

BHIMASHANKAR

SAHAKARI SAKHAR KARKHANA LTD.



भीमाशंकर

सहकारी साखर कारखाना लि.

(Regd.No: P.N.A. / A.G.N. / P.R.G.(A) S-47 / 1994 Dt.31-3-1994) GSTIN : 27AAAAB0949G1ZZ

Dattatraynagar, Pargaon Via Awasari (BK), Tal. Ambegaon, Dist.Pune. 412 406

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BSSK/Mfg/816 /2024-25

Date: - 22/06/2024

By Mail

To,

The Deputy Director General of Forests (Central)
West Central Zone,
Regional Office,
Near Secretariat building,
VCA Ground, Civil lines, Nagpur-440001.
E mail I.D.- eccompliance-mh@gov.in.

Sub- Submission of Six Monthly EC Compliance Report.

(1st Jan 2024 to 30 June 2024) Ref- SIA/MH/THE/70064/2011 Dt – 31/03/2020
(E.C. Identification No.EC22B004MH126409) Dt.21/04/2022.

Dear Sir,

We are submitting herewith six monthly compliance report of Environment Clearance for 19 to 29 MW Co-generation.(From 1st Jan 2024 to 30 June 2024) for your reference.

Thanking you.

Yours Faithfully,

(C.G. Dhage)

Managing Director.

Encl-1) Environment Clearance Copy. 2) Part- I – Data Sheet.

3) Part II -Six Monthly EC Compliance report

- Copy to-
- 1) Cental Pollution Control Board,
Parivesh Bhavan, East, Arjun Nagar,
Shahadra, Delhi-110032
 - 2) Environment Department,
15 th floor, New Administrative Building,
Madam Kama Road, Mantralaya,
Mumbai – 400032
 - 3) The Regional Officer,
Maharashtra Pollution Control Board,
3rd Floor, "Jog Center" Building,
Wakadewadi, Pune. 411003.
 - 4) The Sub- Regional Officer II,
Maharashtra Pollution Control Board,
2nd floor, "Jog Center" Building,
Wakadewadi, Pune 411 003.

Annexure

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Government of India
Ministry of Environment, Forest and Climate Change
(Issued by the State Environment Impact Assessment
Authority(SEIAA), Maharashtra)

To,

The Managing Director

BHIMA SHANKAR SAHAKARI SAKHAR KARKHANA LIMITED

Dattatrayanagar, P.O. Pargaon via Awasari, Taluka: Ambegaon, Dist.
Pune-410406 -410406

Subject: Grant of Environmental Clearance (EC) to the proposed Project Activity
under the provision of EIA Notification 2006-regarding

Sir/Madam,

This is in reference to your application for Environmental Clearance (EC)
in respect of project submitted to the SEIAA vide proposal number
SIA/MH/THE/70064/2011 dated 16 Dec 2021. The particulars of the environmental
clearance granted to the project are as below:

- | | |
|---|--|
| 1. EC Identification No. | EC22B004MH126409 |
| 2. File No. | SIA/MH/THE/70064/2011 |
| 3. Project Type | Expansion |
| 4. Category | B1 |
| 5. Project/Activity including
Schedule No. | 1(d) Thermal Power Plants |
| 6. Name of Project | Proposed Expansion of Co-generation
Plant from 19MW to 29MW at
Dattatraynagar, A/P Pargaon Via Awasari
Bk., Tal. Ambegaon, Dist. Pune by M/s
Bhimashankar Sahakari Sakhar Karkhana
Ltd. |
| 7. Name of Company/Organization | BHIMA SHANKAR SAHAKARI SAKHAR
KARKHANA LIMITED |
| 8. Location of Project | Maharashtra |
| 9. TOR Date | 22 Jun 2011 |

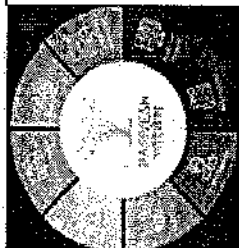
The project details along with terms and conditions are appended herewith from page
no 2 onwards.

Date: 21/04/2022

(e-signed)
Manisha Patankar Mhaiskar
Member Secretary
SEIAA - (Maharashtra)

*Note: A valid environmental clearance shall be one that has EC identification
number & E-Sign generated from PARIVESH. Please quote identification
number in all future correspondence.*

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STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

No. SIA/MH/THE/70064/2011
Environment & Climate Change
Department
Room No. 217, 2nd Floor,
Mantralaya, Mumbai- 400032.

To
M/s Bhimashankar Sahakari Sakhar Karkhana Ltd.,
Dattatraynagar, A/P Pargaon Via Awasari Bk.,
Tal. Ambegaon, Dist. Pune

Subject : Environmental Clearance for Proposed Expansion of Co-generation Plant from 19MW to 29MW at Dattatraynagar, A/P Pargaon Via Awasari Bk., Tal. Ambegaon, Dist. Pune by M/s Bhimashankar Sahakari Sakhar Karkhana Ltd.

Reference : Application no. SIA/MH/THE/70064/2011

This has reference to your communication on the above-mentioned subject. The proposal was considered by the SEAC-1 in its 205th and 216th meeting under screening category 1 (d) as per EIA Notification, 2006 and recommend to SEIAA. Proposal then considered in 239th (Day-2) meeting of State Level Environment Impact Assessment Authority (SEIAA).

2. **Brief Information of the project submitted by you is as below:-**

1.Name of Project	Proposed Expansion of Co-generation Plant from 19MW to 29MW at M/s Bhimashankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, A/P Pargaon Via Awasari Bk., Tal. Ambegaon, Dist. Pune – 412406
2.Type of institution	Private
3.Name of Project Proponent	M/s Bhimashankar Sahakari Sakhar Karkhana Ltd.
4.Name of Consultant	M/s Ultra-Tech (Environmental Consultancy & Laboratory)
5.Type of project	NA
6.New project/expansion in existing project/modernization/diversification in existing project	Expansion
7.If expansion/diversification, whether environmental clearance	EC obtained for vide Letter "SEAC-2011/CR-755/TC2" dated 30th June 2012.

has been obtained for existing project	
8.Location of the project	S.no 148, 202,206,207,208,210,213,214,219,220
9.Taluka	Ambegaon
10.Village	A/P Pargaon Tarfe Awasari Bk
Correspondence Name:	Mr. Chandrakant Gangadhar Dhage (Managing Director)
Room Number:	-
Floor:	-
Building Name:	Administrative Office
Road/Street Name:	Manchar-Shirur Road
Locality:	Dattatrayanagar,
City:	Village -A/P Pargaon Tarfe Awasari Bk
11.Whether in Corporation /Municipal / other area	Grampanchyat- Pargaon Tarfe Awasari Bk.
12.IOD/IOA/Concession/ Plan Approval Number	Non agricultural permission IOD/IOA/Concession/Plan Approval Number: Land NA (industrial) S.no 148, 202,206,207,208,210,213,214,219,220 Approved Built-up Area:
13.Note on the initiated work (If applicable)	NA
14.LOI / NOC / IOD from MHADA/ Other approvals (If applicable)	L.I 675/SIA/IMO/2019 dated 12/04/2019
15.Total Plot Area (sq. m.)	580000 Sq.m
16.Deductions	NA
17.Net Plot area	580000Sq.m
18 (a).Proposed Built-up Area (FSI & Non-FSI)	a) FSI area (sq. m.): NA b) Non FSI area (sq. m.): NA c) Total BUA area (sq. m.):
18 (b).Approved Built up area as per DCR	Approved FSI area (sq. m.): NA Approved Non FSI area (sq. m.): NA Date of Approval: 21-02-2000
19.Total ground coverage (m2)	5341.5
20.Ground-coverage Percentage (%) (Note: Percentage of plot not open to sky)	0.92

21. Estimated cost of the project		414200000	
22. Number of buildings & its configuration			
Serial number	Building Name & number	Number of floors	Height of the building (Mtrs)
1	NA	NA	NA
23. Number of tenants and shops		Not applicable	
24. Number of expected residents /users		NA	
25. Tenant density per hectare		NA	
26. Height of the building(s)			
27. Right of way (Width of the road from the nearest fire station to the proposed building(s))		NA	
28. Turning radius for easy access of fire tender movement from all around the building excluding the width for the plantation		NA	
29. Existing structure (s) if any		NA	
30. Details of the demolition with disposal (If applicable)		NA	

31. Production Details				
Serial Number	Product	Existing (MT/M)	Proposed (MT/M)	Total (MT/M)
1	Sugar	18000	0	18000
2	Power MW	19	10	29
32. Total Water Requirement				
Dry season:	Source of water	Ghod River		
	Fresh water (CMD):	542.2		
	Recycled water - Flushing (CMD):	0		
	Recycled water - Gardening (CMD):	0		
	Swimming pool make up (Cum):	0		
	Total Water Requirement (CMD):	542.2		
	Fire fighting - Underground water tank (CMD):	0		
	Fire fighting - Overhead water tank (CMD):	0		
	Excess treated water	0		
Wet season:	Source of water	Not applicable		
	Fresh water (CMD):	Not applicable		
	Recycled water - Flushing (CMD):	Not applicable		
	Recycled water - Gardening (CMD):	Not applicable		
	Swimming pool make up (Cum):	Not applicable		

				Total Water Requirement (CMD):		Not applicable			
				Fire fighting - Underground water tank(CMD):		Not applicable			
				Fire fighting - Overhead water tank(CMD):		Not applicable			
				Excess treated water		Not applicable			
Details of Swimmingpool (If any)				Not applicable					
33.Details of Total water consumed									
Particulars	Consumption (CMD)			Loss (CMD)			Effluent (CMD)		
Water Requirement	Existing	Proposed	Total	Existing	Proposed	Total	Existing	Proposed	Total
Industrial Process	325.20	169.20	494.40	130.80	63.60	194.40	194.40	105.6	300
Cooling tower & thermopack	2416	2432	2448	2400	2400	4800	16	32	48
Fresh water requirement	341.2	201.20	542.20	130.80	63.60	194.40	210.40	137.60	348
34.Rain Water Harvesting (RWH)				Level of the Groundwater table:		5-10m BGL			
				Size and no of RWH tank(s) and Quantity:		2040m3 x 1 No			
				Location of the RWH tank(s):		near Guest house			
				Quantity of recharge pits:		20			
				Size of recharge pits		1m x 1m x 1.5m			

	Budgetary allocation (Capital cost) :	20 lakh
	Budgetary allocation (O & M cost) :	2.5 lakh
	Details of UGT tanks if any :	NA
35.Storm water drainage	Natural water drainage pattern:	South to North
	Quantity of storm water:	4.5 m ³ /min
	Size of SWD:	600 mm
Sewage and Waste water	Sewage generation in KLD:	40
	STP technology:	NA
	Capacity of STP (CMD):	NA
	Location & area of the STP:	NA
	Budgetary allocation (Capital cost):	NA
	Budgetary allocation (O & M cost):	NA
36.Solid waste Management		
Waste generation in the Pre Construction and Construction phase:	Waste generation:	Not Any
	Disposal of the construction waste debris:	Not Any
Waste generation in the operation	Dry waste:	Ash 52.2 TPD
	Wet waste:	ETP sludge : 24 TP/M
	Hazardous waste:	Spent oil : 0.55 MT /M
	Biomedical waste (If	NA

Phase:	applicable):	
	STP Sludge (Drysludge):	0.5 MT/D
	Others if any:	NA
Mode of Disposal of waste:	Dry waste:	Ash will be sold to Brick Manufacturer
	Wet waste:	Composting and used as soil conditioner
	Hazardous waste:	spent oil burned in Boiler
	Biomedical waste (If applicable):	Not any
	STP Sludge (Drysludge):	NA
	Others if any:	NA
Area requirement:	Location(s):	NA
	Area for the storage of waste & other material:	NA
	Area for machinery:	NA
Budgetary allocation (Capital cost and O&M cost):	Capital cost:	10.00 Lakh
	O & M cost:	5.0 Lakh

37. Effluent Characteristics

Serial Number	Parameters	Unit	Inlet Effluent Characteristics	Outlet Effluent Characteristics	Effluent discharge standards (MPCB)
1	pH	NA	5.5	6.7	6.5-8.5
2	BOD	mg/lit	720	80	100
3	COD	mg/l	1500	230	250
4	TSS	Mg/l	120	80	100
5	O & G	Mg/l	6	<2	10
Amount of effluent generation (CMD):		348			
Capacity of the ETP:		Existing ETP Capacity of 1350m ³ /day is adequate for proposed Co-generation.			
Amount of treated effluent recycled :		NA			
Amount of water send to the CETP:		NA			

Membership of CETP (if require):	NA						
Note on ETP technology to be used	Waste water from a co-gen power plant does not have any significant BOD / COD level. Effluent water sources are boiler & auxiliary cooling tower, blow down, washings, service water, etc. The same will be neutralized and settled in a neutralizing pit. The neutralized effluent will be further treated in the existing ETP and then utilized for ash quenching and gardening of the green belt.						
Disposal of the ETP sludge	Used as manure						
38. Hazardous Waste Details							
Serial Number	Description	Ca t	UO M	Existin g	Propose d	Total	Method of Disposal
1	Used/ spent oil	5.1	MT/ M	0.35	0.20	0.55	Reuse in Boiler
39. Stacks emission Details							
Serial Number	Section & units	Fuel Used with Quantity	Stack No.	Height from ground level (m)	Internal diameter (m)	Temp. of Exhaust Gases	
1	Existing boiler of 80 TPH	32 TPH	1	72	3	136	
2	Existing boiler of 2 x 37 TPH up gradation to 2 x 45 TPH	15.22 TPH	1	60	2.5	140	
3	Proposed 2 x 45 TPH	40.80 TPH	1	60	4	140	
40. Details of Fuel to be used							
Serial Number	Type of Fuel	Existing	Proposed	Total			
1	Baggase	1133.70	638.90	1772.60			
41. Source of Fuel		Baggase from own sugar unit					
42. Mode of Transportation of fuel to site		Convener Belt					
43. Green Belt Development							
		Total RG area :	195000Sq.m				
		No of trees to be cut:	0				
		Number of trees to be planted :	5000				
		List of proposed native trees :	NA				

Timeline for completion of plantation :		plantation will be completed within 2 years		
44.Number and list of trees species to be planted in the ground				
Serial Number	Name of the plant	Common Name	Quantity	Characteristics & ecological importance
1	Asoca (Roxb.) Willd.	Ashok	750	Small evergreen tree with deep green leaves • The bark of the Ashoka plant is used to prepare cosmetics that help to improve skin complexion
2	Aegle marmelos (L.) Corr.	Bel	500	It is a deciduous plant Used as dietary supplement
3	Limonia acidissima L.	Kavath	500	Large tree growing to 9m tall, with rough, spiny bark. & The fruit is used to make a fruit juice with astringent properties and jams
4	Nirachta indica Linn.	Neem	1000	Fast growing evergreen tree • Used for skin diseases. • Neem oil is used to treat for healthy hair, to improve liver function & balance blood sugar level
5	Pongamia pinnata (L.) Pierre	Karanj	250	Legume tree • Flowering tree • Used as oil, soap making, & as lubricant
6	Syzygium cumini (L.) Skeels	Jambhul	500	Evergreen tropical fruit bearing tree • Fruits & seeds are used in Hyperglycemia in diabetic rates.
7	Mangifera indica L.	Amba	1500	Fruit bearing tree
45.Total quantity of plants on ground				
46.Number and list of shrubs and bushes species to be planted in the podium RG:				
Serial	Name	C/C Distance	Area m2	

Number			
1	NA	NA	NA
47. Energy			
Power requirement:	Source of power supply :	Power Plant & MSEDCL	
	During Construction Phase: (Demand Load)	Not any	
	DG set as Power back-up during construction phase	Existing	
	During Operation phase (Connected load):	7MW	
	During Operation phase (Demand load):	7mW	
	Transformer:	220/132 KV	
	DG set as Power back-up during operation phase:	500 KVA	
	Fuel used:	HSD	
	Details of high-tension line passing through the plot if any:	Not any	
48. Energy saving by non-conventional method:			
NA			
49. Detail calculations & % of saving:			
Serial Number	Energy Conservation Measures		Saving %

I	N A	NA		
50.Details of pollution control Systems				
Source	Existing pollution control system	Proposed to be installed		
80 TPH Boiler	ESP and 72 M stack Height	-		
Existing boiler of 2 x 37 TPH up gradati onto2 x45 TPH	Wet Scrubber to each with 60 M stack Height	-		
Budgetary allocation (Capital cost and O&M cost):	Capital cost:	0		
	O & M cost:	0		
51.Environmental Management plan Budgetary Allocation				
a) Construction phase (with Break-up):				
Serial Number	Attributes	Parameter	Total Cost per annum (Rs. In Laacs)	
1	Ambient Air	AAQ Monitoring	0.25	
2	Noise	Noise level monitoring	0.15	
3	Water	Drinking water for workers	0.50	
b) Operation Phase (with Break-up):				
Serial Number	Component	Description	Capital cost Rs. In Laacs	Operational and Maintenance cost (Rs. in Laacs/yr)
1	Air Environment	ESP and 72 M stack Height for 80 TPH and Wet Scrubber to each with 60 M stack Height for 45 TPH Boiler	0	5
2	Water and waste water	Existing ETP having capacity 1350 M3/day	0	5

3	Solid Waste	Solid and Hazardous Waste Disposal & Transportation	10.0	5
4	Green Belt development	Greening Belt Development	20.0	5.0
5	Environment Monitoring	EM Cell -Existing	0	4.05
6	Other	Rain water harvesting, Safety, Security etc.	20.0	2.5

51.Storage of chemicals (inflammable/explosive/hazardous/toxic substances)

Description	Status	Location	Storage Capacity in MT	Maximum Quantity of Storage at any point of time in MT	Consumption / Month in MT	Source of Supply	Means of transportation
NA	NA	NA	NA	0	NA	NA	-

52.Any Other Information

No Information Available

53.Traffic Management

	Nos. of the junction to the main road & design of confluence:	Pargaon Shingave – Kavathe Road
	Number and area of basement:	NA
	Number and area of podia:	NA
	Total Parking area:	2.0
	Area per car:	NA
	Area per car:	NA
	Number of 2-	

Parking details:	Wheelers as approved by competent authority:	NA
	Number of 4-Wheelers as approved by competent authority:	NA
	Public Transport:	NA
	Width of all Internal roads (m):	6 m and 9 m turning radius
	CRZ/ RRZ clearance obtain, if any:	NA
	Distance from Protected Areas / Critically Polluted areas / Eco-sensitive areas/ inter-State boundaries	NA
	Category as per schedule of EIA Notification sheet	I(d) B
	Court cases pending if any	NA
	Other Relevant Informations	NA
	Have you previously submitted Application online on MOEF Website.	No
	Date of online submission	-

3. The proposal has been considered by SEIAA in its 239th (Day-2) meeting and decided to accord Environment Clearance to the said project under the provisions of Environment Impact Assessment Notification, 2006 subject to implantation of following terms and conditions-

Specific Conditions:**SEAC Conditions:-**

1. PP to provide adequate air pollution control equipment's to mitigate the issues related to the emissions and particulate matter.
2. PP to ensure that the entire CER fund are spent before the commissioning of the manufacturing activity in consultation with the District Collector
3. PP to complete green belt development with the provision of drip irrigation before the commissioning of the manufacturing activity.
4. PP to complete rain water harvesting facility before the commissioning of the manufacturing activity.
5. PP to carry out physiochemical analysis of the ETP sludge proposed to be used as manure and obtain approval from the competent Authority so as to ensure its safe use on agricultural land/ garden

SEIAA Conditions

1. PP submitted ADTP plan dated 13.01.2000. As per the said plan total plot area of the project is 2,82,300 sqm. PP has provided 1,39,720 sqm as Plantation (50%). PP to densify said Plantation area / Green belt of 50 % within 6 months of grant of EC.
2. PP to undertake Miyawaki plantation of native and indigenous trees such as Banyan, Peepal, Neem, Jamun and other suitable trees as per the Forest Department, Govt. of Maharashtra circular no SaVaVi-2019/C.R.3/F-11, dated 25th June, 2019. The said plantation to be completed in the first year of operation of Environmental Clearance under expert guidance of Miyawaki experts / arborist.
3. PP to strictly observe the Solid Waste Management Rules, 2016 as amended time to time.
4. PP to strictly observe the Hazardous and Other Wastes (Management & Trans boundary Movement) Rules, 2016 as amended time to time.
5. PP to identify all sources of fugitive air pollution on site and provide pollution control measures to mitigate pollution and meet the standard parameters stipulated in the Environment (Protection) Rules, 1986 amended time to time & Air (Prevention and Control of Pollution) Act, 1981 amended time to time.
6. PP to ensure storage of chemicals as per the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989-amended time to time to ensure no release of any chemical to the atmosphere and leakage to the soil.
7. PP to ensure transport, storage, handling and use of the flammable/toxic chemicals as per conditions stipulated in license/approval of the Petroleum & Explosive Safety Organization (PESO).
8. PP to obtain approval and License from the Directorate of Industrial Health & Safety (DIHS) for proposed project and implement all condition stipulated therein. PP to carry out Safety Audit as stipulated in the Maharashtra Factories Rules, 1963 and ensure compliance of recommendation of the Audit.
9. PP to provide solar energy for illumination of Administrative Building, Street Lights and parking Area.
10. PP to ensure use of briquette /bio coal/ pellets/ or any such suitable product derived from scientific processing of appropriate stream of dry waste/agricultural waste , not less than 50 % of the total fuel requirement to the boiler.
11. PP to provide roof top Rain Water Harvesting facility.

General Conditions:

- I. The project proponent 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 Environmental Clearance letter are available with the Maharashtra Pollution Control Board, website of the company and may also be seen at Website at <http://parivesh.nic.in>

- II. The project Proponent shall upload the status of compliance (soft copies) of the conditions stipulated Environmental Clearance letter including monitoring data of air, water, soil, noise etc. on their website and shall update the same periodically. The half yearly compliance report shall simultaneously be submitted to the Maharashtra Pollution Controls Board, SEIAA and the Regional Office off MoEF&CC at Nagpur, on 1st June & 1st December of each calendar year.
- III. Separate fund shall be allocated for the implementation of Environmental Management Plan along with item wise break up and specific time line for its completion. The cost shall be included as part of the project cost. The funds earmarked for the environmental protection measures shall not be diverted for other purpose and year-wise expenditure should be reported to the MPCB and the SEIAA.
- IV. A separate Environmental Management Cell with qualified personnel shall be set up for implementation of the stipulated environmental safeguards.
- V. In the event of failure of any pollution control equipment, the manufacturing activity shall be immediately stopped safely till the effective functioning of pollution control equipment's is regained.
- VI. PP to strictly follow conditions stipulated in the Consent to Establish/Operate issued by the Maharashtra Pollution Control Board.
- VII. PP to provide separate drains for storm water and effluent, and ensure that, the storm water drains are dry all the time and in no case the effluent shall mix with the storm water drain.
- VIII. Periodic Monitoring of ground water in the study area as marked in the Environmental Impact Assessment Report shall be undertaken and results analysed to ascertain any change in the quality of water. Results shall be regularly submitted to the Maharashtra Pollution Control Board.
- IX. The overall noise levels in and around the factory premises shall be kept within the prescribed standard under the Environment (Protection) Act, 1986 and Rule, 1989 as amended from time to time by providing adequate noise control measures and protective equipment's like ear muff and ear plug etc.
- X. Adequate safety measures shall be ensured to limit the risk zone within the factory premises. Leak detection system shall be installed for early detection and mitigation purpose.
- XI. PP to scrupulously follow the requirements of Maharashtra Factories Act, 1948 & Rules 1963 as amended from time to time.
- XII. The Environmental Statement for each financial year ending on 31st March in Form-V as is mandated to be submitted by the Project Proponent to the concerned Pollution Control Board as prescribed under the Environment (Protection) Rule, 1989 as amended from time to time, it shall also be put on the website of the company along with the status of the compliance of the conditions stipulated in the Environmental Clearance letter.

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. In case of submission of false document and non-compliance of stipulated conditions, Authority/ Environment Department will revoke or suspend the Environment clearance without any intimation and initiate appropriate legal action under Environmental Protection Act, 1986.

6. The Environment department reserves the right to add any stringent condition or 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.

7. Validity of Environment Clearance: The environmental clearance accorded shall be valid as per ELA Notification, 2006, amended time to time.

8. 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.

9. 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.

10. Any appeal against this Environment 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.


Manisha Patankar-Mhaiskar
(Member Secretary, SEIAA)
20/4/2022

Copy to:

1. Chairman, SEIAA (Maharashtra), Mumbai.
2. Secretary, MoEF & CC
3. IA- Division MOEF & CC
4. Member Secretary, Maharashtra Pollution Control Board, Mumbai.
5. Regional Office MoEF & CC, Nagpur
6. District Collector, Pune.
7. Regional Officer, Maharashtra Pollution Control Board, Pune.

