणारे जवरी पाणी हे ताम्रपर्णि नदीमधुन घेण्यात येईल. प्रस्तावित प्रकल्पाअंतर्गत त भूजलाचा वापर होणार नाही. या अधिक, कारखान्यामधुन कोणत्याही प्रकारचे अप्रकियेत सांडपाणी विस्र्जीत होणार नाही त्यामुळे भूजल पाणी पातळीवर व गुणवत्तेवर कोणताही परिणाम होणार नाही.

इ. माती पत्र होणारे परिणाम

मातीच्या गुणधर्मावर होणारे परिणाम हे आधारावरणे वायू उत्सर्जन, झांडपाण्याचे आणि घनकचरा प्रिनियोग यामुळे होत असतात. पत्र उल्लेख केल्याप्रमाणे कोणत्याही प्रकारे अप्रक्रियित झांडपाणी जमिनीवर ओडण्यात येणार नाही. वायू उत्सर्जन रोखण्यासाठी ई.एन.पी. हे वायू प्रदूषणनियंत्रक उपकरण पुरविले आहे. यामुळे कोणत्याही प्रकारे प्रक्रिया उत्सर्जन होणार नाही म्हणून मातीतील घटकांवर होणारा परिणाम शुन्य असेल. ऑयलरची राख, सी. पी. यु. बलज हे खत म्हणून वापरले जाईल. त्यामुळे वायू प्रदूषके अथवा झांडपाण्यामुळे जमिनीच्या रासायनिक घटकांमध्ये कोणताही मोठा बदल होणार नाही.

फ. ध्वनी मर्यादेवर होणारा परिणाम

अतिध्वनी निर्माण करणा-या यंत्रावर काम करीत असणा-या कामगारांचे अंतुलन शिघडून कामावर परिणाम होण्याची शक्यता असते. ध्वनी निर्माण करणाऱ्या यंत्राजवळ असणाऱ्या लोकांची ऐकण्याची क्षमता कमी होऊ शकते. अद्व प्रकल्पांमध्ये मुख्यतः आखर कारखान्यातील मील, कॉम्पेअर, ऑयलर, टर्बाइन व डि. जी. सेट हे ध्वनी प्रदूषणाचे मुख्य स्रोत ठरतील. अद्व प्रकल्प हा ध्वनीप्रदूषण करणारा नसणार आहे.

ग. जमीन वापरावर होणारा परिणाम

भि.अ.भा.का.लि यांच्या अर्थाच्या जागेमध्ये आखर कारखाना उभारण्यात आला आहे. प्रस्तावित आखरणी प्रकल्प व आखर कारखाना प्रस्ताविकरण अर्थाच्या भि.अ.भा.का.लि कारखान्याच्या आकारात उभारण्यात येईल. यामुळे जमीन वापरामध्ये बदल अपेक्षित नाही.

घ. झाडांवर व प्राण्यांवर होणारा परिणाम

प्रक्रिया न केलेले झांडपाणी कारखान्याच्या अभोवताली प्रसर्जित केल्यास पाणी अंधा व त्यावर अवलंबून असलेली जैवप्रिधतेवर परिणाम असतो. वायू प्रदूषणा अंर्भात कारखाना SPM च्या अवरूपात प्रदूषण योगदान देऊ शकतो. याचा प्रिपरीत परिणाम अंशतः पक्षी, अभोवताली पीके आणि अथानिक लोकांवर होऊ शकतो. झाडांवर व प्राण्यांवर होणारा परिणामांची माहिती ई. आय. ए. रिपोर्ट मधील प्रकरण ३ मध्ये देण्यात आलेली आहे.

ङ. ऐतिहासिक ठिकाणावर होणारा परिणाम

प्रकल्पाच्या १० कि.मी क्षेत्रात कोणतेही ऐतिहासिक ठिकाण येत नसलेने ऐतिहासिक ठिकाणावर कोणताही परिणाम अपेक्षित नाही.

१०) पर्यावरणीय निरीक्षण आराखड्याची ठळक वैशिष्ट्ये

तक्ता २३ मध्ये दिलेला प्रस्तुत पर्यावरणीय निरीक्षण आराखड्याची अंमलअजावणी केली जाईल. पर्यावरणीय निरीक्षणाव्यतिरिक्त पर्यावरणीय मंजूरीमध्ये दिलेल्या अटीची पूर्तता तसेच CPCB/ MoEFCC/ MPCB यांच्याकडील नियमित परवानग्या आणि रिपोर्टअ पुढील अंर्भासाठी अुरिथीत ठेवली जातील.

तक्ता २६ पर्यावरणीय निरीक्षण आराखड्याची ठळक वैशिष्ट्ये (ऑनलाईन)

क्र.	तपशील	ठिकाण	परिमाणे	वारंवारता	तपासणी
१	हवेची गुणवत्ता	अपरिंड - २, डाऊनपरिंड - ३ कॉअपरिंड - २ (केन यार्ड, मेन गेट जवळ, (ई.टी.पी. जवळ), असाहती जवळ)	PM ₁₀ , PM _{2.5} , SO ₂ , NO _x , CO	मासिक	MoEFCC approved Laboratory मधुन

क्र.	तपशील	ठिकाण	परिमाणे	पारंपारता	तपावणी
		अभ्यास क्षेत्र गावे - परकुटे , शेजभाभुळगाव, फुलचिंचोली , तासपूर , पुलूज , पाटकूल , टाकळी- क्षिकंदर		त्रैमासिक	
२	कामाच्या ठिकाणाची हवेची गुणवत्ता	४ ठिकाणी (मील विभाग, भास्वरपोती भरणा विभाग, आभयनी विभाग)	PM ₁₀ , PM _{2.5} , SO ₂ , NO _x , CO	मासिक	
३	चिमणीतुन होणाचे उत्सर्जन	ऑयलरच्या २ चिमण्या, डी.जी. बेटची चिमणी	SPM, SO ₂ , NO _x	मासिक	
४	कामाच्या ठिकाणाची ध्वनि	मील विभाग, ऑयलर, डी. जी. बेट, टर्झिन विभाग	Spot Noise Level recording; Leq(n), Leq(d), Leq(dn)	मासिक	
	ध्वनि	मेनगेट जपळ, ई. टी. पी. जपळ, भास्वर गोदाम , टर्झिन विभाग, ऑयलर		मासिक	
	गुणवत्ता				
५	भांडपाणी	<ul style="list-style-type: none"> प्रक्रिया न केलेले प्रक्रिया केलेले 	pH, SS, TDS, COD, BOD, Chlorides, Sulphates, Oil & Grease.	मासिक	
६	पिण्याचे पाणी	कारखान्याची प्राप्त	Parameters as drinking water standards.	मासिक	
७	जमीन	५ किमी मधील ८ ठिकाणे - पाटकूल , भौदणे , तासपूर , पोहारगाव , आंभेचिंचोली	PH, Salinity, Organic Carbon, N.P.K.	मासिक	
८	पाण्याची गुणवत्ता	अभ्यास क्षेत्रामधील ८ ठिकाणे टाकळी-क्षिकंदर , पुलूज , टाकळी-क्षिकंदर , परकुटे , टाकळी-क्षिकंदर , टाकळी-क्षिकंदर , टाकळी-क्षिकंदर , टाकळी-क्षिकंदर , टाकळी-क्षिकंदर ,	Parameters as per CPCB guideline for water quality monitoring - MINARS/27/2007- 08	द्वैमासिक	
९	कचरा प्यवस्थापन	प्रस्थापित कृतीतून तयार होणा-या कच-याचे वैशिष्टे	कच-याचे	वर्षातून दोनदा	

क्र.	तपशील	ठिकाण	परिमाणे	पारंपारता	तपावणी
		आणि रूपानुसार व्यवस्थापन केले जाईल.	निर्मिती, प्रकिया आणि धिल्लेवाट यांची नोंद		भि.स.भा.का.लि यांचेकडून
१०	आपातकालीन तयारी जसे की आग व्यवस्थापन	प्रतिबंधात्मक उपाय म्हणून आगीच्या व स्फोट होणाऱ्या ठिकाणी आगीपाहून संरक्षण आणि सुरक्षिततेची काळजी घेतली जाईल.	ऑन बाईट ईमरजन्सी व बॅकटकालीन आहारे पडण्याचा आराखडा	मासिक	
११	आरोग्य	कारखान्याचे कामगार आणि स्थलांतरीत कामगारांसाठी आरोग्य शिबीराचे आयोजन	सर्व आरोग्य विषयक चाचण्या	वार्षिक	
१२	हरीत पट्टा	कारखान्याच्या परीसरांमध्ये आणि शेजारील गावांमध्ये	झाडे जगण्याचा दर	जिल्हा वन अधिकारी यांच्या सल्ल्यानुसार	
१३	सी.ई.आर.	निर्देशाप्रमाणे		सहा महिन्यातून	

No.IA-J-11011/191/2023-IA-II(I)

Government of India
Minister of Environment, Forest and Climate Change
Impact Assessment Division

Indira Paryavaran Bhavan,
Vayu Wing, 3rd Floor, Aliganj,
Jor Bagh Road, New Delhi-110003
09 May 2023

To,

M/s BHIMA SAHAKARI SAKHAR KARKHANA LTD
Takali sikandar, Tal. Mohol, Dist. Solapur, Maharashtra.,
Solapur-413248
Maharashtra

Tel.No.-; Email:bhimasugar@gmail.com

Sir/Madam,

This has reference to the proposal submitted in the Ministry of Environment, Forest and Climate Change to prescribe the Terms of Reference (TOR) for undertaking detailed EIA study for the purpose of obtaining Environmental Clearance in accordance with the provisions of the EIA Notification, 2006. For this purpose, the proponent had submitted online information in the prescribed format (Form-1) along with a Pre-feasibility Report. The details of the proposal are given below:

- | | |
|---|---|
| 1. Proposal No.: | IA/MH/IND2/427524/2023 |
| 2. Name of the Proposal: | Establishment 200 KLPD B / C Heavy Molasses / Sugarcane Juice based Distillery and Expansion of Sugar Factory from 5000 TCD to 8000 TCD by Bhima Sahakari Sakhar Karkhana Ltd. (BSSKL), A/P: Takali- Sikandar, Tal.: Mohal, Dist.: Solapur, Maharashtra State |
| 3. Category of the Proposal: | Industrial Projects - 2 |
| 4. Project/Activity applied for: | 1(d) Thermal Power Plants
5(g) Distilleries
5(j) Sugar Industry |
| 5. Date of submission for TOR: | 29 Apr 2023 |

In this regard, under the provisions of the EIA Notification 2006 as amended, the Standard TOR for the purpose of preparing environment impact assessment report and environment management plan for obtaining prior environment clearance is prescribed with public consultation as follows:

ACTIVITY 5 (g)- DISTILLERIES

SPECIFIC TERMS OF REFERENCE FOR EIA STUDIES FOR DISTILLERIES

GENERIC TERMS OF REFERENCE

1) Executive Summary

2) Introduction

- i. Details of the EIA Consultant including NABET accreditation
- ii. Information about the project proponent

3) Project Description

- i. Cost of project and time of completion.
- ii. 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.
- iii. List of raw materials required and their source along with mode of transportation.
- iv. Other chemicals and materials required with quantities and storage capacities
- v. 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)
- vi. Process description along with major equipments and machineries, process flow sheet (quantitative) from raw material to products to be provided.
- vii. Hazard identification and details of proposed safety systems.
- viii. Expansion/modernization proposals:
 - 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 30th May, 2012 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.
 - 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. Further, compliance report to the conditions of consents from the SPCB shall be submitted.

4) Site Details

i. Location of the project site covering village, Taluka/Tehsil, District and State, Justification for selecting the site, whether other sites were considered.

ii. 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)

iii. 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.

iv. Photographs of the proposed and existing (if applicable) plant site. If existing, show photographs of plantation/greenbelt, in particular.

v. 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).

vi. A list of major industries with name and type within study area (10km radius) shall be incorporated.

vii. 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. (mega green field projects).

viii. Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.

ix. R&R details in respect of land in line with state Government policy.

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

i. Permission and approval for the use of forest land (forestry clearance), if any, and recommendations of the State Forest Department. (if applicable)

ii. 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).

iii. Status of Application submitted for obtaining the stage I forestry clearance along with latest status shall be submitted.

iv. 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

v. Wildlife Conservation Plan duly authenticated by the Chief Wildlife Warden of the State

Government for conservation of Schedule I fauna, if any exists in the study area

vi. 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

i. 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.

ii. 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.

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.

iv. 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.

v. Whether the site falls near to polluted stretch of river identified by the CPCB/MoEF&CC, if yes give details.

vi. Ground water monitoring at minimum at 8 locations shall be included.

vii. Noise levels monitoring at 8 locations within the study area.

viii. Soil Characteristic as per CPCB guidelines.

ix. Traffic study of the area, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc.

x. 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.

xi. Socio-economic status of the study area.

7) Impact and Environment Management Plan

- i Assessment of ground level concentration of pollutants from the stack emission based on site specific 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.
- ii. Water Quality modeling - in case of discharge in water body
- iii. 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.
- iv. 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.
- v. Details of stack emission and action plan for control of emissions to meet standards.
- vi. Measures for fugitive emission control
- vii. 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.
- viii. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 2009. A detailed plan of action shall be provided.
- ix. Action plan for the green belt development plan in 33 % area i.e. land with not less than 1,500 trees per ha. Giving details of species, width of plantation, planning schedule etc. shall be included. The green belt shall be around the project boundary and a scheme for greening of the roads used for the project shall also be incorporated.
- x. 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.

8) Occupational health

- i. Plan and fund allocation to ensure the occupational health & safety of all contract and casual workers.
- ii. 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 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.

iii. 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.

iv. Annual report of health status of workers with special reference to Occupational Health and Safety.

9) Corporate Environment Policy

i. 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.

ii. 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.

iii. 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.

iv. 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 labor force during construction as well as to the casual workers including truck drivers during operation phase.

11) Enterprise Social Commitment (ESC)

i. Adequate funds (at least 2.5 % of the project cost) shall be ear marked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan shall be included. Socio-economic development activities need to be elaborated upon.

11) 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.

13) A tabular chart with index for point wise compliance of above TOR.

SPECIFIC CONDITIONS

1. List of existing distillery units in the study area along with their capacity and sourcing of raw material.
2. Number of working days of the distillery unit.
3. Details of raw materials such as molasses/grains, their source with availability.
4. Details of the use of steam from the boiler.
5. Surface and Ground water quality around proposed spent wash storage lagoon, and compost yard.
6. Plan to reduce spent wash generation within 6-8 KL/KL of alcohol produced.
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.
8. Proposed action to restrict fresh water consumption within 10 KL/KL of alcohol production.
9. Details about capacity of spent wash holding tank, material used, design consideration. No. of peizometers to be proposed around spent wash holding tank.
10. Details of solid waste management including management of boiler ash, yeast, etc. Details of incinerated spent wash ash generation and its disposal.
12. Details of bio-composting yard (if applicable).
13. Action plan to control odour pollution.
14. Arrangements for installation of continuous online monitoring system (24x7 monitoring device)
15. Add: If Sugar and distillery will have integrated effluent treatment facilities. Details regarding the same.

ACTIVITY 5(j)- SUGAR INDUSTRY

SPECIFIC TERMS OF REFERENCE FOR EIA STUDIES FOR SUGAR INDUSTRY

GENERIC TERMS OF REFERENCE

1) Executive Summary

2) Introduction

- i. Details of the EIA Consultant including NABET accreditation
- ii. Information about the project proponent

3) Project Description

- i. Cost of project and time of completion.
- ii. 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.
- iii. List of raw materials required and their source along with mode of transportation.
- iv. Other chemicals and materials required with quantities and storage capacities
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- vi. Process description along with major equipments and machineries, process flow sheet (quantitative) from raw material to products to be provided.
- vii. Hazard identification and details of proposed safety systems.
- viii. Expansion/modernization proposals:
 - 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 30th May, 2012 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.
 - 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. Further, compliance report to the conditions of consents from the SPCB shall be submitted.

4) Site Details

i. Location of the project site covering village, Taluka/Tehsil, District and State, Justification for selecting the site, whether other sites were considered.

ii. 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)

iii. 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.

iv. Photographs of the proposed and existing (if applicable) plant site. If existing, show photographs of plantation/greenbelt, in particular.

v. 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).

vi. A list of major industries with name and type within study area (10km radius) shall be incorporated.

vii. 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. (mega green field projects).

viii. Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.

ix. R&R details in respect of land in line with state Government policy.

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ii. 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).

iii. Status of Application submitted for obtaining the stage I forestry clearance along with latest status shall be submitted.

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Government for conservation of Schedule I fauna, if any exists in the study area

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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.

iv. 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.

v. Whether the site falls near to polluted stretch of river identified by the CPCB/MoEF&CC, if yes give details.

vi. Ground water monitoring at minimum at 8 locations shall be included.

vii. Noise levels monitoring at 8 locations within the study area.

viii. Soil Characteristic as per CPCB guidelines.

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- ii. Water Quality modeling - in case of discharge in water body
- iii. 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.
- iv. 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.
- v. Details of stack emission and action plan for control of emissions to meet standards.
- vi. Measures for fugitive emission control
- vii. 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.
- viii. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 2009. A detailed plan of action shall be provided.
- ix. Action plan for the green belt development plan in 33 % area i.e. land with not less than 1,500 trees per ha. Giving details of species, width of plantation, planning schedule etc. shall be included. The green belt shall be around the project boundary and a scheme for greening of the roads used for the project shall also be incorporated.
- x. 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.

8) Occupational health

- i. Plan and fund allocation to ensure the occupational health & safety of all contract and casual workers.
- ii. 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 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.

iii. 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.

iv. Annual report of health status of workers with special reference to Occupational Health and Safety.

9) Corporate Environment Policy

i. 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.

ii. 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.

iii. 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.

iv. 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 labor force during construction as well as to the casual workers including truck drivers during operation phase.

11) Enterprise Social Commitment (ESC)

i. Adequate funds (at least 2.5 % of the project cost) shall be ear marked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan shall be included. Socio-economic development activities need to be elaborated upon.

11) 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.

13) A tabular chart with index for point wise compliance of above TOR.

SPECIFIC CONDITIONS

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. Details on water balance including quantity of effluent generated, recycled & reused. Efforts to minimize effluent discharge and to maintain quality of receiving water body.
 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.
 4. Number of working days of the sugar production unit.
 5. Details of the use of steam from the boiler.
 6. Details of proposed source-specific pollution control schemes and equipments to meet the national standards.
 7. Collection, storage, handling and transportation of molasses.
 8. Collection, storage and handling of bagasse and press mud.
 9. Fly ash management plan for coal based and bagasse and action plan
 10. 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.
 11. Details on existing ambient air quality and expected, stack and fugitive emissions for PM10, PM2.5, SO₂*, NO_x*, 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)
- Add: 12: If Sugar and Distillery will have integrated effluent treatment facilities. Details regarding the same.

ACTIVITY 5(j)- SUGAR INDUSTRY

SPECIFIC TERMS OF REFERENCE FOR EIA STUDIES FOR SUGAR INDUSTRY

GENERIC TERMS OF REFERENCE

1) Executive Summary

2) Introduction

- i. Details of the EIA Consultant including NABET accreditation
- ii. Information about the project proponent

3) Project Description

- i. Cost of project and time of completion.
- ii. 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.
- iii. List of raw materials required and their source along with mode of transportation.
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- vi. Process description along with major equipments and machineries, process flow sheet (quantitative) from raw material to products to be provided.
- vii. Hazard identification and details of proposed safety systems.
- viii. Expansion/modernization proposals:
 - 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 30th May, 2012 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.
 - 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. Further, compliance report to the conditions of consents from the SPCB shall be submitted.

4) Site Details

i. Location of the project site covering village, Taluka/Tehsil, District and State, Justification for selecting the site, whether other sites were considered.

ii. 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)

iii. 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.

iv. Photographs of the proposed and existing (if applicable) plant site. If existing, show photographs of plantation/greenbelt, in particular.

v. 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).

vi. A list of major industries with name and type within study area (10km radius) shall be incorporated.

vii. 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. (mega green field projects).

viii. Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.

ix. R&R details in respect of land in line with state Government policy.

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

i. Permission and approval for the use of forest land (forestry clearance), if any, and recommendations of the State Forest Department. (if applicable)

ii. 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).

iii. Status of Application submitted for obtaining the stage I forestry clearance along with latest status shall be submitted.

iv. 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

v. Wildlife Conservation Plan duly authenticated by the Chief Wildlife Warden of the State

Government for conservation of Schedule I fauna, if any exists in the study area

vi. 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

i. 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.

ii. 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.

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.

iv. 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.

v. Whether the site falls near to polluted stretch of river identified by the CPCB/MoEF&CC, if yes give details.

vi. Ground water monitoring at minimum at 8 locations shall be included.

vii. Noise levels monitoring at 8 locations within the study area.

viii. Soil Characteristic as per CPCB guidelines.

ix. Traffic study of the area, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc.

x. 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.

xi. Socio-economic status of the study area.

7) Impact and Environment Management Plan

- i Assessment of ground level concentration of pollutants from the stack emission based on site specific 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.
- ii. Water Quality modeling - in case of discharge in water body
- iii. 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.
- iv. 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.
- v. Details of stack emission and action plan for control of emissions to meet standards.
- vi. Measures for fugitive emission control
- vii. 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.
- viii. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 2009. A detailed plan of action shall be provided.
- ix. Action plan for the green belt development plan in 33 % area i.e. land with not less than 1,500 trees per ha. Giving details of species, width of plantation, planning schedule etc. shall be included. The green belt shall be around the project boundary and a scheme for greening of the roads used for the project shall also be incorporated.
- x. 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.

8) Occupational health

- i. Plan and fund allocation to ensure the occupational health & safety of all contract and casual workers.
- ii. 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 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.

iii. 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.

iv. Annual report of health status of workers with special reference to Occupational Health and Safety.

9) Corporate Environment Policy

i. 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.

ii. 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.

iii. 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.

iv. 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 labor force during construction as well as to the casual workers including truck drivers during operation phase.

11) Enterprise Social Commitment (ESC)

i. Adequate funds (at least 2.5 % of the project cost) shall be ear marked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan shall be included. Socio-economic development activities need to be elaborated upon.

11) 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.

13) A tabular chart with index for point wise compliance of above TOR.

SPECIFIC CONDITIONS

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. Details on water balance including quantity of effluent generated, recycled & reused. Efforts to minimize effluent discharge and to maintain quality of receiving water body.
 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.
 4. Number of working days of the sugar production unit.
 5. Details of the use of steam from the boiler.
 6. Details of proposed source-specific pollution control schemes and equipments to meet the national standards.
 7. Collection, storage, handling and transportation of molasses.
 8. Collection, storage and handling of bagasse and press mud.
 9. Fly ash management plan for coal based and bagasse and action plan
 10. 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.
 11. Details on existing ambient air quality and expected, stack and fugitive emissions for PM10, PM2.5, SO₂*, NO_x*, 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)
- Add: 12: If Sugar and Distillery will have integrated effluent treatment facilities. Details regarding the same.

ACTIVITY 1(d)- THERMAL POWER PLANT

STANDARD TERMS OF REFERENCE FOR CONDUCTING ENVIRONMENT IMPACT ASSESSMENT STUDY FOR THERMAL POWER PLANTS PROJECTS AND INFORMATION TO BE INCLUDED IN EIA/EMP REPORT

A. Statutory compliance

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.
2. Vision document specifying prospective long term plan of the project shall be formulated and submitted.
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.

B. Details of the Project and Site

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. 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.
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.
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.
5. Layout plan indicating break-up of plant area, ash pond, green belt, infrastructure, roads etc. shall be provided.
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.
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.

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.
9. The land acquisition and R&R scheme with a time bound Action Plan should be formulated and addressed in the EIA report.
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.
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.

C. Ecology biodiversity and Environment

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.
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. 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.
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.
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.

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.
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.
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.
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.
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.
11. Feasibility of near zero discharge concept shall be critically examined and its details submitted.
12. Optimization of Cycles of Concentration (COC) along with other water conservation measures in the project shall be specified.
13. Plan for recirculation of ash pond water and its implementation shall be submitted.
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.
15. Hazards Characterization: Past incidents of hazard events within 10km radius of project area with detailed analysis of causes and probability of reoccurrence

D. Environmental Baseline study and mitigation measures

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 analysis and the dates of 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.

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).
3. A list of industries existing and proposed in the study area shall be furnished.
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.
5. Radio activity and heavy metal contents of coal to be sourced shall be examined and submitted along with laboratory reports.
6. Fuel analysis shall be provided. Details of auxiliary fuel, if any, including its quantity, quality, storage etc should also be furnished.
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
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/conveyer belt.
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.
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.

E. Environmental Management Plan

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.
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.
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.
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.

F. Green belt development

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.
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.

G. Socio-economic activities

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.
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.

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.
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.*
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). CER details done in the past should be clearly spelt out in case of expansion projects.*
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 dependant on land falling in the project, as well as, population who were dependant on land not owned by them.
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.
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.

H. Corporate Environment Policy

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.
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.
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.

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.

I. Miscellaneous

1. All the above details should be adequately brought out in the EIA report and in the presentation to the Committee.
2. Details of litigation pending or otherwise with respect to project in any Court, Tribunal etc. shall invariably be furnished.
3. In case any dismantling of old plants are envisaged, the planned land use & land reclamation of dismantled area to be furnished.

J. Additional TOR for Coastal Based Thermal Power Plants Projects (TPPs):

Over and above the TOR mentioned in Thermal Power Plants Projects, the following shall be strictly followed (as applicable):

1. Low lying areas fulfilling the definition wetland as per Ramsar Convention shall be identified and clearly demarcated w.r.t the proposed site.
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.
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 desilted.
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.
5. Marshy areas which hold large quantities of flood water to be identified and shall not be disturbed.
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.

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.
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.
9. Impact on fisheries at various socio economic level shall be assessed.
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.
11. Tsunami Emergency Management Plan shall be prepared wherever applicable and Plan submitted prior to the commencement of construction work.
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.

Appendix - I Plot Layout

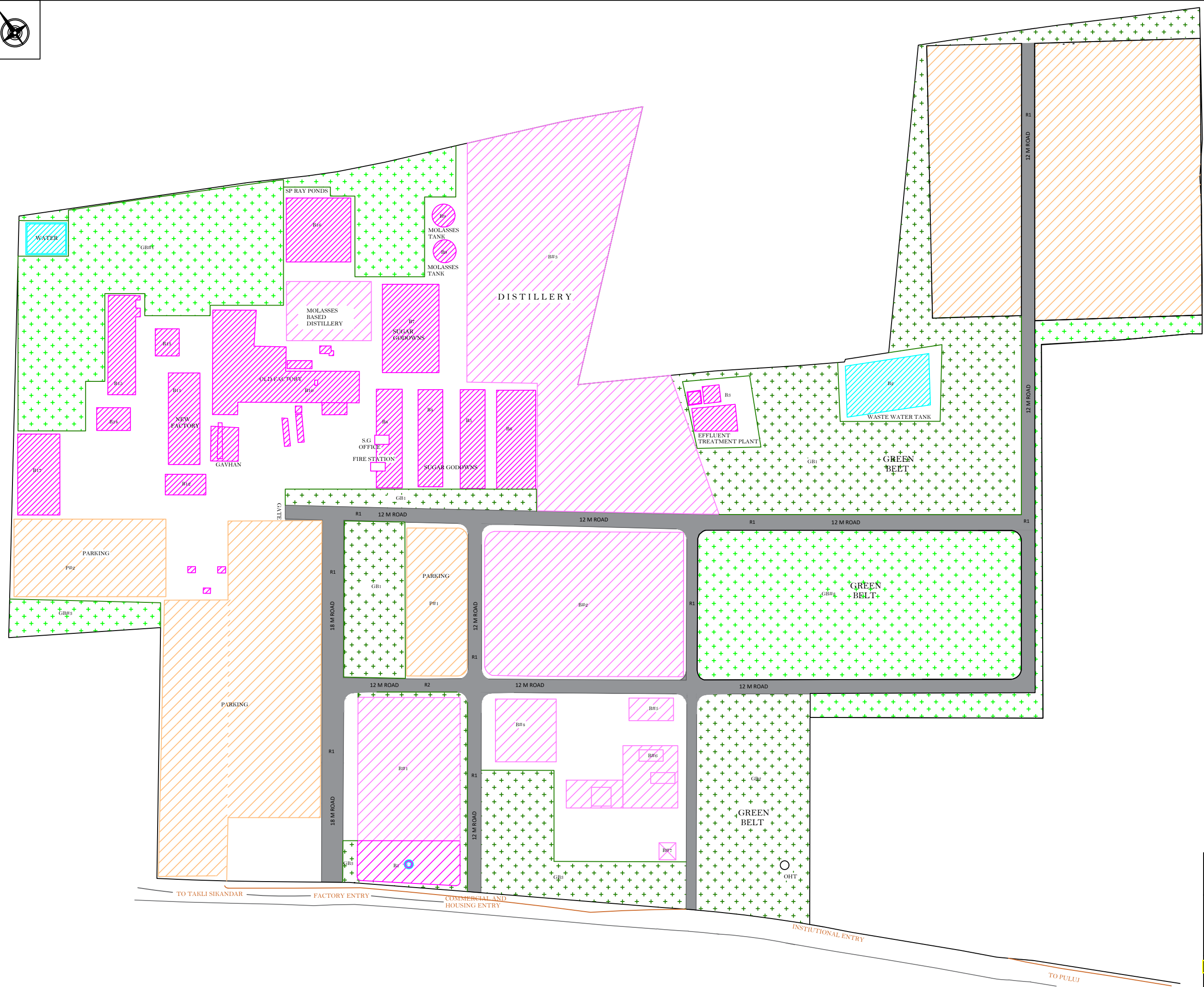
LEGENDS	DESCRIPTION
	EXISTING BUILDING
	PROPOSED BUILDING
	EXISTING GREEN BELT
	PROPOSED GREEN BELT
	ROAD
	PARKING

AREA STATEMENT -

NO	LIST OF AREA	TOTAL AREA
1	TOTAL LAND	5,06,478.80
2	TOTAL BUILT UP AREA	1,89,843.00
3	OPEN SPACE	16,280.00
4	GREEN BELT AREA	1,68,906.00
5	ROAD	39,749.00
6	PARKING	91701.00

GROUND COVERAGE AREA

NO	DESCRIPTION
B1	STATUE
B2	WASTE WATER TANK
B3	EFFLUENT TREATMENT PLANT
B4	SUGAR GODOWNS 1
B5	SUGAR GODOWNS 2
B6	SUGAR GODOWNS 3
B7	SUGAR GODOWNS 4
B8	S.G OFFICE AND
B9	MOLASSIS TANK
B10	OLD FACTORY
B11	NEW FACTORY
B12	COOLING TOWER
B13	COGEN
B14	AERO PLANT
B15	STORE ROOM
B16	SPRAY PONDS
B17	SWITCH YARD
B#1	ADMINISTRATION OFFICE
B#2	RECREATIONAL AREA
B#3	DISTILLERY
B#4	HOUSING
B#5	HOSPITAL
B#6	CANTEEN
B#7	TEMPLE



CLIENT NAME - BHIMA S. S. K. LTD, TAKLI SIKANDAR
TAL - MOHOL, DIST-SOLAPUR

Sachin Malvade
Civil Engineer & Contractor
14, New Nagarparishad Bldg., Basement Floor,
Mirachi Bazar, Pandharpur. Mobile: 9823751382
email: atharvconstruction2005@gmail.com

ATHARV ENGINEERS	Drawn by Sachin	Checked by Sachin	Scale As Shown	Date 25/07/2022
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DIRECTOR

DIRECTORATE OF SUGAR,
 MAHARASHTRA STATE,
 मध्याह्निक कर्मचारी आवास कक्षा, शंकरशेठ रोड, पुणे-९
 Mithapalli Estate, Shankarsheth Road, Poona. 9

Date :- 9-8-1974.

NO. SUR/PRG/(A)-5Certificate of Registration.

The Director of Sugar and Additional Registrar ,
 Co-operative Societies, Maharashtra State, Poona No.9,
 hereby certifies that " Bhima Sahakari Sakhar Karkhana
 Ltd., At and Post Takli Sikander, Taluka Mohol, District-
 Sholapur," has been registered under Section 9(1) of the
 Maharashtra Cooperative Societies Act, 1960 (Maharashtra
 Act XXIV of 1961). The registration No. of the Society
 is "SUR/PRG/(A)-5" and same has been ~~been~~ classified as
 a Processing Society, Sub-Class Agricultural Processing
 Society under Section 12(1) of the said Act read with
 Maharashtra Cooperative Societies Rule No.10(1).

Poona No.9.
 Date: 9-8-1974.

(A.M. Nimbalkar)
 Director of Sugar & Additional
 Registrar, Coop. Socys. M.S. Poona.



गाव नमुना सात

अधिकार अभिलेख पत्रक

(महाराष्ट्र जमीन महसूल अधिकार अभिलेख आणि नोंदवहया (तयार करणे व सुस्थितीत ठेवणे) नियम, १९७१ यातील नियम ३, ५, ६ आणि ७)

गाव :- टाकळी सिकंदर

तालुका :- मोहोळ

जिल्हा :- सोलापूर

अहवाल दिनांक:- 26-09-2017

गट क्रमांक व उपविभाग	भुधारणा पद्धती	भोगवटदाराचे नांव	क्षेत्र आकारआणे पै	पो.ख. फे.फा	खाते क्रमांक
214	भोगवटादार वर्ग -1	भिमा सह.साखर का.लि. टाकळी सिकंदर	40000.00.00	6.13 (281)	433
क्षेत्र एकक आर.चौ.मी					कुळाचे नाव
बिन शेती 40000.00.00					इतर अधिकार
बिन शेती 6.15					बोजा - सहकारी सोसायटी इकरार (469)
आकारणी					टाकळी.सि.वि.का.से.सो.इ.क.प.रु. (469)
फेरफार 281					बोजा - सहकारी सोसायटी इकरार (3396)
क्रमांक					दि. महा स्टे.को.ऑ.बॅ.लि.मुंबई (3396)
जिरायत -					र.रु. 1034.39 लाख (3396)
बागायत -					बोजा - राष्ट्रीयकृत बँक गहाण (4273)
तरी -					महाराष्ट्र राज्य सहकारी बँक लि.मुंबई
वरकस -					र.रु.1085600000/-दि.10.12.2013. (4273)
इतर -					बोजा - राष्ट्रीयकृत बँक गहाण (4399)
-----					महाराष्ट्र राज्य सहकारी बँक लि.मुंबई
एकुण क्षेत्र-					यांचेकडुन कर्ज र.रु. 186600000/- (4399)
-----					बोजा - सहकारी सोसायटी इकरार (4399)
-----					महाराष्ट्र राज्य को ऑफ. बँक लि. मुंबई
पोटखराब (लागवडीस अयोग्य)					येथील र. रु. 186600000/- दी 9/6/2014 (4399)
वर्ग (अ) -					बोजा - राष्ट्रीयकृत बँक गहाण (4647)
वर्ग (ब) -					महाराष्ट्र राज्य सहकारी बँक लि. मुंबई
एकुण पो 0.00.00					र. रु. 10,38,58,000/- दि. 29/01/2016 (4647)
ख					

जुडी किवा -					
विशेष					
आकारणी					

सुचना : या संकेतस्थळावर दर्शविलेली माहिती ही कोणत्याही शासकीय अथवा कायदेशीर बाबींसाठी वापरता येणार नाही.