Signature Not Verified

Digitally signed by Manisha
Patankar Mhaiskar
Member Secretary

Date: 4/21/2022 6:12:02 AM

**19 to 29 MW Co Generation EC
SIX MONTHLY COMPLIANCE REPORT**

**Part-I
DATA SHEET**

1	Project Type: River Valley/Mining/Industry/Thermal/Nuclear/Others (Specify)	Industry
2	<u>Name of the Project</u>	Proposed Expansion of Co-generation plant from 19 to 29 MW of Bhimashankar Sahakari Sakhar Karkhana Ltd.Dattatrayanagar,Pargaon Tarfe Awasari Bk.,Tal_Ambegaon Dist-Pune Pin- 412406
3	Clearance letter(S)/OM No. and Date	SIA/MH/THE/470064/2011 (E.C. Identification No.EC22B004MH126409) Dt. 21/04/2022.
4	Location a) District (s)	Pune
	b) State (s)	Maharashtra
	c) Location latitude / longitude	Latitude 18°58' 30.57"N and Longitude 74°5'31.68"E
5	Address For Correspondence	
	a) Address of the Managing Director(with Pin code/Telephone/Telex/Fax/Numbers)	Mr. Chandrakant G. Dhage Bhimashankar Sahakari Sakhar Karkhana Ltd.Dattatrayanagar, Pargaon Tarfe Awasari Bk.,Tal_Ambegaon, Dist-Pune, Pin- 412406 Phone No.-99755568130, 8888846990.
6	Salient Features	
	a) of the Project	This Distillery unit situated at Dattatrayanagar.
	b) of the Environmental Management Plans	Environment Management Plan Includes – Green Belt Development (Plantation with mostly indigenous plant species) Measures to avoid sound pollution Water Environment Solid waste management Rain water Harvesting Firefighting system
7	Breakup of the Project Area	
	Submergence area : Forest & Non Forest	N.A.
	Others	Plot Area-580000m2 Total Built up area - 72844 m2 Open area- 513952 m2
8	Break up the Project affected population with the enumeration of those losing Houses/Dwelling units only, Agricultural Land & Landless Laborers /Artisans:	Project land is owned by project proponent. Population is not affected.
	a) SC,ST / Adivasi	N.A.

	B) Others (Please indicate whether these figures are based on any scientific and systematic survey carried out or only provisional figures, if a survey is carried out give details & year of survey)	N.A.
9 (a)	Financial Details: Project cost as originally planned and subsequent revised estimates and the year of price reference	Total Project Cost- 4142 Lakhs.
(b)	Allocation made for environmental management plans with item wise and year wise breakup	Year 2024-25 = 10 Lakhs Year 2025-26= 10 Lakhs Year 2026-27 = 07 Lakhs
c)	Payback Period	----
d)	Whether (c) includes the cost of environmental management as shown in the above	Yes
e)	Actual expenditure incurred on the project so far	Rs.3091.77 lakhs upto Dt.31/03/2024.
f)	Actual expenditure incurred on the environmental management plans so far.	-
10	Forest Land Requirement:-	
a)	The Status of approval for diversion of forest land for non-forestry use.	N.A.
b)	The status of clearing felling	N.A.
c)	The Status of compensatory afforestation, if any comments on the viability & sustainability of compensatory afforestation program in the light of actual field experience so far	N.A.
11	The status of clear felling in non-forest areas (such as submergence area or reservoir, approach roads) if any with quantitative information required.	N.A.
12	Status of construction (Actual & / or Planned)	Actual
a)	Date of commencement (Actual & / or Planned)	Actual.
b)	Date of completion (Actual & / or Planned)	Actual.
13	Reasons for the delay if the project is yet to start	-
14	Dates of the site visits- The dates on which the project was monitored by the Regional Office on previous occasions, if any.	Mr.Suresh Kumar Adappa (Scientist D), MoEF, Regional Office, Nagpur visited on date 22/06/2021 and Satisfactory report is issued.
a)	Details of correspondence with project authorities for obtaining action plan/information on status of compliance to safeguards other than the routine letters for logistics support for site visit.(the monitoring report may obtain the details of all letters issued so far but the later reports may cover only the letters issued subsequently.	No show notices of pollution department. We are regularly monitoring both air & water data as per CPCB guidelines & parameters are within limit.


K. P. Thare
 (Process Manager)
 Bhramashanker Sahakar Sakhar Karkhana Ltd.
 Dattatrayanagar, Pargaon Via - Awasari Bk.
 Tal.Ambegaon, Dist.Pune - 412 408

PART II		
19 to 29 MW Co-generation EC Compliance Conditions		
Con No	Condition	Compliance
Specific conditions- A. SEAC Conditions-		
1	PP to provide adequate air pollution control equipment's to mitigate the issues related to the emissions and particulate matter.	We have provided air pollution control equipment's ESP for 80 TPH Boiler & Wet Scrubber for 45 TPH Boilers.(Details & Photographs are attached Ann.I) (Page No. 26 to 43) Akanksha Laboratory (NABL) monthwise (Nov.23 to March 24) report for Ambient air monitoring at 5 different locations of factory.(Ann.II) (Page No. 44 to 83) Month wise Online Continuous Monitoring reports From Nov. 23 to March 24.(Ann.III) (Page No. 84 to 91)
2.	PP to ensure that the entire CER fund are spent before the commissioning of the manufacturing activity in consultation with District Collector.	In the meeting dated 24/08/2023, the proposal of CER fund has been approved by Hon. Collector. Accordingly, we will start the work soon.(Ann.IV) (Page No. 92 to 109)
3.	PP to complete green belt development with the provision of drip irrigation before the commissioning of the manufacturing activity.	Till 2019, we have planted 6502 trees on 33% of the total area of the factory with drip irrigation. Apart from, it is planned to plant 5000 trees on the remaining area.(Certificate issued by The regional Forest Officer-Manchar and Taluka Agricultural Officer and Photographs are attached.(Ann.-V) (Page No.110 to 117)
4.	PP to complete rain water harvesting facility before the commissioning of the manufacturing activity.	For rain water harvesting factory building and office building Roof water is collected and charged in charging pit. Surface water is collected in

		downstream pond and reused for Plant irrigation, factory operations and machinery cleaning. Rain water harvesting area and harvested water quantity statement is attached.(Ann.VI) (Page No.118 to 127)
5.	PP to carry out physiochemical analysis of the ETP sludge proposed to be used as manure and obtain approval from the competent authority so as to ensure its safe use on agricultural land/garden.	We have analyzed ETP sludge from VSI's lab Report attached.(Ann. VII) (Page No.128 to 129)
A. SEIAA Conditions-		
1.	PP submitted ADTP plan dated 13.01.2000.As per the said plan total plot area of the project is 2,82,300 sqm.PP has provided 1,39,720 sqm. As Plantation (50%).PP to densify said Plantation area/Green Belt of 50% within 6 months of grant of EC.	Till 2019 ,we have planted 6502 trees on 33% of the total area of the factory with drip irrigation. Apart from, it is planned to plant 5000 trees on the remaining area.(Certificate issued by The regional Forest Officer-Manchar and Taluka Agricultural Officer)
2.	PP to undertake Miyawaki plantation of native and indigenous trees such a Banyan, Peeple, Neem, Jamun and suitable trees as per the Forest Department, Govt. of Maharashtra Circular No.SaVaVi-0219/C.R.3/F-11, dated 25 th June 2019.The said plantation to be completed in the first year of operation of Environmental Clearance under expert guidance of Miyasaki expert/arborist.	Trees Species are selected as per the Forest Department (Certificate issued By Regional Forest-Manchar and Taluka Agricultural Officer & Photographs are attached.-V)
3.	PP to strictly observe the Solid Waste Management Rules,2016 as amended time to time.	We will follow the rules of solid waste management.
4.	PP to strictly observe the Hazardous and other Wastes(management & Trans Boundary Movement) Rules,2016 as amended time to time.	We will follow the rules of solid waste management.

5.	PP to identify all sources of fugitive air pollution on site and provide pollution control measures to mitigate pollution and meet the standard parameter stipulated in the Environment (Protection) Rules, 1986 amended time to time & Air (Prevention and Control of Pollution) Act, 1981 amended time to time.	Reports are within limit. MoEF approved Akanksha Lab reports are attached. Season 2023-24 (Month Nov.23 to March 24) (Ann.VIII)(Page No.130 to 135)
6.	PP to ensure storage of chemicals as per the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 amended time to time to ensure no releases of any chemical to the atmosphere and leakage to the soil.	We are doing transport, storage, handling and use of the flammable /toxic chemicals as per conditions no leakages to the soil.
7.	PP to ensure transport, storage, handling and use of the flammable/toxic chemicals as per conditions stipulated in license /approval of the Petroleum & Explosive Safety Organization (PESO).	We are doing transport, storage, handling and use of the flammable /toxic chemicals as per conditions.
8.	PP to obtain approval and License from the Directorate of Industrial Health & Safety (DISH) for proposed project and implement all condition stipulated in the Maharashtra Factories Rules, 1963 and ensure compliance of recommendation of the Audit.	We have obtained and License the Directorate of Industrial Health & Safety(DISH) for this project. Copy attached. (Ann. IX) (Page No.136 to 188).
9.	PP to provide solar energy for illumination of Administrative Building ,Street lights and Parking area.	Solar energy lights are installed at administrative building ,street lighting.
10.	PP to ensure use of briquette /bio coal/pellets/or such suitable product derived from scientific processing of appropriate stream of dry waste/agricultural waste, not less than 50% of the total fuel requirement to the boiler.	100% dry waste, Agri waste is used as boiler fuel.
11.	PP to provide roof top Rain Water Harvesting facility .	Roof top Rain water harvesting is working satisfactory.
General Conditions-		
I.	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	Karkhana published advertise in local newspapers - 1) Financial Standard (English)- 26 th April 2022 2) Purnanagari (Marathi) - 256 th April 2022 (Copy Attached Ann. X) (Page No. 189 to 192)

	accorded environmental clearance and copies of clearance letter are available with the Maharashtra Pollution Control Board and may also be seen at Website http://parivesh.nic.in	
II.	The proponent shall upload the status of compliance (soft copies) of the conditions stipulated Environmental Clearance letter including monitored data of air, water, soil, noise etc. on their website and shall update the same periodically. The half yearly compliance report shall simultaneously be submitted to the Maharashtra Pollution Control Board, SELAA and Regional Office of MoEF& CC at Nagpur, on 1 st June & 1 st December of each calendar year.	Regularly Submitting. We have uploaded EC compliance report and all analysis Reports on our Karkhana Website. Further we are submitting Six monthly compliance report to MoEF, Nagpur on regular basis. (Screen shot copy attached.) (Ann. XI) (Page No. 193 to 196)
III.	A Separate funds shall be allocated for implementation of Environment Management Plan along with item wise break up and specific time line for its completion. These cost shall be included as part of the project cost. The fund earmarked for the environment protection measures shall not be diverted for other purposes and year wise expenditure should reported to the MPCB & SELAA.	We have received the EC in April 2022. Project -For Environment Management Protection separate fund allocated. -Management is very committed for the same. -The funds earmarked for Environment does not diverted to any account head. -We have made Rs.10 Lakhs provision for the operational expenditure for the year 2023-24.
IV.	A separate environment management cell with qualified staff shall be set up for Implementation of the stipulated environmental safeguards.	Environment Management cell is established. It is headed by qualified and experienced. Environmental Officer having experience more than 10 years.
V.	In the event of the failure of any pollution control equipment, the manufacturing activity shall be immediately stooped safety till the effective functioning of pollution control equipment's is regained.	After failure of pollution control device, we have immediately stop the Boiler operation & restart after activation of pollution controlling device. We intimate both CPCB & MPCB time to time by mail in this regard without any delay.
VI.	PP to strictly follow conditions stipulated into Consent to Establish /Operate issued by the Maharashtra Pollution Control Board.	We are strictly follow consent conditions.

VII	PP to provide separate drains for storm water and effluent, and ensure that, the storm water drains are dry all the time and in no case the effluent shall mix with the storm water drain.	We have proper drainage for storm water & effluent and there is no mixing of waste water & storm water.
VIII	Periodic monitoring of ground water in the study area as marked in the Environmental Impact assessment Report shall be undertaken and result analyzed to ascertain any change in the quality of water. Result shall be regularly submitted to the shall be undertaken and result analyzed to ascertain any change in the quality of water. Result shall be regularly submitted to the Maharashtra Pollution Control Board.	We are checking Ground water samples within 5 Km radius area in every month during crushing season. All the results are within limit. (Reports attached. Ann. XII) MoEF Approved Akanksha Lab -reports are attached. Season 2023-24. (Month Nov. 23 to March 24) (Page No. 197 to 226)
IX.	The overall noise level in and around the factory premises shall be kept well within the standards under the Environment (Protection) Act, 1986 Rules, 1989 as amended from time to time by providing adequate noise control measures and protective equipment's like ear muff and ear plug etc.	Noise proof cabins are provided to operates wherever is possible. Further we are providing ear plugs for employees. Noise level is within standard limits. (Akanksha Lab .Noise analysis reports are attached. (Season 2023-24) (Month Nov. 23 to March 24 (Ann. XIII) (Page No. 227 to 232)
X.	Adequate safety measures shall be provided to limit the risk zone within factory premises. Leak detection devices shall also be installed for early detection and mitigation purpose.	Adequate safety measures like helmets, Shoes, Safety belts etc. are provided.
XI.	PP to scrupulously follow the requirements of Maharashtra Factories Act, 1948 & Rules 1963 as amended from time to time	We are strictly follow Maharashtra Factories Rules as amended from time to time.
XII	The environment statement for each financial year ending 31 st 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 compliances of conditions stipulated in the Environment Clearance Letter.	Submitting Regularly. Statement Attached. (Year 2023-24) (Ann. XIV) (Page No. 233 to 236)

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K. P. Thare
 (Process Manager)
 Shree Shankar Sahakar Karkhana Ltd
 Dattarayanagar, Parganah Vile - Awasari Bk
 Tal. Ambegaon, Dist. Pune - 412 406

14) ELECTROSTATIC PRECIPITATOR (ESP)

The ESP should be designed on the following basic parameters :

- Gas Flow Rate : Corresponding to MCR of boiler
- Temperature of gasses at ESP inlet : 150°C
- Inlet Dust concentration : about 5.0 g / N cu.m
- Outlet Emission (concentration) at ESP exit: shall be less than 100mg/Nm^3
- Pressure Drop across ESP for above condition: shall be less than 25mmWc to gas side.

The electrostatic precipitator of suitable capacity shall be designed so that the dust emission at the outlet of the chimney should be limited to 100 mg / NM^3 or as prescribed by State Pollution Control Board. The ESP shall be installed on the suction side of ID fan and shall be complete with rotary air lock valve with drive provided with local and remote push button control and a side manual gate. The minimum elevation of the discharge flange of the rotary air lock valve shall be at + 2500 mm, suitable platform, MS steel staging, ladders, staircases, railing, inspection and packing holes shall be included in the scope of supply. The ESP should be properly insulated with aluminum cladding ESP be provided with indication for ash level, low and high temperature alarm, water washing arrangement ESP Switchgear Control Panels, rectifier control panels complete in all respects. The general arrangement showing major dimension and clearances for ESP system, ESP foundation drawing for load data, electric single line diagram along with detailed drawings should be furnished for approval from the Purchaser. Necessary instruction / maintenance manual and training to be provided.

BHEL/GEA/L&T/Bharat heavy plates and
vessels ltd./Western India enterprises

ABB/BHEL/Thermax/ACC

Audco/BDK/BHEL/KSB/Steel
strog/Valvetech

Elecon/Fmg/WIL/Greaves cotton

Insulation India/Lloyds/Minwool rock
fibre/raja insulation

Asia Imi/Enpro/PSI engg/ fluid control/
positive metering

Burgmann/Durametallic/Jhone
crane/Sealol

BHEL/L&T/Pipe supports India (p) ltd
(MYRICKS)/Sarathi

Spirex marshall/Uniklinger/Pennant

Bhatia/Filtron engg./Strainwell/Sungov

Detroit/Fosterwheeler/IJT/TBW/Zum/Riley

AUMA/Antrieb/Rotark/Limtorque

Massibus/Yokogawa

ABB/Rosemount/Tata
well/Yogokawa blue star ltd

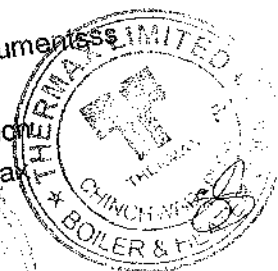
ABB/Rosemount/Yogokawa
star/Forbe marshall

An Instruments/General instruments/Pyro
electric/Waree

Entek ird/Scenk avery/spm instruments

Sitson / RR techno / High - Techno

BHEL/Batliboi/ Alstom/ Tharmax



Handwritten signature/initials.

Description	Unit	100 % MCR Bagasse
Flue Gas Draught at	MMWC	
a. Furnace Outlet		-5
b. Superheater Inlet		-5
c. Superheater Outlet		-10
d. Bank Inlet		-10
e. Bank Outlet		-15
f. Economiser Inlet		-20
g. Economiser Outlet		-55
h. Low efficiency grit separator inlet		-60
i. Low efficiency grit separator outlet		-85
j. Airheater Inlet		-95
k. Airheater Outlet		-135
l. ESP Inlet		-150
m. ESP Outlet		-175
n. ID fan inlet		-190
33 Flue Gas Velocities	M/Sec.	
a. Combustion Chamber		4.8
b. Superheater Zone		6 max
c. Bank Tube		8.0 max
d. Economiser		8 - 10
e. Air Preheater		10 - 14
Data Sheet 1.3.1		
No.		

Sheet No.:



13

10/11

21) HP AND LP DOSING

Tri-sodium based HP dosing system, hydrazine and ammonia based LP system shall be provided. HP system shall add chemical to boiler water while LP dosing is done to feed water preferably at deaerator outlet water. HP dosing pump shall be simplex reciprocating plunger type stroke adjustable while pump is in operation for 0 to 100 % capacity, while LP dosing pump shall be of diaphragm type. Wetted parts of pumps shall be of SS construction. Each system to include SS mixing tank with motor driven stirrer and with dished bottom ends with flat top covers. Inspection doors with swivel bolts and wing nuts shall be provided for top cover. Volumetric capacity of both the tanks shall be suitable for 24 hours based on 1 % concentration of tri-sodium phosphate for HP dosing and 0.1 % for LP dosing. Each mixing tank shall have rubber linings from inside and shall be fitted with motorised stirrer. The capacity of each tank shall be of minimum 500 litres.

22) R C C CHIMNEY

One RCC Chimney of approx 3.5 m. inside dia. at the top and about 70 m. in height with ladder and guards will be constructed by purchaser, however refractory lining up to 20 m. height of suitable thickness shall be provided by seller, lightening arrestor, m. s. frames and fittings for flue gas inlet to chimney etc. shall be in the seller's scope of supply. The seller shall give chimney design calculations.

23) BOILER FEED WATER PUMPS

Three nos (2W+1S) each of 50 cub. m. /hr capacity at about 1050 m. head running at 2900 RPM shall be provided. In normal working two numbers of 50 cub. m. /hr. shall be in operation and one no. as standby. Each multistage electrical driven pump shall be suitable for pumping hot water at 105 to 120 Deg. C. from deaerator to boiler of 87 Kg /sq. Cm. pressure. Pumps shall be provided with mechanical seals and mechanical seals shall be with spare conversion kit. Each pump shall have an automatic recirculation (ARC) valve of Schroevedhal / Hora make and shall be sized for higher of maximum flow thermal and minimum flow stable value such that in any case maximum temperature rise of feed water is limited to 8 Deg. C.

Material of construction of pumps shall be as under;

Casing-SA216Gr. WCB, discharge casing—CA6NM, impeller—CA6NM, shaft—AISI 410, casing wearing ring —CA6NM, Pressure switch shall be provided in individual discharge piping of pump up stream of automatic re-circulating valve. Removable conical type suction strainers of SS304 material shall be provided for each pump with free flow area equal to four times flow area of pipe. Impeller size shall be one size lower than maximum. Each pump shall be driven by AC motor with VVFD drive. Re-circulated water shall lead to de-aerated water storage tank.

A - DESIGN DATA.

SR.NO.	DESIGN PARAMETER	BAGASSE 100% MCR (HP HEATER IN)	BAGASSE 100% MCR (HP HEATER OUT)
1	DESIGN GAS FLOW RATE IN M ³ /HR		
2	TEMPERATURE DEG.C (OPERATING)	241560	231480
3	CASING MECHANICAL DESIGN TEMPERATURE DEG.C	150	150
4	DUST TYPE	200	200
5	MAXIMUM INLET DUST LOADING (GM / M ³)	FLY ASH	FLY ASH
6	OUTLET EMISSION FOR ESP (MGM / M ³) ALL FIELD WORKING.	5	5
7	OUTLET EMISSION (MGM/M ³) - FIRST FIELD OUT OF SERVICE	100	100
8	MOISTURE IN GAS (% V / V)	-	-
9	UNBURNED CARBON IN FLY ASH (%)	25.74	26.52
10	COLLECTION AREA M ²	45-55	45-55
11	SPECIFIC COLLECTION AREA M ² / M ³ / SEC.	2054.64	2054.6
12	NO OF GAS PASSAGES	30.62	31.95
13	EFFECTIVE C E WIDTH (METER)	19	19
14	EFFECTIVE C E HEIGHT (METER)	3.696	3.696
15	VELOCITY THROUGH ESP M/SEC.	7.315	7.315
16	TREATMENT TIME (SEC.)	1.19	1.14
17	NO OF FIELDS IN SERIES	6.2	6.5
18	MIGRATION VELOCITY (CM/SEC.)	2 MECH & 2 ELECT	2 MECH & 2 ELECT
19	DESIGN PRESSURE (mmWG)	12.77	12.24
20	DUST DENSITY FOR POWER (KG/M ³)	± 250	± 250
21	DUST DENSITY FOR DISCHARGE (KG/M ³)	600	600
22	FLG TO FLG PRESSURE DROP (mmWG)	250	250
23	EFFICIENCY (%)	25	25
-	-	98	98
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

B - ASH COLLECTION RATE IN EACH FIELD (KG/HR)

SR NO.	FUEL	BAGASSE 100% MCR (HP HEATER IN)	BAGASSE 100% MC (HP HEATER OUT)
1	FIELD-1	669 (0)	641 (0)
2	FIELD-2	95 (764)	91 (732)
3	FIELD-3	-	-
4	FIELD-4	-	-
5	FIELD-5	-	-
6	FIELD-6	-	-
7	TOTAL DUST COLLECTED IN ESP (KG/HR)	764 (764)	732 (732)

VALUES IN PARENTHESIS ARE FOR FIRST FIELD OUT OF SERVICE.

ROTARY AIR LOCK VALVE CAPACITY IN M³/HR. AT 50 % FILLING EFFICIENCY.

MINIMUM WIDTH OF ASH HANDLING SYSTEM SHALL BE GREATER THAN 350 mm.

APPLICABLE

10

C - PRODUCT DATA

C - 1	CASING THK. mm.		4
C - 2	HOPPER WALL THK. mm.		4
C - 3	INLET & OUTLET NOZZLE THK. mm.		4
C - 4	PENTHOUSE SIDE WALL THK. mm.		3
C - 5	PENTHOUSE TOP SHEET CHQ. PLT. THK. mm.		4
C - 6	PERFORATED SHEET FOR NOZZLE THK. Mm		2.5
C - 7	INSULATION THK. mm		50
C - 8	INSULATION DENSITY Kg/M3		100
C - 9	CLADDING TYPE / THK. (SWG)		PL AL / 24
C - 10	HOPPER VOLUME M3 (100% FULL)		79
C - 11	INSULATION AREA M ² (APPROX)		875

D - TR SET DETAILS

D - 1	T.R. CONTROLL TYPE	MICROPROCESSOR CONTROLLED		
D - 2	T.R. SET RATING DETAILS -			
	a) OUTPUT VOLTAGE	120 KV DC		
	b) OUTPUT CURRENT (mA)			
	1) TR SET NO.1	300	5) TR SET NO.5	NA
	2) TR SET NO.2	400	6) TR SET NO.6	NA
	3) TR SET NO.3	NA	7) TR SET NO.7	NA
	4) TR SET NO.4	NA		

NOTES FOR WATER WASHING ARRANGEMENT :-

1	CUSTOMER TO USE 20 Mtr. FLEXIBLE WATER RUBBER HOSE FOR CLEANING THE ESP FROM INSIDE ONLY DURING COMPLETE SHUTDOWN.
2	NO PERMANENT WATER CONNECTION TO BE CONNECTED. THIS IS TO BE USED ONLY DURING SHUTDOWN.
3	ESP SHOULD NOT BE STARTED UNLESS WATER IS DRIED WITH HOT GAS FOR APPROX 2 TO 3 HR.
4	DUST DISCHARGE EQUIPMENT TO BE REMOVED BEFORE WASHING.

E - LOAD DATA

DESIGN WIND PRESSURE		120		SEISMIC ZONE		III		AS PER		IS 1893			
ESP. LOAD DATA ON RCC PEDESTAL TOP													
SR NO.	COLUMN NUMBER	STATIC LOAD	DUST LOAD	ALL LOADS ARE IN TON / COLUMN								LIVE LOAD	
				HORIZONTAL		VERTICAL		HORIZONTAL		VERTICAL			
				+/- X	+/- Z	+/- X	+/- Z	+/- X	+/- Z	+/- X	+/- Z		
1	H8, H7	29	16	3	7	9	17	3	4	3	10		1.5
2	J8, J7	45	32	8	8	38	23	9	6	44	14		1.5
3	K8, K7	45	32	8	8	38	23	9	6	44	14		1.5
4	L8, L7	29	16	3	7	9	17	3	4	3	10		1.5
5	M10, M9	0.5	-	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	-	-	-	-
7	-	-	-	-	-	-	-	-	-	-	-	-	-
8	-	-	-	-	-	-	-	-	-	-	-	-	-
9	-	-	-	-	-	-	-	-	-	-	-	-	-
10	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-
13	-	-	-	-	-	-	-	-	-	-	-	-	-
14	-	-	-	-	-	-	-	-	-	-	-	-	-
15	-	-	-	-	-	-	-	-	-	-	-	-	-

ASH DENSITY CONSIDERED

ASH DENSITY CONSIDERED =

800

CIVIL FOUNDATION DETAILS SHOWN IN THIS DRG. ARE PICTORIAL ONLY.

CIVIL FOUNDATION DESIGN & DETAILING IS IN CUSTOMER SCOPE BASED ON LOAD DATA MENTIONED ABOVE.

F - PAINTING DETAILS

TYPE	INSULATED (INSIDE & OUTSIDE)	NON INSULATED
Components	Casing, Hopper, Nozzle, Pent-house/Insulator Box & misc.	Support Structure, Monorails, Staircase & Platforms, Ladder, Canopy if applicable
Surface Preparation	Mechanical Cleaning to ST-2 Grade	Mechanical Cleaning to ST-2 Grade
Primer	Two coats of Red Oxide Primer, DFT/Coat : 25-30 Microns,	Two coats of Red Oxide Primer, DFT/Coat : 20-25 Microns,
Intermediate Paint	Not Applicable	Not Applicable
Finish Paint	Not Applicable	Not Applicable
Finish Paint Shade	Not Applicable	Not Applicable
Grating for Staircase & Platform	As per Non-insulated scheme.	Not Applicable
Railing for Staircase & Platform	As per Non-insulated scheme.	Not Applicable
Internals	Rust preventive Oil Coating	
Bought outs	As per manufacturer STD	
Hardware	STD.	

CONSULTANT		VASANTDADA SUGAR INSTITUTE									
ACTUAL USER		BHIMASHANKAR SSK LTD.								DOMESTIC	
APPLICATION		ESP FOR 80 TPH BAGASSE FIRED TG BOILER									
PROJECT NO :-		E210259									
	PREPARED	CHECKED	APPROVED	SIZE	SCALE	CUSTOMER :-	B&H A/C BHIMASHANKAR SSK LTD.				
SIGN	SD	SD	SD	A2	1 : 1	PRODUCT NAME	ELECTROSTATIC PRECIPITATOR				
NAME	SMC/DLP	PVM/DMD	PGD			TITLE	GENERAL ARRANGEMENT OF ESP				
DATE	10.07.12	10.07.12	10.07.12			MODEL - TE1					
THERMAX LIMITED						EXCEL FILE NAME	EEAA010310-2-01 [E210259].xls				
						PROJECTION	SHEET	DRAWING NO		REV	
							2 OF 2	EEAA010310		1	
ENVIRO DIVISION											

Wadgaon, Pargaon Via Awasari Bk.,

Far Ambagaon, Dist - Pune. 412 406

TELEFAX: (02133) 284231, 284232,

284241, 284246, 284270, 9975568130

Telegram : Bhimashankar Sugar

E-mail : bsskltd@gmail.com / bsskl@redif fmail.com



BHIMASHANKAR
SAHAKARI SAKHAR KARKHANA LTD.

(Regd.No: P.N.A. / A.G.N. / P.R.G.(A) S-47 1994 DL31-3-94)

BSSK/ Pur./ 237/ 2013 - 2014

Date :- 27/07/2013

28

Work Order

To,

M/s. Niks Technical Services

1, white field Apartment, plot no. 20

Ashok Nagar, Pune - 411 007

Ph - 020 - 25510450

Mob - 9822014385

Sub:- Design, Supply, Erection, Commissioning of Wet Scrubber for Boiler.

Dear Sir,

With reference to your quotation for above we are pleased to place our order on you as follows.

1) Scope -

Wet scrubber Make - M/s. Aerochem Engineering co.

Design, Supply, Erection, Commissioning of Venture Wet type Scrubber following specification.

Boiler Capacity - 37 TPH

Type of scrubber - Venture Wet type Scrubber

Inlet gas Volume - 144000 CMH (2400 CMS)

Inlet gas Temp. - 180 deg. C

Efficiency - 97 - 99%

Type of Throat - Fixed

Dust Loading at Outlet - < 100 mg / Nm³

Material of Construction:-

Venturi Stainless Steel 304 10mm thk.

Plenum Chamber, scrubber & Other Connections MS 10mm thk

Scrubber bottom shell, Bottom cone, Cyclonic entry & Plenum inside lining with SS 304 1.6mm thk.

Scrubber shall be provided with with mist eliminator and sight and light glasses and manhole for inspection and maintenance.

Spray header with nozzles shall be provided in two sets in scrubber, One set in plenum and backwash for mist eliminator.....MOC SS304.

Date: 10/10/2010, Sugar, Pargaon Via Awasari Bk.,

ambegaon, Dist - Pune. 412 406

TELEFAX: (02133) 284231, 284232,

284241, 284246, 284270, 9975568130

Telegram : Bhimashankar Sugar

E-mail : bsskltd@gmail.com / bsskl@rediffmail.com



BHIMASHANKAR

SAHAKARI SAKHAR KARKHANA LTD.

(Regd.No: P.N.A. / A.G.N. / P.R.G.(A) S-47 1994 Dt.31-3-94)

Wet scrubber installation shall be such that it should be suitable for operation with both boilers, one at a time.

Required steel material for flue gas ducting from existing ducting upto venturi inlet and from scrubber outlet upto existing ducting is excluded from scope of supply and work.

6 Nos. flue gas ducting dampers are included in the scope of supply for wet scrubber.

Ash handling system is excluded from scope of supply.

Required pumps- 2 Nos. Clearwater pump with SS impeller, CI body self priming type.

Civil work is in the scope of BSSK Ltd.

All required valves are in the scope of supply.

Approval from pollution authorities. is in the scope of work. Necessary fees will be paid by BSSK Ltd.

2) Quantity – 1 Set ✓

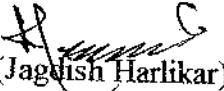
3) Rate – for supply Rs. 30,00,000/- (Rupyees Thirty Lakh Only)
for Erection Commissioning Rs. 5,00,000/- (Rupyees Five Lakh Only)

4) Payment – For Supply – 30% Advance, 60% Against delivery, Balance after satisfactory trial.
For Erection Commissioning – 90% After completion of work, 10% After satisfactory Trial. ✓

5) Taxes – Extra as applicable ✓

6) Transportation – Nil.

Thanking you,
Yours faithfully


(Jagdish Harlikar)
Managing Director

Da. 30 Agar, Pargaon Via Awasari Bk.,

Ambegaon, Dist - Pune. 412 406

TELEFAX: (02133) 284231, 284232,

284241, 284246, 284270, 9975568130

Telegram : Bhimashankar Sugar

E-mail : bsskltd@gmail.com / bsskl@rediffmail.com



BHIMASHANKAR
SAHAKARI SAKHAR KARKHANA LTD.

(Regd.No: P.N.A. / A.G.N. / P.R.G.(A) S-47 1994 Dt.31-3-94)

Wet scrubber Make - M/s. Aerochem Engineering co.

Design, Supply, Erection, Commissioning of Venture Wet type Scrubber following specification.

Boiler Capacity - 37 TPH

Type of scrubber - Venture Wet type Scrubber

Inlet gas Volume - 144000 CMH (2400 CMS)

Inlet gas Temp. - 180 deg. C

Efficiency - 97 - 99%

Type of Throat - Fixed

Dust Loading at Outlet - < 100 mg / Nm³

Material of Construction:-

Venturi Stainless Steel 304 10mm thk.

Plenum Chamber, scrubber & Other ConnectionsMS 10mm thk.

Scrubber bottom shell, Bottom cone, Cyclonic entry & Plenum inside lining with SS 304 1.6mm thk.

Scrubber shall be provided with with mist eliminator and sight and light glasses and manhole for inspection and maintenance.

Spray header with nozzles shall be provided in two sets in scrubber, One set in plenum and backwash for mist eliminator.....MOC SS304.

Venturi Type Wet Scrubber installed at M/s Bhimashankar SSK Ltd.,
Tal.- Ambegaon, Dist.-Pune, common to Two Nos. 40 TPH Boilers.

- 1) Reference Drawings - a) Drg. No.- 2148-103837/1, GA Drg. of Wet Scrubber,
b) Drg. No.- 2148- 103837/2, Venturi Details,
c) Drg. No.- 2148- 103837 R5, Wet Scrubber Layout
Details
d) Drg. No.- 2148-103837/14, Fresh Water Pump &
Piping Details

2) General arrangement of Venturi Type Wet Scrubber System.

Prior to installation of 'Airochem' make Wet Scrubber, there were two MDC's installed, one for each boiler independently. In the present system, one of the two existing MDC's is removed from it's place and One No. 'Airochem' Venturi Type Wet Scrubber is installed in it's place.

Inter-connecting flue gas ducting path is designed in such a way that when only one boiler in operation, flue gases from that boiler shall be routed Venturi through newly installed Venturi type Wet Scrubber. When both boilers are in operation, one Boiler shall be connected MDC and other Boiler shall be connected to newly installed Venturi type Wet Scrubber. Suitable multi-louvered are provided in the ducting to carry out this operation.

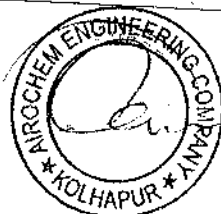
3) Design & Working of 'Airochem' make Venturi type Wet Scrubber.

The 'Airochem' Wet Scrubber consist of a Wet Venturi followed by a liquid entrainment separator. Ash particles laden flue gases enter the venture and instantly make contact with the radially introduced scrubbing liquid swirling down the venturi's convergent walls.

At the venture throat, the flue gas and liquid streams collide and the liquid breaks down into droplets which trap fly ash particles. This gas/liquid mixture passes throu an elbow diffuser and enters the entrainment separator through a tangential inlet. Centrifugal action removes the heavy wetted particles from the gas stream.

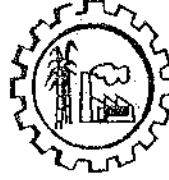
Suitably designed mist eliminators are provided inside entrainment separator at it's top for removing fine water particles from the gas stream.

Clean gases are let out from top of the entrainment separator, to ID Fan inlet. Wetted ash mixed with liquid, commonally called as Slurry, is let out at the bottom, to the suitably designed soak pits.



BHIMASHANKAR

SAHAKARI SAKHAR KARKHANA LTD.



भीमाशंकर

सहकारी साखर कारखाना लि.

Regd.No: P.N.A. / A.G.N. / P.R.G.(A) S-47 / 1994 Dt.31-3-1994

Dattatraynagar, Pargaon Via Awasari (Bk.), Tal- Ambegaon, Dist - Pune. 412 406

Tel.Fax: (02133) 284241, 284270, 9975568130, 8888846990 E-mail : bsskltd@gmail.com Web site: www.bhimashankarssk.com, www.bsskl.sets.co.in

BSSK/Pur./ 512 /2021 – 2022

Date :- 10/07/2021

Work Order

13

To,

M/s. ONSHA MANUFACTURES (3/77) ✓

A/P- MANCHAR, TAL- AMBEGAON,
DIST- PUNE.

Mob – 9960829840

Email- ashokhingencp@gmail.com

Sub:- Boiler Wet Scrubber Repairing Work . (Tender A-62) ✓

Dear Sir,

With reference to Board of Director Meeting negotiations dated 03/07/2021, we are pleased to place our order for Boiler Wet Scrubber Repairing Work as follows.

Sr. No.	Item code	Description	Unit	Qty	Rate /Unit INR
1	1274	Wet Scrubber repairing work for Boiler No MR 13151 Scope of Work Complete replacement of wet scrubber body, Top Plate & bottom cone Height of body – 14 Mtr Diameter – 4.600 Mtr Plate thickness for complete body, top plate & bottom cone – M.S. 10 mm	Job	01	2700000/- (Rs. Twenty Seven Lakh Only)

Terms and Conditions :-

- 1) GST:- Extra As Applicable. ✓
- 2) Payment- 50% Advance, balance as per work progress. ✓
- 3) Transportation – Nil. ✓

Thanking You,

Yours faithfully,

(C.G. Dhage)

Managing Director

NOTES (ALL DIMENSIONS ARE IN MM)

2) REF. ASSY. DRG. NO. 2148-103637

3) GENERAL NOTES

4) SURFACE FINISHES

5) FIELD SYMBOLS

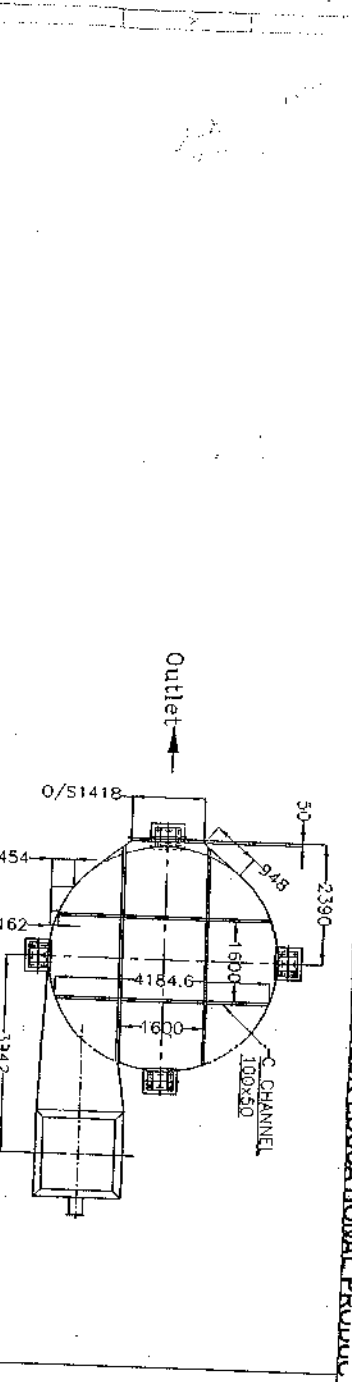
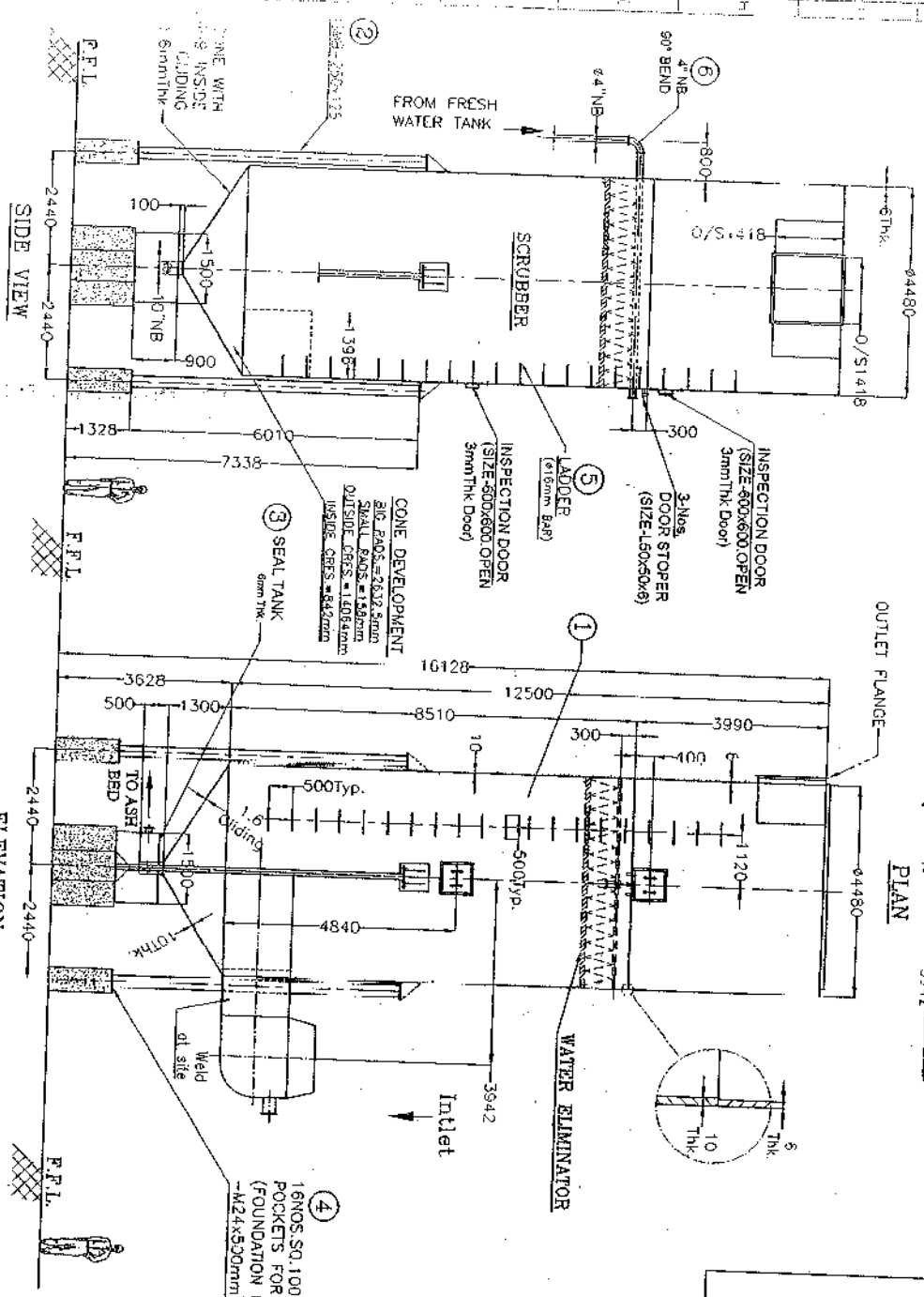
6) REV. NO.

7) ZONE

8) 3-STEP DESCRIPTION OF REV.

9) SIGN

10) DATE

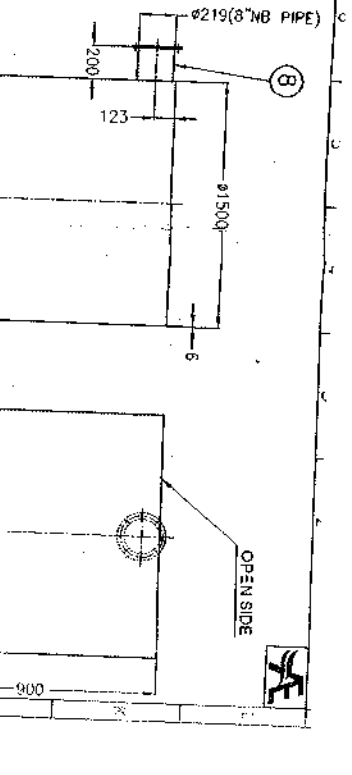
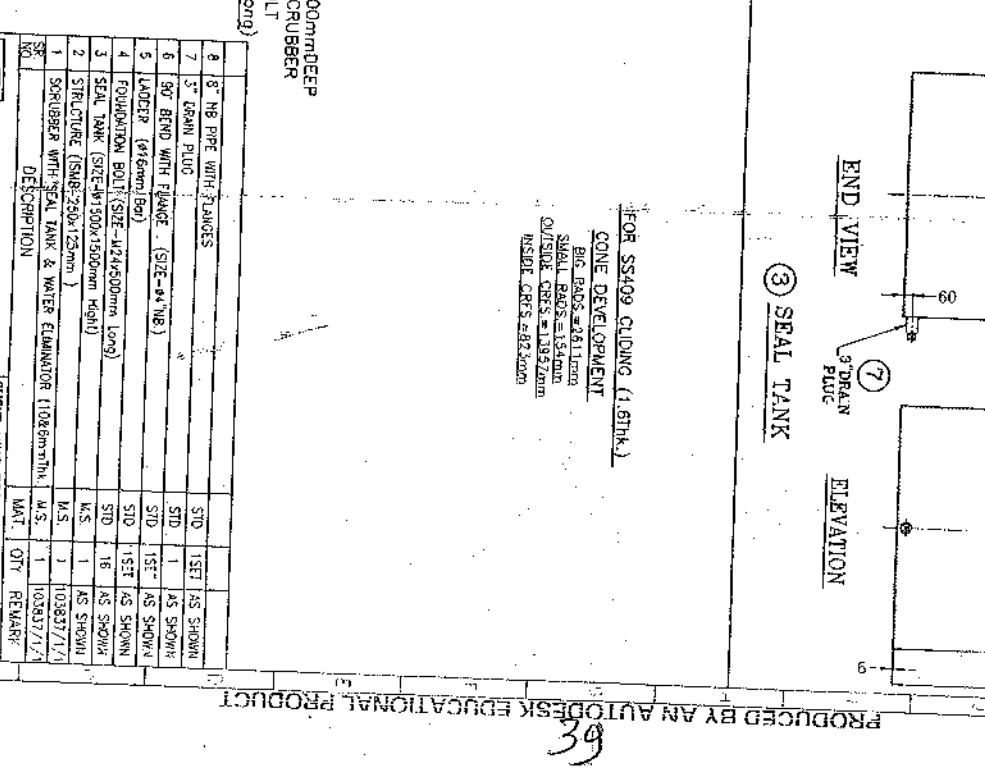


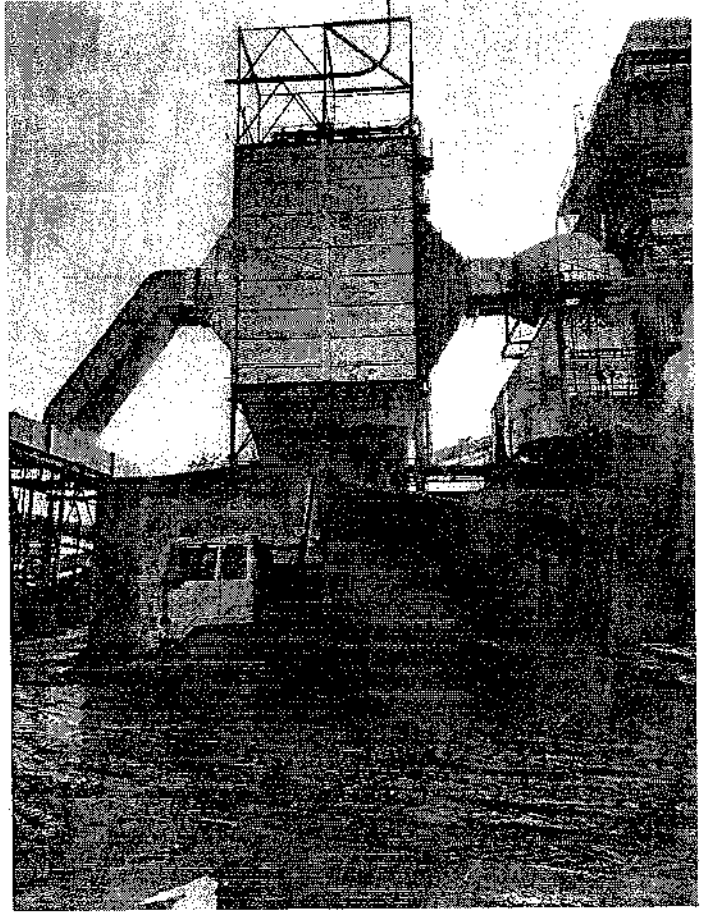
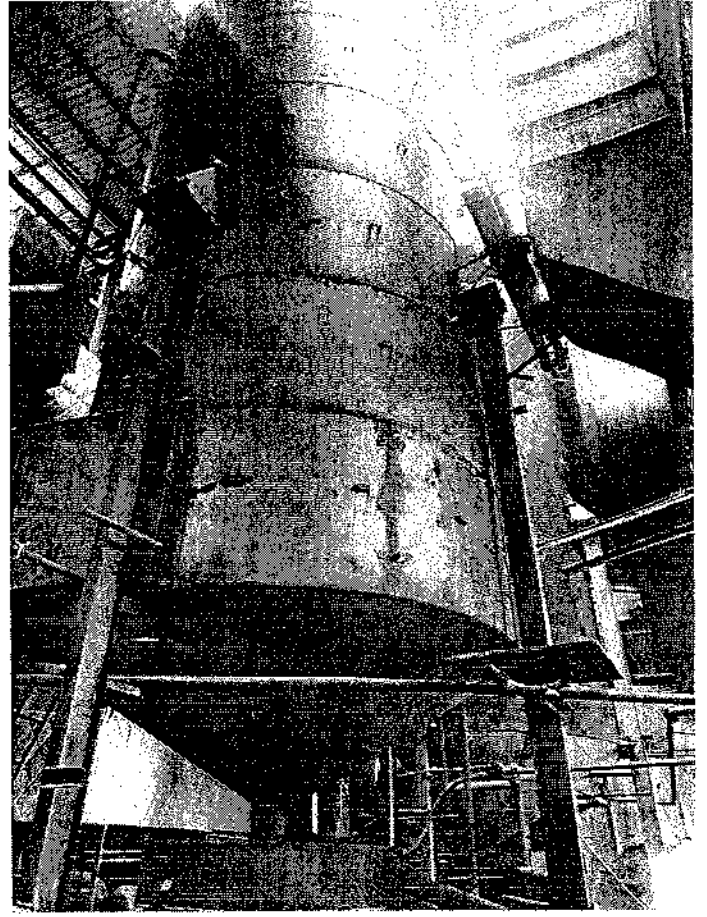
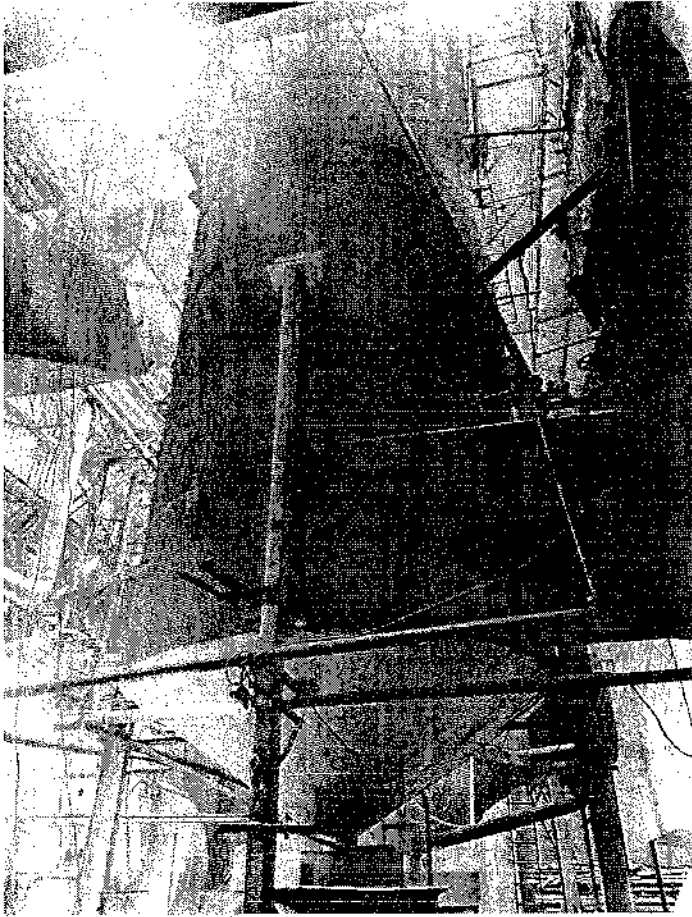
SCALE: 1/4" = 1'-0"