गाव नमुना बारा

अहवाल दिनांक: 26-09-2017

अधिकार अभिलेख पत्रक

(महाराष्ट्र जमीन महसूल अधिकार अभिलेख आणि नोंदवहया (करणे व सुस्थितीत ठेवणे) नियम, १९७१ यातील नियम २९)

गाव: टाकळी सिकंदर

तालुका: मोहोळ

जिल्हा: सोलापूर

वर्ष	हंगाम	पिकाखालील क्षेत्राचा तपशील									निर्भळपिकाखालील लागवडीसाठी उपलब्ध नसलेली जमीन	जल सिंचनाचे साधन	शेरा		
		मिश्र पिकाखालील क्षेत्र						निर्भळ पिकाखालील क्षेत्र							
		मिश्रणाचा संकेत क्रमांक		घटक पिके व प्रत्येकाखालील क्षेत्र				पिकांचे नाव	जल सिंचित	अजल सिंचित				स्वरूप	क्षेत्र
2002-03	संपूर्ण वर्ष											तलाव पड	3.9900		
2003-04	संपूर्ण वर्ष											तलाव पड	3.9900		
2004-05	संपूर्ण वर्ष											तलाव पड	3.9900		
2005-06	संपूर्ण वर्ष											तलाव पड	3.9900		
2006-07	संपूर्ण वर्ष											तलाव पड	3.9900		
2007-08	संपूर्ण वर्ष											तलाव पड	3.9900		
2008-09	संपूर्ण वर्ष											तलाव पड	3.9900		
2009-10	संपूर्ण वर्ष											तलाव पड	3.9900		
2010-11	संपूर्ण वर्ष											तलाव पड	3.9900		
2011-12	संपूर्ण वर्ष											तलाव पड	3.9900		
2012-13	संपूर्ण वर्ष											तलाव पड	3.9900		
2013-14	संपूर्ण वर्ष											तलाव पड	3.9900		
2014-15	संपूर्ण वर्ष											तलाव पड	3.9900		
2015-16	संपूर्ण वर्ष											पडळ	3.9900		
2016-17	संपूर्ण वर्ष											पडळ	3.9900		

सुचना : या संकेतस्थळावर दर्शविलेली माहिती ही कोणत्याही शासकीय अथवा कायदेशीर बाबींसाठी वापरता येणार नाही.

महा-ई-सेवा केंद्र, मोहोळ
ता. मोहोळ जि. सोलापूर

गाव नमुना सात

अधिकार अभिलेख पत्रक

(महाराष्ट्र जमीन महसूल अधिकार अभिलेख आणि नोंदवहया (तयार करणे व सुस्थितीत ठेवणे) नियम, १९७१ यातील नियम ३, ५, ६ आणि ७)

गाव :- टाकळी सिकंदर

तालुका :- मोहोळ

जिल्हा :- सोलापूर

अहवाल दिनांक:- 26-09-2017

गट क्रमांक व उपविभाग	भुधारणा पद्धती	भोगवटदाराचे नांव	
215	भोगवटादार वर्ग -1		
शेतीचे स्थानिक नांव	क्षेत्र आकारआणे पै	पो.ख. फे.फा	खाते क्रमांक
क्षेत्र एकक आर.चौ.मी	भिमा सह.साखर का.लि. टाकळी सिकंदर	42400.00.00 6.48	(278) 433
बिन शेती 42400.00.00			कुळाचे नाव
बिन शेती 6.50			इतर अधिकार
आकारणी			बोजा - मृदसधारण कर्ज (130)
फेरफार 278			बडींग बोजा रु. 2187.34 (130)
क्रमांक			बोजा - सहकारी सोसायटी इकरार (3396)
जिरायत -			दि.महा.स्टे.को.ऑ.वॅ.लि.मुंबई (3396)
बागायत -			र.रु. 1034.39 लाख (3396)
तरी -			बोजा - राष्ट्रीयकृत बँक गहाण (4273)
वरकस -			महाराष्ट्र राज्य सहकारी बँक लि.मुंबई
इतर -			र.रु.1085600000/-दि.10.12.2013. (4273)
एकूण क्षेत्र-			बोजा - सहकारी सोसायटी इकरार (4399)
			महाराष्ट्र राज्य को ओप. बँक लि. मुंबई
			र. रु. 186600000/- चे कर्ज दि. 9/6/२०१४
			असे (4399)
			बोजा - राष्ट्रीयकृत बँक गहाण (4647)
			महाराष्ट्र राज्य सहकारी बँक लि. मुंबई
			र. रु. 10,38,58,000/- दि. 29/01/2016 (4647)
पोटखराब (लागवडीस अयोग्य)			
वर्ग (अ) -			
वर्ग (ब) -			
एकूण पो 0.00.00			
ख			
जुडी किंवा विशेष			
आकारणी			

सुचना : या संकेतस्थळावर दर्शविलेली माहिती ही कोणत्याही शासकीय अथवा कायदेशीर बाबींसाठी वापरता येणार नाही.



गाव नमुना बारा

अहवाल दिनांक: 26-09-2017

अधिकार अभिलेख पत्रक

(महाराष्ट्र जमीन महसूल अधिकार अभिलेख आणि नोंदवहया (करणे व सुस्थितीत ठेवणे) नियम, १९७१ यातील नियम २९)

गाव: टाकळी सिकंदर

तालुका: मोहोळ

जिल्हा: सोलापूर

वर्ष	हंगाम	पिकाखालील क्षेत्राचा तपशील									निर्भळपिकाखालील लागवडीसाठी उपलब्ध नसलेली जमीन	जल सिंचनाचे साधन	शेरा		
		मिश्र पिकाखालील क्षेत्र						निर्भळ पिकाखालील क्षेत्र							
		मिश्रणाचा संकेत क्रमांक		घटक पिके व प्रत्येकाखालील क्षेत्र											
जल सिंचित	अजल सिंचित	पिकांचे नाव	जल सिंचित	अजल सिंचित	पिकांचे नाव	जल सिंचित	अजल सिंचित	स्वरूप	क्षेत्र						
2002-03	संपूर्ण वर्ष											तलाव पड	4.2300		
2003-04	संपूर्ण वर्ष											तलाव पड	4.2300		
2004-05	संपूर्ण वर्ष											तलाव पड	4.2300		
2005-06	संपूर्ण वर्ष											तलाव पड	4.2300		
2006-07	संपूर्ण वर्ष											तलाव पड	4.2300		
2007-08	संपूर्ण वर्ष											तलाव पड	4.2300		
2008-09	संपूर्ण वर्ष											तलाव पड	4.2300		
2009-10	संपूर्ण वर्ष											तलाव पड	4.2300		
2010-11	संपूर्ण वर्ष											तलाव पड	4.2300		
2011-12	संपूर्ण वर्ष											तलाव पड	4.2300		
2012-13	संपूर्ण वर्ष											तलाव पड	4.2300		
2013-14	संपूर्ण वर्ष											तलाव पड	4.2300		
2014-15	संपूर्ण वर्ष											तलाव पड	4.2300		
2015-16	संपूर्ण वर्ष											बिगर शेती पड	4.2300		
2016-17	संपूर्ण वर्ष											बिगर शेती पड	4.2300		

सुचना : या संकेतस्थळावर दर्शविलेली माहिती ही कोणत्याही शासकीय अथवा कायदेशीर बाबींसाठी वापरता येणार नाही.

महा-ई-सेवा केंद्र, मोहोळ
ता. मोहोळ जि. सोलापूर

गाव नमुना सात

अधिकार अभिलेख पत्रक

(महाराष्ट्र जमीन महसूल अधिकार अभिलेख आणि नोंदवहया (तयार करणे व सुस्थितीत ठेवणे) नियम, १९७१ यातील नियम ३, ५, ६ आणि ७)

गाव :- टाकळी सिकंदर

तालुका :- मोहोळ

जिल्हा :- सोलापूर

अहवाल दिनांक:- 26-09-2017

गट क्रमांक व उपविभाग	भुधारणा पद्धती	भोगवटदाराचे नांव	क्षेत्र आकारआणे पै पो.ख. फे.फा	खाते क्रमांक
465	भोगवटादार वर्ग -1			
क्षेत्र एकक आर.चौ.मी	भिमा सह.साखर का.लि. टाकळी सिकंदर	15500.00.00 2.45	(2754)	433
बिन शेती 15500.00.00				कुळाचे नाव
बिन शेती 2.45				इतर अधिकार
आकारणी				बोजा - मृदसधारण कर्ज (130)
फेरफार 282				बडीग बोजा रु. 258.12 (130)
क्रमांक				बोजा - सहकारी सोसायटी इकरार (3396)
जिरायत -				दि.महा.स्टे.को.ऑ.बॅ.लि.मुंबई (3396)
बागायत -				र.रु. 1034.39 लाख (3396)
तरी -				बोजा - राष्ट्रीयकृत बँक गहाण (4273)
वरकस -				महाराष्ट्र राज्य सहकारी बँक लि.मुंबई
इतर -				र.रु.1085600000/-दि.10.12.2013. (4273)
एकुण क्षेत्र-				बोजा - राष्ट्रीयकृत बँक गहाण (4399)
				महाराष्ट्र राज्य सहकारी बँक लि.मुंबई
पोटखराब (लागवडीस अयोग्य)				यांचेकडून कर्ज र.रु. 186600000/-दि. 19.12.018 (4399)
वर्ग (अ) -				बोजा - सहकारी सोसायटी इकरार (4399)
वर्ग (ब) -				महाराष्ट्र राज्य को. ओप. बँक लि. मुंबई
एकुण पो 0.00.00				र. रु. 186600000/-चे कर्ज दि. 9/6/2018 (4399)
ख				बोजा - राष्ट्रीयकृत बँक गहाण (4647)
				महाराष्ट्र राज्य सहकारी बँक लि. मुंबई
जुडी किवा - विशेष आकारणी				र. रु. 10,38,58,000/- दि. 29/01/2016 (4647)

सुचना : या संकेतस्थळावर दर्शविलेली माहिती ही कोणत्याही शासकीय अथवा कायदेशीर बाबींसाठी वापरता येणार नाही.



गाव नमुना बारा

अहवाल दिनांक: 26-09-2017

अधिकार अभिलेख पत्रक

(महाराष्ट्र जमीन महसूल अधिकार अभिलेख आणि नोंदवहया (करणे व सुस्थितीत ठेवणे) नियम, १९७१ यातील नियम २९)

गाव: टाकळी सिकंदर

तालुका: मोहोळ

जिल्हा: सोलापूर

वर्ष	हंगाम	पिकाखालील क्षेत्राचा तपशील									निर्भळपिकाखालील लागवडीसाठी उपलब्ध नसलेली जमीन	जल सिंचनाचे साधन	शेरा	
		मिश्र पिकाखालील क्षेत्र						निर्भळ पिकाखालील क्षेत्र						
		मिश्रणाचा संकेत क्रमांक	घटक पिके व प्रत्येकाखालील क्षेत्र											
जल सिंचित	अजल सिंचित	पिकांचे नाव	जल सिंचित	अजल सिंचित	पिकांचे नाव	जल सिंचित	अजल सिंचित	स्वरूप	क्षेत्र					
2002-03	संपूर्ण वर्ष										तलाव पड	1.5500		
2003-04	संपूर्ण वर्ष										तलाव पड	1.5500		
2004-05	संपूर्ण वर्ष										तलाव पड	1.5500		
2005-06	संपूर्ण वर्ष										तलाव पड	1.5500		
2006-07	संपूर्ण वर्ष										तलाव पड	1.5500		
2007-08	संपूर्ण वर्ष										तलाव पड	1.5500		
2008-09	संपूर्ण वर्ष										तलाव पड	1.5500		
2009-10	संपूर्ण वर्ष										तलाव पड	1.5500		
2010-11	संपूर्ण वर्ष										तलाव पड	1.5500		
2011-12	संपूर्ण वर्ष										तलाव पड	1.5500		
2012-13	संपूर्ण वर्ष										तलाव पड	1.5500		
2013-14	संपूर्ण वर्ष										तलाव पड	1.5500		
2014-15	संपूर्ण वर्ष										तलाव पड	1.5500		
2015-16	संपूर्ण वर्ष										तलाव पड	1.5500		
2016-17	संपूर्ण वर्ष										तलाव पड	1.5500		

सुचना : या संकेतस्थळावर दर्शविलेली माहिती ही कोणत्याही शासकीय अथवा कायदेशीर बाबींसाठी वापरता येणार नाही.

महा-ई-सेवा केंद्र, मोहोळ
ता. मोहोळ जि. सोलापूर

गाव नमुना सात

अधिकार अभिलेख पत्रक

(महाराष्ट्र जमीन महसूल अधिकार अभिलेख आणि नोंदवहया (तयार करणे व सुस्थितीत ठेवणे) नियम, १९७१ यातील नियम ३, ५, ६ आणि ७)

गाव :- टाकळी सिकंदर

तालुका :- मोहोळ

जिल्हा :- सोलापूर

अहवाल दिनांक:- 26-09-2017

गट क्रमांक व उपविभाग	भुधारणा पद्धती	भोगवटदाराचे नांव		क्षेत्र	आकार	आणे	पै	पो.ख.	फे.फा	खाते क्रमांक
204	भोगवटदार वर्ग -1									
शेतीचे स्थानिक नांव				क्षेत्र	आकार	आणे	पै	पो.ख.	फे.फा	खाते क्रमांक
क्षेत्र एकक हे.आर.चौ.मी	भिमा सह.साखर का.लि. टाकळी सिकंदर			4.71.00	7.20			0.06.00	(279)	433
जिरायत	4.71.00									कुळाचे नाव
बागायत	-									इतर अधिकार
तरी	-									बोजा - सहकारी सोसायटी इकरार (1)
वरकस	-									बलभिम सो.इ.क.प. (1)
इतर	-									रु. 200/- ता. 30/4/65 (1)
एकुण क्षेत्र	4.71.00									बोजा - राष्ट्रीयकृत बँक गहाण (2754)
पोटखराब (लागवडीस अयोग्य)	वर्ग (अ) 0.06.00									दि.महाराष्ट्र राज्य सह.बँक लि.पुणे (2754)
वर्ग (ब) -	एकुण पो 0.06.00									कर्ज रु. 117-34 दि.29/3/03 (2754)
ख										बोजा - राष्ट्रीयकृत बँक गहाण (4273)
जुडी किवा - विशेष										महाराष्ट्र राज्य सहकारी बँक लि.मुंबई
आकारणी										र.रु.1085600000/-दि.10.12.2013. (4273)
										बोजा - सहकारी सोसायटी इकरार (4399)
										महाराष्ट्र राज्य को. ओप. बँक लि. मुंबई
										र. रु. 186600000/- चे कर्ज असे दि. 9/6/2014 (4399)
										बोजा - राष्ट्रीयकृत बँक गहाण (4647)
										महाराष्ट्र राज्य सहकारी बँक लि. मुंबई
										र. रु. 10,38,58,000/- दि. 29/01/2016 (4647)
										सीमा आणि भुमापन चिन्हे
										(2755),(3029),(3120),(4934)

सुचना : या संकेतस्थळावर दर्शविलेली माहिती ही कोणत्याही शासकीय अथवा कायदेशीर बाबींसाठी वापरता येणार नाही.

वर्ष	हंगाम	पिकाखालील क्षेत्राचा तपशील									निर्भळपिकाखालील लागवडीसाठी उपलब्ध नसलेली जमीन	जल सिंचनाचे साधन	शेरा	
		मिश्र पिकाखालील क्षेत्र						निर्भळ पिकाखालील क्षेत्र						
		मिश्रणाचा संकेत क्रमांक		घटक पिके व प्रत्येकाखालील क्षेत्र				पिकांचे नाव	जल सिंचित	अजल सिंचित				स्वरूप
2002-03	संपूर्ण वर्ष										बिगर शेती पड	4.7100		
2003-04	संपूर्ण वर्ष										बिगर शेती पड	4.7100		
2004-05	संपूर्ण वर्ष										तलाव पड	4.7100		
2005-06	संपूर्ण वर्ष										तलाव पड	4.7100		
2006-07	संपूर्ण वर्ष										तलाव पड	4.7100		
2007-08	संपूर्ण वर्ष										तलाव पड	4.7100		
2008-09	संपूर्ण वर्ष										तलाव पड	4.7100		
2009-10	संपूर्ण वर्ष										तलाव पड	4.7100		
2010-11	संपूर्ण वर्ष										तलाव पड	4.7100		
2011-12	संपूर्ण वर्ष										तलाव पड	4.7100		
2012-13	संपूर्ण वर्ष										तलाव पड	4.7100		
2013-14	संपूर्ण वर्ष										बिगर शेती पड	4.7100		
2014-15	संपूर्ण वर्ष										बिगर शेती पड	4.7100		
2015-16	रब्बी										बिगर शेती पड	4.7700		
2016-17	संपूर्ण वर्ष										बिगर शेती पड	4.7100		

सुचना : या संकेतस्थळावर दर्शविलेली माहिती ही कोणत्याही शासकीय अथवा कायदेशीर बाबींसाठी वापरता येणार नाही.

महा-ई-सेवा केंद्र, मोहोळ
ता. मोहोळ जि. सोलापूर

गाव नमुना सात

अधिकार अभिलेख पत्रक

(महाराष्ट्र जमीन महसूल अधिकार अभिलेख आणि नोंदवहया (तयार करणे व सुस्थितीत ठेवणे) नियम, १९७१ यातील नियम ३, ५, ६ आणि ७)

गाव :- टाकळी सिकंदर

तालुका :- मोहोळ

जिल्हा :- सोलापूर

अहवाल दिनांक:- 26-09-2017

गट क्रमांक व उपविभाग	भुधारणा पद्धती	भोगवटदाराचे नांव
205	भोगवटादार वर्ग -1	
शेतीचे स्थानिक नांव	क्षेत्र आकारआणे पै	पो.ख. फे.फा
क्षेत्र एकक आर.चौ.मी	भिमा सह.साखर का.लि. टाकळी	26700.00.00 1.16
बिन शेती 26700.00.00	सिकंदर	(277)
बिन शेती 1.16		
आकारणी		
फेरफार 277		
क्रमांक		
जिरायत -		
बागायत -		
तरी -		
वरकस -		
इतर -		
एकुण क्षेत्र-		
पोटखराब (लागवडीस अयोग्य)		
वर्ग (अ) -		
वर्ग (ब) -		
एकुण पो 0.00.00		
ख		
जुडी किंवा विशेष		
आकारणी		
		खाते क्रमांक
		433
		कुळाचे नाव
		इतर अधिकार
		इतर (2695)
		रा.सो.न.ग.दा.र (2695)
		बोजा - राष्ट्रीयकृत बँक गहाण (2754)
		महाराष्ट्र राज्य सहकारी बँक लि.पुणे (2754)
		रु. 117-34 लाख दि.29/3/03 (2754)
		बोजा - राष्ट्रीयकृत बँक गहाण (4273)
		महाराष्ट्र राज्य सहकारी बँक लि.मुंबई
		र.रु.1085600000/-दि.10.12.2013. (4273)
		बोजा - राष्ट्रीयकृत बँक गहाण (4399)
		महाराष्ट्र राज्य सहकारी बँक लि.मुंबई
		यांचेकडून कर्ज र.रु. 1866000000/- दि.
		१९.१२.०१४ (4399)
		बोजा - सहकारी सोसायटी इकरार (4399)
		महाराष्ट्र राज्य को. ऑफ. बँक लि.
		मुंबई र. रु. 1866000000/- दि. 9/6/2014 (4399)
		बोजा - राष्ट्रीयकृत बँक गहाण (4647)
		महाराष्ट्र राज्य सहकारी बँक लि. मुंबई
		र. रु. 10,38,58,000/- दि. 29/01/2016 (4647)

सुचना : या संकेतस्थळावर दर्शविलेली माहिती ही कोणत्याही शासकीय अथवा कायदेशीर बाबींसाठी वापरता येणार नाही.



गाव नमुना बारा

अहवाल दिनांक: 26-09-2017

अधिकार अभिलेख पत्रक

(महाराष्ट्र जमीन महसूल अधिकार अभिलेख आणि नोंदवहया (करणे व सुस्थितीत ठेवणे) नियम, १९७१ यातील नियम २९)

गाव: टाकळी सिकंदर

तालुका: मोहोळ

जिल्हा: सोलापूर

वर्ष	हंगाम	पिकाखालील क्षेत्राचा तपशील									निर्मळपिकाखालील लागवडीसाठी उपलब्ध नसलेली जमीन	जल सिंचनाचे साधन	शेरा		
		मिश्र पिकाखालील क्षेत्र						निर्मळ पिकाखालील क्षेत्र							
		मिश्रणाचा संकेत क्रमांक		घटक पिके व प्रत्येकाखालील क्षेत्र				पिकांचे नाव	जल सिंचित	अजल सिंचित				स्वरूप	क्षेत्र
2002-03	संपूर्ण वर्ष											बिगर शेती पड	1.1600		
2003-04	संपूर्ण वर्ष											बिगर शेती पड	1.1600		
2004-05	संपूर्ण वर्ष											तलाव पड	1.1600		
2005-06	संपूर्ण वर्ष											तलाव पड	1.1600		
2006-07	संपूर्ण वर्ष											तलाव पड	1.1600		
2007-08	संपूर्ण वर्ष											तलाव पड	1.1600		
2008-09	संपूर्ण वर्ष											तलाव पड	1.1600		
2009-10	संपूर्ण वर्ष											तलाव पड	1.1600		
2010-11	संपूर्ण वर्ष											तलाव पड	1.1600		
2011-12	संपूर्ण वर्ष											तलाव पड	1.1600		
2012-13	संपूर्ण वर्ष											तलाव पड	1.1600		
2013-14	संपूर्ण वर्ष											बिगर शेती पड	1.1600		
2014-15	संपूर्ण वर्ष											बिगर शेती पड	1.1600		
2015-16	रब्बी											बिगर शेती पड	1.1800		
2016-17	संपूर्ण वर्ष											बिगर शेती पड	1.1600		

सुचना : या संकेतस्थळावर दर्शविलेली माहिती ही कोणत्याही शासकीय अथवा कायदेशीर बाबींसाठी वापरता येणार नाही.

महा-ई-सेवा केंद्र, मोहोळ
ता. मोहोळ जि. सोलापूर

गाव नमुना सात

अधिकार अभिलेख पत्रक

(महाराष्ट्र जमीन महसूल अधिकार अभिलेख आणि नोंदवहया (तयार करणे व सुस्थितीत ठेवणे) नियम, १९७१ यातील नियम ३, ५, ६ आणि ७)

गाव :- टाकळी सिकंदर

तालुका :- मोहोळ

जिल्हा :- सोलापूर

अहवाल दिनांक:- 26-09-2017

गट क्रमांक व उपविभाग	भुधारणा पद्धती	भोगवटदाराचे नांव		क्षेत्र	आकार	आणे	पै	पो.ख.	फे.फा	खाते क्रमांक		
206/1	भोगवटादार वर्ग -1											
क्षेत्र एकक हे.आर.चौ.मी	जिरायत	बागायत	तरी	वरकस	इतर	एकुण क्षेत्र	पोटखराब (लागवडीस अयोग्य)	वर्ग (अ)	वर्ग (ब)	एकुण पो	ख	जुडी किंवा विशेष आकारणी
4.81.00	4.81.00	-	-	-	-	4.81.00	0.06.00	0.06.00	0.06.00			
शेतीचे स्थानिक नांव		क्षेत्र आकारआणे पै		पो.ख. फे.फा		खाते क्रमांक						
क्षेत्र एकक हे.आर.चौ.मी		क्षेत्र आकारआणे पै		पो.ख. फे.फा		खाते क्रमांक						
जिरायत 4.81.00		4.81.00 6.10		0.06.00 (287)		433						
बागायत -						कुळाचे नाव						
तरी -						इतर अधिकार						
वरकस -						बोजा - सहकारी सोसायटी इकरार (1)						
इतर -						टा.सि.वि.का.से.सो.इ.क.प. (1)						
एकुण क्षेत्र 4.81.00						रु. 400/- ता. 9/7/64 (1)						
पोटखराब (लागवडीस अयोग्य)						बोजा - मृदसधारण कर्ज (130)						
वर्ग (अ) 0.06.00						बडींग बोजा रु. 532.0.04 (130)						
वर्ग (ब) -						बोजा - राष्ट्रीयकृत बँक गहाण (2754)						
एकुण पो 0.06.00						दि.महाराष्ट्र राज्य सह.बँक लि.पुणे (2754)						
ख						तारण रु.117-34 दि.29/3/03 (2754)						
जुडी किंवा विशेष आकारणी						बोजा - राष्ट्रीयकृत बँक गहाण (4273)						
						महाराष्ट्र राज्य सहकारी बँक लि.मुंबई र.रु.1085600000/-दि.10.12.2013. (4273)						
						बोजा - राष्ट्रीयकृत बँक गहाण (4399)						
						महाराष्ट्र राज्य सहकारी बँक लि.मुंबई यांचेकडुन कर्ज र.रु. 1866000000/- (4399)						
						बोजा - सहकारी सोसायटी इकरार (4399)						
						महाराष्ट्र राज्य को ओप. बँक लि. मुंबई र. रु. 1866000000/- चे कर्ज दि. 9/6/२०१४ (4399)						
						बोजा - राष्ट्रीयकृत बँक गहाण (4647)						
						महाराष्ट्र राज्य सहकारी बँक लि. मुंबई र. रु. 10,38,58,000/- दि. 29/01/2016 (4647)						
						सीमा आणि भुमापन चिन्हे						
						(1),(576),(2754),(3029),(3120),(5755)						

सुचना : या संकेतस्थळावर दर्शविलेली माहिती ही कोणत्याही शासकीय अथवा कायदेशीर बाबींसाठी वापरता येणार नाही.

गाव नमुना बारा
अधिकार अभिलेख पत्रक

अहवाल दिनांक: 26-09-2017

(महाराष्ट्र जमीन महसूल अधिकार अभिलेख आणि नोंदवहया (करणे व सुस्थितीत ठेवणे) नियम, १९७१ यातील नियम २९)

गाव: टाकळी सिकंदर

तालुका: मोहोळ

जिल्हा: सोलापूर

वर्ष	हंगाम	पिकाखालील क्षेत्राचा तपशील									निर्भळपिकाखालील लागवडीसाठी उपलब्ध नसलेली जमीन	जल सिंचनाचे साधन	शेरा	
		मिश्र पिकाखालील क्षेत्र			निर्भळ पिकाखालील क्षेत्र									
		मिश्रणाचा संकेत क्रमांक	घटक पिके व प्रत्येकाखालील क्षेत्र		पिकांचे नाव	जल सिंचित	अजल सिंचित	पिकांचे नाव	जल सिंचित	अजल सिंचित				स्वरूप
2002-03	संपूर्ण वर्ष										बिगर शेती पड	4.8100		
2003-04	संपूर्ण वर्ष										बिगर शेती पड	4.8100		
2004-05	संपूर्ण वर्ष										तलाव पड	4.8100		
2005-06	संपूर्ण वर्ष										तलाव पड	4.8100		
2006-07	संपूर्ण वर्ष										तलाव पड	4.8100		
2007-08	संपूर्ण वर्ष										तलाव पड	4.8100		
2008-09	संपूर्ण वर्ष										तलाव पड	4.8100		
2009-10	संपूर्ण वर्ष										तलाव पड	4.8100		
2010-11	संपूर्ण वर्ष										तलाव पड	4.8100		
2011-12	संपूर्ण वर्ष										तलाव पड	4.8100		
2012-13	संपूर्ण वर्ष										तलाव पड	4.8100		
2013-14	संपूर्ण वर्ष										बिगर शेती पड	4.8100		
2014-15	संपूर्ण वर्ष										बिगर शेती पड	4.8100		
2015-16	रब्बी										बिगर शेती पड	4.8700		
2016-17	संपूर्ण वर्ष										बिगर शेती पड	4.8100		

सुचना : या संकेतस्थळावर दर्शविलेली माहिती ही कोणत्याही शासकीय अथवा कायदेशीर बाबींसाठी वापरता येणार नाही.

महा-ई-सेवा केंद्र, मोहोळ
ता. मोहोळ जि. सोलापूर

गाव नमुना सात

अधिकार अभिलेख पत्रक

(महाराष्ट्र जमीन महसूल अधिकार अभिलेख आणि नोंदवहया (तयार करणे व सुस्थितीत ठेवणे) नियम, १९७१ यातील नियम ३, ५, ६ आणि ७)

गाव :- टाकळी सिकंदर

तालुका :- मोहोळ

जिल्हा :- सोलापूर

अहवाल दिनांक:- 26-09-2017

गट क्रमांक व उपविभाग	भुधारणा पद्धती	भोगवटदाराचे नांव	क्षेत्र आकारआणे पै पो.ख. फे.फा	खाते क्रमांक
203/2	भोगवटादार वर्ग -1			
क्षेत्र एकक आर.चौ.मी	भिमा सह.साखर का.लि. टाकळी सिकंदर	40400.00.00 5.05	(3395)	433 कुळाचे नाव इतर अधिकार बोजा - सहकारी सोसायटी इकरार (3396) दि.महा.स्टे.को.ऑ.बॅ.लि.मुंबई (3396) र.रु. 1034.39 लाख (3396) बोजा - राष्ट्रीयकृत बँक गहाण (4273) महाराष्ट्र राज्य सहकारी बँक लि.मुंबई र.रु.1085600000/-दि.10.12.2013. (4273) बोजा - सहकारी सोसायटी इकरार (4399) महाराष्ट्र को. ऑफ बँक लि. मुंबई र. रु. 1866000000/- (4399) बोजा - राष्ट्रीयकृत बँक गहाण (4647) महाराष्ट्र राज्य सहकारी बँक लि. मुंबई र. रु. 10,38,,58,000/- दि. 29/01/2016 (4647)
बिन शेती 40400.00.00				
बिन शेती 5.05				
आकारणी				
फेरफार 280				
क्रमांक				
जिरायत -				
बागायत -				
तरी -				
वरकस -				
इतर -				
एकुण क्षेत्र-				
पोटखराब (लागवडीस अयोग्य)				
वर्ग (अ) -				
वर्ग (ब) -				
एकुण पो 0.00.00				
ख				
जुडी किवा विशेष				
आकारणी				

सुचना : या संकेतस्थळावर दर्शविलेली माहिती ही कोणत्याही शासकीय अथवा कायदेशीर बाबींसाठी वापरता येणार नाही.



गाव नमुना बारा

अहवाल दिनांक: 26-09-2017

अधिकार अभिलेख पत्रक

(महाराष्ट्र जमीन महसूल अधिकार अभिलेख आणि नोंदवहया (करणे व सुस्थितीत ठेवणे) नियम, १९७१ यातील नियम २९)

गाव: टाकळी सिकंदर

तालुका: मोहोळ

जिल्हा: सोलापूर

वर्ष	हंगाम	पिकाखालील क्षेत्राचा तपशील								निर्भळपिकाखालील लागवडीसाठी उपलब्ध नसलेली जमीन	जल सिंचनाचे साधन	शेरा	
		मिश्र पिकाखालील क्षेत्र				निर्भळ पिकाखालील क्षेत्र							
		मिश्रणाचा संकेत क्रमांक		घटक पिके व प्रत्येकाखालील क्षेत्र		पिकांचे नाव		जल सिंचित					अजल सिंचित
2002-03	संपूर्ण वर्ष										4.0400		
2003-04	संपूर्ण वर्ष										4.0400		
2004-05	संपूर्ण वर्ष										पडळ 4.0400		
2005-06	संपूर्ण वर्ष										4.0400		
2006-07	संपूर्ण वर्ष										4.0400		
2007-08	संपूर्ण वर्ष										4.0400		
2008-09	संपूर्ण वर्ष										4.0400		
2009-10	संपूर्ण वर्ष										4.0400		
2010-11	संपूर्ण वर्ष										4.0400		
2011-12	संपूर्ण वर्ष										4.0400		
2012-13	संपूर्ण वर्ष										4.0400		
2013-14	संपूर्ण वर्ष										4.0400		
2014-15	संपूर्ण वर्ष										4.0400		
2016-17	संपूर्ण वर्ष										4.0400		

सुचना : या संकेतस्थळावर दर्शविलेली माहिती ही कोणत्याही शासकीय अथवा कायदेशीर बाबींसाठी वापरता येणार नाही.

महा-ई-सेवा केंद्र, मोहोळ
ता. मोहोळ जि. सोलापूर

गाव नमुना सात

अधिकार अभिलेख पत्रक

(महाराष्ट्र जमीन महसूल अधिकार अभिलेख आणि नोंदवहया (तयार करणे व सुस्थितीत ठेवणे) नियम, १९७१ यातील नियम ३, ५, ६ आणि ७)

गाव :- टाकळी सिकंदर

तालुका :- मोहोळ

जिल्हा :- सोलापूर

अहवाल दिनांक:- 26-09-2017

गट क्रमांक व उपविभाग	भुधारणा पद्धती	भोगवटदाराचे नांव
207/1	भोगवटदारा वर्ग -1	
शेतीचे स्थानिक नांव	क्षेत्र आकारआणे पै	पो.ख. फे.फा
क्षेत्र एककआर.चौ.मी	भिमा सह.साखर का.लि. टाकळी सिकंदर	90400.00.00 12.96 (288)
बिन शेती 90400.00.00		433
बिन शेती 13.10		कुळाचे नाव
आकारणी		इतर अधिकार
फेरफार 288		बोजा - सहकारी सोसायटी इकरार (1)
क्रमांक		टाकळी.सि.वि.का.से.सो.इ.क.प (1)
जिरायत -		रु. 500/- ता. 26/6/64 (1)
बागायत -		बोजा - मृदसधारण कर्ज (130)
तरी -		बडींग बोजा रु. 1773.46 (130)
वरकस -		बोजा - राष्ट्रीयकृत बँक गहाण (288)
इतर -		डे.जि.सोलापूर क.ग.घेणार (288)
-----		रु. 2500/- ता. 25/7/73 (288)
एकुण क्षेत्र-		विहीर - (2701)
-----		पडीक विहीर (2701)
पोटखराब (लागवडीस अयोग्य)		बोजा - राष्ट्रीयकृत बँक गहाण (2754)
वर्ग (अ) -		दि.महाराष्ट्र राज्य सह.बँक लि.पुणे (2754)
वर्ग (ब) -		तारण रु.117-34 लाख दि.29/3/03 (2754)
एकुण पो 0.00.00		बोजा - राष्ट्रीयकृत बँक गहाण (4273)
ख		महाराष्ट्र राज्य सहकारी बँक लि.मुंबई
-----		र.रु.1085600000/-दि.10.12.2013. (4273)
-----		बोजा - राष्ट्रीयकृत बँक गहाण (4399)
जुडी किवा -		महाराष्ट्र राज्य सहकारी बँक लि.मुंबई
विशेष		यांचेकडुन कर्ज र.रु. 186600000/- (4399)
आकारणी		बोजा - सहकारी सोसायटी इकरार (4399)
		महाराष्ट्र राज्य को. ओप. बँक लि. मुंबई
		येथील र. रु. 186600000/- दि. 9/6/2014
		असे (4399)
		बोजा - राष्ट्रीयकृत बँक गहाण (4647)
		महाराष्ट्र राज्य सहकारी बँक लि. मुंबई
		र. रु. 10,38,58,000/- दि. 29/01/2016 (

(108),(130),(142),(288),(576),(2754),(2755),(3029),(3120),(4934)

सीमा आणि भुमापन चिन्हे

सुचना : या संकेतस्थळावर दर्शविलेली माहिती ही कोणत्याही शासकीय अथवा कायदेशीर बाबींसाठी वापरता येणार नाही.

गाव नमुना बारा

अहवाल दिनांक: 26-09-2017

अधिकार अभिलेख पत्रक

(महाराष्ट्र जमीन महसूल अधिकार अभिलेख आणि नोंदवहया (करणे व सुस्थितीत ठेवणे) नियम, १९७१ यातील नियम २९)

गाव: टाकळी सिकंदर

तालुका: मोहोळ

जिल्हा: सोलापूर

वर्ष	हंगाम	पिकाखालील क्षेत्राचा तपशील									निर्भळपिकाखालील लागवडीसाठी उपलब्ध नसलेली जमीन	जल सिंचनाचे साधन	शेरा	
		मिश्र पिकाखालील क्षेत्र						निर्भळ पिकाखालील क्षेत्र						
		मिश्रणाचा संकेत क्रमांक		घटक पिके व प्रत्येकाखालील क्षेत्र										
जल सिंचित	अजल सिंचित	पिकांचे नाव	जल सिंचित	अजल सिंचित	पिकांचे नाव	जल सिंचित	अजल सिंचित	स्वरूप	क्षेत्र					
2002-03	संपूर्ण वर्ष										तलाव पड	9.0400		
2003-04	संपूर्ण वर्ष										तलाव पड	9.0400		
2004-05	संपूर्ण वर्ष										तलाव पड	9.0400		
2005-06	संपूर्ण वर्ष										तलाव पड	9.0400		
2006-07	संपूर्ण वर्ष										तलाव पड	9.0400		
2007-08	संपूर्ण वर्ष										तलाव पड	9.0400		
2008-09	संपूर्ण वर्ष										तलाव पड	9.0400		
2009-10	संपूर्ण वर्ष										तलाव पड	9.0400		
2010-11	संपूर्ण वर्ष										तलाव पड	9.0400		
2011-12	संपूर्ण वर्ष										तलाव पड	9.0400		
2012-13	संपूर्ण वर्ष										तलाव पड	9.0400		
2013-14	संपूर्ण वर्ष										तलाव पड	9.0400		
2014-15	संपूर्ण वर्ष										तलाव पड	9.0400		
2016-17	संपूर्ण वर्ष										तलाव पड	9.0400		

सुचना : या संकेतस्थळावर दर्शविलेली माहिती ही कोणत्याही शासकीय अथवा कायदेशीर बाबींसाठी वापरता येणार नाही.