DATE: 25-9-2013

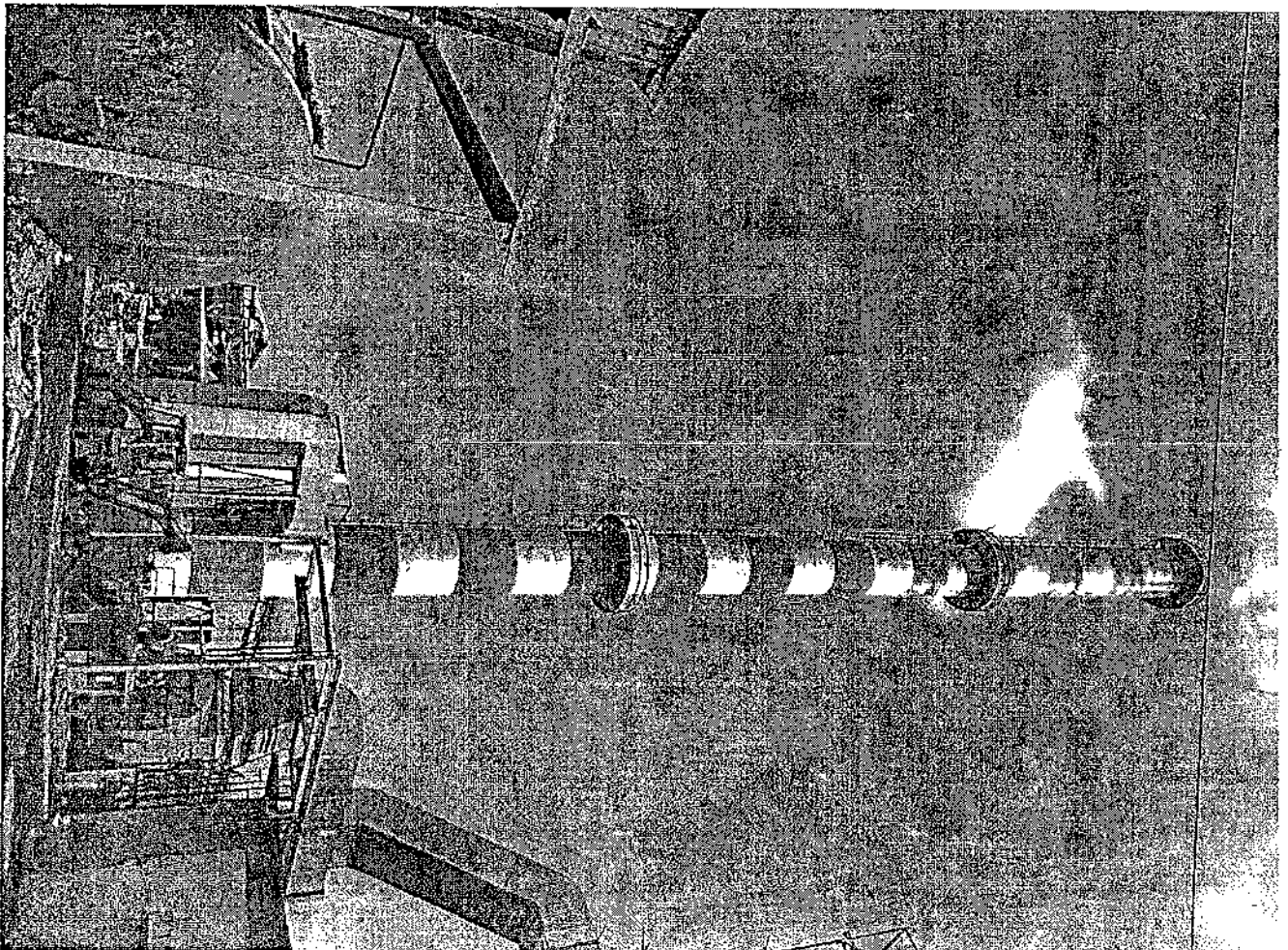
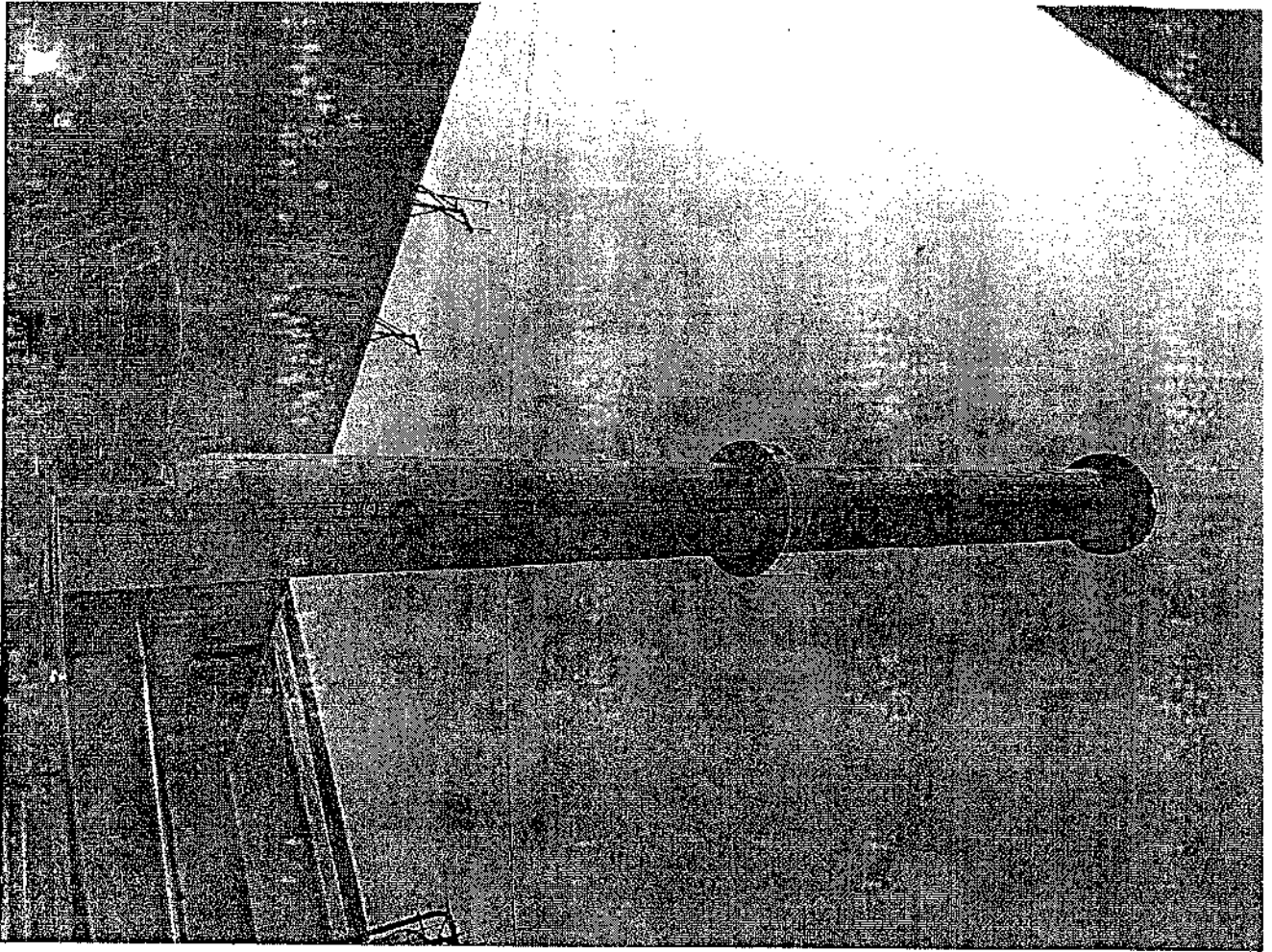
DRG. NO. 2148-103637/1

SHEET 1 OF 1











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- ISO 45001 : 2018 Certified Organization

ANALYSIS REPORT FOR AMBIENT AIR QUALITY MONITORING		Page 1 of 1	
NAME OF COMPANY:- M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. -Ambegaon, Dist.- Pune-412 406		Report No	AL/TR/76-465/23-24
		Report Date	09/12/2023
		Inward No	AL/8-492/03/23-24
		Sampling Date	30/11/2023
Sample Location	East Side- Mr. Ramesh Gaikwad	Sampling Time	12:21 PM
Sample Collected By	AARL	Time duration	08 Hr

SR.NO.	PARAMETER	UNIT	RESULT	LIMITS	METHOD
1.	Ambient Temperature	°C	30.0	N.S.	EPA -454/R-99-005
2.	Relative Humidity	% rh	50	N.S.	EPA -454/R-99-005
3.	Sulphur Dioxide (SO ₂)	µg/m ³	16.41	≤ 80	IS:5182(Part-2):2001
4.	Oxides of Nitrogen (NO _x)	µg/m ³	18.36	≤ 80	IS:5182(Part-6):2006
5.	Particulate matter-PM ₁₀ (less than 10 micron)	µg/m ³	50.26	≤ 100	IS:5182(Part-23):2006
6.	Particulate matter-PM _{2.5} (less than 2.5 micron)	µg/m ³	21.26	≤ 60	IS:5182(Part-24):2019
7.	Ozone (O ₃)	µg/m ³	16.95	≤ 180	IS:5182(Part-9):1974
8.	Lead (Pb)	µg/m ³	BDL	≤ 1.0	IS:5182(Part-22):2004
9.	Carbon Monoxide (CO)	mg/m ³	01.25	≤ 04	IS:5182(Part-10):1999
10.	Ammonia as (NH ₃)	µg/m ³	BDL	≤ 400	Method No.401,(Indophenols method)Method Of Air Sampeling,3 rd Edition
11.	Benzene (C ₆ H ₆)	µg/m ³	BDL	≤ 05	IS:5182 (Part 11):2006
12.	Benzo(a)Pyrene (BaP)	ng/m ³	BDL	≤ 01	IS:5182 (Part 12):2004
13.	Arsenic (As)	ng/m ³	BDL	≤ 06	IS:3025 (PART-37)
14.	Nickel (Ni)	ng/m ³	BDL	≤ 20	IS:3025 (PART-54) 2003

REMARK,OPINION & INTERPRITATION-

- ❖ All above results are within limits as per (NAAQS) National Ambient Air Quality Standards 2009.
- ❖ BDL-Below Detectable Limit.
- ❖ N.S. -Not Specified

[Signature]
Verified by
(Analyst)

[Signature]
Authorized Signatory

...End of test report...

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ANALYSIS REPORT FOR AMBIENT AIR QUALITY MONITORING			Page 1 of 1
NAME OF COMPANY:- M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon, Dist. - Pune-412 406		Report No	AL/TR/76-466/23-24
		Report Date	09/12/2023
		Inward No	AL/8-492/04/23-24
		Sampling Date	30/11/2023
Sample Location	West side- Shri. Nivruthi Dhobale House	Sampling Time	12:29 PM
Sample Collected By	AARL	Time duration	08 Hr

SR.NO.	PARAMETER	UNIT	RESULT	LIMITS	METHOD
1.	Ambient Temperature	°C	30.0	N.S.	EPA -454/R-99-005
2.	Relative Humidity	% rh	51	N.S.	EPA -454/R-99-005
3.	Sulphur Dioxide (SO ₂)	µg/m ³	17.23	≤ 80	IS:5182(Part-2):2001
4.	Oxides of Nitrogen (NO _x)	µg/m ³	17.63	≤ 80	IS:5182(Part-6):2006
5.	Particulate matter-PM ₁₀ (less than 10 micron)	µg/m ³	48.26	≤ 100	IS:5182(Part-23):2006
6.	Particulate matter-PM _{2.5} (less than 2.5 micron)	µg/m ³	20.26	≤ 60	IS:5182(Part-24):2019
7.	Ozone (O ₃)	µg/m ³	16.32	≤ 180	IS:5182(Part-9):1974
8.	Lead (Pb)	µg/m ³	BDL	≤ 1.0	IS:5182(Part-22):2004
9.	Carbon Monoxide (CO)	mg/m ³	00.95	≤ 04	IS:5182(Part-10):1999
10.	Ammonia as (NH ₃)	µg/m ³	BDL	≤ 400	Method No.401, (Indophenols method) Method Of Air Sampling, 3 rd Edition
11.	Benzene (C ₆ H ₆)	µg/m ³	BDL	≤ 05	IS:5182 (Part 11):2006
12.	Benzo(a)Pyrene (BaP)	ng/m ³	BDL	≤ 01	IS:5182 (Part 12):2004
13.	Arsenic (As)	ng/m ³	BDL	≤ 06	IS:3025 (PART-37)
14.	Nickel (Ni)	ng/m ³	BDL	≤ 20	IS:3025 (PART-54) 2003

REMARK, OPINION & INTERPRITATION-

- ❖ All above results are within limits as per (NAAQS) National Ambient Air Quality Standards 2009.
- ❖ BDL-Below Detectable Limit.
- ❖ N.S. -Not Specified

Prave
Verified by
(Analyst)

Cipul
Authorized Signatory

...End of test report...

45



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2023-22/12/23
2023-22/12/23
2023-22/12/23

ANALYSIS REPORT FOR AMBIENT AIR QUALITY MONITORING				Page 1 of 1
NAME OF COMPANY:- M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. -Ambegaon, Dist.- Pune-412 406		Report No	AL/TR/76-463/23-24	
		Report Date	09/12/2023	
		Inward No	AL/8-492/01/23-24	
		Sampling Date	30/11/2023	
Sample Location	South side - Shri Pandurang Walase House	Sampling Time	12:10 PM	
Sample Collected By	AARL	Time duration	08 Hr	

SR.NO.	PARAMETER	UNIT	RESULT	LIMITS	METHOD
1.	Ambient Temperature	°C	30.0	N.S.	EPA -454/R-99-005
2.	Relative Humidity	% rh	52	N.S.	EPA -454/R-99-005
3.	Sulphur Dioxide (SO ₂)	µg/m ³	15.26	≤ 80	IS:5182(Part-2):2001
4.	Oxides of Nitrogen (NO _x)	µg/m ³	17.25	≤ 80	IS:5182(Part-6):2006
5.	Particulate matter-PM ₁₀ (less than 10 micron)	µg/m ³	45.26	≤ 100	IS:5182(Part-23):2006
6.	Particulate matter-PM _{2.5} (less than 2.5 micron)	µg/m ³	20.15	≤ 60	IS:5182(Part-24):2019
7.	Ozone (O ₃)	µg/m ³	16.33	≤ 180	IS:5182(Part-9):1974
8.	Lead (Pb)	µg/m ³	BDL	≤ 1.0	IS:5182(Part-22):2004
9.	Carbon Monoxide (CO)	mg/m ³	01.14	≤ 04	IS:5182(Part-10):1999
10.	Ammonia as (NH ₃)	µg/m ³	BDL	≤ 400	Method No.401,(Indophenols method)Method Of Air Sampling,3 rd Edition
11.	Benzene (C ₆ H ₆)	µg/m ³	BDL	≤ 05	IS:5182 (Part 11):2006
12.	Benzo(a)Pyrene (BaP)	ng/m ³	BDL	≤ 01	IS:5182 (Part 12):2004
13.	Arsenic (As)	ng/m ³	BDL	≤ 06	IS:3025 (PART-37)
14.	Nickel (Ni)	ng/m ³	BDL	≤ 20	IS:3025 (PART-54) 2003

REMARK, OPINION & INTERPRITATION-

- ❖ All above results are within limits as per (NAAQS) National Ambient Air Quality Standards 2009.
- ❖ BDL-Below Detectable Limit.
- ❖ N.S. -Not Specified

Verified by
(Analyst)

PM
AARL
23/12

...End of test report...

Authorized Signatory

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ANALYSIS REPORT FOR AMBIENT AIR QUALITY MONITORING		Page 1 of 1	
NAME OF COMPANY:- M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon, Dist. - Pune-412 406		Report No	AL/TR/76-464/23-24
		Report Date	09/12/2023
		Inward No	AL/8-492/02/23-24
		Sampling Date	30/11/2023
Sample Location	North Side-Yogesh Pingale	Sampling Time	12:16 PM
Sample Collected By	AARL	Time duration	08 Hr

SR.NO.	PARAMETER	UNIT	RESULT	LIMITS	METHOD
1.	Ambient Temperature	°C	30.0	N.S.	EPA -454/R-99-005
2.	Relative Humidity	% rh	50	N.S.	EPA -454/R-99-005
3.	Sulphur Dioxide (SO ₂)	µg/m ³	15.25	≤ 80	IS:5182(Part-2):2001
4.	Oxides of Nitrogen (NO _x)	µg/m ³	19.26	≤ 80	IS:5182(Part-6):2006
5.	Particulate matter-PM ₁₀ (less than 10 micron)	µg/m ³	44.56	≤ 100	IS:5182(Part-23):2006
6.	Particulate matter-PM _{2.5} (less than 2.5 micron)	µg/m ³	20.41	≤ 60	IS:5182(Part-24):2019
7.	Ozone (O ₃)	µg/m ³	16.63	≤ 180	IS:5182(Part-9):1974
8.	Lead (Pb)	µg/m ³	BDL	≤ 1.0	IS:5182(Part-22):2004
9.	Carbon Monoxide (CO)	mg/m ³	00.95	≤ 04	IS:5182(Part-10):1999
10.	Ammonia as (NH ₃)	µg/m ³	BDL	≤ 400	Method No.401,(Indophenols method)Method Of Air Sampling, 3 rd Edition
11.	Benzene (C ₆ H ₆)	µg/m ³	BDL	≤ 05	IS:5182 (Part 11):2006
12.	Benzo(a)Pyrene (BaP)	ng/m ³	BDL	≤ 01	IS:5182 (Part 12):2004
13.	Arsenic (As)	ng/m ³	BDL	≤ 06	IS:3025 (PART-37)
14.	Nickel (Ni)	ng/m ³	BDL	≤ 20	IS:3025 (PART-54) 2003

REMARK, OPINION & INTERPRITATION-

- ❖ All above results are within limits as per (NAAQS) National Ambient Air Quality Standards 2009.
- ❖ BDL-Below Detectable Limit.
- ❖ N.S. -Not Specified

[Signature]

Verified by
(Analyst)

[Signature]

Authorized Signatory

...End of test report...

47



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ANALYSIS REPORT FOR AMBIENT AIR QUALITY MONITORING				Page 1 of 1
NAME OF COMPANY:- M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon, Dist. - Pune-412 406		Report No	AL/TR/76-467/23-24	
		Report Date	09/12/2023	
		Inward No	AL/8-492/05/23-24	
		Sampling Date	30/11/2023	
Sample Location	Main Gate (Company Premises)	Sampling Time	12:35 PM	
Sample Collected By	AARL	Time duration	08 Hr	

SR.NO.	PARAMETER	UNIT	RESULT	LIMITS	METHOD
1.	Ambient Temperature	°C	30.0	N.S.	EPA -454/R-99-005
2.	Relative Humidity	% rh	50	N.S.	EPA -454/R-99-005
3.	Sulphur Dioxide (SO ₂)	µg/m ³	22.26	≤ 80	IS:5182(Part-2):2001
4.	Oxides of Nitrogen (NO _x)	µg/m ³	24.23	≤ 80	IS:5182(Part-6):2006
5.	Particulate matter-PM ₁₀ (less than 10 micron)	µg/m ³	53.52	≤ 100	IS:5182(Part-23):2006
6.	Particulate matter-PM _{2.5} (less than 2.5 micron)	µg/m ³	22.26	≤ 60	IS:5182(Part-24):2019
7.	Ozone (O ₃)	µg/m ³	16.87	≤ 180	IS:5182(Part-9):1974
8.	Lead (Pb)	µg/m ³	BDL	≤ 1.0	IS:5182(Part-22):2004
9.	Carbon Monoxide (CO)	mg/m ³	01.56	≤ 04	IS:5182(Part-10):1999
10.	Ammonia as (NH ₃)	µg/m ³	BDL	≤ 400	Method No.401,(Indophenols method)Method Of Air Sampling, 3 rd Edition
11.	Benzene (C ₆ H ₆)	µg/m ³	BDL	≤ 05	IS:5182 (Part 11):2006
12.	Benzo(a)Pyrene (BaP)	ng/m ³	BDL	≤ 01	IS:5182 (Part 12):2004
13.	Arsenic (As)	ng/m ³	BDL	≤ 06	IS:3025 (PART-37)
14.	Nickel (Ni)	ng/m ³	BDL	≤ 20	IS:3025 (PART-54) 2003

REMARK, OPINION & INTERPRITATION-

- ❖ All above results are within limits as per (NAAQS) National Ambient Air Quality Standards 2009.
- ❖ BDL-Below Detectable Limit.
- ❖ N.S. -Not Specified

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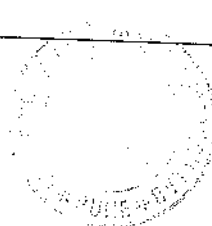
ANALYSIS REPORT FOR AMBIENT AIR QUALITY MONITORING				Page 1 of 1
NAME OF COMPANY:- M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon, Dist. - Pune-412 406		Report No	AL/TR/77-290/23-24	
		Report Date	05/01/2024	
		Inward No	AL/8-566/01/23-24	
		Sampling Date	27/12/2023	
Sample Location	South East-Shri. Raghunath Dhobale House		Sampling Time	01:57 PM
Sample Collected By	AARL		Time duration	08 Hr

SR.NO.	PARAMETER	UNIT	RESULT	LIMITS	METHOD
1.	Ambient Temperature	°C	29.0	N.S.	EPA -454/R-99-005
2.	Relative Humidity	% rh	58	N.S.	EPA -454/R-99-005
3.	Sulphur Dioxide (SO ₂)	µg/m ³	21.23	≤ 80	IS:5182(Part-2):2001
4.	Oxides of Nitrogen (NO _x)	µg/m ³	22.25	≤ 80	IS:5182(Part-6):2006
5.	Particulate matter-PM ₁₀ (less than 10 micron)	µg/m ³	48.60	≤ 100	IS:5182(Part-23):2006
6.	Particulate matter-PM _{2.5} (less than 2.5 micron)	µg/m ³	23.50	≤ 60	IS:5182(Part-24):2019
7.	Ozone (O ₃)	µg/m ³	16.23	≤ 180	IS:5182(Part-9):1974
8.	Lead (Pb)	µg/m ³	BDL	≤ 1.0	IS:5182(Part-22):2004
9.	Carbon Monoxide (CO)	mg/m ³	01.25	≤ 04	IS:5182(Part-10):1999
10.	Ammonia as (NH ₃)	µg/m ³	BDL	≤ 400	Method No.401, (Indophenols method) Method Of Air Sampling, 3 rd Edition
11.	Benzene (C ₆ H ₆)	µg/m ³	BDL	≤ 05	IS:5182 (Part 11):2006
12.	Benzo(a)Pyrene (BaP)	µg/m ³	BDL	≤ 01	IS:5182 (Part 12):2004
13.	Arsenic (As)	ng/m ³	BDL	≤ 06	IS:3025 (PART-37)
14.	Nickel (Ni)	ng/m ³	BDL	≤ 20	IS:3025 (PART-54) 2003

REMARK, OPINION & INTERPRITATION-

- ❖ All above results are within limits as per (NAAQS) National Ambient Air Quality Standards 2009.
- ❖ BDL-Below Detectable Limit.
- ❖ N.S. -Not Specified

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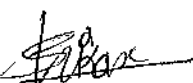
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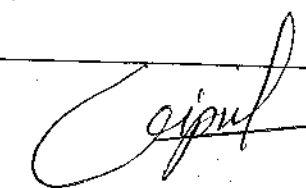
ANALYSIS REPORT FOR AMBIENT AIR QUALITY MONITORING			Page 1 of 1
NAME OF COMPANY:- M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. -Ambegaon, Dist.- Pune-412 406		Report No	AL/TR/77-291/23-24
		Report Date	05/01/2024
		Inward No	AL/8-566/02/23-24
		Sampling Date	27/12/2023
Sample Location	South west - Taniskha Mangal Karyalaya	Sampling Time	02:51 PM
Sample Collected By	AARL	Time duration	08 Hr

SR.NO.	PARAMETER	UNIT	RESULT	LIMITS	METHOD
1.	Ambient Temperature	°C	29.0	N.S.	EPA -454/R-99-005
2.	Relative Humidity	% rh	58	N.S.	EPA -454/R-99-005
3.	Sulphur Dioxide (SO ₂)	µg/m ³	23.26	≤ 80	IS:5182(Part-2):2001
4.	Oxides of Nitrogen (NO _x)	µg/m ³	22.25	≤ 80	IS:5182(Part-6):2006
5.	Particulate matter-PM ₁₀ (less than 10 micron)	µg/m ³	48.60	≤ 100	IS:5182(Part-23):2006
6.	Particulate matter-PM _{2.5} (less than 2.5 micron)	µg/m ³	23.25	≤ 60	IS:5182(Part-24):2019
7.	Ozone (O ₃)	µg/m ³	16.45	≤ 180	IS:5182(Part-9):1974
8.	Lead (Pb)	µg/m ³	BDL	≤ 1.0	IS:5182(Part-22):2004
9.	Carbon Monoxide (CO)	mg/m ³	01.23	≤ 04	IS:5182(Part-10):1999
10.	Ammonia as (NH ₃)	µg/m ³	BDL	≤ 400	Method No.401,(Indophenols method)Method Of Air Sampling,3 rd Edition
11.	Benzene (C ₆ H ₆)	µg/m ³	BDL	≤ 05	IS:5182 (Part 11):2006
12.	Benzo(a)Pyrene (BaP)	ng/m ³	BDL	≤ 01	IS:5182 (Part 12):2004
13.	Arsenic (As)	ng/m ³	BDL	≤ 06	IS:3025 (PART-37)
14.	Nickel (Ni)	ng/m ³	BDL	≤ 20	IS:3025 (PART-54) 2003