पहा-ई-सेवा केंद्र, मोहोळ.
ता. मोहोळ जि. सोलापूर

गाव नमुना सात

अधिकार अभिलेख पत्रक

(महाराष्ट्र जमीन महसूल अधिकार अभिलेख आणि नोंदवहया (तयार करणे व सुस्थितीत ठेवणे) नियम, १९७१ यातील नियम ३, ५, ६ आणि ७)

गाव :- टाकळी सिकंदर

तालुका :- मोहोळ

जिल्हा :- सोलापूर

अहवाल दिनांक:- 26-09-2017

गट क्रमांक व उपविभाग	भुधारणा पद्धती	भोगवटदाराचे नांव	क्षेत्र आकार आणि पै	पो.ख. फे.फा	खाते क्रमांक
209	भोगवटादार वर्ग -1				
क्षेत्र एकक आर.चौ.मी	भिमा सह.साखर का.लि. टाकळी सिकंदर		72700.00.00 11.25	(286)	433
विन शेती 72700.00.00					कुळाचे नाव
विन शेती 11.25					इतर अधिकार
आकारणी					बोजा - सहकारी सोसायटी इकरार (1)
फेरफार 286					टाकळी.सि.वि.का.से.सो.इ.क.प. (1)
क्रमांक					रु. 200/- ता. 7/1/65 + 2500/- ता. 25/6/76 (1)
जिरायत -					बोजा - सहकारी सोसायटी इकरार (3396)
बागायत -					दि.महा.स्टे.को.ऑ.बॅ.लि.मुंबई (3396)
तरी -					र.रु. 1034.39 लाख (3396)
वरकस -					बोजा - राष्ट्रीयकृत बँक गहाण (4273)
इतर -					महाराष्ट्र राज्य सहकारी बँक लि.मुंबई
एकुण क्षेत्र-					र.रु.1085600000/-दि.10.12.2013. (4273)
					बोजा - राष्ट्रीयकृत बँक गहाण (4399)
					महाराष्ट्र राज्य सहकारी बँक लि.मुंबई
					यांचेकडून कर्ज र.रु. 186600000/- (4399)
					बोजा - सहकारी सोसायटी इकरार (4399)
					महाराष्ट्र राज्य को ओप बँक लि. मुंबई
					येथील र. रु. 186600000/- दि. 9/6/2014 (4399)
					बोजा - राष्ट्रीयकृत बँक गहाण (4647)
					महाराष्ट्र राज्य सहकारी बँक लि. मुंबई
					र. रु. 10,38,58,000/- दि. 29/01/2016 (4647)
पोटखराब (लागवडीस अयोग्य)					
वर्ग (अ) -					
वर्ग (ब) -					
एकुण पो 0.00.00					
ख					
जुडी किवा -					
विशेष					
आकारणी					



सुचना : या संकेतस्थळावर दर्शविलेली माहिती ही कोणत्याही शासकीय अथवा कायदेशीर बाबींसाठी वापरता येणार नाही.



गाव नमुना बारा
अधिकार अभिलेख पत्रक

अहवाल दिनांक: 26-09-2017

(महाराष्ट्र जमीन महसूल अधिकार अभिलेख आणि नोंदवहया (करणे व सुस्थितीत ठेवणे) नियम, १९७१ यातील नियम २९)

गाव: टाकळी सिकंदर

तालुका: मोहोळ

जिल्हा: सोलापूर

वर्ष	हंगाम	पिकाखालील क्षेत्राचा तपशील									निर्भळपिकाखालील लागवडीसाठी उपलब्ध नसलेली जमीन	जल सिंचनाचे साधन	शेरा		
		मिश्र पिकाखालील क्षेत्र						निर्भळ पिकाखालील क्षेत्र							
		मिश्रणाचा संकेत क्रमांक		घटक पिके व प्रत्येकाखालील क्षेत्र				पिकांचे नाव	जल सिंचित	अजल सिंचित					
जल सिंचित	अजल सिंचित	पिकांचे नाव	जल सिंचित	अजल सिंचित	स्वरूप	क्षेत्र									
2002-03	संपूर्ण वर्ष											तलाव पड	7.2700		
2003-04	संपूर्ण वर्ष											तलाव पड	7.2700		
2004-05	संपूर्ण वर्ष											तलाव पड	7.2700		
2005-06	संपूर्ण वर्ष											तलाव पड	7.2700		
2006-07	संपूर्ण वर्ष											तलाव पड	7.2700		
2007-08	संपूर्ण वर्ष											तलाव पड	7.2700		
2008-09	संपूर्ण वर्ष											तलाव पड	7.2700		
2009-10	संपूर्ण वर्ष											तलाव पड	7.2700		
2010-11	संपूर्ण वर्ष											तलाव पड	7.2700		
2011-12	संपूर्ण वर्ष											तलाव पड	7.2700		
2012-13	संपूर्ण वर्ष											तलाव पड	7.2700		
2013-14	संपूर्ण वर्ष											तलाव पड	7.2700		
2014-15	संपूर्ण वर्ष											तलाव पड	7.2700		
2016-17	संपूर्ण वर्ष											तलाव पड	7.2700		

सुचना : या संकेतस्थळावर दर्शविलेली माहिती ही कोणत्याही शासकीय अथवा कायदेशीर बाबींसाठी वापरता येणार नाही.

महा-ई-सेवा केंद्र, मोहोळ
ता. मोहोळ जि. सोलापूर

गाव नमुना सात

अधिकार अभिलेख पत्रक

(महाराष्ट्र जमीन महसूल अधिकार अभिलेख आणि नोंदवह्या (तयार करणे व सुस्थितीत ठेवणे) नियम, १९७१ यातील नियम ३, ५, ६ आणि ७)

गाव :- टाकळी सिकंदर

तालुका :- मोहोळ

जिल्हा :- सोलापूर

अहवाल दिनांक:- 26-09-2017

गट क्रमांक व उपविभाग 211/1	भुधारणा पद्धती भोगवटादार वर्ग -I	भोगवटदाराचे नांव	क्षेत्र आकारआणे पै	पो.ख. फे.फा	खाते क्रमांक
क्षेत्र एकक हे.आर.चौ.मी जिरायत 2.02.00 बागायत - तरी - वरकस - इतर - एकुण क्षेत्र 2.02.00 पोटखराब (लागवडीस अयोग्य) वर्ग (अ) 0.14.00 वर्ग (ब) - एकुण पो 0.14.00 ख आकारणी 3.30 जुडी किंवा विशेष आकारणी	भिमा सह.साखर का.लि. टाकळी सिकंदर काशीबाई भरत भोसले विजय भरत भोसले संजय भरत भोसले	2.02.00 3.30 2.02.00 3.30 0.1400 (3478) (3478) (3478) (3478)	0.14.00 (3478)))))	433, 578 कुळाचे नाव इतर अधिकार बोजा - मृदसधारण कर्ज (130) वडींग बोजा रु. 1499.58 (130) बोजा - राष्ट्रीयकृत बँक गहाण (2695) महाराष्ट्र राज्य सह.बँक लि.पुणे (2695) रु. 500 लाख ता. 2/11/02 (2695) बोजा - राष्ट्रीयकृत बँक गहाण (4399) महाराष्ट्र राज्य सहकारी बँक लि.मुंबई यांचेकडुन कर्ज र.रु. 186600000/- (4399) बोजा - सहकारी सोसायटी इकरार (4399) महाराष्ट्र राज्य को ऑफ बँक लि. मुंबई येथील र. रु. 186600000/- चे कर्ज दि. 9/6/2014 (4399) बोजा - राष्ट्रीयकृत बँक गहाण (4647) महाराष्ट्र राज्य सहकारी बँक लि. मुंबई र. रु. 10,38,58,000/- दि. 29/01/2016 (4647)	
		(1),(33),(89),(130),(284),(919)			सीमा आणि भुमापन चिन्हे

सुचना : या संकेतस्थळावर दर्शविलेली माहिती ही कोणत्याही शासकीय अथवा कायदेशीर बाबींसाठी वापरता येणार नाही.

गाव नमुना बारा
अधिकार अभिलेख पत्रक

अहवाल दिनांक: 26-09-2017

(महाराष्ट्र जमीन महसूल अधिकार अभिलेख आणि नोंदवहया (करणे व सुस्थितीत ठेवणे) नियम, १९७१ यातील नियम २९)

गाव: टाकळी सिकंदर

तालुका: मोहोळ

जिल्हा: सोलापूर

वर्ष	हंगाम	पिकाखालील क्षेत्राचा तपशील									निर्भळपिकाखालील लागवडीसाठी उपलब्ध नसलेली जमीन	जल सिंचनाचे साधन	शेरा		
		मिश्र पिकाखालील क्षेत्र			निर्भळ पिकाखालील क्षेत्र			स्वरूप	क्षेत्र						
		मिश्रणाचा संकेत क्रमांक	जल सिंचित	अजल सिंचित	घटक पिके व प्रत्येकाखालील क्षेत्र	पिकांचे नाव	जल सिंचित			अजल सिंचित				पिकांचे नाव	जल सिंचित
2002-03	रब्बी				ऊस	2.0000									
	संपूर्ण वर्ष														
2003-04	रब्बी				ऊस	2.0000						पडळ	2.0200		
	संपूर्ण वर्ष														
2004-05	रब्बी				ऊस	2.0000									
	संपूर्ण वर्ष														
2005-06	संपूर्ण वर्ष											पडळ	0.0200		
2006-07	संपूर्ण वर्ष											पडळ	2.0200		
2007-08	संपूर्ण वर्ष											पडळ	2.0200		
2008-09	संपूर्ण वर्ष											पडळ	2.0200		
2009-10	संपूर्ण वर्ष											पडळ	2.0200		
2010-11	संपूर्ण वर्ष											पडळ	2.0200		
2011-12	संपूर्ण वर्ष											पडळ	2.0200		
2012-13	संपूर्ण वर्ष											पडळ	2.0200		
2013-14	रब्बी				ऊस	2.0000									
	संपूर्ण वर्ष														
2014-15	रब्बी				ऊस	2.0000									
	संपूर्ण वर्ष														
2015-16	संपूर्ण वर्ष											पडळ	2.0200		
2016-17	संपूर्ण वर्ष											पडळ	2.0200		

सुचना : या संकेतस्थळावर दर्शविलेली माहिती ही कोणत्याही शासकीय अथवा कायदेशीर बाबींसाठी वापरता येणार नाही.

महा-ई-सेवा केंद्र, मोहोळ
ता. मोहोळ जि. सोलापूर

गाव नमुना सात

अधिकार अभिलेख पत्रक

(महाराष्ट्र जमीन महसूल अधिकार अभिलेख आणि नोंदवहया (तयार करणे व सुस्थितीत ठेवणे) नियम, १९७१ यातील नियम ३, ५, ६ आणि ७)

गाव :- टाकळी सिकंदर

तालुका :- मोहोळ

जिल्हा :- सोलापूर

अहवाल दिनांक:- 26-09-2017

गट क्रमांक व उपविभाग	भुधारणा पद्धती	भोगवटदाराचे नांव	क्षेत्र आकारआणे पै पो.ख. फे.फा	खाते क्रमांक
211/2	भोगवटादार वर्ग -1			
क्षेत्र एकक आर.चौ.मी	भिमा सह.साखर का.लि. टाकळी सिकंदर	64800.00.00 9.90	(284)	433
बिन शेती 64800.00.00				कुळाचे नाव
बिन शेती 9.90				इतर अधिकार
आकारणी				बोजा - सहकारी सोसायटी इकरार (3396)
फेरफार 284				दि.महा.स्टे.को.ऑ.बॅ.लि.मुंबई (3396)
क्रमांक				र.रु. 1034.39 लाख (3396)
जिरायत -				बोजा - राष्ट्रीयकृत बँक गहाण (4273)
बागायत -				महाराष्ट्र राज्य सहकारी बँक लि.मुंबई
तरी -				र.रु.1085600000/-दि.10.12.2013. (4273)
वरकस -				बोजा - राष्ट्रीयकृत बँक गहाण (4399)
इतर -				महाराष्ट्र राज्य सहकारी बँक लि.मुंबई
एकुण क्षेत्र-				यांचेकडुन कर्ज र.रु. 186600000/- (4399)
				बोजा - सहकारी सोसायटी इकरार (4399)
				महाराष्ट्र राज्य को ऑफ बँक लि. मुंबई
				र. रु. 186600000/- दि 9/6/2014 (4399)
				बोजा - राष्ट्रीयकृत बँक गहाण (4647)
				महाराष्ट्र राज्य सहकारी बँक लि. मुंबई
				र. रु. 10,38,58,000/- दि. 29/01/2016 (4647)
पोटखराब (लागवडीस अयोग्य)				
वर्ग (अ) -				
वर्ग (ब) -				
एकुण पो 0.00.00				
ख				
जुडी किवा - विशेष आकारणी				

सुचना : या संकेतस्थळावर दर्शविलेली माहिती ही कोणत्याही शासकीय अथवा कायदेशीर बाबींसाठी वापरता येणार नाही.



गाव नमुना बारा
अधिकार अभिलेख पत्रक

अहवाल दिनांक: 26-09-2017

(महाराष्ट्र जमीन महसूल अधिकार अभिलेख आणि नोंदवह्या (करणे व सुस्थितीत ठेवणे) नियम, १९७१ यातील नियम २९)
गाव: टाकळी सिकंदर

तालुका: मोहोळ

जिल्हा: सोलापूर

वर्ष	हंगाम	पिकाखालील क्षेत्राचा तपशील									निर्भळपिकाखालील लागवडीसाठी उपलब्ध नसलेली जमीन	जल सिंचनाचे साधन	शेरा	
		मिश्र पिकाखालील क्षेत्र						निर्भळ पिकाखालील क्षेत्र						
		मिश्रणाचा संकेत क्रमांक		घटक पिके व प्रत्येकाखालील क्षेत्र										
जल सिंचित	अजल सिंचित	पिकांचे नाव	जल सिंचित	अजल सिंचित	पिकांचे नाव	जल सिंचित	अजल सिंचित	स्वरूप	क्षेत्र					
2002-03	संपूर्ण वर्ष													
2003-04	संपूर्ण वर्ष											6.4800		
2004-05	संपूर्ण वर्ष											6.4800		
2005-06	संपूर्ण वर्ष											6.4800		
2006-07	संपूर्ण वर्ष											6.4800		
2007-08	संपूर्ण वर्ष											6.4800		
2008-09	संपूर्ण वर्ष											6.4800		
2009-10	संपूर्ण वर्ष											6.4800		
2010-11	संपूर्ण वर्ष											6.4800		
2011-12	संपूर्ण वर्ष											6.4800		
2012-13	संपूर्ण वर्ष											6.4800		
2013-14	संपूर्ण वर्ष											6.4800		
2014-15	संपूर्ण वर्ष											6.4800		
2015-16	संपूर्ण वर्ष											बिगर शेती पड	6.4800	
2016-17	संपूर्ण वर्ष											बिगर शेती पड	6.4800	

सुचना : या संकेतस्थळावर दर्शविलेली माहिती ही कोणत्याही शासकीय अथवा कायदेशीर बाबींसाठी वापरता येणार नाही.

महा-ई-सेवा केंद्र, मोहोळ
ता. मोहोळ जि. सोलापूर

गाव नमुना सात

अधिकार अभिलेख पत्रक

(महाराष्ट्र जमीन महसूल अधिकार अभिलेख आणि नोंदवह्या (तयार करणे व सुस्थितीत ठेवणे) नियम, १९७१ यातील नियम ३, ५, ६ आणि ७)

गाव :- टाकळी सिकंदर

तालुका :- मोहोळ

जिल्हा :- सोलापूर

अहवाल दिनांक:- 26-09-2017

गट क्रमांक व उपविभाग 212	भुधारणा पद्धती भोगवटादार वर्ग -1	भोगवटदाराचे नांव	क्षेत्र आकारआणे पै पो.ख. फे.फा	खाते क्रमांक
क्षेत्र एकक आर.चौ.मी बिन शेती 35700.00.00 बिन शेती 5.45 आकारणी फेरफार 303 क्रमांक जिरायत - बागायत - तरी - वरकस - इतर - ----- एकुण क्षेत्र- ----- पोटखराब (लागवडीस अयोग्य) वर्ग (अ) - वर्ग (ब) - एकुण पो ख ----- ----- जुडी किंवा - विशेष आकारणी	भिमा सह.साखर का.लि. टाकळी सिकंदर	35700.00.00 5.37	(303)	433 कुळाचे नाव इतर अधिकार बोजा - मृदसधारण कर्ज (1) वडींग बोजा रु. 611.05 (1) बोजा - सहकारी सोसायटी इकरार (130) टाकळी.सि.वि.का.से.सो.इ.क.प. (130) रु. 300/- ता. 20/5/65 + 1000/- ता. 8/6/73 (130) बोजा - सहकारी सोसायटी इकरार (3396) दि.महा.स्टे.को.ऑ.बॅ.लि.मुंबई (3396) र.रु. 1034.39 लाख (3396) बोजा - राष्ट्रीयकृत बँक गहाण (4273) महाराष्ट्र राज्य सहकारी बँक लि.मुंबई र.रु.1085600000/-दि.10.12.2013. (4273) बोजा - राष्ट्रीयकृत बँक गहाण (4399) महाराष्ट्र राज्य सहकारी बँक लि.मुंबई यांचेकडून कर्जर.रु. 1866000000/- (4399) बोजा - सहकारी सोसायटी इकरार (4399) महाराष्ट्र राज्य को. ऑफ. बँक लि. मुंबई र. रु. 1866000000/- दि. 9/6/2014 (4399) बोजा - राष्ट्रीयकृत बँक गहाण (4647) महाराष्ट्र राज्य सहकारी बँक लि. मुंबई र. रु. 10,38,58,000/- दि. 29/01/2016 (4647)

सुचना : या संकेतस्थळावर दर्शविलेली माहिती ही कोणत्याही शासकीय अथवा कायदेशीर बाबींसाठी वापरता येणार नाही.



गाव नमुना बारा
अधिकार अभिलेख पत्रक

अहवाल दिनांक: 26-09-2017

(महाराष्ट्र जमीन महसूल अधिकार अभिलेख आणि नोंदवह्या (करणे व सुस्थितीत ठेवणे) नियम, १९७१ यातील नियम २९)

गाव: टाकळी सिकंदर

तालुका: मोहोळ

जिल्हा: सोलापूर

वर्ष	हंगाम	पिकाखालील क्षेत्राचा तपशील									निर्भळपिकाखालील लागवडीसाठी उपलब्ध नसलेली जमीन	जल सिंचनाचे साधन	शेरा		
		मिश्र पिकाखालील क्षेत्र						निर्भळ पिकाखालील क्षेत्र							
		मिश्रणाचा संकेत क्रमांक		घटक पिके व प्रत्येकाखालील क्षेत्र											
जल सिंचित	अजल सिंचित	पिकांचे नाव	जल सिंचित	अजल सिंचित	पिकांचे नाव	जल सिंचित	अजल सिंचित	स्वरूप	क्षेत्र						
2002-03	संपूर्ण वर्ष														
2003-04	संपूर्ण वर्ष										तलाव पड	3.5700			
2004-05	संपूर्ण वर्ष										तलाव पड	3.5700			
2005-06	संपूर्ण वर्ष										तलाव पड	3.5200			
2006-07	संपूर्ण वर्ष										तलाव पड	3.5700			
2007-08	संपूर्ण वर्ष										तलाव पड	3.5700			
2008-09	संपूर्ण वर्ष										तलाव पड	3.5700			
2009-10	संपूर्ण वर्ष										तलाव पड	3.5700			
2010-11	संपूर्ण वर्ष										तलाव पड	3.5700			
2011-12	संपूर्ण वर्ष										तलाव पड	3.5700			
2012-13	संपूर्ण वर्ष										तलाव पड	3.5700			
2013-14	संपूर्ण वर्ष										तलाव पड	3.5700			
2014-15	संपूर्ण वर्ष										तलाव पड	3.5700			
2015-16	संपूर्ण वर्ष										तलाव पड	3.5700			
2016-17	संपूर्ण वर्ष										पडळ	3.5200			
											पडळ	3.5200			

सुचना : या संकेतस्थळावर दर्शविलेली माहिती ही कोणत्याही शासकीय अथवा कायदेशीर बाबींसाठी वापरता येणार नाही.

महा-ई-सेवा केंद्र, मोहोळ
ता. मोहोळ जि. सोलापूर

गाव नमुना सात

अधिकार अभिलेख पत्रक

(महाराष्ट्र जमीन महसूल अधिकार अभिलेख आणि नोंदवहया (तयार करणे व सुस्थितीत ठेवणे) नियम, १९७१ यातील नियम ३, ५, ६ आणि ७)

गाव :- टाकळी सिकंदर

तालुका :- मोहोळ

जिल्हा :- सोलापूर

अहवाल दिनांक:- 26-09-2017

गट क्रमांक व उपविभाग	भुधारणा पद्धती	भोगवटदाराचे नांव
213	भोगवटादार वर्ग -1	
शेतीचे स्थानिक नांव	क्षेत्र आकारआणे पै	पो.ख. फे.फा
क्षेत्र एक आर.चौ.मी	38600.00.00	5.90 (285)
बिन शेती 38600.00.00	भिमा सह.साखर का.लि. टाकळी सिकंदर	433
बिन शेती 5.95		कुळाचे नाव
आकारणी		इतर अधिकार
फेरफार 285		बोजा - मृदसधारण कर्ज (143)
क्रमांक		वडींग बोजा रु. 665.49 (143)
जिरायत -		बोजा - सहकारी सोसायटी इकरार (205)
बागायत -		श्री.भिमा सो.न.ग.दार (205)
तरी -		बोजा - सहकारी सोसायटी इकरार (3396)
वरकस -		दि.महा.स्टे.को.ऑ.वॅ.लि.मुंबई (3396)
इतर -		र.रु. 1034.39 लाख (3396)
एकुण क्षेत्र-		बोजा - राष्ट्रीयकृत बँक गहाण (4273)
		महाराष्ट्र राज्य सहकारी बँक लि.मुंबई
		र.रु.1085600000/-दि.10.12.2013. (4273)
		बोजा - राष्ट्रीयकृत बँक गहाण (4399)
		महाराष्ट्र राज्य सहकारी बँक लि.मुंबई
		यांचेकडून कर्ज र.रु. 186600000/- (4399)
		बोजा - सहकारी सोसायटी इकरार (4399)
		महाराष्ट्र राज्य को ऑफ बँक लि. मुंबई
		र.रु. 186600000/- दि. 9/6/2014 (4399)
		बोजा - राष्ट्रीयकृत बँक गहाण (4647)
		महाराष्ट्र राज्य सहकारी बँक लि. मुंबई
		र. रु. 10,38,58,000/- दि. 29/01/2016 (4647)
पोटखराब (लागवडीस अयोग्य)		
वर्ग (अ) -		
वर्ग (ब) -		
एकुण पो 0.00.00		
ख		
जुडी किवा विशेष		
आकारणी		

सुचना : या संकेतस्थळावर दर्शविलेली माहिती ही कोणत्याही शासकीय अथवा कायदेशीर बाबींसाठी वापरता येणार नाही.



गाव नमुना बारा

अहवाल दिनांक: 26-09-2017

अधिकार अभिलेख पत्रक

(महाराष्ट्र जमीन महसूल अधिकार अभिलेख आणि नोंदवहया (करणे व सुस्थितीत ठेवणे) नियम, १९७१ यातील नियम २९)

गाव: टाकळी सिकंदर

तालुका: मोहोळ

जिल्हा: सोलापूर

वर्ष	हंगाम	पिकाखालील क्षेत्राचा तपशील									निर्भळपिकाखालील लागवडीसाठी उपलब्ध नसलेली जमीन	जल सिंचनाचे साधन	शेरा		
		मिश्र पिकाखालील क्षेत्र						निर्भळ पिकाखालील क्षेत्र							
		मिश्रणाचा संकेत क्रमांक		घटक पिके व प्रत्येकाखालील क्षेत्र											
जल सिंचित	अजल सिंचित	पिकांचे नाव	जल सिंचित	अजल सिंचित	पिकांचे नाव	जल सिंचित	अजल सिंचित	स्वरूप	क्षेत्र						
2002-03	संपूर्ण वर्ष											तलाव पड	3.8300		
2003-04	संपूर्ण वर्ष											तलाव पड	3.8300		
2004-05	संपूर्ण वर्ष											तलाव पड	3.8300		
2005-06	संपूर्ण वर्ष											तलाव पड	3.8300		
2006-07	संपूर्ण वर्ष											तलाव पड	3.8300		
2007-08	संपूर्ण वर्ष											तलाव पड	3.8300		
2008-09	संपूर्ण वर्ष											तलाव पड	3.8300		
2009-10	संपूर्ण वर्ष											तलाव पड	3.8300		
2010-11	संपूर्ण वर्ष											तलाव पड	3.8300		
2011-12	संपूर्ण वर्ष											तलाव पड	3.8300		
2012-13	संपूर्ण वर्ष											तलाव पड	3.8300		
2013-14	संपूर्ण वर्ष											तलाव पड	3.8300		
2014-15	संपूर्ण वर्ष											तलाव पड	3.8300		
2015-16	संपूर्ण वर्ष											बिगर शेती पड	3.8300		
2016-17	संपूर्ण वर्ष											बिगर शेती पड	3.8300		

सुचना : या संकेतस्थळावर दर्शविलेली माहिती ही कोणत्याही शासकीय अथवा कायदेशीर बाबींसाठी वापरता येणार नाही.

महा-ई-सेवा केंद्र, मोहोळ
ता. मोहोळ जि. सोलापूर

- Read:- 1) Application of Managing Director, Bhima Sahakari Sakhar Karkhana Ltd. Takali (C) Tahsil Mohol dated 26-7-1978 bearing No. BSSK/Land/77-78/779.
- 2) Tahsildar Mohol endorsement No. LND/unauthorized N.A. use/SR/1 dt. 5-3-79 addressed to the Addl. Tahsildar (N.A. detection) Solapur.
- 3) Govt. Circular Revenue & Forest Deptt. No. N/A/1078/209881/IS/III dt. 19-12-1978.
- 4) Collector, Solapur's No. RB/Desk/3/III/C/RR/19271 dt. 8-12-1980.



Office of the Sub-Divisional Officer, Madha Divn, Kurduwadi. No. A/E/2832 Kurduwadi: 17/12/1981

632 19019

Whereas it has been brought to my notice that the Managing Director, Bhima Sahakari Sakhar Karkhana Ltd. Takali (C) Tahsil Mohol Dist: Solapur has constructed the buildings of Sakhar Karkhana and Staff quarters etc. in the area of Gut Nos. as shown below of the village Takali (S) Tahsil Mohol without obtaining previous permission of the competent Revenue authority under Maharashtra Land Revenue Code 1966 as detailed below:-

Sr. No.	Gat No.	Area A.-G.	Assessment Rs. NONP	Area under N.A. use A.G.
1)	203 Part	17-32	4-36	10-32
2)	204	11-81	4-81	11-37
3)	205	2-36	1-17	2-36
4)	206	12-07	4-92	12-07
5)	207	25-07	8-57	21-07
6)	209	18-07	-	-
7)	211	15-28	6-35	15-28
8)	212	9-22	3-86	9-22
9)	213	9-22	3-86	9-22
10)	214	9-35	3-99	9-35
11)	215	10-19	4-24	10-19
12)	216	10-30	4-35	10-30
13)	465	3-36	1-58	3-36
		150-38	52-07	128-31

Now therefore in exercise of the powers conferred upon me under section 45 of the M.C.R. Code 1966 read with rule-9 of M.L.R. (Conversion of use of Land and N.A.A.) Rules 1969, I, Sub-Divisional Officer, Madha Division, Kurduwadi am hereby pleased to regularise the N.A. use of the above land on the following conditions:-

- 1) The land holder shall execute bond in the form prescribed under Rule 7 of the Maharashtra Land Revenue (Conversion of use of Land and N.A.) Rules, 1969.
- 2) The land holder shall use the land only for the purpose of Industrial purpose for which it is allowed to be used and for no other purpose without previous permission of the Collector in writing.

- iii) that the grantee shall pay fine of Rs. 1000/- (One thousand only) for the said unauthorised N.A. use within a period of 15 days from the date of this order.
- iv) that the occupant shall pay N.A.A. of Rs. (5207-00) Five thousand two hundred seven only per annum plus local Fund Cess thereon w.e.f. 20-10-1977 to be guaranteed for a period of fifteen years from the date of this order and thereafter at the revised rates that will be fixed by the Govt.
- v) The amount of N.A.A. and fine shall be liable for recovery as arrears of Land Revenue.
- vi) Measurement fee of Rs. 50/- should be credited to Govt. and Land got measured from Dist:Inspector of Land Record, Solapur.
- vii) that no additions or alternations shall be made in the existing use or buildings erected in the land without previous permission in writing and without getting the plans approved from the Collector and village Panchayat Takali (S).
- viii) that a breach of any of the conditions mentioned above shall entail revocation of the permission, and imposition of the penalties as provided in section 45 of the Maharashtra Land Revenue Code 1966 as if the N.A. use is unauthorised.

Provided:

- 1) Notwithstanding anything contained in above conditions the undersigned may without prejudice to any other penalty to which the occupant may be liable under the provisions of the said code continue the land in their occupation on payment of such fine and N.A. Assessment or rent as may be directed.
- 2) It shall also be lawful for the undersigned to direct the removal or alternation of any building or structures erected contrary to the provisions of the grant of permission for the particular N.A. use within time prescribed in that behalf by the undersigned and on such removal or alternation not being carried out to get it removed or altered at Govt. cost and to levy the cost of carrying out the same on and to recover the same from the occupants of the land as an arrears of Land Revenue.

Sd/---

Suh- Divisional Officer,
Madha Divn., Kurduwadi.

To,

The Managing Director,
Bhima Sahakeri Sakhar Karkhana Ltd., Takali (S)
Tahsil Mohol Dist:Solapur.



// True Copy //

B.S. WHITE
Managing Director.

१. ४. ५.
६३२/१९९१५
२००८

STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

SEAC- 2014/CR-242/TC-2
 Environment department
 Room No. 217, 2nd floor,
 Mantralaya Annex,
 Mumbai- 400 032.
 Date: 12th July, 2016.

To,
 M/s. Bhima Sahakari Sakhar Karkhana Ltd.
 Village- Sikander, Tal Mohol, Solapur.

Subject: Environment clearance for Expansion cum Modernization of Sugar plant from 2500 to 5000 TCD along with Co-gen of 25 MW at village Takali Sikander, Tal Mohol, Solapur by M/s. Bhima Sahakari Sakhar Karkhana Ltd.

Sir,

This has reference to your communication on the above mentioned subject. The proposal was considered as per the EIA Notification, 2006, by the State Level Expert Appraisal Committee-I, Maharashtra in its 115th meeting and decided to recommend the project for prior environmental clearance to SEIAA. Information submitted by you has been considered by State Level Environment Impact Assessment Authority in its 98th meeting.

2. It is noted that the proposal is considered by SEAC-I under screening category 5(j) & 1 (d) B1 as per EIA Notification 2006.

Brief Information of the project submitted by Project Proponent is as:

Sr. no	Particulars	Commitment On
1.	Name of the Project	Expansion cum modernization of 2500 TCD sugar to 5000 TCD sugar & 25 mw cogeneration plant by M/s Bhima Sahakari Sakhar Karkhana Ltd
2.	Project Proponent	Mr. Sadanand E.G. (Managing Director) M/s. Bhima Sahakari Sakhar Karkhana Ltd At Takali Sikandar, Tal. Mohol, Dist. Solapur, Maharashtra India.
3.	Consultant	Mr. Pradeep Joshi / Dr. Prashant Banne M/s. Green Circle Inc., Address : Green Empire Besides Canara Bank, Nr. Yash Complex, Gotri Road, Vadodara - 390021.
4.	Accreditation of consultant (NABET Accreditation)	Sr. No. 72 Dated 08/01/2015
5.	New Project / Expansion in existing project/ Modernization/Diversifi cation in exiting project	Expansion in existing project

6.	If expansion/ Diversification, whether environmental clearance has been obtained for existing project (If yes, enclose a copy with compliance table)	Not Applicable
7.	Activity schedule in the EIA Notification	'B' category under EIA notification activity schedule of 1(d) for Co-generation power plant and 5 (j) for sugar Industry
8.	Area Details	<ul style="list-style-type: none"> Total plot area (sq. m.): 9,20,000 Sq. mt. Built up area (Sq. m.): 36219.30 Sq.mt
9.	Name of the Notified Industrial area / MIDC area	The Industry / unit does not comes under any notified industrial area or MIDC area
10	TOR given by SEAC? (If yes then specify the meeting)	Yes , 92 nd meeting of SEAC-I held on 22:12.2014
11	Estimated capital cost of the Project (including cost for land, building, plant and machinery separately)	Total: Rs. 19958.77 Lakhs
12	Location details of the project :	<ul style="list-style-type: none"> Latitude- 17^o41'57.72" N Longitude- 75^o32' 17.76' E Location- Village –Takali-Sikander, Town-Mohol 20 km, Railway station –Pandharpur.
13	Distance from Protected Areas / Critically Polluted areas / Eco-sensitive areas / inter-State boundaries	No any Protected areas / Critically Polluted areas / Eco-sensitive areas / inter-State boundaries within the 15 Km distance from Sugar factory.

14	Raw materials (including process chemicals, Catalysts, & additives).	List of raw materials to be used	'Physical and chemical nature of raw material	'Quantity (tonnes/year) full production capacity	Source of materials	Means of transportation (Source to storage site) with justification
		Sugarcane	Harvested mature sugarcane	1,65,000 MT / Month	Nearby villages	Sufficient open space is available
		Lime	As an Cao	0.14%	Local Vendors	Lime Godowns
		Sulphur	Sulphur Powder / Granular Sulphur Powder (80%)	0.05%	Local Vendors	Sulphur Godowns
[[[
15	Production details		Existing 2500 TCD Sugar	Proposed activity (new/modernization/expansion) T/year	Total Existing + Proposed 2500 TCD Sugar + 25 MW Co-gen	
		White Crystal Sugar	9900	9900	19800	
		Electricity (Export)	--	10080	10080 MW/month	
		Molasses	3500		6600	
		Bagasse	28500		49500	
		Pressmud	3200		5770	
16	Process details /manufacturing details	Detailed manufacturing process is attached- Refer Annexure				
17	Rain Water Harvesting(RWH)	Max. rainfall intensity : 511.35 mm <ul style="list-style-type: none"> • Trenches with bore wells = 04 nos. • Budgetary allocation (Capital cost and O&M cost) : - • 				

18	Total Water Requirement	<p>Total water requirement:</p> <ul style="list-style-type: none"> ➤ Fresh water (CMD) :Source : 1670 ➤ Recycled water (CMD) : 500 ➤ Use of the water: <ul style="list-style-type: none"> Process and Washing(CMD) : 660 • Industrial Process <ul style="list-style-type: none"> ➤ Boiler Blowdown : (CMD) - 30 ➤ Cooling water (CMD) : 960 ➤ DM Water (CMD): -- ➤ Dust Suppression (CMD): -- ➤ Domestic : 50 			
19	Storm water drainage	<p>Provision of Storm water drain of adequate size</p> <ul style="list-style-type: none"> • Proper storm water drainage network will be provided within project site • Natural water drainage pattern : • Quantity of storm water: - • Size of SWD : 			
20	Sewage generation and treatment	<ul style="list-style-type: none"> • Amount of sewage generation (CMD) : 40.00 • Proposed treatment for the sewage : __ • Capacity of the STP (CMD) (If applicable) 			
21	Effluent characteristic	Parameters (pH, BOD, COD, heavy metal.ect	Inlet effluent characteristic	Outlet effluent characteristic	Effluent discharge standard (CPCB/MP CB)
		pH	5-8	5.5 to 9.0	5.5 to 9.0
		BOD	1200	30	100
		COD	2500	100	250
		TDS	2000	1650	2100
		TSS	600	100	100
		Oil & Grease	10-50	1-3	10
22	ETP details	<ul style="list-style-type: none"> <input type="checkbox"/> Amount of effluent generation (CMD) : 700 <input type="checkbox"/> Capacity of the ETP (CMD) :- 700 Amount of treated effluent recycled (CMD): 100% used for irrigation purpose on own land (35 acre) <input type="checkbox"/> Amount of water send to the CETP (CMD) : NA <input type="checkbox"/> Membership of the CETP (If require): If yes then attach the letter submit the letter :- 			
23	Note on ETP technology to be used	Anaerobic Biological Treatment Process.			