REMARK, OPINION & INTERPRITATION-

- ❖ All above results are within limits as per (NAAQS) National Ambient Air Quality Standards 2009.
- ❖ BDL-Below Detectable Limit.
- ❖ N.S. -Not Specified


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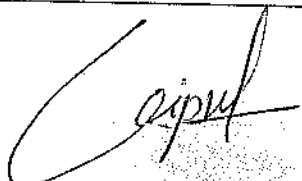
ANALYSIS REPORT FOR AMBIENT AIR QUALITY MONITORING			Page 1 of 1
NAME OF COMPANY:- M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon, Dist. - Pune-412 406		Report No	AL/TR/77-292/23-24
		Report Date	05/01/2024
		Inward No	AL/8-566/03/23-24
		Sampling Date	27/12/2023
Sample Location	North East -Shri. Pravin Sable House	Sampling Time	01:05 PM
Sample Collected By	AARL	Time duration	08 Hr

SR.NO.	PARAMETER	UNIT	RESULT	LIMITS	METHOD
1.	Ambient Temperature	°C	29.0	N.S.	EPA -454/R-99-005
2.	Relative Humidity	% rh	58	N.S.	EPA -454/R-99-005
3.	Sulphur Dioxide (SO ₂)	µg/m ³	23.25	≤ 80	IS:5182(Part-2):2001
4.	Oxides of Nitrogen (NO _x)	µg/m ³	22.56	≤ 80	IS:5182(Part-6):2006
5.	Particulate matter-PM ₁₀ (less than 10 micron)	µg/m ³	46.20	≤ 100	IS:5182(Part-23):2006
6.	Particulate matter-PM _{2.5} (less than 2.5 micron)	µg/m ³	22.90	≤ 60	IS:5182(Part-23):2006
7.	Ozone (O ₃)	µg/m ³	16.23	≤ 180	IS:5182(Part-9):1974
8.	Lead (Pb)	µg/m ³	BDL	≤ 1.0	IS:5182(Part-22):2004
9.	Carbon Monoxide (CO)	mg/m ³	01.15	≤ 04	IS:5182(Part-10):1999
10.	Ammonia as (NH ₃)	µg/m ³	BDL	≤ 400	Method No.401, (Indophenols method) Method Of Air Sampling, 3 rd Edition
11.	Benzene (C ₆ H ₆)	µg/m ³	BDL	≤ 05	IS:5182 (Part 11):2006
12.	Benzo(a)Pyrene (BaP)	ng/m ³	BDL	≤ 01	IS:5182 (Part 12):2004
13.	Arsenic (As)	ng/m ³	BDL	≤ 06	IS:3025 (PART-37)
14.	Nickel (Ni)	ng/m ³	BDL	≤ 20	IS:3025 (PART-54) 2003

REMARK, OPINION & INTERPRITATION-

- ❖ All above results are within limits as per (NAAQS) National Ambient Air Quality Standards 2009.
- ❖ BDL-Below Detectable Limit.
- ❖ N.S. -Not Specified


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ANALYSIS REPORT FOR AMBIENT AIR QUALITY MONITORING			Page 1 of 1
NAME OF COMPANY:- M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. -Ambegaon, Dist.- Pune-412 406		Report No	AL/TR/77-293/23-24
		Report Date	05/01/2024
		Inward No	AL/8-566/04/23-24
		Sampling Date	27/12/2023
Sample Location	North west - Shri. Suresh Giri House	Sampling Time	02:20 PM
Sample Collected By	AARL	Time duration	08 Hr

SR.NO.	PARAMETER	UNIT	RESULT	LIMITS	METHOD
1.	Ambient Temperature	°C	29.0	N.S.	EPA -454/R-99-005
2.	Relative Humidity	% rh	58	N.S.	EPA -454/R-99-005
3.	Sulphur Dioxide (SO ₂)	µg/m ³	24.23	≤ 80	IS:5182(Part-2):2001
4.	Oxides of Nitrogen (NO _x)	µg/m ³	23.26	≤ 80	IS:5182(Part-6):2006
5.	Particulate matter-PM ₁₀ (less than 10 micron)	µg/m ³	45.50	≤ 100	IS:5182(Part-23):2006
6.	Particulate matter-PM _{2.5} (less than 2.5 micron)	µg/m ³	23.20	≤ 60	IS:5182(Part-24):2019
7.	Ozone (O ₃)	µg/m ³	16.26	≤ 180	IS:5182(Part-9):1974
8.	Lead (Pb)	µg/m ³	BDL	≤ 1.0	IS:5182(Part-22):2004
9.	Carbon Monoxide (CO)	mg/m ³	00.98	≤ 04	IS:5182(Part-10):1999
10.	Ammonia as (NH ₃)	µg/m ³	BDL	≤ 400	Method No.401,(Indophenols method)Method Of Air Samping,3 rd Edition
11.	Benzene (C ₆ H ₆)	µg/m ³	BDL	≤ 05	IS:5182 (Part 11):2006
12.	Benzo(a)Pyrene (BaP)	ng/m ³	BDL	≤ 01	IS:5182 (Part 12):2004
13.	Arsenic (As)	ng/m ³	BDL	≤ 06	IS:3025 (PART-37)
14.	Nickel (Ni)	ng/m ³	BDL	≤ 20	IS:3025 (PART-54) 2003

REMARK,OPINION & INTERPRITATION-

- ❖ All above results are within limits as per (NAAQS) National Ambient Air Quality Standards 2009.
- ❖ BDL-Below Detectable Limit.
- ❖ N.S. -Not Specified


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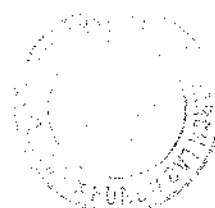
ANALYSIS REPORT FOR AMBIENT AIR QUALITY MONITORING			Page 1 of 1
NAME OF COMPANY:- M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon, Dist. - Pune-412 406		Report No	AL/TR/77-294/23-24
		Report Date	05/01/2024
		Inward No	AL/8-566/05/23-24
		Sampling Date	27/12/2023
Sample Location	Karkhana Premises-Senior College	Sampling Time	01:25 PM
Sample Collected By	AARL	Time duration	08 Hr

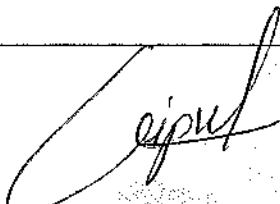
SR.NO.	PARAMETER	UNIT	RESULT	LIMITS	METHOD
1.	Ambient Temperature	°C	29.0	N.S.	EPA -454/R-99-005
2.	Relative Humidity	% rh	58	N.S.	EPA -454/R-99-005
3.	Sulphur Dioxide (SO ₂)	µg/m ³	24.26	≤ 80	IS:5182(Part-2):2001
4.	Oxides of Nitrogen (NO _x)	µg/m ³	23.25	≤ 80	IS:5182(Part-6):2006
5.	Particulate matter-PM ₁₀ (less than 10 micron)	µg/m ³	45.60	≤ 100	IS:5182(Part-23):2006
6.	Particulate matter-PM _{2.5} (less than 2.5 micron)	µg/m ³	22.50	≤ 60	IS:5182(Part-24):2019
7.	Ozone (O ₃)	µg/m ³	16.23	≤ 180	IS:5182(Part-9):1974
8.	Lead (Pb)	µg/m ³	BDL	≤ 1.0	IS:5182(Part-22):2004
9.	Carbon Monoxide (CO)	mg/m ³	01.45	≤ 04	IS:5182(Part-10):1999
10.	Ammonia as (NH ₃)	µg/m ³	BDL	≤ 400	Method No.401,(Indophenols method)Method Of Air Sampling,3 rd Edition
11.	Benzene (C ₆ H ₆)	µg/m ³	BDL	≤ 05	IS:5182 (Part 11):2006
12.	Benzo(a)Pyrene (BaP)	ng/m ³	BDL	≤ 01	IS:5182 (Part 12):2004
13.	Arsenic (As)	ng/m ³	BDL	≤ 06	IS:3025 (PART-37)
14.	Nickel (Ni)	ng/m ³	BDL	< 20	IS:3025 (PART-54) 2003

REMARK, OPINION & INTERPRITATION-

- ❖ All above results are within limits as per (NAAQS) National Ambient Air Quality Standards 2009.
- ❖ BDL-Below Detectable Limit.
- ❖ N.S. -Not Specified


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ANALYSIS REPORT FOR AMBIENT AIR QUALITY MONITORING			Page 1 of 1
NAME OF COMPANY:- M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon, Dist. - Pune-412 406		Report No	AL/TR/78-003/23-24
		Report Date	05/02/2024
		Inward No	AL/8-641/01/23-24
		Sampling Date	27/01/2024
Sample Location	East Side- Mr. Ramesh Gaikwad House	Sampling Time	11:40 AM
Sample Collected By	AARL	Time duration	08 Hr

SR.NO.	PARAMETER	UNIT	RESULT	LIMITS	METHOD
1.	Ambient Temperature	°C	30.0	N.S.	EPA -454/R-99-005
2.	Relative Humidity	% rh	58	N.S.	EPA -454/R-99-005
3.	Sulphur Dioxide (SO ₂)	µg/m ³	24.78	≤ 80	IS:5182(Part-2):2001
4.	Oxides of Nitrogen (NO _x)	µg/m ³	20.36	≤ 80	IS:5182(Part-6):2006
5.	Particulate matter-PM ₁₀ (less than 10 micron)	µg/m ³	48.10	≤ 100	IS:5182(Part-23):2006
6.	Particulate matter-PM _{2.5} (less than 2.5 micron)	µg/m ³	22.60	≤ 60	IS:5182(Part-24):2019
7.	Ozone (O ₃)	µg/m ³	16.41	≤ 180	IS:5182(Part-9):1974
8.	Lead (Pb)	µg/m ³	BDL	≤ 1.0	IS:5182(Part-22):2004
9.	Carbon Monoxide (CO)	mg/m ³	01.36	≤ 04	IS:5182(Part-10):1999
10.	Ammonia as (NH ₃)	µg/m ³	BDL	≤ 400	Method No.401, (Indophenols method) Method Of Air Sampling, 3 rd Edition
11.	Benzene (C ₆ H ₆)	µg/m ³	BDL	≤ 05	IS:5182 (Part 11):2006
12.	Benzo(a)Pyrene (BaP)	ng/m ³	BDL	≤ 01	IS:5182 (Part 12):2004
13.	Arsenic (As)	ng/m ³	BDL	≤ 06	IS:3025 (PART-37)
14.	Nickel (Ni)	ng/m ³	BDL	≤ 20	IS:3025 (PART-54) 2003

REMARK, OPINION & INTERPRITATION-

- ❖ All above results are within limits as per (NAAQS) National Ambient Air Quality Standards 2009.
- ❖ BDL-Below Detectable Limit.
- ❖ N.S. -Not Specified

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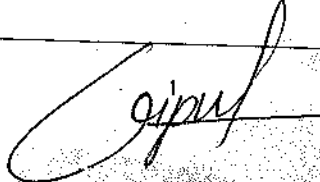
ANALYSIS REPORT FOR AMBIENT AIR QUALITY MONITORING			Page 1 of 1
NAME OF COMPANY:- M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon, Dist. - Pune-412 406		Report No	AL/TR/78-004/23-24
		Report Date	05/02/2024
		Inward No	AL/8-641/02/23-24
		Sampling Date	27/01/2024
Sample Location	West side- Shri. Nivruthi Dhobale House	Sampling Time	10:40 AM
Sample Collected By	AARL	Time duration	08 Hr

SR.NO.	PARAMETER	UNIT	RESULT	LIMITS	METHOD
1.	Ambient Temperature	°C	30.0	N.S.	EPA -454/R-99-005
2.	Relative Humidity	% rh	58	N.S.	EPA -454/R-99-005
3.	Sulphur Dioxide (SO ₂)	µg/m ³	22.45	≤ 80	IS:5182(Part-2):2001
4.	Oxides of Nitrogen (NO _x)	µg/m ³	21.78	≤ 80	IS:5182(Part-6):2006
5.	Particulate matter-PM ₁₀ (less than 10 micron)	µg/m ³	48.70	≤ 100	IS:5182(Part-23):2006
6.	Particulate matter-PM _{2.5} (less than 2.5 micron)	µg/m ³	23.10	≤ 60	IS:5182(Part-24):2019
7.	Ozone (O ₃)	µg/m ³	16.47	≤ 180	IS:5182(Part-9):1974
8.	Lead (Pb)	µg/m ³	BDL	≤ 1.0	IS:5182(Part-22):2004
9.	Carbon Monoxide (CO)	mg/m ³	01.12	≤ 04	IS:5182(Part-10):1999
10.	Ammonia as (NH ₃)	µg/m ³	BDL	≤ 400	Method No.401,(Indophenols method)Method Of Air Sampling,3 rd Edition
11.	Benzene (C ₆ H ₆)	µg/m ³	BDL	≤ 05	IS:5182 (Part 11):2006
12.	Benzo(a)Pyrene (BaP)	ng/m ³	BDL	≤ 01	IS:5182 (Part 12):2004
13.	Arsenic (As)	ng/m ³	BDL	≤ 06	IS:3025 (PART-37)
14.	Nickel (Ni)	ng/m ³	BDL	≤ 20	IS:3025 (PART-54) 2003

REMARK, OPINION & INTERPRITATION-

- ❖ All above results are within limits as per (NAAQS) National Ambient Air Quality Standards 2009.
- ❖ BDL-Below Detectable Limit.
- ❖ N.S. -Not Specified


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ANALYSIS REPORT FOR AMBIENT AIR QUALITY MONITORING				Page 1 of 1
NAME OF COMPANY:- M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon, Dist. - Pune-412 406		Report No	AL/TR/78-005/23-24	
		Report Date	05/02/2024	
		Inward No	AL/8-641/03/23-24	
		Sampling Date	27/01/2024	
Sample Location	South side - Shri Pandurang Walase House	Sampling Time	11:20 AM	
Sample Collected By	AARL	Time duration	08 Hr	

SR.NO.	PARAMETER	UNIT	RESULT	LIMITS	METHOD
1.	Ambient Temperature	°C	30.0	N.S.	EPA -454/R-99-005
2.	Relative Humidity	% rh	58	N.S.	EPA -454/R-99-005
3.	Sulphur Dioxide (SO ₂)	µg/m ³	22.45	≤ 80	IS:5182(Part-2):2001
4.	Oxides of Nitrogen (NO _x)	µg/m ³	20.89	≤ 80	IS:5182(Part-6):2006
5.	Particulate matter-PM ₁₀ (less than 10 micron)	µg/m ³	49.50	≤ 100	IS:5182(Part-23):2006
6.	Particulate matter-PM _{2.5} (less than 2.5 micron)	µg/m ³	21.40	≤ 60	IS:5182(Part-23):2006
7.	Ozone (O ₃)	µg/m ³	16.23	≤ 180	IS:5182(Part-9):1974
8.	Lead (Pb)	µg/m ³	BDL	≤ 1.0	IS:5182(Part-22):2004
9.	Carbon Monoxide (CO)	mg/m ³	01.63	≤ 04	IS:5182(Part-10):1999
10.	Ammonia as (NH ₃)	µg/m ³	BDL	≤ 400	Method No.401, (Indophenols method) Method Of Air Sampling, 3 rd Edition
11.	Benzene (C ₆ H ₆)	µg/m ³	BDL	≤ 05	IS:5182 (Part 11):2006
12.	Benzo(a)Pyrene (BaP)	ng/m ³	BDL	≤ 01	IS:5182 (Part 12):2004
13.	Arsenic (As)	ng/m ³	BDL	≤ 06	IS:3025 (PART-37)
14.	Nickel (Ni)	ng/m ³	BDL	≤ 20	IS:3025 (PART-54) 2003

REMARK, OPINION & INTERPRITATION-

- ❖ All above results are within limits as per (NAAQS) National Ambient Air Quality Standards 2009.
- ❖ BDL-Below Detectable Limit.
- ❖ N.S. -Not Specified

Verified by
(Analyst)

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ANALYSIS REPORT FOR AMBIENT AIR QUALITY MONITORING			Page 1 of 1
NAME OF COMPANY:- M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. -Ambegaon, Dist. - Pune-412 406		Report No	AL/TR/78-006/23-24
		Report Date	05/02/2024
		Inward No	AL/8-641/04/23-24
		Sampling Date	27/01/2024
Sample Location	North Side-Yogesh Pingale House	Sampling Time	11:00 AM
Sample Collected By	AARL	Time duration	08 Hr

SR.NO.	PARAMETER	UNIT	RESULT	LIMITS	METHOD
1.	Ambient Temperature	°C	30.0	N.S.	EPA -454/R-99-005
2.	Relative Humidity	% rh	58	N.S.	EPA -454/R-99-005
3.	Sulphur Dioxide (SO ₂)	µg/m ³	20.69	≤ 80	IS:5182(Part-2):2001
4.	Oxides of Nitrogen (NO _x)	µg/m ³	21.98	≤ 80	IS:5182(Part-6):2006
5.	Particulate matter-PM ₁₀ (less than 10 micron)	µg/m ³	47.60	≤ 100	IS:5182(Part-23):2006
6.	Particulate matter-PM _{2.5} (less than 2.5 micron)	µg/m ³	21.60	≤ 60	IS:5182(Part-24):2019
7.	Ozone (O ₃)	µg/m ³	16.15	≤ 180	IS:5182(Part-9):1974
8.	Lead (Pb)	µg/m ³	BDL	≤ 1.0	IS:5182(Part-22):2004
9.	Carbon Monoxide (CO)	mg/m ³	01.20	≤ 04	IS:5182(Part-10):1999
10.	Ammonia as (NH ₃)	µg/m ³	BDL	≤ 400	Method No.401,(Indophenols method)Method Of Air Sampling,3 rd Edition
11.	Benzene (C ₆ H ₆)	µg/m ³	BDL	≤ 05	IS:5182 (Part 11):2006
12.	Benzo(a)Pyrene (BaP)	ng/m ³	BDL	≤ 01	IS:5182 (Part 12):2004
13.	Arsenic (As)	ng/m ³	BDL	≤ 06	IS:3025 (PART-37)
14.	Nickel (Ni)	ng/m ³	BDL	≤ 20	IS:3025 (PART-54) 2003

REMARK, OPINION & INTERPRITATION-

- ❖ All above results are within limits as per (NAAQS) National Ambient Air Quality Standards 2009.
- ❖ BDL-Below Detectable Limit.
- ❖ N.S. -Not Specified

Verified by
(Analyst)

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ANALYSIS REPORT FOR AMBIENT AIR QUALITY MONITORING			Page 1 of 1
NAME OF COMPANY:- M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon, Dist. - Pune-412 406		Report No	AL/TR/78-007/23-24
		Report Date	05/02/2024
		Inward No	AL/8-641/05/23-24
		Sampling Date	27/01/2024
Sample Location	Kata Gate (Company Premises)	Sampling Time	10:30 AM
Sample Collected By	AARL	Time duration	08 Hr

SR.NO.	PARAMETER	UNIT	RESULT	LIMITS	METHOD
1.	Ambient Temperature	°C	29.0	N.S.	EPA -454/R-99-005
2.	Relative Humidity	% rh	57	N.S.	EPA -454/R-99-005
3.	Sulphur Dioxide (SO ₂)	µg/m ³	21.78	≤ 80	IS:5182(Part-2):2001
4.	Oxides of Nitrogen (NO _x)	µg/m ³	20.63	≤ 80	IS:5182(Part-6):2006
5.	Particulate matter-PM ₁₀ (less than 10 micron)	µg/m ³	49.80	≤ 100	IS:5182(Part-23):2006
6.	Particulate matter-PM _{2.5} (less than 2.5 micron)	µg/m ³	21.70	≤ 60	IS:5182(Part-24):2019
7.	Ozone (O ₃)	µg/m ³	16.45	≤ 180	IS:5182(Part-9):1974
8.	Lead (Pb)	µg/m ³	BDL	≤ 1.0	IS:5182(Part-22):2004
9.	Carbon Monoxide (CO)	mg/m ³	01.40	≤ 04	IS:5182(Part-10):1999
10.	Ammonia as (NH ₃)	µg/m ³	BDL	≤ 400	Method No.401,(Indophenols method) Method Of Air Sampling, 3 rd Edition
11.	Benzene (C ₆ H ₆)	µg/m ³	BDL	≤ 05	IS:5182 (Part 11):2006
12.	Benzo(a)Pyrene (BaP)	ng/m ³	BDL	≤ 01	IS:5182 (Part 12):2004
13.	Arsenic (As)	ng/m ³	BDL	≤ 06	IS:3025 (PART-37)
14.	Nickel (Ni)	ng/m ³	BDL	≤ 20	IS:3025 (PART-54) 2003

REMARK, OPINION & INTERPRITATION-

- ❖ All above results are within limits as per (NAAQS) National Ambient Air Quality Standards 2009.
- ❖ BDL-Below Detectable Limit.
- ❖ N.S. -Not Specified

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(Analyst)

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ANALYSIS REPORT FOR AMBIENT AIR QUALITY MONITORING		Page 1 of 1	
NAME OF COMPANY:- M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon, Dist. - Pune-412 406		Report No	AL/TR/78-545/23-24
		Report Date	28/02/2024
		Inward No	AL/8-698/01/23-24
		Sampling Date	22/02/2024
Sample Location	South East-Shri. Vishvnath Nahre House	Sampling Time	11:20 AM
Sample Collected By	AARL	Time duration	08 Hr

SR.NO.	PARAMETER	UNIT	RESULT	LIMITS	METHOD
1.	Ambient Temperature	°C	30.0	N.S.	EPA -454/R-99-005
2.	Relative Humidity	% rh	57	N.S.	EPA -454/R-99-005
3.	Sulphur Dioxide (SO ₂)	µg/m ³	21.32	≤ 80	IS:5182(Part-2):2001
4.	Oxides of Nitrogen (NO _x)	µg/m ³	23.45	≤ 80	IS:5182(Part-6):2006
5.	Particulate matter-PM ₁₀ (less than 10 micron)	µg/m ³	52.20	≤ 100	IS:5182(Part-23):2006
6.	Particulate matter-PM _{2.5} (less than 2.5 micron)	µg/m ³	24.10	≤ 60	IS:5182(Part-23):2006
7.	Ozone (O ₃)	µg/m ³	16.32	≤ 180	IS:5182(Part-9):1974
8.	Lead (Pb)	µg/m ³	BDL	≤ 1.0	IS:5182(Part-22):2004
9.	Carbon Monoxide (CO)	mg/m ³	01.35	≤ 04	IS:5182(Part-10):1999
10.	Ammonia as (NH ₃)	µg/m ³	BDL	≤ 400	Method No.401,(Indophenols method)Method Of Air Sampling,3 rd Edition
11.	Benzene (C ₆ H ₆)	µg/m ³	BDL	≤ 05	IS:5182 (Part 11):2006
12.	Benzo(a)Pyrene (BaP)	ng/m ³	BDL	≤ 01	IS:5182 (Part 12):2004
13.	Arsenic (As)	ng/m ³	BDL	≤ 06	IS:3025 (PART-37)
14.	Nickel (Ni)	ng/m ³	BDL	≤ 20	IS:3025 (PART-54) 2003

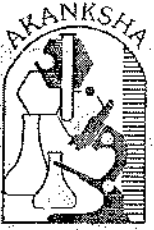
REMARK, OPINION & INTERPRITATION-

- ❖ All above results are within limits as per (NAAQS) National Ambient Air Quality Standards 2009.
- ❖ BDL-Below Detectable Limit.
- ❖ N.S. -Not Specified

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ANALYSIS REPORT FOR AMBIENT AIR QUALITY MONITORING		Page 1 of 1
NAME OF COMPANY:- M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon, Dist.- Pune-412 406	Report No	AL/TR/78-546/23-24
	Report Date	28/02/2024
	Inward No	AL/8 699/02/23-24
	Sampling Date	22/02/2024
Sample Location	South West- Shri. Vitthal Dhobale House	Sampling Time 11:26 AM
Sample Collected By	AARL	Time duration 08 Hr

SR.NO.	PARAMETER	UNIT	RESULT	LIMITS	METHOD
1.	Ambient Temperature	°C	30.0	N.S.	EPA -454/R-99-005
2.	Relative Humidity	% rh	57	N.S.	EPA -454/R-99-005
3.	Sulphur Dioxide (SO ₂)	µg/m ³	24.52	≤ 80	IS:5182(Part-2):2001
4.	Oxides of Nitrogen (NO _x)	µg/m ³	23.89	≤ 80	IS:5182(Part-6):2006
5.	Particulate matter-PM ₁₀ (less than 10 micron)	µg/m ³	51.20	≤ 100	IS:5182(Part-23):2006
6.	Particulate matter-PM _{2.5} (less than 2.5 micron)	µg/m ³	23.65	≤ 60	IS:5182(Part-24):2019
7.	Ozone (O ₃)	µg/m ³	16.52	≤ 180	IS:5182(Part-9):1974
8.	Lead (Pb)	µg/m ³	BDL	≤ 1.0	IS:5182(Part-22):2004
9.	Carbon Monoxide (CO)	mg/m ³	01.38	≤ 04	IS:5182(Part-10):1999
10.	Ammonia as (NH ₃)	µg/m ³	BDL	≤ 400	Method No.401,(Indophenols method)Method Of Air Sampling, 3 rd Edition
11.	Benzene (C ₆ H ₆)	µg/m ³	BDL	≤ 05	IS:5182 (Part 11):2006
12.	Benzo(a)Pyrene (BaP)	ng/m ³	BDL	≤ 01	IS:5182 (Part 12):2004
13.	Arsenic (As)	ng/m ³	BDL	≤ 06	IS:3025 (PART-37)
14.	Nickel (Ni)	ng/m ³	BDL	≤ 20	IS:3025 (PART-54) 2003

REMARK, OPINION & INTERPRITATION-

- ❖ All above results are within limits as per (NAAQS) National Ambient Air Quality Standards 2009.
- ❖ BDL-Below Detectable Limit.
- ❖ N.S. -Not Specified

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ANALYSIS REPORT FOR AMBIENT AIR QUALITY MONITORING				Page 1 of 1
NAME OF COMPANY:- M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon, Dist.- Pune-412 406		Report No	AL/TR/78-547/23-24	
		Report Date	28/02/2024	
		Inward No	AL/8 698/03/23 24	
		Sampling Date	22/02/2024	
Sample Location	North Side- Shri Balasaheb Dhobale House		Sampling Time	11:32 AM
Sample Collected By	AARL		Time duration	08 Hr

SR.NO.	PARAMETER	UNIT	RESULT	LIMITS	METHOD
1.	Ambient Temperature	°C	30.0	N.S.	EPA -454/R-99-005
2.	Relative Humidity	% rh	56	N.S.	EPA -454/R-99-005
3.	Sulphur Dioxide (SO ₂)	µg/m ³	23.15	≤ 80	IS:5182(Part-2):2001
4.	Oxides of Nitrogen (NO _x)	µg/m ³	22.41	≤ 80	IS:5182(Part-6):2006
5.	Particulate matter-PM ₁₀ (less than 10 micron)	µg/m ³	51.40	≤ 100	IS:5182(Part-23):2006
6.	Particulate matter-PM _{2.5} (less than 2.5 micron)	µg/m ³	24.20	≤ 60	IS:5182(Part-24):2019
7.	Ozone (O ₃)	µg/m ³	16.45	≤ 180	IS:5182(Part-9):1974
8.	Lead (Pb)	µg/m ³	BDL	≤ 1.0	IS:5182(Part-22):2004
9.	Carbon Monoxide (CO)	mg/m ³	00.98	≤ 04	IS:5182(Part-10):1999
10.	Ammonia as (NH ₃)	µg/m ³	BDL	≤ 400	Method No.401,(Indophenols method)Method Of Air Sampling, 3 rd Edition
11.	Benzene (C ₆ H ₆)	µg/m ³	BDL	≤ 05	IS:5182 (Part 11):2006
12.	Benzo(a)Pyrene (BaP)	ng/m ³	BDL	≤ 01	IS:5182 (Part 12):2004
13.	Arsenic (As)	ng/m ³	BDL	≤ 06	IS:3025 (PART-37)
14.	Nickel (Ni)	ng/m ³	BDL	≤ 20	IS:3025 (PART-54) 2003

REMARK, OPINION & INTERPRITATION-

- ❖ All above results are within limits as per (NAAQS) National Ambient Air Quality Standards 2009.
- ❖ BDL-Below Detectable Limit.
- ❖ N.S. -Not Specified

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ANALYSIS REPORT FOR AMBIENT AIR QUALITY MONITORING		Page 1 of 1	
NAME OF COMPANY:- M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. -Ambegaon, Dist.- Pune-412 406		Report No	AL/TR/78-548/23-24
		Report Date	28/02/2024
		Inward No	AL/8 698/04/23-24
		Sampling Date	22/02/2024
Sample Location	South Side-Shri. Popat Lole House	Sampling Time	11:42 AM
Sample Collected By	AARL	Time duration	08 Hr

SR.NO.	PARAMETER	UNIT	RESULT	LIMITS	METHOD
1.	Ambient Temperature	°C	30.0	N.S.	EPA -454/R-99-005
2.	Relative Humidity	% rh	57	N.S.	EPA -454/R-99-005
3.	Sulphur Dioxide (SO ₂)	µg/m ³	20.21	≤ 80	IS:5182(Part-2):2001
4.	Oxides of Nitrogen (NO _x)	µg/m ³	19.45	≤ 80	IS:5182(Part-6):2006
5.	Particulate matter-PM ₁₀ (less than 10 micron)	µg/m ³	49.50	≤ 100	IS:5182(Part-23):2006
6.	Particulate matter-PM _{2.5} (less than 2.5 micron)	µg/m ³	20.30	≤ 60	IS:5182(Part-24):2019
7.	Ozone (O ₃)	µg/m ³	16.80	≤ 180	IS:5182(Part-9):1974
8.	Lead (Pb)	µg/m ³	BDL	≤ 1.0	IS:5182(Part-22):2004
9.	Carbon Monoxide (CO)	mg/m ³	01.54	≤ 04	IS:5182(Part-10):1999
10.	Ammonia as (NH ₃)	µg/m ³	BDL	≤ 400	Method No.401,(Indophenols method)Method Of Air Sampling,3 rd Edition
11.	Benzene (C ₆ H ₆)	µg/m ³	BDL	≤ 05	IS:5182 (Part 11):2006
12.	Benzo(a)Pyrene (BaP)	ng/m ³	BDL	≤ 01	IS:5182 (Part 12):2004
13.	Arsenic (As)	ng/m ³	BDL	≤ 06	IS:3025 (PART-37)
14.	Nickel (Ni)	ng/m ³	BDL	≤ 20	IS:3025 (PART-54) 2003

REMARK, OPINION & INTERPRITATION-

- ❖ All above results are within limits as per (NAAQS) National Ambient Air Quality Standards 2009.
- ❖ BDL-Below Detectable Limit.
- ❖ N.S. -Not Specified

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ANALYSIS REPORT FOR AMBIENT AIR QUALITY MONITORING			Page 1 of 1
NAME OF COMPANY:- M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon, Village-Awasari Bk, Tal. - Ambegaon, Dist. - Pune-412 406		Report No	AL/TR/78-549/23-24
		Report Date	28/02/2024
		Inward No	AL/8-698/05/23-24
		Sampling Date	22/02/2024
Sample Location	Kata Gate (Company Premises)	Sampling Time	11:56 AM
Sample Collected By	AARL	Time duration	08 Hr

SR.NO.	PARAMETER	UNIT	RESULT	LIMITS	METHOD
1.	Ambient Temperature	°C	30.0	N.S.	EPA -454/R-99-005
2.	Relative Humidity	% rh	56	N.S.	EPA -454/R-99-005
3.	Sulphur Dioxide (SO ₂)	µg/m ³	23.45	≤ 80	IS:5182(Part-2):2001
4.	Oxides of Nitrogen (NO _x)	µg/m ³	22.14	≤ 80	IS:5182(Part-6):2006
5.	Particulate matter-PM ₁₀ (less than 10 micron)	µg/m ³	52.20	≤ 100	IS:5182(Part-23):2006
6.	Particulate matter-PM _{2.5} (less than 2.5 micron)	µg/m ³	24.10	≤ 60	IS:5182(Part-24):2019
7.	Ozone (O ₃)	µg/m ³	16.56	≤ 180	IS:5182(Part-9):1974
8.	Lead (Pb)	µg/m ³	BDL	≤ 1.0	IS:5182(Part-22):2004
9.	Carbon Monoxide (CO)	mg/m ³	01.47	≤ 04	IS:5182(Part-10):1999
10.	Ammonia as (NH ₃)	µg/m ³	BDL	≤ 400	Method No.401,(Indophenols method)Method Of Air Sampling,3 rd Edition
11.	Benzene (C ₆ H ₆)	µg/m ³	BDL	≤ 05	IS:5182 (Part 11):2006
12.	Benzo(a)Pyrene (BaP)	ng/m ³	BDL	≤ 01	IS:5182 (Part 12):2004
13.	Arsenic (As)	ng/m ³	BDL	≤ 06	IS:3025 (PART-37)
14.	Nickel (Ni)	ng/m ³	BDL	≤ 20	IS:3025 (PART-54) 2003

REMARK, OPINION & INTERPRITATION-

- ❖ All above results are within limits as per (NAAQS) National Ambient Air Quality Standards 2009.
- ❖ BDL-Below Detectable Limit.
- ❖ N.S. -Not Specified

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भीमाशंकर सहकारी साखर कारखाना लि.

पत्र आवक सं. 989

दिनांक - 20/08/2024

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ANALYSIS REPORT FOR AMBIENT AIR QUALITY MONITORING			Page 1 of 1
NAME OF COMPANY:- M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon, Dist. - Pune-412 406		Report No	AL/TR/79-646/2024-25
		Report Date	06/04/2024
		Inward No	AL/8-787/01/2024-25
		Samplin Date	30/03/2024
		Sampling Time	10:50 AM
Sample Location	South East - Shri Bharat Dhobale House	Time duration	08 Hr
Sample Collected By	AARL		

SR.NO.	PARAMETER	UNIT	RESULT	LIMITS	METHOD
1.	Ambient Temperature	°C	32.0	N.S.	EPA -454/R-99-005
2.	Relative Humidity	% rh	36	N.S.	EPA -454/R-99-005
3.	Sulphur Dioxide (SO ₂)	µg/m ³	23.45	≤ 80	IS:5182(Part-2/Sec-1)RA2023
4.	Oxides of Nitrogen (NO _x)	µg/m ³	18.20	≤ 80	IS:5182(Part-6)RA 2022
5.	Particulate matter-PM ₁₀ (less than 10 micron)	µg/m ³	50.30	≤ 100	IS:5182(Part-23)RA 2022
6.	Particulate matter-PM _{2.5} (less than 2.5 micron)	µg/m ³	24.20	≤ 60	IS:5182(Part-24):2019
7.	Ozone (O ₃)	µg/m ³	16.45	≤ 180	IS:5182(Part-9)RA 2019
8.	Lead (Pb)	µg/m ³	BDL	≤ 1.0	IS:5182(Part-22)RA 2019
9.	Carbon Monoxide (CO)	mg/m ³	01.52	≤ 04	IS:5182(Part-10)RA 2019
10.	Ammonia as (NH ₃)	µg/m ³	BDL	≤ 400	Method No.401, (Indophenols method) Method Of Air Sampling, 3 rd Edition
11.	Benzene (C ₆ H ₆)	µg/m ³	BDL	≤ 05	IS:5182 (Part 11)RA 2022
12.	Benzo(a)Pyrene (BaP)	ng/m ³	BDL	≤ 01	IS:5182 (Part 12)RA 2019
13.	Arsenic (As)	ng/m ³	BDL	≤ 06	Lab Method/SOP/013/AAS EPM 2000 Equivalent filter paper
14.	Nickel (Ni)	ng/m ³	BDL	≤ 20	Lab Method/SOP/014/AAS EPM 2000 Equivalent filter paper

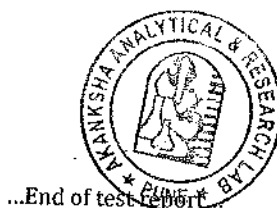
Details of equipment used and its Calibration Certificate

Name of Equipment	Lab ID No.	Calibration Certificate No.	Validity
Ambient Air Quality Machine	AK-AAQ-03	2250148	30/07/2024
Digital Weighing Balance	AL-DWB-01	2023/60146/01	27/06/2024
Spectrophotometer	AARL/SPM/02	2250120	01/08/2024
Atomic Absorption Spectrometer	AARL/AA/01	2250106	01/08/2024

REMARK, OPINION & INTERPRITATION-

- All above results are within limits as per (NAAQS) National Ambient Air Quality Standards 2009.
- BDL-Below Detectable Limit.
- N.S. -Not Specified

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ANALYSIS REPORT FOR AMBIENT AIR QUALITY MONITORING				Page 1 of 1
NAME OF COMPANY:- M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. -Ambegaon, Dist.- Pune-412 406		Report No	AL/TR/79-647/2024-25	
		Report Date	06/04/2024	
		Inward No	AL/8-787/02/2024-25	
		Sampling Date	30/03/2024	
Sample Location	South West- Shri. Mayur Dhobale House	Sampling Time	11:00 AM	
Sample Collected By	AARL	Time duration	08 Hr	

SR.NO.	PARAMETER	UNIT	RESULT	LIMITS	METHOD
1.	Ambient Temperature	°C	30.0	N.S.	EPA -454/R-99-005
2.	Relative Humidity	% rh	37	N.S.	EPA -454/R-99-005
3.	Sulphur Dioxide (SO ₂)	µg/m ³	23.69	≤ 80	IS:5182(Part-2/Sec-1)RA2023
4.	Oxides of Nitrogen (NO _x)	µg/m ³	24.58	≤ 80	IS:5182(Part-6)RA 2022
5.	Particulate matter-PM ₁₀ (less than 10 micron)	µg/m ³	52.30	≤ 100	IS:5182(Part-23)RA 2022
6.	Particulate matter-PM _{2.5} (less than 2.5 micron)	µg/m ³	24.80	≤ 60	IS:5182(Part-24):2019
7.	Ozone (O ₃)	µg/m ³	16.78	≤ 180	IS:5182(Part-9)RA 2019
8.	Lead (Pb)	µg/m ³	BDL	≤ 1.0	IS:5182(Part-22)RA 2019
9.	Carbon Monoxide (CO)	mg/m ³	01.65	≤ 04	IS:5182(Part-10)RA 2019
10.	Ammonia as (NH ₃)	µg/m ³	BDL	≤ 400	Method No.401, (Indophenols method) Method Of Air Sampling, 3 rd Edition
11.	Benzene (C ₆ H ₆)	µg/m ³	BDL	≤ 05	IS:5182 (Part 11)RA 2022
12.	Benzo(a)Pyrene (BaP)	ng/m ³	BDL	≤ 01	IS:5182 (Part 12)RA 2019
13.	Arsenic (As)	ng/m ³	BDL	≤ 06	Lab Method/SOP/013/AAS EPM 2000 Equivalent filter paper
14.	Nickel (Ni)	ng/m ³	BDL	≤ 20	Lab Method/SOP/014/AAS EPM 2000 Equivalent filter paper

Details of equipment used and its Calibration Certificate

Name of Equipment	Lab ID No.	Calibration Certificate No.	Validity
Ambient Air Quality Machine	AK-AAQ-04	2250149	30/07/2024
Digital Weighing Balance	AL-DWB-01	2023/60146/01	27/06/2024
Spectrophotometer	AARL/SPM/02	2250120	01/08/2024
Atomic Absorption Spectrometer	AARL/AA/01	2250106	01/08/2024

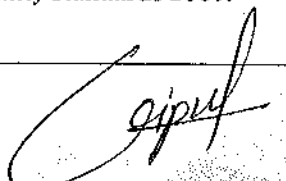
REMARK, OPINION & INTERPRITATION-

- All above results are within limits as per (NAAQS) National Ambient Air Quality Standards 2009.
- BDL-Below Detectable Limit.
- N.S. -Not Specified


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ANALYSIS REPORT FOR AMBIENT AIR QUALITY MONITORING				Page 1 of 1
NAME OF COMPANY:- M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. -Ambegaon, Dist.- Pune-412 406		Report No	AL/TR/79-648/2024-25	
		Report Date	06/04/2024	
		Inward No	AL/8-787/03/2024-25	
		Sampling Date	30/03/2024	
Sample Location	North East- Shri Pandurang Karande House		Sampling Time	11:45 AM
Sample Collected By	AARL		Time duration	08 Hr

SR.NO.	PARAMETER	UNIT	RESULT	LIMITS	METHOD
1.	Ambient Temperature	°C	32.0	N.S.	EPA -454/R-99-005
2.	Relative Humidity	% rh	35	N.S.	EPA -454/R-99-005
3.	Sulphur Dioxide (SO ₂)	µg/m ³	24.65	≤ 80	IS:5182(Part-2/Sec-1)RA2023
4.	Oxides of Nitrogen (NO _x)	µg/m ³	23.78	≤ 80	IS:5182(Part-6)RA 2022
5.	Particulate matter-PM ₁₀ (less than 10 micron)	µg/m ³	53.60	≤ 100	IS:5182(Part-23)RA 2022
6.	Particulate matter-PM _{2.5} (less than 2.5 micron)	µg/m ³	23.20	≤ 60	IS:5182(Part-24):2019
7.	Ozone (O ₃)	µg/m ³	16.47	≤ 180	IS:5182(Part-9)RA 2019
8.	Lead (Pb)	µg/m ³	BDL	≤ 1.0	IS:5182(Part-22)RA 2019
9.	Carbon Monoxide (CO)	mg/m ³	01.75	≤ 04	IS:5182(Part-10)RA 2019
10.	Ammonia as (NH ₃)	µg/m ³	BDL	≤ 400	Method No.401, (Indophenols method) Method Of Air Sampling, 3 rd Edition
11.	Benzene (C ₆ H ₆)	µg/m ³	BDL	≤ 05	IS:5182 (Part 11)RA 2022
12.	Benzo(a)Pyrene (BaP)	ng/m ³	BDL	≤ 01	IS:5182 (Part 12)RA 2019
13.	Arsenic (As)	ng/m ³	BDL	≤ 06	Lab Method/SOP/013/AAS EPM 2000 Equivalent filter paper
14.	Nickel (Ni)	ng/m ³	BDL	≤ 20	Lab Method/SOP/014/AAS EPM 2000 Equivalent filter paper

Details of equipment used and its Calibration Certificate

Name of Equipment	Lab ID No.	Calibration Certificate No.	Validity
Ambient Air Quality Machine	AK-AAQ-05	2250150	30/07/2024
Digital Weighing Balance	AL-DWB-01	2023/60146/01	27/06/2024
Spectrophotometer	AARL/SPM/02	2250120	01/08/2024
Atomic Absorption Spectrometer	AARL/AA/01	2250106	01/08/2024

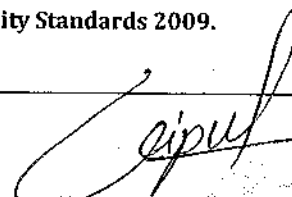
REMARK, OPINION & INTERPRITATION-

- All above results are within limits as per (NAAQS) National Ambient Air Quality Standards 2009.
- BDL-Below Detectable Limit.
- N.S. -Not Specified


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ANALYSIS REPORT FOR AMBIENT AIR QUALITY MONITORING				Page 1 of 1
NAME OF COMPANY:- M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon, Village Awasari Blk., Tal. - Ambegaon, Dist. - Pune-412 406		Report No	AL/TR/79-649/2024-25	
		Report Date	06/04/2024	
		Inward No	AL/8-787/04/2024-25	
		Smpling Date	30/03/2024	
Sample Location	North West- Mr. Prashant Asware	Sampling Time	12:10 PM	
Sample Collected By	AARL	Time duration	08 Hr	

SR.NO.	PARAMETER	UNIT	RESULT	LIMITS	METHOD
1.	Ambient Temperature	°C	32.0	N.S.	EPA -454/R-99-005
2.	Relative Humidity	% rh	35	N.S.	EPA -454/R-99-005
3.	Sulphur Dioxide (SO ₂)	µg/m ³	24.30	≤ 80	IS:5182(Part-2/Sec-1)RA2023
4.	Oxides of Nitrogen (NO _x)	µg/m ³	23.21	≤ 80	IS:5182(Part-6)RA 2022
5.	Particulate matter-PM ₁₀ (less than 10 micron)	µg/m ³	50.40	≤ 100	IS:5182(Part-23)RA 2022
6.	Particulate matter-PM _{2.5} (less than 2.5 micron)	µg/m ³	23.10	≤ 60	IS:5182(Part-24):2019
7.	Ozone (O ₃)	µg/m ³	16.54	≤ 180	IS:5182(Part-9)RA 2019
8.	Lead (Pb)	µg/m ³	BDL	≤ 1.0	IS:5182(Part-22)RA 2019
9.	Carbon Monoxide (CO)	mg/m ³	01.78	≤ 04	IS:5182(Part-10)RA 2019
10.	Ammonia as (NH ₃)	µg/m ³	BDL	≤ 400	Method No.401, (Indophenols method) Method Of Air Sampling, 3 rd Edition
11.	Benzene (C ₆ H ₆)	µg/m ³	BDL	≤ 05	IS:5182 (Part 11)RA 2022
12.	Benzo(a)Pyrene (BaP)	ng/m ³	BDL	≤ 01	IS:5182 (Part 12)RA 2019
13.	Arsenic (As)	ng/m ³	BDL	≤ 06	Lab Method/SOP/013/AAS EPM 2000 Equivalent filter paper
14.	Nickel (Ni)	ng/m ³	BDL	≤ 20	Lab Method/SOP/014/AAS EPM 2000 Equivalent filter paper

Details of equipment used and its Calibration Certificate			
Name of Equipment	Lab ID No.	Calibration Certificate No.	Validity
Ambient Air Quality Machine	AK-AAQ-06	2250151	30/07/2024
Digital Weighing Balance	AL-DWB-01	2023/60146/01	27/06/2024
Spectrophotometer	AARL/SPM/02	2250120	01/08/2024
Atomic Absorption Spectrometer	AARL/AA/01	2250106	01/08/2024

REMARK, OPINION & INTERPRITATION-

- ❖ All above results are within limits as per (NAAQS) National Ambient Air Quality Standards 2009.
- ❖ BDL-Below Detectable Limit.
- ❖ N.S. -Not Specified

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ANALYSIS REPORT FOR AMBIENT AIR QUALITY MONITORING				Page 1 of 1
NAME OF COMPANY:- M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon, Dist. - Pune-412 406		Report No	AL/TR/79-650/2024-25	
		Report Date	06/04/2024	
		Inward No	AL/8-787/05/2024-25	
		Sampling Date	30/03/2024	
Sample Location	Main Gate (Company Premises)	Sampling Time	10:30 AM	
Sample Collected By	AARL	Time duration	08 Hr	

SR.NO.	PARAMETER	UNIT	RESULT	LIMITS	METHOD
1.	Ambient Temperature	°C	32.0	N.S.	EPA -454/R-99-005
2.	Relative Humidity	% rh	35	N.S.	EPA -454/R-99-005
3.	Sulphur Dioxide (SO ₂)	µg/m ³	24.69	≤ 80	IS:5182(Part-2/Sec-1)RA2023
4.	Oxides of Nitrogen (NO _x)	µg/m ³	25.62	≤ 80	IS:5182(Part-6)RA 2022
5.	Particulate matter-PM ₁₀ (less than 10 micron)	µg/m ³	54.20	≤ 100	IS:5182(Part-23)RA 2022
6.	Particulate matter-PM _{2.5} (less than 2.5 micron)	µg/m ³	25.80	≤ 60	IS:5182(Part-24):2019
7.	Ozone (O ₃)	µg/m ³	16.74	≤ 180	IS:5182(Part-9)RA 2019
8.	Lead (Pb)	µg/m ³	BDL	≤ 1.0	IS:5182(Part-22)RA 2019
9.	Carbon Monoxide (CO)	mg/m ³	01.86	≤ 04	IS:5182(Part-10)RA 2019
10.	Ammonia as (NH ₃)	µg/m ³	BDL	≤ 400	Method No.401, (Indophenols method) Method Of Air Sampling, 3 rd Edition
11.	Benzene (C ₆ H ₆)	µg/m ³	BDL	≤ 05	IS:5182 (Part 11)RA 2022
12.	Benzo(a)Pyrene (BaP)	ng/m ³	BDL	≤ 01	IS:5182 (Part 12)RA 2019
13.	Arsenic (As)	ng/m ³	BDL	≤ 06	Lab Method/SOP/013/AAS EPM 2000 Equivalent filter paper
14.	Nickel (Ni)	ng/m ³	BDL	≤ 20	Lab Method/SOP/014/AAS EPM 2000 Equivalent filter paper

Details of equipment used and its Calibration Certificate			
Name of Equipment	Lab ID No.	Calibration Certificate No.	Validity
Ambient Air Quality Machine	AK-AAQ-01	2250146	30/07/2024
Digital Weighing Balance	AL-DWB-01	2023/60146/01	27/06/2024
Spectrophotometer	AARL/SPM/02	2250120	01/08/2024
Atomic Absorption Spectrometer	AARL/AA/01	2250106	01/08/2024

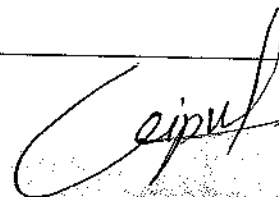
REMARK, OPINION & INTERPRITATION-

- All above results are within limits as per (NAAQS) National Ambient Air Quality Standards 2009.
- BDL-Below Detectable Limit.
- N.S. -Not Specified


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SOURCE EMISSION MONITORING REPORT				Page 1 of 1
NAME OF COMPANY:- M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon, Dist. - Pune-412 406		Report No	AL/TR/76-469/23-24	
		Report Date	09/12/2023	
		Inward No	AL/8-492/07/23-24	
		Sampling Date	30/11/2023	
Sample Location	Old Boiler (45 T/hr)-2	Sampling Time	12:10 PM	
Sample Collected By	AARL	Time duration	30 Min	

SR. NO	DESCRIPTION	UNIT	RESULT	LIMITS	METHOD
A. Stack Details					
1.	Material of stack	--	RCC	N.S.	--
2.	Type of fuel	--	Bagasse	N.S.	--
3.	Stack Height from G.L.	m	60.00	N.S.	--
4.	Type of Stack	--	Round	N.S.	--
5.	Dimensions of Stack	m	04.00	N.S.	--
6.	Stack area	m ²	12.56	N.S.	--
B. Parameters					
7.	Flue Gas Temperature	°C	120.0	N.S.	IS 11255 (PART 3):2008
8.	Differential Pressure	mmwg	04.30	N.S.	IS 11255 (PART 3):2008
9.	Velocity	m/s	07.80	N.S.	IS 11255 (PART 3):2008
10.	Gas volume	Nm ³ /hr.	267624.23	N.S.	IS 11255 (PART 3):2008
11.	Particulate Matter	mg/Nm ³	102.50	≤ 150	IS 11255 (PART 1):1985
12.	Sulphur Dioxide	kg/day	120.53	≤ 3920	IS 11255 (PART 2):1985
13.	Oxide of Nitrogen	mg/Nm ³	148.80	N.S.	IS 11255 (PART 7):2005
14.	Carbon Monoxide	ppm	2425.14	N.S.	IS 13270 :1992