24	Disposal of the ETP sludge (If applicable)	Disposal : ETP Sludge : 3.0 MT/M Disposal: Use as manure					
25	Solid waste Management	Sr no	Source	Qty(TPM)	Form (sludge/Dry/slurry ect.)	Com position	
		1.	ETP Sludge	3.0 MT/M	Dry		
		2.	Spent Catalyst	300 Kg/M	Slurry		
		3.	Boiler Ash	562T/M	Solid		
<ul style="list-style-type: none"> • If waste(s) contain any hazardous/toxic substance/radioactive materials or heavy metals then provide quantity, disposal data and proposed precautionary measures. – NA • What are the possibilities of recovery and recycling of wastes? • Possible users of solid waste • Method of disposal of solid waste: 							
26	Atmospheric Emissions (Flue gas characteristics SPM, SO ₂ , NO _x , CO, etc.)	Sr No	Pollutant	Source of emission		Concentration in flue gas (g/m ³)	
		1	SPM	Boiler & DG Set		<150 mg/Nm ³	
		2	SO ₂	Boiler & DG Set		800 Kg/day	
27	Stack emission Details: (All the stacks attached to process units, Boilers, captive power plant, D.G. Sets, Incinerator both for existing and proposed activity). Please indicate the specific section to	Plant section & units	Stack no	Height from ground level (M)	Internal diameter (top) (m)	Emission rate Mg/Nm ³ .	Temp.of exhaust
		Boiler 130MT/hr	1	85	3.5	<150	180 ⁰ c
		DG Set 1000 KVA	2	30	1.0	<150	170 ⁰ c

	<p>which the stack is attached.</p> <p>e.g.: Process section, D.G.</p> <p>Set, Boiler, Power Plant, incinerator etc.</p> <p>Emission rate(kg/hr.) for each pollutant (SPM, SO₂, NO_x etc. should be specified</p>																																																														
28	Emission Standard	Pollutants (SPM, SO ₂ , etc	Emission standard limit (mg/Nm ³)	Proposed limit (mg/Nm ³)	MPCB consent (mg/Nm ³)																																																										
29	Ambient Air Quality Data	Pollutant	Permissible standard	Proposed concentration (in ug/m ³)	Remarks																																																										
		SPM			Within limit																																																										
		PM 10	100	80																																																											
		PM 2.5	60	40																																																											
		SO ₂	80	30	Within limit																																																										
		NO _x	80	30	Within limit																																																										
		CO	04	Traces																																																											
30	Details of Fuel to be used:	<table border="1"> <thead> <tr> <th rowspan="2">S r n o</th> <th rowspan="2">Fuel</th> <th colspan="2">Daily Consumption (TPD/KLD)</th> <th rowspan="2">Calorific value(kcals /kg)</th> <th rowspan="2">% ash</th> <th rowspan="2">% Sulphur</th> </tr> <tr> <th>Existing</th> <th>Proposed</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Gas</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>Naphtha</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>3</td> <td>HSD</td> <td>250 Ltr/H</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>4</td> <td>Fuel Oil</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>5</td> <td>Coal</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>6</td> <td>Lignte</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>7</td> <td>Other (pl.specify) Baggase</td> <td>52 TPH</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>				S r n o	Fuel	Daily Consumption (TPD/KLD)		Calorific value(kcals /kg)	% ash	% Sulphur	Existing	Proposed	1	Gas						2	Naphtha						3	HSD	250 Ltr/H					4	Fuel Oil						5	Coal						6	Lignte						7	Other (pl.specify) Baggase	52 TPH				
S r n o	Fuel	Daily Consumption (TPD/KLD)		Calorific value(kcals /kg)	% ash			% Sulphur																																																							
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6	Lignte																																																														
7	Other (pl.specify) Baggase	52 TPH																																																													
		<input type="checkbox"/> Source of fuel: <input type="checkbox"/> Mode of transportation of fuel to site: Baggase from factory & Spent oil in barrels as and when required from nearest petrol pump.																																																													

31	Energy	<p>Power supply:</p> <ul style="list-style-type: none"> ➤ Power supply is through Express Feeder of Maharashtra State Electricity Distribution Company ➤ D.G set : 2 MVA <p><input type="checkbox"/> Existing power requirement: <input type="checkbox"/> Proposed power requirement:</p> <p>DG sets: <input type="checkbox"/> Number and capacity DG sets to be used (existing and proposed) : 1 Existing – 320 KVA, 1 Proposed -1000 KVA</p> <p>Additional Fuels -</p> <p>Details of the non-conventional renewable energy proposed to be used :</p>			
32	Green Belt Development	<p><input type="checkbox"/> Green belt area (Sq. m.): 18000</p> <p><input type="checkbox"/> Number and species of trees to be planted :- 4500-5000 nos.</p> <p><input type="checkbox"/> Number, size, age and species of trees to be cut, trees to be transplanted</p>			
33	Details of Pollution Control Systems	Sr no		Existing pollution control system	Proposed to be installed
		1	Air	Dust Collectors	ESP
		2	Water	ETP	ETP with expansion
		3	Noise	PPE	PPE
		4	Solid waste		
34	Environmental Management plan Budgetary Allocation	<p><input type="checkbox"/> Capital cost (With break up) : 440.5 L</p> <p><input type="checkbox"/> O&M cost (With break up) : 29.50 L</p>			
		Sr no		Recurring Cost per annum Rs. lakh.	Capital Cost Rs. lakhs
		1	Air Pollution Control	10.00	96.00
		2	Water Pollution Control	12.00	85.00
		3	Noise Pollution Control	0.50	05.00
		4	Environment monitoring and Management	03.00	MOEF approved agency
		5	Reclamation borrow/mined area (if applicable)	---	---
		6	Occupational health	01.00	08.00
		7	Green Belt	1.00	04.50
		8	Solid waste management	02.00	15.00
		9	CSR Activities	-	227.00
		10	Others (Pl.Specify) Total	29.50	440.50

35	EIA Submitted(If yes then submit the salient features)	<input type="checkbox"/> Period of data collected : November, December & January <input type="checkbox"/> Details of the primary data collection (i.e. location of the sample collection, number of visit, etc) : Refer EIA/EMP report <input type="checkbox"/> Details of the secondary data collection (i.e. Source and year of data) : Refer EIA/EMP report <input type="checkbox"/> Potential hazard and mitigation measures; Refer EIA/EMP report <input type="checkbox"/> Conclusion of the EIA study : Refer EIA/EMP report
36	Public hearing report (If public hearing conducted then submit the salient features)	<input type="checkbox"/> Date of the public hearing : 16.06.2015 <input type="checkbox"/> Name of the news paper in which the advertisement appeared (Please attach the copy): Lokmat & Pudhari(Refer public hearing report) <input type="checkbox"/> Location of the public hearing: Bhima Sahakari Sakhar Karkhana Ltd At Takali Sikandar, Tal. Mohol, Dist. Solapur <input type="checkbox"/> Number of people attended the hearing: 115 Nos. <input type="checkbox"/> Objection(s) / Suggestion(s) if any
37	Air pollution, water pollution issues in the project area, If any	No issues
38	Storage of chemicals (inflammable /explosive/hazardous/toxic substances)- Note- These type of chemicals are not used by our factory.	

3. The proposal has been considered by SEIAA in its 98th meeting & decided to accord environmental clearance to the said project under the provisions of Environment Impact Assessment Notification, 2006 subject to implementation of the following terms and conditions :

General Conditions for Pre- construction phase:-

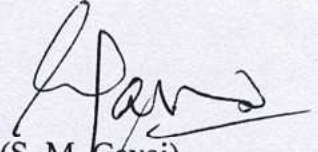
- (i) No additional land shall be used /acquired for any activity of the project without obtaining proper permission.
- (ii) For controlling fugitive natural dust, regular sprinkling of water & wind shields at appropriate distances in vulnerable areas of the plant shall be ensured.
- (iii) Regular monitoring of the air quality, including SPM & SO₂ levels both in work zone and ambient air shall be carried out in and around the power plant and records shall be maintained. The location of monitoring stations and frequency of monitoring shall be decided in consultation with Maharashtra Pollution Control Board (MPCB) & submit report accordingly to MPCB.
- (iv) Necessary arrangement shall be made to adequate safety and ventilation arrangement in furnace area.
- (v) Proper Housekeeping programmers shall be implemented.
- (vi) In the event of the failure of any pollution control system adopted by the unit, the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieve.
- (vii) A stack of adequate height based on DG set capacity shall be provided for control and dispersion of pollutant from DG set.(If applicable)

- (viii) A detailed scheme for rainwater harvesting shall be prepared and implemented to recharge ground water.
- (ix) Arrangement shall be made that effluent and storm water does not get mixed.
- (x) Periodic monitoring of ground water shall be undertaken and results analyzed to ascertain any change in the quality of water. Results shall be regularly submitted to the Maharashtra Pollution Control Board.
- (xi) Noise level shall be maintained as per standards. For people working in the high noise area, requisite personal protective equipment like earplugs etc. shall be provided.
- (xii) The overall noise levels in and around the plant are 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 confirm to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989.
- (xiii) Green belt shall be developed & maintained around the plant periphery. Green Belt Development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO/ Agriculture Dept.
- (xiv) Adequate safety measures shall be provided to limit the risk zone within the plant boundary, in case of an accident. Leak detection devices shall also be installed at strategic places for early detection and warning.
- (xv) Occupational health surveillance of the workers shall be done on a regular basis and record maintained as per Factories Act.
- (xvi) The company shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling.
- (xvii) The project authorities must strictly comply with the rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Waste (Management and Handling) Rules, 2003 (amended). Authorization from the MPCB shall be obtained for collections/treatment/storage/disposal of hazardous wastes.
- (xviii) The company shall undertake following Waste Minimization Measures :
 - Metering of quantities of active ingredients to minimize waste.
 - Reuse of by- products from the process as raw materials or as raw material substitutes in other process.
 - Maximizing Recoveries.
 - Use of automated material transfer system to minimize spillage.
- (xix) Regular mock drills for the on-site emergency management plan shall be carried out. Implementation of changes / improvements required, if any, in the on-site management plan shall be ensured.
- (xx) A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.
- (xxi) Transportation of ash will be through closed containers and all measures should be taken to prevent spilling of the ash.
- (xxii) Separate silos will be provided for collecting and storing bottom ash and fly ash.
- (xxiii) Separate funds shall be allocated for implementation of environmental protection measures/EMP along with item-wise breaks-up. These cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year-wise expenditure should reported to the MPCB & this department
- (xxiv) The project management shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the marathi language of the local concerned within seven days of issue of this letter, informing that the project has been accorded environmental clearance and copies of clearance letter

are available with the Maharashtra Pollution Control Board and may also be seen at Website at <http://ec.maharashtra.gov.in>

- (xxv) Project management should submit half yearly compliance reports in respect of the stipulated prior environment clearance terms and conditions in hard & soft copies to the MPCB & this department, on 1st June & 1st December of each calendar year.
 - (xxvi) A copy of the clearance letter shall be sent by proponent to the concerned Municipal Corporation and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.
 - (xxvii) The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
 - (xxviii) The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.
 - (xxix) The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent 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 EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.
4. The environmental clearance is being issued without prejudice to the action initiated under EP Act or any court case pending in the court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision under EP Act or of the Hon'ble court will be binding on the project proponent. Hence this clearance does not give immunity to the project proponent in the case filed against him, if any or action initiated under EP Act.
 5. The Environment department reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the department or for that matter, for any other administrative reason.
 6. **Validity of Environment Clearance:** The environmental clearance accorded shall be valid for a period of 7 years as per MoEF & CC Notification dated 29th April, 2015 to start of production operations.
 7. In case of any deviation or alteration in the project proposed from those submitted to this department for clearance, a fresh reference should be made to the department to assess the adequacy of the condition(s) imposed and to incorporate additional environmental protection measures required, if any.
 8. The above stipulations would be enforced among others under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and rules there under, Hazardous Wastes (Management and Handling) Rules, 1989 and its amendments, the public Liability Insurance Act, 1991 and its amendments.

9. Any appeal against this environmental clearance shall lie with the National Green Tribunal (Western Zone Bench, Pune), New Administrative Building, 1st Floor, D-, Wing, Opposite Council Hall, Pune, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.


(S. M. Gavai)
Member Secretary, SEIAA.

Copy to:

1. Shri T. C. Benjamin, IAS (Retired), Chairman, SEAC-I, 602, PECAN, Marigold, Behind Gold Adlabs, Kalyani Nagar, Pune – 411014. .
2. Additional Secretary, MoEF & CC, Indira Paryavaran Bhavan, Jorbagh Road, Aliganj, New Delhi-110003.
3. Member Secretary, Maharashtra Pollution Control Board, with request to display a copy of the clearance.
4. The CCF, Regional Office, Ministry of Environment and Forest (Regional Office, Western Region, Kendriya Paryavaran Bhavan, Link Road No- 3, E-5, Ravi-Shankar Nagar, Bhopal- 462 016). (MP).
5. Regional Office, MPCB, Solapur.
6. Collector, Solapur
7. IA- Division, Monitoring Cell, MoEF & CC, Indira Paryavaran Bhavan, Jorbagh Road, Aliganj, New Delhi-110003.
8. Select file (TC-3)

(EC uploaded on)

Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

For Consent/ Authorisation

Application for

Establish/Operate/Renewal of consent under section 25 and 26 of the Water (Prevention & Control of Pollution) Act, 1974 as

Establish/Operate/Renewal of consent under Section 21 of the Air (Prevention and Control of Pollution) Act, 1981, as

Renewal of authorization under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 in my/our/existing/proposed/altared/ additional manufacturing/processing activity from the premises as per the details given

Application No.

NT-0000175526

Application submitted on:
05-07-2023

Received
12-09-2023
SRO - Solapur
M. S. Patil
M. S. Patil
M. S. Patil

Industry Name

IIN No.:

Submit to:
SRO - Solapur

Institution:

Industry Type:
R12 Sugar (excluding
Khandasari)

Category:
Red

Scale:
L.S.I

Activity/etc:
Industry Estate

Name of Private Industry
Estate:
BHIMA SSKL

EC Obtained
EC Obtained

CR-242

Date of Issue of EC
Jul 12, 2016

Parivesh Proposal Number
IA/MH/IND/22078/2014

MoEFCC/SEIAA File Number
J-11011/79/2014-IA-II(I)

Instruction-bulldup area is more than 20,000
(existing Expansion Unit)

No

Signature

Signature, office address with Telephone/Fax numbers, e-mail of the Applicant Occupier/Industry/Institution / Local Body.

Address

A/p- Takali (S) Tal. - Mohol, Dist - Solapur

Director

Taluka

Mohol

District

Solapur



Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण बोर्ड

Application for Consent/ Authorisation

Sir,
We hereby apply for*

1. Consent to Establish/Operate/Renewal of consent under section 25 and 26 of the Water (Prevention & Control of Pollution) Act, 1974 as amended.
2. Consent to Establish/Operate/Renewal of consent under Section 21 of the Air (Prevention and Control of Pollution) Act, 1981, as amended.
3. Authorization/renewal of authorization under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 in connection with my/our/existing/proposed/alterd/ additional manufacturing/processing activity from the premises as per the details given below.

Consent Information

UAN No:
MPCB-CONSENT-0000147660

Application submitted on:
04-09-2022

Industry Information

Consent To:
Operate

IIN No.:

Submit to:
SRO - Solapur

Type of institution:
Industry

Industry Type:
R12 Sugar (excluding
Khandsari)

Category:
Red

Scale:
L.S.I

Location of industry/activity/etc:
Private Industry Estate

Name of Private Industry Estate:
BHIMA SSKL

EC Reqd.
Yes

EC Obtained
EC Obtained

EC Ref. No.
SEAC-2014/CR-242/TC-2

Date of issue of EC
Jul 12, 2016

Parivesh Proposal Number
IA/MH/IND/22078/2014

MoEFCC/SEIAA File Number
J-11011/79/2014-IA-III(I)

Whether construction-buildup area is more than 20,000 sq.mtr.(Existing Expansion Unit)

No

General Information

1. Name, designation, office address with Telephone/Fax numbers, e-mail of the Applicant (Applicant's name, address, telephone, fax, e-mail)

Name
SAGARE M.B.
Designation
Managing Director
Area
Takali (S)

Address
A/p- Takali (S) Tal. - Mohol, Dist - Solapur
Taluka
Mohol
District
Solapur

Received
JEKans
22-09-2022
Jr. Clerk
Sub. Regional Office
M. P. C. Board,
Solapur

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-0000097306 & -0000076131/CR/2202001568

Date: 24/02/2022

To,
BHIMA SSKL
465, Takali (S), Mohol, Solapur.



Your Service is Our Duty

Sub: Renewal of consent for of 5000 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-0000054395 &
0000028720/CR-1901000901 dtd. 14.01.2019.
2. Minutes of CAC Meeting dtd. 03.12.2021.**

Your application No.MPCB-CONSENT-0000097306 Dated 29.01.2021

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:

- The Consent to Renewal is granted upto: 31.07.2022**
- The capital investment of the industry is Rs.264.8954 Crs. (As per C.A Certificate submitted by industry).**
- Consent is valid for the manufacture of:**

Sr No	Product	Maximum Quantity	UOM
1	Sugar	18150	MT/M
2	Molasses	6600	MT/M
3	Pressmud	5770	MT/M
4	Bagasse	54450	MT/M
5	Electricity (Co-generation)	25	MW

The cane crushing capacity shall not exceed to 5000 TCD

- Conditions under Water (P&CP) Act, 1974 for discharge of effluent:**

Sr No	Description	Permitted in CMD	Standards to	Disposal
1.	Trade effluent	440	As per Schedule -I	40 CMD is recycled and 400 CMD on land for irrigation

Sr No	Description	Permitted in CMD	Standards to	Disposal
2.	Domestic effluent	40	As per Schedule - I	On land for gardening

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 (130 TPH)	1	As per Schedule -II
2	Boiler (30 TPH)	1	As per Schedule -II
2	Boiler (2 X 20 TPH)	1	As per Schedule -II

(As per previous consent of existing unit)

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

Sr No	Type of Waste	Quantity	UoM	Treatment	Disposal
1	ETP sludge	3.00	MT/M	NA	Manure
2	Boiler Ash	500	MT/M	NA	Sale to Brick Manufacturer.