REMARK, OPINION & INTERPRITATION-

- ❖ All above results are within limits as per MPCB Consent.
- ❖ BDL-Below Detectable Limit.
- ❖ N.S. - Not Specified

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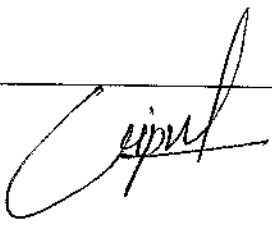
SOURCE EMISSION MONITORING REPORT			Page 1 of 1
NAME OF COMPANY:- M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon, Village-Awasari Bk, Tal. - Ambegaon, Dist. - Pune-412 406		Report No	AL/TR/76-470/23-24
		Report Date	09/12/2023
		Inward No	AL/8-492/08/23-24
		Sampling Date	30/11/2023
Sample Location	New Boiler (80 T/hr)-1	Sampling Time	12:40 PM
Sample Collected By	AARL	Time duration	30 Min

SR. NO	DESCRIPTION	UNIT	RESULT	LIMITS	METHOD
A. Stack Details					
1.	Material of stack	--	RCC	N.S.	--
2.	Type of fuel	--	Bagasse	N.S.	--
3.	Stack Height from G.L.	m	72.00	N.S.	--
4.	Type of Stack	--	Round	N.S.	--
5.	Dimensions of Stack	m	03.54	N.S.	--
6.	Stack area	m ²	09.83	N.S.	--
B. Parameters					
7.	Flue Gas Temperature	° C	133.0	N.S.	IS 11255 (PART 3):2008
8.	Differential Pressure	mmwg	03.67	N.S.	IS 11255 (PART 3):2008
9.	Velocity	m/s	07.32	N.S.	IS 11255 (PART 3):2008
10.	Gas volume	Nm ³ /hr.	190521.58	N.S.	IS 11255 (PART 3):2008
11.	Particulate Matter	mg/Nm ³	111.40	≤ 150	IS 11255 (PART 1):1985
12.	Sulphur Dioxide	kg/day	1376.20	≤ 3120	IS 11255 (PART 2): 1985
13.	Oxide of Nitrogen	mg/Nm ³	228.60	N.S.	IS 11255 (PART 7):2005
14.	Carbon Monoxide	ppm	2545.2	N.S.	IS 13270 :1992

REMARK, OPINION & INTERPRITATION-

- ❖ All above results are within limits as per MPCB Consent.
- ❖ BDL-Below Detectable Limit.
- ❖ N.S. - Not Specified


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SOURCE EMISSION MONITORING REPORT		Page 1 of 1
NAME OF COMPANY:- M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon, Dist. - Pune-412 406	Report No	AL/TR/77-296/23-24
	Report Date	05/01/2024
	Inward No	AL/8-566/07/23-24
	Sampling Date	27/12/2023
Sample Location	Old Boiler (45 T/hr)-2	Sampling Time 03:00 PM
Sample Collected By	AARL	Time duration 30 Min

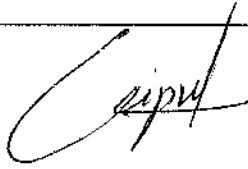
SR. NO	DESCRIPTION	UNIT	RESULT	LIMITS	METHOD
A. Stack Details					
1.	Material of stack	--	RCC	N.S.	--
2.	Type of fuel	--	Bagasse	N.S.	--
3.	Stack Height from G.L.	m	60.00	N.S.	--
4.	Type of Stack	--	Round	N.S.	--
5.	Dimensions of Stack	m	04.00	N.S.	--
6.	Stack area	m ²	12.56	N.S.	--
B. Parameters					
7.	Flue Gas Temperature	° C	121.0	N.S.	IS 11255 (PART 3):2008
8.	Differential Pressure	mmwg	04.31	N.S.	IS 11255 (PART 3):2008
9.	Velocity	m/s	07.82	N.S.	IS 11255 (PART 3):2008
10.	Gas volume	Nm ³ /hr.	267595.09	N.S.	IS 11255 (PART 3):2008
11.	Particulate Matter	mg/Nm ³	98.26	≤ 150	IS 11255 (PART 1):1985
12.	Sulphur Dioxide	kg/day	122.26	≤ 3920	IS 11255 (PART 2):1985
13.	Oxide of Nitrogen	mg/Nm ³	147.26	N.S.	IS 11255 (PART 7):2005
14.	Carbon Monoxide	ppm	2413.25	N.S.	IS 13270 :1992

REMARK, OPINION & INTERPRITATION-

- ❖ All above results are within limits as per MPCB Consent.
- ❖ BDL-Below Detectable Limit.
- ❖ N.S. - Not Specified


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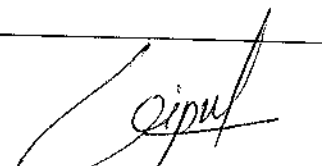
SOURCE EMISSION MONITORING REPORT				Page 1 of 1
NAME OF COMPANY:- M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon, Dist. - Pune-412 406		Report No	AL/TR/77-297/23-24	
		Report Date	05/01/2024	
		Inward No	AL/8-566/08/23-24	
		Sampling Date	27/12/2023	
Sample Location	New Boiler (80 T/hr)-1	Sampling Time	03:30 PM	
Sample Collected By	AARL	Time duration	30 Min	

SR. NO	DESCRIPTION	UNIT	RESULT	LIMITS	METHOD
A. Stack Details					
1.	Material of stack	--	RCC	N.S.	--
2.	Type of fuel	--	Bagasse	N.S.	--
3.	Stack Height from G.L.	m	72.00	N.S.	--
4.	Type of Stack	--	Round	N.S.	--
5.	Dimensions of Stack	m	03.54	N.S.	--
6.	Stack area	m ²	09.83	N.S.	--
B. Parameters					
7.	Flue Gas Temperature	°C	134.0	N.S.	IS 11255 (PART 3):2008
8.	Differential Pressure	mmwg	03.68	N.S.	IS 11255 (PART 3):2008
9.	Velocity	m/s	07.34	N.S.	IS 11255 (PART 3):2008
10.	Gas volume	Nm ³ /hr.	190546.45	N.S.	IS 11255 (PART 3):2008
11.	Particulate Matter	mg/Nm ³	99.23	≤ 150	IS 11255 (PART 1):1985
12.	Sulphur Dioxide	kg/day	1352.36	≤ 3120	IS 11255 (PART 2): 1985
13.	Oxide of Nitrogen	mg/Nm ³	242.25	N.S.	IS 11255 (PART 7):2005
14.	Carbon Monoxide	ppm	2548.60	N.S.	IS 13270 :1992

REMARK, OPINION & INTERPRITATION-

- ❖ All above results are within limits as per MPCB Consent.
- ❖ BDL-Below Detectable Limit.
- ❖ N.S. - Not Specified


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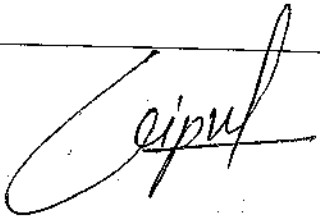
SOURCE EMISSION MONITORING REPORT				Page 1 of 1
NAME OF COMPANY:- M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon, Dist. - Pune-412 406		Report No	AL/TR/78-009/23-24	
		Report Date	05/02/2024	
		Inward No	AL/8-641/07/23-24	
		Sampling Date	27/01/2024	
Sample Location	Old Boiler (45 T/hr)-2 No.	Sampling Time	12:40 PM	
Sample Collected By	AARL	Time duration	30 Min	

SR. NO	DESCRIPTION	UNIT	RESULT	LIMITS	METHOD
A. Stack Details					
1.	Material of stack	--	RCC	N.S.	--
2.	Type of fuel	--	Bagasse	N.S.	--
3.	Stack Height from G.L.	m	60.00	N.S.	--
4.	Type of Stack	--	Round	N.S.	--
5.	Dimensions of Stack	m	04.00	N.S.	--
6.	Stack area	m ²	12.56	N.S.	--
B. Parameters					
7.	Flue Gas Temperature	°C	122.0	N.S.	IS 11255 (PART 3):2008
8.	Differential Pressure	mmwg	04.32	N.S.	IS 11255 (PART 3):2008
9.	Velocity	m/s	07.84	N.S.	IS 11255 (PART 3):2008
10.	Gas volume	Nm ³ /hr.	267566.01	N.S.	IS 11255 (PART 3):2008
11.	Particulate Matter	mg/Nm ³	90.40	≤ 150	IS 11255 (PART 1):1985
12.	Sulphur Dioxide	kg/day	128.50	≤ 3920	IS 11255 (PART 2):1985
13.	Oxide of Nitrogen	mg/Nm ³	150.63	N.S.	IS 11255 (PART 7):2005
14.	Carbon Monoxide	ppm	2425.36	N.S.	IS 13270 :1992

REMARK, OPINION & INTERPRITATION-

- ❖ All above results are within limits as per MPCB Consent.
- ❖ BDL-Below Detectable Limit.
- ❖ N.S. - Not Specified


Verified by
(Analyst)


Authorized Signatory

...End of test report...



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- ISO 45001:2018 Certified Organization

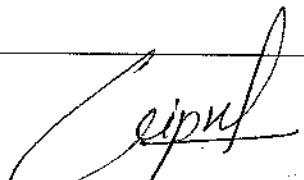
SOURCE EMISSION MONITORING REPORT		Page 1 of 1	
NAME OF COMPANY:- M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon, Dist. - Pune-412 406		Report No	AL/TR/78-010/23-24
		Report Date	05/02/2024
		Inward No	AL/8-641/08/23-24
		Sampling Date	27/01/2024
Sample Location	New Boiler (80 T/hr)-1 No.	Sampling Time	01:10 PM
Sample Collected By	AARL	Time duration	30 Min

SR. NO	DESCRIPTION	UNIT	RESULT	LIMITS	METHOD
A. Stack Details					
1.	Material of stack	--	RCC	N.S.	--
2.	Type of fuel	--	Bagasse	N.S.	--
3.	Stack Height from G.L.	m	72.00	N.S.	--
4.	Type of Stack	--	Round	N.S.	--
5.	Dimensions of Stack	m	03.54	N.S.	--
6.	Stack area	m ²	09.83	N.S.	--
B. Parameters					
7.	Flue Gas Temperature	° C	135.0	N.S.	IS 11255 (PART 3):2008
8.	Differential Pressure	mmwg	03.69	N.S.	IS 11255 (PART 3):2008
9.	Velocity	m/s	07.36	N.S.	IS 11255 (PART 3):2008
10.	Gas volume	Nm ³ /hr.	190571.20	N.S.	IS 11255 (PART 3):2008
11.	Particulate Matter	mg/Nm ³	96.20	≤ 150	IS 11255 (PART 1):1985
12.	Sulphur Dioxide	kg/day	1355.63	≤ 3120	IS 11255 (PART 2): 1985
13.	Oxide of Nitrogen	mg/Nm ³	244.45	N.S.	IS 11255 (PART 7):2005
14.	Carbon Monoxide	ppm	2550.25	N.S.	IS 13270 :1992

REMARK, OPINION & INTERPRITATION-

- ❖ All above results are within limits as per MPCB Consent.
- ❖ BDL-Below Detectable Limit.
- ❖ N.S. - Not Specified


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(Analyst)


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...End of test report...



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SOURCE EMISSION MONITORING REPORT				Page 1 of 1
NAME OF COMPANY:-		Report No	AL/TR/78-551/23-24	
M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd.		Report Date	28/02/2024	
Dattatraynagar, Pargaon,		Inward No	AL/8-698/07/23-24	
Village-Awasari Bk., Tal. - Ambegaon, Dist. - Pune-412 406		Sampling Date	22/02/2024	
Sample Location	Old Boiler (45 T/hr)-2 No.	Sampling Time	01:30 PM	
Sample Collected By	AARL	Time duration	30 Min	

SR. NO	DESCRIPTION	UNIT	RESULT	LIMITS	METHOD
A. Stack Details					
1.	Material of stack	--	RCC	N.S.	--
2.	Type of fuel	--	Bagasse	N.S.	--
3.	Stack Height from G.L.	m	60.00	N.S.	--
4.	Type of Stack	--	Round	N.S.	--
5.	Dimensions of Stack	m	04.00	N.S.	--
6.	Stack area	m ²	12.56	N.S.	--
B. Parameters					
7.	Flue Gas Temperature	°C	123.0	N.S.	IS 11255 (PART 3):2008
8.	Differential Pressure	mmwg	04.33	N.S.	IS 11255 (PART 3):2008
9.	Velocity	m/s	07.86	N.S.	IS 11255 (PART 3):2008
10.	Gas volume	Nm ³ /hr.	267537.07	N.S.	IS 11255 (PART 3):2008
11.	Particulate Matter	mg/Nm ³	92.10	≤ 150	IS 11255 (PART 1):1985
12.	Sulphur Dioxide	kg/day	130.52	≤ 3920	IS 11255 (PART 2):1985
13.	Oxide of Nitrogen	mg/Nm ³	153.41	N.S.	IS 11255 (PART 7):2005
14.	Carbon Monoxide	ppm	2430.56	N.S.	IS 13270 :1992

REMARK, OPINION & INTERPRITATION-

- ❖ All above results are within limits as per MPCB Consent.
- ❖ BDL-Below Detectable Limit.
- ❖ N.S. - Not Specified

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...End of test report...



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SOURCE EMISSION MONITORING REPORT			Page 1 of 1
NAME OF COMPANY:- M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon, Dist. - Pune-412 406		Report No	AL/TR/78-552/23-24
		Report Date	28/02/2024
		Inward No	AL/8-698/08/23-24
		Sampling Date	22/02/2024
Sample Location	New Boiler (80 T/hr)-1 No.	Sampling Time	02:00 PM
Sample Collected By	AARL	Time duration	30 Min

SR. NO	DESCRIPTION	UNIT	RESULT	LIMITS	METHOD
A. Stack Details					
1.	Material of stack	--	RCC	N.S.	--
2.	Type of fuel	--	Bagasse	N.S.	--
3.	Stack Height from G.L.	m	72.00	N.S.	--
4.	Type of Stack	--	Round	N.S.	--
5.	Dimensions of Stack	m	03.54	N.S.	--
6.	Stack area	m ²	09.83	N.S.	--
B. Parameters					
7.	Flue Gas Temperature	° C	136.0	N.S.	IS 11255 (PART 3):2008
8.	Differential Pressure	mmwg	03.70	N.S.	IS 11255 (PART 3):2008
9.	Velocity	m/s	07.38	N.S.	IS 11255 (PART 3):2008
10.	Gas volume	Nm ³ /hr.	190595.82	N.S.	IS 11255 (PART 3):2008
11.	Particulate Matter	mg/Nm ³	94.30	≤ 150	IS 11255 (PART 1):1985
12.	Sulphur Dioxide	kg/day	1345.31	≤ 3120	IS 11255 (PART 2): 1985
13.	Oxide of Nitrogen	mg/Nm ³	250.45	N.S.	IS 11255 (PART 7):2005
14.	Carbon Monoxide	ppm	2558.14	N.S.	IS 13270 :1992

REMARK, OPINION & INTERPRITATION-

- ❖ All above results are within limits as per MPCB Consent.
- ❖ BDL-Below Detectable Limit.
- ❖ N.S. - Not Specified

C. S. Patil

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...End of test report...



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SOURCE EMISSION MONITORING REPORT				Page 1 of 1
NAME OF COMPANY:- M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon, Dist. - Pune-412 406		Report No	AL/TR/79-652/2024-25	
		Report Date	06/04/2024	
		Inward No	AL/8-787/07/2024-25	
		Sampling Date	30/03/2024	
Sample Location	Old Boiler (45 T/hr)-2 No.	Sampling Time	12:40 PM	
Sample Collected By	AARL	Time duration	30 Min	

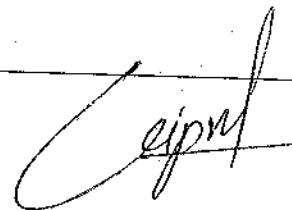
SR. NO	DESCRIPTION	UNIT	RESULT	LIMITS	METHOD
A. Stack Details					
1.	Material of stack	--	RCC	N.S.	--
2.	Type of fuel	--	Bagasse	N.S.	--
3.	Stack Height from G.L.	m	60.00	N.S.	--
4.	Type of Stack	--	Round	N.S.	--
5.	Dimensions of Stack	m	04.00	N.S.	--
6.	Stack area	m ²	12.56	N.S.	--
B. Parameters					
7.	Flue Gas Temperature	°C	124.0	N.S.	IS 11255 (PART 3) RA 2013
8.	Differential Pressure	mmwg	04.34	N.S.	IS 11255 (PART 3) RA 2013
9.	Velocity	m/s	07.88	N.S.	IS 11255 (PART 3) RA 2013
10.	Gas volume	Nm ³ /hr.	267508.28	N.S.	IS 11255 (PART 3) RA 2013
11.	Particulate Matter	mg/Nm ³	96.40	≤ 150	IS 11255 (PART 1) RA 2019
12.	Sulphur Dioxide	kg/day	122.69	<3920	IS 11255 (PART 2) RA 2019
13.	Oxide of Nitrogen	mg/Nm ³	144.85	N.S.	IS 11255 (PART 7) RA2022
14.	Carbon Monoxide	ppm	2442.65	N.S.	IS:13270(Part-3):2008
Details of equipment used and its Calibration Certificate					
Name of Equipment		Lab ID No.	Calibration Certificate No.	Validity	
Flue Gas Analyzer		AK-VAYU-03	VAYU-098	03/05/2024	
Stack Monitoring Kit Manual		AK-SMK-01	2250144	30/07/2024	

REMARK, OPINION & INTERPRITATION-

- ❖ All above results are within limits as per MPCB Consent.
- ❖ BDL-Below Detectable Limit.
- ❖ N.S. - Not Specified


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SOURCE EMISSION MONITORING REPORT				Page 1 of 1
NAME OF COMPANY:- M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon, Village-Awasari Bk, Tal. - Ambegaon, Dist. - Pune-412 406		Report No	AL/TR/79-653/2024-25	
		Report Date	06/04/2024	
		Inward No	AL/8-787/08/2024-25	
		Sampling Date	30/03/2024	
Sample Location	New Boiler (80 T/hr)-1 No.	Sampling Time	01:20 PM	
Sample Collected By	AARI.	Time duration	30 Min	

SR. NO	DESCRIPTION	UNIT	RESULT	LIMITS	METHOD
A. Stack Details					
1.	Material of stack	--	RCC	N.S.	--
2.	Type of fuel	--	Bagasse	N.S.	--
3.	Stack Height from G.L.	m	72.00	N.S.	--
4.	Type of Stack	--	Round	N.S.	--
5.	Dimensions of Stack	m	03.54	N.S.	--
6.	Stack area	m ²	09.83	N.S.	--
B. Parameters					
7.	Flue Gas Temperature	° C	137.0	N.S.	IS 11255 (PART 3) RA 2013
8.	Differential Pressure	mmwg	03.71	N.S.	IS 11255 (PART 3) RA 2013
9.	Velocity	m/s	07.40	N.S.	IS 11255 (PART 3) RA 2013
10.	Gas volume	Nm ³ /hr.	190620.32	N.S.	IS 11255 (PART 3) RA 2013
11.	Particulate Matter	mg/Nm ³	96.20	≤ 150	IS 11255 (PART 1) RA 2019
12.	Sulphur Dioxide	kg/day	1312.45	≤ 3120	IS 11255 (PART 2) RA 2019
13.	Oxide of Nitrogen	mg/Nm ³	263.32	N.S.	IS 11255 (PART 7) RA 2022
14.	Carbon Monoxide	ppm	2565.26	N.S.	IS:13270(Part-3):2008

Details of equipment used and its Calibration Certificate

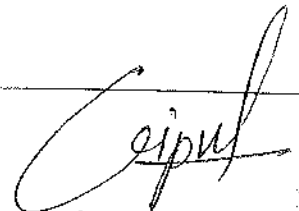
Name of Equipment	Lab ID No.	Calibration Certificate No.	Validity
Flue Gas Analyzer	AK-VAYU-03	VAYU-098	03/05/2024
Stack Monitoring Kit Manual	AK-SMK-01	2250144	30/07/2024

REMARK, OPINION & INTERPRITATION:-

- ❖ All above results are within limits as per MPCB Consent.
- ❖ BDL-Below Detectable Limit.
- ❖ N.S. - Not Specified


Verified by
(Analyst)




Authorized Signatory

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EnviroConnect Forbes Marshall Multi Station Report

From Date 01-03-2024 00:00
To Date 31-03-2024 23:59
Interval Daily
Function Average

Plant BSSK
Analyzer STACK1
Parameter PM
Unit mg/Nm3
Limit 0.00 - 150.00

15-03-2024 00:00	23 < M
16-03-2024 00:00	21.63 <
17-03-2024 00:00	22.02 <
18-03-2024 00:00	22 <
19-03-2024 00:00	19.73 <
20-03-2024 00:00	22.86 <
21-03-2024 00:00	22.75 <
22-03-2024 00:00	22.34 <
26-03-2024 00:00	66 < M
27-03-2024 00:00	66 < M
28-03-2024 00:00	66 < M
29-03-2024 00:00	66 < M
30-03-2024 00:00	66 < M
31-03-2024 00:00	66 < M

Average	40.9
Geom.Mean	35.2
Maximum	66
Median	22.9
Minimum	19.7
Mode	66
Std.Deviation	22.6
Total Active Duration	

EnviroConnect Forbes Marshall Multi Station Report

From Date 01-04-2024 00:00
 To Date 30-04-2024 23:59
 Interval Daily
 Function Average

Plant BSSK
 Analyzer STACK1
 Parameter PM
 Unit mg/Nm3
 Limit 0.00 - 150.00

01-04-2024 00:00	66 < M
02-04-2024 00:00	66 < M
03-04-2024 00:00	66 < M
04-04-2024 00:00	66 < M
05-04-2024 00:00	66 < M
06-04-2024 00:00	66 < M
10-04-2024 00:00	66 < M
11-04-2024 00:00	66 < M
13-04-2024 00:00	66 < M
14-04-2024 00:00	66 < M
15-04-2024 00:00	66 < M
Average	66
Geom.Mean	66
Maximum	66
Median	66
Minimum	66
Mode	66
Std.Deviation	0
Total Active Duration	

EnviroConnect Forbes Marshall Multi Station Report

From Date 01-11-2023 00:00

To Date 30-11-2023 23:59

Interval Daily

Function Average

Plant BSSK

Analyzer STACK2

Parameter PM

Unit mg/Nm3

Limit 0.00 - 150.00

08-11-2023 00:00 66 < M

09-11-2023 00:00 66 < M

10-11-2023 00:00 66 < M

11-11-2023 00:00 66 < M

12-11-2023 00:00 66 < M

13-11-2023 00:00 66 < M

14-11-2023 00:00 66 < M

15-11-2023 00:00 66 M

16-11-2023 00:00 66 < M

17-11-2023 00:00 66 < M

18-11-2023 00:00 66 < M

19-11-2023 00:00 66 < M

20-11-2023 00:00 66 < M

21-11-2023 00:00 66 < M

22-11-2023 00:00 66 < M

23-11-2023 00:00 66 < M

24-11-2023 00:00 66 < M

25-11-2023 00:00 66 < M

26-11-2023 00:00 66 < M

27-11-2023 00:00 66 < M

28-11-2023 00:00 66 < M

29-11-2023 00:00 66 < M

Average 66

Geom.Mean 66

Maximum 66

Median 66

Minimum 66

Mode 66

Std.Deviation 0

Total Active Duration

EnviroConnect Forbes Marshall Multi Station Report

From Date 01-12-2023 00:00
 To Date 31-12-2023 23:59
 Interval Daily
 Function Average

Plant BSSK
 Analyzer STACK2
 Parameter PM
 Unit mg/Nm3
 Limit 0.00 - 150.00

01-12-2023 00:00	66 < M
02-12-2023 00:00	66 < M
03-12-2023 00:00	66 < M
04-12-2023 00:00	66 < M
05-12-2023 00:00	66 < M
06-12-2023 00:00	66 < M
07-12-2023 00:00	66 < M
08-12-2023 00:00	66 < M
09-12-2023 00:00	66 < M
10-12-2023 00:00	66 < M
11-12-2023 00:00	66 < M
12-12-2023 00:00	66 < M
13-12-2023 00:00	66 < M
14-12-2023 00:00	66 M
15-12-2023 00:00	66 < M
16-12-2023 00:00	66 < M
17-12-2023 00:00	66 < M
18-12-2023 00:00	66 < M
19-12-2023 00:00	66 < M
20-12-2023 00:00	66 < M
21-12-2023 00:00	66 < M
22-12-2023 00:00	66 < M
23-12-2023 00:00	66 < M
24-12-2023 00:00	66 < M
27-12-2023 00:00	66 < M
28-12-2023 00:00	66 < M
29-12-2023 00:00	66 < M
30-12-2023 00:00	66 < M
31-12-2023 00:00	66 < M

Average	66
Geom.Mean	66
Maximum	66
Median	66
Minimum	66
Mode	66
Std.Deviation	0
Total Active Duration	

EnviroConnect Forbes Marshall Multi Station Report

From Date 01-01-2024 00:00
To Date 31-01-2024 23:59
Interval Daily
Function Average

Plant BSSK
Analyzer STACK2
Parameter PM
Unit mg/Nm3
Limit 0.00 - 150.00

01-01-2024 00:00	66 < M
02-01-2024 00:00	66 < M
03-01-2024 00:00	66 < M
04-01-2024 00:00	66 < M
05-01-2024 00:00	66 < M
06-01-2024 00:00	66 < M
07-01-2024 00:00	66 < M
08-01-2024 00:00	66 < M
09-01-2024 00:00	66 < M
10-01-2024 00:00	66 < M
11-01-2024 00:00	66 < M
12-01-2024 00:00	66 < M
13-01-2024 00:00	66 < M
14-01-2024 00:00	66 < M
15-01-2024 00:00	66 < M
16-01-2024 00:00	66 < M
17-01-2024 00:00	65.89 < M
18-01-2024 00:00	66 < M
19-01-2024 00:00	66 < M
20-01-2024 00:00	66 < M
21-01-2024 00:00	66 < M
22-01-2024 00:00	66 < M
23-01-2024 00:00	66 < M
24-01-2024 00:00	66 < M
25-01-2024 00:00	66 < M
26-01-2024 00:00	66 < M
27-01-2024 00:00	66 < M
28-01-2024 00:00	66 < M
29-01-2024 00:00	66 < M
30-01-2024 00:00	66 < M
31-01-2024 00:00	66 < M