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	20 MT/A	Recycle	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 & Transboundary 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 ensure uninterrupted connectivity of OCEMS to Board server directly through data logger.
11. This consent is issued as per the CAC meeting dated 03.12.2021.
12. PP shall operate pollution control system scientifically to achieve the consented norms

Received Consent fee of -

Sr.No	Amount(Rs.)	Transaction/DR.No.	Date	Transaction Type
1	529791.00	MPCB-DR-2530	29/01/2021	RTGS
2	530490.00	MPCB-DR-8710	08/11/2021	RTGS
3	537862.00	MPCB-DR-9492	29/12/2021	RTGS
4	43326.00	MPCB-DR-10007	22/02/2022	RTGS

Copy to:

1. Regional Officer, MPCB, Pune and Sub-Regional Officer, MPCB, Solapur
- 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) **A] As per your application, you have provided Effluent treatment plant of designed capacity 700 CMD consisting of Primary, secondary & tertiary system for trade effluent 440 CMD and treated effluent is used on land for irrigation. In no case effluent shall discharge into stream directly or indirectly.**
- 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)	pH	5.5-9.0
(2)	Oil & Grease	10
(3)	BOD (3 days 27 ^o c)	100
(4)	Sulphate	1000
(5)	Suspended Solids	100
(6)	COD	250
(7)	Chloride	600
(8)	Total Dissolved Solids	2100

- D] The treated effluent 400.00 CMD shall be disposed on land for irrigation on 14.50 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 40.00 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.

2) **A] As per your application, you have provided septic tank and soak pit for the treatment of 40 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	960.00
2.	Domestic purpose	50.00
3.	Processing whereby water gets polluted & pollutants are easily biodegradable	660.00
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	S%	SO₂
1	Boiler (130 TPH)	ESP	85	Bagasse	1080 MT/Day	0.20	4320.00
2	Boiler (30 TPH)	Wet Scrubber	60	Bagasse	180 MT/Day	0.20	720.00
2	Boiler (20 TPH)	Wet Scrubber	60	Bagasse	120 MT/Day	0.20	480.00
2	Boiler (20 TPH)	Wet Scrubber	60	Bagasse	120 MT/Day	0.20	480.00
3	DG Set (1000 KVA)	Acoustic Enclosure	6	HSD	100 Lit/Day	1.00	2.00

(As per previous consent of existing unit)

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 control system, so as to achieve the level of pollutants to the following standards:

Total Particulate matter	Not to exceed	150 mg/Nm ³
--------------------------	---------------	------------------------

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).

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 R	2500000	15 Days/ Extend	towards compliance of consent conditions and O & M of pollution control system to achieve consented standards.	31.07.2022	31.01.2023.

BG Forfeiture History

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



FOR MIDC / MJP / LOCAL BODIES



सत्यमेव जयते

Government of Maharashtra

Water Resources Department.

Command Area Development Authority, Solapur.

Bhima Development Divn. No. 2, Solapur.

Agreement for Non Irrigation Water Supply

Name of Company :- *Bhima Sahakari Sakhar
Karkhana Ltd. Takali (6) Tal. Mohol*

Date of Agreement :- *31/10/2014*

Period of Agreement :- *1/11/2014 To 31/10/2024*

भारतीय गैर न्यायिक INDIA NON JUDICIAL

एक हजार रुपये

ONE THOUSAND RUPEES

रु.1000

Rs.1000



महाराष्ट्र MAHARASHTRA

M 301154

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झोना अठ्ठाळी वसणार कावळानालि.टाठळी-सिद्धर-ये

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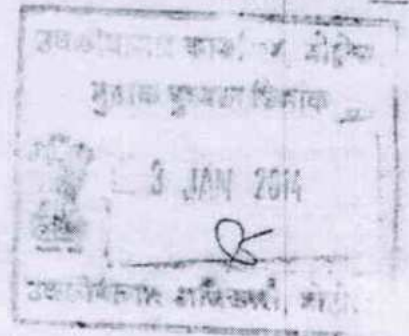
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कर्मचारी व्यावृत्त

श्री. ए. म. सिंगरा

वसणारे

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महाराष्ट्र शासन, नैतिक
पर्यावरण विभाग

AGREEMENT

Dt. 31/10/2014

Agreement for Non Irrigation water supply with the Executive Engineer, Bhima Development Division No. 2 Solapur and Managing Director, Bhima S.S.K. Ltd. Takali (S.) Tal. Mohol (As attached page No. 1 to 9)

[Handwritten signature]
A Managing Director
Bhima S.S.K.Ltd. Takali (S.)
Tal. Mohol, Dist. Solapur,
Pin Code - 413 248.

[Handwritten signature]
Executive Engineer
Bhima Development Div.No.2
SOLAPUR.

AGREEMENT

An agreement made on the 31 day of October Two thousand 2014 between Bhima S.S.K Ltd-Takali (S) a local self Government body such as Grampanchayat / Municipal authorities / Zilla parishad / Jeevan pradhikaran or Company/Industrial corporation / Maharashtra Jeevan Pradhikaran (which expression here in after referred to as 'the company' / MIDC / MJP shall, unless excluded by or it be repugnant to the context or meaning thereof 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 Takali (S) hereinafter referred to as 'the company' of the one part and the Governor of Maharashtra hereinafter referred to as 'the Government' (which expression shall unless excluded by or it be repugnant to the context or meaning thereof be deemed to include his successors and assigns) of the other Part.

Whereas the company is desirous of constructing a pumping station on the company's land at Puluj for drawing water from the source Shama river (hereinafter referred to as "the said source") for the use by the company's Bhima river Sugar Plant (hereinafter referred to as "the said Plant") and laying underground and surface pipes and drains for discharge of the factory effluent.

AND whereas the company has applied to the Government for permission to draw 5.30.000 Million liters of water per day / year from the said source

AND whereas the company has paid Rs. - (Rupees -) to 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 hereinafter appearing

AND WHEREAS UNDER the said terms and conditions the company has to deposit with the Executive Engineer Bhima Development Division No. 2, Solapur to the Government a sum of Rs. 1,89,260 as 'security' equivalent to 2 Months company's probable water charges based on yearly sanctioned and as communicated in cash or in the form fixed deposit receipt or a bank Guarantee issued by a scheduled/nationalised bank having its main/branch office situated locally for the due observance and performance by the company of the terms and condition of this Agreement AND WHEREAS the company has accordingly prior to the execution of these presents deposited with the Government Rs. 1,89,260 as security for the due observance and performance by the company of the terms and conditions herein contained, AND WHEREAS it has been agreed that the said amount will not carry any interest if deposited in cash. (As per Bhima

Irrigation Sub Div Tungat D.R. NO - 12992 dt 23/2/18

Cheque NO. 657568 dt 29/12/2018 Total RS-189240/-

Definitions

Quota - Quota means demand sanctioned and communicated to _____ by the Executive Engineer.

Corporation - Corporation means the River Basin corporations like Maharashtra Krishna Valley Development Corporation (MKVDC), Godavari Marathwada Irrigation Development Corporation (GMIDC), Tapi Irrigation Development Corporation (TIDC), Kokan Irrigation Development Corporation (KIDC) & Vidharbha Irrigation Development Corporation (VIDC) Municipal Corporations, 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 st November to 31st October to the Execvutive Engineer & sanctioned by Irrigation Department every year in the month of September alongwith its bifurcation for industrial, domestic and agricultural use.

USER - User means Water using agency like individual company/MIDC/MJP/LOCAL bodies.

NOW THIS AGREEMENT WITNESSTH AS FOLLOWS:

1) (a) In consideration of the company making payment to the Government as hereinafter specified and observing and performing the convenience and conditions herein contained Government do hereby grant to the company permission to draw _____ Million Liters (0.10 Mcum) of water per year from the said source [_____ Million Liters (— Mcum) of water per year for Industry using potable water bottling plant, _____ Million Liters (0.10 Mcum) of water per year for other than water as raw material Industrial Use, _____ Million Liters (— Mcum) of water per year for domestic use and _____ Million Liters (— Mcum) of water per year for agricultural use (nursery / gardening) within the Premises] and use the same for the purpose of the Company's said plant or project and for supply to residential colonies and for agricultural use (nursery/gardening) for a term of ten years commencing from the 1st day of November 2014 on the following terms and conditions.

(b) The quota asigned for domestic use & for agricultural use shall not exceed 10% each of the total water demand. In the cases Wherein the water used for Domestic/Agricultural use exceed 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 revisions, 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.

- 3) Nothing herein contained shall be deemed to imply any guarantee on the 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 inadequate 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 charged as per actual quantity of water lifted 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 other than M.I.D.C. shall not sale 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 Government without prejudice to its right will forthwith revoke the licence, Government shall be entitled to recover from the company the proceeds of any such sale made by the company.

As regards water supply to M.I.D.C. this clause of resale of water will not be applicable to the extent of the water supplied by them to the industrial units and residential colonies in their jurisdiction. But, for any purposes other than the above, if M.I.D.C. desires to supply the water then the prior permission of the Government in Irrigation Department is obligatory Water supply made by M.I.D.C. without prior permission will be charged at the maximum rates applicable for Industrial water supply.

- 5) Government shall be entitled to utilise water of the said river available after meeting the reasonable requirements of the company; as to which matter the decision of the Government shall be final and binding on the company, for such purpose as Government deem fit.
- 6) The permission hereby 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's right to here after launch or implement in public interest any new schemes or schemes of its own at, on or in connection with the present source of channel of water supply available to the company, subject however to the safeguarding of its reasonable demand referred to in clause (5) above.
- 7) The company shall not construct the pick-up weir in the Bhima river bed of the said river unless the proposals, plans, drawings, specifications, estimates and all other details thereof are previously submitted to and approved in writing by an officer authorised in that behalf by the Government and while granting its approval to the construction of the pick-up 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 for the said independent intention (hereinafter referred to as "the said electronic measuring devices") at such places as in indicated by the Executive Engineer. All the pipeline showing locations of the metering equipments from the said source for different purposes shall be got jointly varified and got approved from Executive Engineer, Irrigation Department. Layout from the said source shall be got approved from the Executive Enginner. No changes in the approved layout shall be made without 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 electronic measuring devices for use of water for 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 as mentioned in clause 8(d) I and II. During such period 125 % of the proportionate sanctioned quantity will be charged at the prevailing rates for the said plant. The said electronic measuring devices shall always be kept under the lock and seal of the Executive Engineer and the key of such lock shall at all times remain with the Executive Engineer. The company shall at all times during the substance of this agreement at its own cost maintain the said electronic measuring devices in proper working order and condition. **(The underline portion not applicable to MIDC)**
- (b) Reading for the water so drawn by the company will be taken on the said electronic measuring devices on the _____ day of each month/at agreed times, jointly by the authorised 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 the cost of such testing shall be borne and paid by the company, If on such testing 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 company failling to do so within 30 (thirty) days thereafter the Executive Engineer may proceed to do so on account and at the cost of the company.
- (d) In the event of the said electronic measuring devices going out of 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 ascertained in the following manner.
- (i) (i) If the said electronic measuring devices remain out of order for a period of less than 30 (thirty) days then the quantity of water deemed to be drawn by the USER during the said period shall be taken to be 90% of the yearly sanctioned demand as communicated in clause No. 11 or average for the last six months whichever in higher.

(ii) If the said electronic measuring devices remain out of order for a period exceeding 30 (thirty) days then the quantity of water deemed to be drawn, by the USER during the said period shall be taken to be 110% of the yearly sanctioned demand as communicated in clause No. 11 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 of the said electronic measuring devices for repairs or the same in the opinion of the Executive Engineer not working properly.

(iii) If electronic meter meant for domestic or for agricultural use is not filled 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 to in clause 1 (a) 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 months. The company shall thereafter duly pay the same by demand draft drawn in the name of the Executive Engineer **Bhima Development Division No. 2, Solapur** 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 the bill i.e. before the end of the current month) extra charge not exceeding 10% per annum of the amount due will be charged. If the delay in payment of water charges exceeds six months, the Irrigation department reserves the right to terminate the water supply with a notice of 15 days in advance.

10) The cost of all works in connection with the arrangements 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) hereof, the company shall pay to the Government at the time and in the manner specified in clause (12) hereof water charges for the quantity of water drawn by the company from the said river as measured by the said electronic measuring devices at the following rates.

Purpose of water use	Sanctioned Quota	Present rate Per 10,000 lit.
a) Domestic use
b) Industrial use	5,30,000 Lit/day	95.00/10000 Lit/day
c) Agricultural use	As per Govt Rate.

(0.10 m cum / year)

(The rates quoted above are subject to its revision from time to time by the Govt.)

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 Irrigation Department shall be charged.

- I. Provided however that after the expiry of two years from the date the company starts drawing water from the said river if in any month the quantity of water drawn by the company is less than 90 per cent of the quantity of water specified in clause (1) hereof then the company shall pay to the Government water charges calculated for 90 per cent of the quantity of water specified in clause (1) 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. (Not applicable to MIDC)
- II. For any unforeseen reasons, 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 the commencement of the year i.e. 1st day of November. On acceptance of such revised demand the company will be charged as per changed demand for period specified, other conditions remaining same. A supplementary agreement on hundred rupees stamp paper for this changed quantity which will form part of main agreement.
- III. No penal rate will be levied for the quantity limited to 10% in excess of the sanctioned one. For quantity used in excess of this 10 % without prior sanction a penal rate of 25% 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 reasons (such as - sudden closure of the units or sudden rise in production etc.) there could be abrupt fluctuations in the demand on both sides. Such cases will be decided at Govt. level only, by giving due considerations to the availability of water in the particular 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 funds cess at the rate of 20 paise per every rupee of basic water charges.
- 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 month of September & October (11th & 12th 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 the annual sanctioned demand has been lifted used.

The water lifted in excess upto 10% of sanctioned demand shall be charged at single 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 month on the basis of anticipated quantum of water to be drawn by it from the said source during the month or on monthly basis within fifteen (15) days from the date of receipt of the bi-monthly demands by the USER S from the Executive Engineer. On default of the USER to pay the water rate or local fund 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 forthwith as per clause No. 9
- (b) In the case of disputes regarding quantity of water billed or rate at which the bill is prepared the Company/firms/individual water user shall first pay the complete amount of the bill and then claim for refund of any excess bill charged giving the reasons / justification of wrong billing. However the decision of Superintending Engineer, CADA, Solapur in this regard 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 fund cess and company shall pay the revised water rates and local fund cess as may be fixed by 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 nalla / river even by septic tank effluents. If any water sources are polluted, by any industry as indentified irrigation/ Pollution Control Board / MIDC / MJP the company shall be charged with a penalty of rupees 5,000/- per such incident per day till it is 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 their use such as gardening, recreation, cooling, cleaning, washing and manufacturing process etc. so that at least 50% reduction 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 / Environmental Department of the Government prior to commencing the operation of pumping / drawing water from the source. (Underline Portion not applicable to MIDC)
- While granting water supply connection, MIDC shall insist the company / industry to produce consent / NOC for effluent disposal arrangement from Maharashtra Pollution Control Board wherever required (i.e. in case of polluting company / Industry).
- 16) The company shall at all the times allow an officer of Irrigation Department of the Government authorised in that behalf to inspect the said works as well as the accounts and copies taken of entries from the records maintained by the company.
- 17) Any notice or other document to be given to or served upon the company may be given or served on behalf of the Government by the Executive Engineer Bhima Development Division No. 2, Solapur 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.

- 18) The said sum of Rs. _____ deposited in the form of FDR / Bank guarantee / cash by the company with the Executive Engineer, **Bhima Development Division No. 2, Solapur** 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 on 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 discretion 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 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 _____ or such part thereof as 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 term of this agreement, Government may renew this agreement within 90 days for such further period and on such terms and conditions, 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 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. (Not applicable for MIDC)
- 23) The agreement supercedes all the previous agreements (except certain cases when MIDC has paid the Capital Contribution and entered into an agreement) entered into by the USER with the Government in connection with the supply of water from Bhima RIVER
- 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 month requirement in case of water source from seasonal river / nalla and one months water requirement in case of perennial water source of river/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. (Not applicable to MIDC)


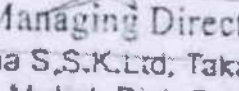
25) IF THE COMPANY COMMITS BREACH OF ANY OF THE TERMS AND CONDITIONS THEREOF GOVERNMENT SHALL BE ENTITLED TO CANCEL THIS PERMISSION AND DISCONTINUE THE SUPPLY OF WATER WITHOUT PAYMENT OF ANY COMPENSATION WHATSOEVER TO THE COMPANY.

26) The Govt. hereby reserves to itself its right 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.

IN WITNESS WHEREOF THE Common Seal of the Bhima S.S.K. Ltd
Takali-(S) Tal-Mohol has been hereunto affixed _____

AND _____ the Executive Engineer, Bhima Development Division No. 2, Solapur has for and on Behalf of the 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 Bhima S.S.K.Ltd-Takali(S)

was pursuant to a resolution of the Board of Directors of the company dated the _____ Hereto affixed in the presence of -

1. 
Managing Director
Bhima S.S.K.Ltd, Takali (S)
Tal. Mohol, Dist. Solapur.
2. 
Pin Code 413 248.

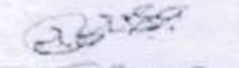
two Directors _____ taken thereof have hereto set their respective hands in the presence of

1. श्री. शिवाजी नामदेव चव्हाण

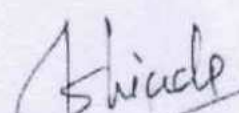
2. श्री. विठ्ठल बाबा बाधु



SIGNED, SEALED AND DELIVERED by the Executive Engineer, Bhima Development Division No. 2, Solapur for and on behalf of the Governor of Maharashtra in presence of

1. 
साकारिकारी
कला साखरारे बाबा च. बाधु
2. कला (सि.)

महासक अभियंता व्हेणी-१
भीमा पाटबंधारे उपविभाग,
हंगत, ता. पंढरपूर.


Executive Engineer
Bhima Development Division No. 2,
Solapur