Average	66
Geom.Mean	66
Maximum	66
Median	66
Minimum	65.9
Mode	66
Std.Devlation	0

EnviroConnect Forbes Marshall Multi Station Report

From Date 01-02-2024 00:00
 To Date 29-02-2024 23:59
 Interval Daily
 Function Average

Plant BSSK
 Analyzer STACK2
 Parameter PM
 Unit mg/Nm3
 Limit 0.00 - 150.00

01-02-2024 00:00	66 < M
02-02-2024 00:00	66 < M
03-02-2024 00:00	66 < M
04-02-2024 00:00	66 < M
05-02-2024 00:00	66 < M
06-02-2024 00:00	66 < M
07-02-2024 00:00	66 < M
08-02-2024 00:00	66 < M
09-02-2024 00:00	66 < M
10-02-2024 00:00	66 M
11-02-2024 00:00	66 < M
12-02-2024 00:00	66 M
13-02-2024 00:00	66 < M
14-02-2024 00:00	66 < M
15-02-2024 00:00	66 < M
16-02-2024 00:00	66 < M
17-02-2024 00:00	66 < M
18-02-2024 00:00	66 < M
19-02-2024 00:00	66 < M
20-02-2024 00:00	66 < M
21-02-2024 00:00	66 < M
22-02-2024 00:00	66 < M
23-02-2024 00:00	66 < M
24-02-2024 00:00	66 < M
25-02-2024 00:00	66 < M
26-02-2024 00:00	66 < M
27-02-2024 00:00	66 < M
28-02-2024 00:00	66 < M
29-02-2024 00:00	66 < M

Average	66
Geom.Mean	66
Maximum	66
Median	66
Minimum	66
Mode	66
Std.Deviation	0
Total Active Duration	

EnviroConnect Forbes Marshall Multi Station Report

From Date 01-03-2024 00:00
 To Date 31-03-2024 23:59
 Interval Daily
 Function Average

Plant BSSK
 Analyzer STACK2
 Parameter PM
 Unit mg/Nm3
 Limit 0.00 - 150.00

01-03-2024 00:00	66 < M
02-03-2024 00:00	66 < M
03-03-2024 00:00	66 < M
04-03-2024 00:00	66 < M
05-03-2024 00:00	66 < M
06-03-2024 00:00	66 < M
07-03-2024 00:00	66 < M
08-03-2024 00:00	66 < M
09-03-2024 00:00	66 < M
10-03-2024 00:00	66 M
11-03-2024 00:00	66 M
12-03-2024 00:00	66 < M
13-03-2024 00:00	66 < M
14-03-2024 00:00	66 < M
15-03-2024 00:00	67.44 < M
16-03-2024 00:00	66 < M
17-03-2024 00:00	66 < M
18-03-2024 00:00	66 < M
19-03-2024 00:00	66 < M
20-03-2024 00:00	66 < M
21-03-2024 00:00	66 < M
22-03-2024 00:00	66 < M
26-03-2024 00:00	66 < M
27-03-2024 00:00	66 < M
28-03-2024 00:00	66 < M
29-03-2024 00:00	66 < M
30-03-2024 00:00	66 < M
31-03-2024 00:00	66 < M

Average	66.1
Geom.Mean	66.1
Maximum	67.4
Median	66
Minimum	66
Mode	66
Std.Deviation	0.3
Total Active Duration	

EnviroConnect Forbes Marshall Multi Station Report

From Date 01-04-2024 00:00
 To Date 30-04-2024 23:59
 Interval Daily
 Function Average

Plant BSSK
 Analyzer STACK2
 Parameter PM
 Unit mg/Nm3
 Limit 0.00 - 150.00

01-04-2024 00:00	66 < M
02-04-2024 00:00	66 < M
03-04-2024 00:00	66 < M
04-04-2024 00:00	66 < M
05-04-2024 00:00	66 < M
06-04-2024 00:00	66 < M
10-04-2024 00:00	66 < M
11-04-2024 00:00	66 < M
13-04-2024 00:00	66 < M
14-04-2024 00:00	66 < M
15-04-2024 00:00	66 < M

Average	66
Geom.Mean	66
Maximum	66
Median	66
Minimum	66
Mode	66
Std.Deviation	0
Total Active Duration	

कार्यकारी संचालक, भीमाशंकर सहकारी साखर कारखाना लि. दत्तात्रयनगर पारगांव तर्फे अवसरी बु., ता. आंबेगांव, जि. पुणे यांनी Corporate Environment Responsibility (CER) अंतर्गत करावयाच्या प्रस्तावित केलेल्या कामांबाबत मा. जिल्हाधिकारी पुणे यांचे अध्यक्षतेखाली दिनांक २४/०८/२०२३ रोजी झालेल्या बैठकीचा इतिवृत्तांत.

१. कार्यकारी संचालक, भीमाशंकर सहकारी साखर कारखाना लि. दत्तात्रयनगर पारगांव तर्फे अवसरी बु., ता. आंबेगांव, जि. पुणे यांनी Corporate Environment Responsibility (CER) अंतर्गत करावयाच्या प्रस्तावित केलेल्या कामांबाबतच्या प्रस्तावाचे अनुषंगाने मा. जिल्हाधिकारी पुणे यांचे अध्यक्षतेखाली दिनांक २४/०८/२०२३ रोजी बैठक आयोजित करणेत आली. सदर बैठकीस खालील अधिकारी उपस्थित होते:-

अ.क्र.	अधिकार्यांचे नांव व पदनाम	कार्यालयाचे नांव
१.	डॉ. राजेश देशमुख, मा. जिल्हाधिकारी	जिल्हाधिकारी कार्यालय पुणे
२	श्रीमती. एस.डी.दबडे, अधीक्षक	माध्यमिक शिक्षण विभाग पुणे विभाग पुणे
३	श्री. अजित कुन्हाडे, तहसिलदार महसूल	जिल्हाधिकारी कार्यालय पुणे
४	श्री. किशोर पांडुरंग तिजारे	भीमाशंकर सहकारी साखर कारखाना पारगांव तर्फे अवसरी बु.

२. सर्वप्रथम मा. जिल्हाधिकारी यांनी उपस्थितांचे स्वागत करून बैठकीस सुरुवात केली.

३. तद्नंतर श्री. किशोर पांडुरंग तिजारे यांनी CER अंतर्गत प्रस्तावित केलेल्या कामांबाबतच्या प्रस्तावाबाबत नमूद केले.

४. तसेच पर्यावरण, वन एवं जल वायु परिवर्तन मंत्रालय, नवी दिल्ली यांचे परिपत्रक दिनांक १/०५/२०१८ बाबत सविस्तर माहिती बैठकीत दिली. सदर परिपत्रकामध्ये स्थानिक गरजेनुसार नवीन कामे व अस्तित्वातील कामांमध्ये बदल करण्याचे अधिकार जिल्हाधिकारी यांना देण्यात आले असलेबाबत नमूद केले.

५. सदर प्रस्तावित कामांबाबत बैठकीमध्ये सविस्तर चर्चा करणेत येवून त्यानुसार खालील प्रमाणे कामांस मंजूरी देणेत आली :-

अ.क्र.	कामाचे नांव	गावाचे नांव	करावयाच्या कामाचा तपशिल	कामासाठी अंदाजित रक्कम (करविरहीत)
१	न्यू इंग्लिश स्कूलकरीता शौचालय युनिट बांधणे	लाखनगांव	मुलींसाठी १ टॉयलेट ब्लॉक (३ टॉयलेट व चेंजिंग रुम-१, वॉशबेसिन) व मुलांसाठी १ टॉयलेस ब्लॉक (२ टॉयलेट व युरीनल-३, वॉशबेसिन-१)	८,६१,००८/-
२	संगमेश्वर माध्य. व उच्च माध्य. विद्यालयासाठी शौचालय युनिट बांधणे	पारगांव	मुलींसाठी १ टॉयलेट ब्लॉक (३ टॉयलेट व चेंजिंग रुम-१, वॉशबेसिन) व मुलांसाठी १ टॉयलेस ब्लॉक (२ टॉयलेट व युरीनल-३, वॉशबेसिन-१)	८,६१,००८/-
३.	भैरवनाथ माध्य. व उच्च माध्य. विद्यालयासाठी शौचालय युनिट बांधणे	लोणी	मुलींसाठी १ टॉयलेट ब्लॉक (३ टॉयलेट व चेंजिंग रुम-१, वॉशबेसिन) व मुलांसाठी १ टॉयलेस ब्लॉक (२ टॉयलेट व युरीनल-३, वॉशबेसिन-१)	८,६१,००८/-

४.	जिल्हा परिषद प्राथमिक शाळा काठापूर बु.	काठापूर बु.	मुलींसाठी १ टॉयलेट ब्लॉक (३ टॉयलेट व चेंजिंग रुम-१, वॉशबेसिन)	५,००,०००/-
५.	जिल्हा परिषद प्राथमिक शाळा शिंगवे	शिंगवे	मुलींसाठी १ टॉयलेट ब्लॉक (३ टॉयलेट व चेंजिंग रुम-१, वॉशबेसिन) व मुलांसाठी १ टॉयलेट ब्लॉक (२ टॉयलेट व युरीनल-३, वॉशबेसिन-१)	८,६१,००८/-
६.	मामासाहेब मोहोळ माध्य. विद्यालयासाठी शौचालय युनिट बांधणे	पोंदेवाडी	मुलींसाठी १ टॉयलेट ब्लॉक (३ टॉयलेट व चेंजिंग रुम-१, वॉशबेसिन) व मुलांसाठी १ टॉयलेट ब्लॉक (२ टॉयलेट व युरीनल-३, वॉशबेसिन-१)	८,६१,००८/-
७.	नरसिंह विद्यालय रांजणी भाग शाळा वळती येथे शौचालय युनिट बांधणे	वळती	मुलींसाठी १ टॉयलेट ब्लॉक (३ टॉयलेट व चेंजिंग रुम-१, वॉशबेसिन) व मुलांसाठी १ टॉयलेट ब्लॉक (२ टॉयलेट व युरीनल-३, वॉशबेसिन-१)	८,६१,००८/-
८.	विद्या विकास मंदीर माध्य. विद्यालयासाठी शौचालय युनिट बांधणे	अवसरी बु.	मुलींसाठी १ टॉयलेट ब्लॉक (३ टॉयलेट व चेंजिंग रुम-१, वॉशबेसिन) व मुलांसाठी १ टॉयलेट ब्लॉक (२ टॉयलेट व युरीनल-३, वॉशबेसिन-१)	८,६१,००८/-
९.	काळभैरवनाथ माध्य. विद्यालयासाठी (सौ. लक्ष्मीबाई बाबुराव बांगर) शौचालय युनिट बांधणे	खडकी	मुलींसाठी १ टॉयलेट ब्लॉक (३ टॉयलेट व चेंजिंग रुम-१, वॉशबेसिन) व मुलांसाठी १ टॉयलेट ब्लॉक (२ टॉयलेट व युरीनल-३, वॉशबेसिन-१)	८,६१,००८/-
१०.	पंडीत जवाहरलाल नेहरु माध्य. व द.गो.वळसे पाटील उच्च माध्यमिक विद्यालयासाठी शौचालय युनिट बांधणे	निरगुडसर	इमारतीचे पत्रे बदलणे, कलरिंग करणे, फरशी बसविणे इ. सुधारणा करणे.	१०,००,०००/-
११.	जिल्हा परिषद शाळा	नागापूर	वृषारोपन करणे	१०,००,०००/-
			एकुण -	९३,८८,०६४/-

६. वरीलप्रमाणे Corporate Environment Responsibility (CER) अंतर्गत करावयाच्या प्रस्तावित केलेल्या कामास सदरचा निधी खर्च करणेस बैठकीमध्ये मान्यता देणेत आलेली आहे.

८. तसेच वरील प्रस्तावित कामांचे संनियंत्रण व अभिलेख हे मुख्य कार्यकारी अधिकारी, जिल्हा परिषद पुणे व उपसंचालक, माध्यमिक शिक्षण विभाग पुणे यांनी ठेवावयाचे असून त्याबाबतचा अहवाल यथावकाश जिल्हाधिकारी पुणे यांचेकडे सादर करावयाचा आहे.

वरीलप्रमाणे सदर बैठकीत चर्चा होवून तदनंतर जिल्हाधिकारी यांनी उपस्थितांचे आभार मानून बैठक संपल्याचे जाहीर केले.

दिनांक :- २४/०८/२०२३

ठिकाण :- पुणे

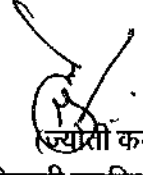
सही/-X-X-X
(डॉ. राजेश देशमुख)
जिल्हाधिकारी पुणे

जिल्हाधिकारी कार्यालय पुणे
(महसूल शाखा)

जा.क्र. पमन/CER/एसआर/०२/२०२३
दिनांक : ०१/०९/२०२३

- प्रत : १. मुख्य कार्यकारी अधिकारी, जिल्हा परिषद पुणे
२. उपसंचालक, माध्यमिक शिक्षण विभाग, पुणे विभाग पुणे
३. कार्यकारी संचालक, भीमार्शकर सहकारी साखर कारखाना लि. दत्तात्रयनगर, पारगांव तर्फे अवसरी
बु., ता. आंबेगांव, जि. पुणे

स्थळप्रतीवर मा. जिल्हाधिकारी सो. }
यांची स्वाक्षरी असे: }


(ज्योती कदम)
निवासी उपजिल्हाधिकारी
जिल्हाधिकारी कार्यालय पुणे

BHIMASHANKAR
SAHAKARI SAKHAR KARKHANA LTD.



भीमाशंकर
सहकारी साखर कारखाना लि.

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जा.क्र. भीमाशंकर/उत्पादन/३९० /२०२३-२४

दि. १२/०५/२०२३

प्रति,
मा.जिल्हाधिकारी,
जिल्हाधिकारी कार्यालय, पुणे.

विषय :- Corporate Environment Responsibility (CER) अंतर्गत करावयाच्या कामांना मंजूरी मिळणेबाबत ...

संदर्भ :- १) २९ मे. वॉट सहवीज निर्मिती प्रकल्प एन्व्हाय्रनमेंट क्लिअरन्स पत्र क्र.

EC22B004MH126409 दि.२१/०४/२०२२

२) ९५ के. एल. पी. डी. डिस्टीलरी प्रकल्प एन्व्हाय्रनमेंट क्लिअरन्स पत्र क्र. EC22B0022MH110015 दि.०७/०९/२०२२.

३) मा. संचालक मंडळ सभा दि.१०/०३/२०२३ मधील ठराव क्र.९ ची प्रत

महोदय,

पर्यावरण, वने आणि वातावरणीय बदल मंत्रालय, भारत सरकार यांचे F.No.22-65/2017-IA.III दि.०१ मे २०१८ रोजीच्या परिपत्रकानुसार एकूण प्रकल्प किंमतीच्या १% रक्कम कारखान्यापासून १० कि.मी. परिसरातील गावांमध्ये Corporate Environment Responsibility (CER) अंतर्गत येणा-या पर्यावरणपूरक कामांसाठी खर्च करणे आवश्यक आहे.

कारखान्याने ९५ के.एल.पी.डी. डिस्टीलरी प्रकल्प व २९ मे.वॉट कोजनरेशनसाठी एन्व्हाय्रनमेंट क्लिअरन्स State Environment Impact Assessment Authority (SEIAA) यांचेकडून घेतलेला असून EC मधील अटीनुसार १० कि.मी. परिसरातील गावांमधील शाळांमध्ये विद्यार्थ्यांसाठी पर्यावरण पूरक कामांसाठी खर्च करणेसाठी मा.संचालक मंडळाने ठरविलेले आहे.

९५ के.एल.पी.डी. डिस्टीलरी प्रकल्प खर्चाच्या सीईआर अंतर्गत रु.९९.२९ लाख आणि २९ मे. वॉट सहवीज निर्मिती प्रकल्प खर्चाच्या सीईआर अंतर्गत रु.४१.४२ लाख याप्रमाणे एकूण १४०.७१ लाख रु. खर्च करणे आवश्यक आहे. त्यापैकी कोविड कालावधीत शासकीय दवाखान्यांस Oxygen Concentrator देणेसाठी रु.१७.०० लाख खर्च केलेला आहे व तसे आमचे पत्र क्र. भीमाशंकर/रसायन/३३०/२०२१-२२ दि.०३/०५/२०२१ नुसार मा. जिल्हाधिकारी कार्यालयास कळविलेले आहे. त्यामुळे यापूढे उर्वरित रु.१२३.७१ लाख खर्च करावयाचा आहे.

त्याकरीता कारखाना मा.संचालक मंडळाने १० कि.मी. परिसरातील गावांचा सर्व्हे करून अती गरजू प्राथमिक आणि माध्यमिक शाळांना स्वच्छतागृह देणेकरीता येणा-या रु.९३,८८,०६४/- खर्चाचे अंदाजपत्रक तयार करून सदरील कामे करणेसाठी मा. संचालक मंडळ सभा दि.१०/०३/२०२३ मधील ठराव क्र.९ नुसार सर्वानुमते ठराव संमत केलेला आहे.

BHIMASHANKAR

SAHAKARI SAKHAR KARKHANA LTD.

**भीमाशंकर**

सहकारी साखर कारखाना लि.

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GSTIN : 27AAAABO949G1ZZ

गाव, शाळेचे नाव, कामाचा तपशील व त्यासाठी खर्चाचे अंदाजपत्रकाची माहिती खालीलप्रमाणे-

अ. नं	कामाचे नाव	गावाचे नाव	करावयाच्या कामाचा तपशील	कामासाठी अंदाजित रक्कम (करविरहीत)
१	न्यू इंग्लिश स्कूलकरीता शौचालय युनिट बांधणे.	लाखणगाव	मुलींसाठी १ टॉयलेट ब्लॉक (३ टॉयलेट व चेंजिंग रूम-१, वॉशबेसिन) व मुलांसाठी १ टॉयलेट ब्लॉक (२ टॉयलेट व युरीनल-३, वॉशबेसिन - १)	८,६१,००८/-
२	संगमेश्वर माध्य. व उच्च माध्यमिक विद्यालयासाठी शौचालय युनिट बांधणे.	पारगाव	मुलींसाठी १ टॉयलेट ब्लॉक (३ टॉयलेट व चेंजिंग रूम-१, वॉशबेसिन) व मुलांसाठी १ टॉयलेट ब्लॉक (२ टॉयलेट व युरीनल-३, वॉशबेसिन - १)	८,६१,००८/-
३	भैरवनाथ माध्य. व उच्च माध्यमिक विद्यालयासाठी शौचालय युनिट बांधणे.	लोणी	मुलींसाठी १ टॉयलेट ब्लॉक (३ टॉयलेट व चेंजिंग रूम-१, वॉशबेसिन) व मुलांसाठी १ टॉयलेट ब्लॉक (२ टॉयलेट व युरीनल-३, वॉशबेसिन - १)	८,६१,००८/-
४	जिल्हा परिषद प्राथमिक शाळा- काठापूर बु शौचालय युनिट बांधणे.	काठापूर बु.	मुलींसाठी १ टॉयलेट ब्लॉक (३ टॉयलेट व चेंजिंग रूम-१, वॉशबेसिन)	५,००,०००/-
५	जिल्हा परिषद प्राथमिक शाळा- शिंगवे शौचालय युनिट बांधणे.	शिंगवे	मुलींसाठी १ टॉयलेट ब्लॉक (३ टॉयलेट व चेंजिंग रूम-१, वॉशबेसिन) व मुलांसाठी १ टॉयलेट ब्लॉक (२ टॉयलेट व युरीनल-३, वॉशबेसिन - १)	८,६१,००८/-
६	मामासाहेब मोहोळ माध्यमिक विद्यालयासाठी शौचालय युनिट बांधणे.	पोंदेवाडी	मुलींसाठी १ टॉयलेट ब्लॉक (३ टॉयलेट व चेंजिंग रूम-१, वॉशबेसिन) व मुलांसाठी १ टॉयलेट ब्लॉक (२ टॉयलेट व युरीनल-३, वॉशबेसिन - १)	८,६१,००८/-
७	नरसिंह विद्यालय रांजणी भाग शाळा वळती येथे शौचालय युनिट बांधणे.	वळती	मुलींसाठी १ टॉयलेट ब्लॉक (३ टॉयलेट व चेंजिंग रूम-१, वॉशबेसिन) व मुलांसाठी १ टॉयलेट ब्लॉक (२ टॉयलेट व युरीनल-३, वॉशबेसिन - १)	८,६१,००८/-
८	विद्या विकास मंदीर माध्यमिक विद्यालयासाठी शौचालय युनिट बांधणे.	अवसरी बु.	मुलींसाठी १ टॉयलेट ब्लॉक (३ टॉयलेट व चेंजिंग रूम-१, वॉशबेसिन) व मुलांसाठी १ टॉयलेट ब्लॉक (२ टॉयलेट व युरीनल-३, वॉशबेसिन - १)	८,६१,००८/-



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GSTIN : 27AAAABO949G1ZZ

९	काळभैरवनाथ माध्यमिक (सौ.लक्ष्मीबाई बाबुराव बांगर) विद्यालयासाठी शौचालय युनिट बांधणे.	खडकी	मुलींसाठी १ टॉयलेट ब्लॉक (३ टॉयलेट व चेंजिंग रूम-१, वॉशबेसिन) व मुलांसाठी १ टॉयलेट ब्लॉक (२ टॉयलेट व युरीनल-३, वॉशबेसिन - १)	८,६१,००८/-
१०	पंडीत जवाहरलाल नेहरू माध्य. व द.गो.वळसे पाटील उच्च माध्यमिक विद्यालया साठी शौचालय युनिट बांधणे.	निरगुडसर	इमारतीचे पत्रे बदलणे, कलरिंग करणे, फरशी बसविणे इ.सुधारणा करणे.	१०,००,०००/-
११	जिल्हा परिषद शाळा	नागापूर	वृक्षारोपण करणे.	१०,००,०००/-
एकूण रक्कम				९३,८८,०६४/-

तरी, मा.संचालक मंडळामार्फत / कारखान्यामार्फत वरीलप्रमाणे करावयाच्या कामांना मंजूरी मिळावी, ही नम्र विनंती.

आपला विश्वास,

(सी.जी.दगे)

कार्यकारी संचालक

सोबत-

- १) २९ मे. वॅट सहवीज निर्मिती प्रकल्प एन्व्हायरनमेंट क्लिअरन्स पत्र क्र. EC22B004MH126409 दि.२१/०४/२०२२
- २) १५ के. एल. पी. डी. डिस्टिलरी प्रकल्प एन्व्हायरनमेंट क्लिअरन्स पत्र क्र. EC22B0022MH110015 दि.०६/०९/२०२२.
- ३) मा. संचालक मंडळ सभा दि.१०/०३/२०२३ मधील ठराव क्र.९ ची प्रत
- ४) पत्र क्र. भीमाशंकर/रसायन/३३०/२०२१-२२ दि.०३/०५/२०२१

भीमाशंकर सहकारी साखर कारखाना लि.

दत्तात्रयनगर, पारगाव तर्फे अवसरी बु., ता. आंबेगाव, जि. पुणे.

मा. संचालक मंडळ सभा दि. १०/०३/२०२३ मधील ठराव क्र. ९ ची सत्यप्रत.

विषय क्र. ९ :- को-जनरेशन व डिस्टीलरी प्रकल्प एन्व्हायरनमेंट क्लिअरन्ससाठी सीईआर अंतर्गत करावयाचे कामाचे अंदाजपत्रकास मान्यता देणे.

ठराव क्र. ९ :- पर्यावरण, वने आणि वातावरणीय बदल मंत्रालय, भारत सरकार यांचे F.No.22-65/ 2017-IA.III दि.०१ मे २०१८ रोजीच्या परिपत्रकानुसार एकूण प्रकल्प किंमतीच्या १% रक्कम मा. जिल्हाधिकारी, पुणे यांची मंजूरी घेऊन पाणी पुरवठा, सॅनिटरी फॅसिलिटी, कौशल्य विकास, सॉलर प्लॅट, घन कचरा व्यवस्थापन, पीकोचे उत्पादन वाढीसाठी विविध योजना राबविणे, रेन वॉटर हार्वेस्टिंग, मृदा संधारण करिता विविध योजना, वृक्षारोपण इ. सीईआर अंतर्गत येणा-या कामांसाठी खर्च करणे आवश्यक आहे.

त्यानुसार २९ मे. वॉट सहवीज निर्मिती प्रकल्पाच्या एन्व्हायरनमेंट क्लिअरन्ससाठी सीईआर अंतर्गत रु.४१.४२ लाख आणि ९५ के.एल.पी.डी. डिस्टीलरी प्रकल्पाच्या एन्व्हायरनमेंट क्लिअरन्ससाठी सीईआर अंतर्गत रु.९९.२९ लाख वर्ष २०२२-२३ पासून पुढील ३ वर्षात खर्च करणे आवश्यक आहे. CER खर्चापैकी ४५ KLPD च्या डिस्टीलरी प्रकल्पाच्या CER अंतर्गत देवाखान्यांना Oxygen Concentrator देणेसाठी रु.१७.०० लाख खर्च केलेला असून ४५ KLPD प्रकल्पा ऐवजी ९५ KLPD डिस्टीलरी प्रकल्प होणार असल्याने सदर खर्च ९५ KLPD डिस्टीलरी प्रकल्पाचे CER अंतर्गत दाखविता येणार असून त्याकरीता (रु.९९.२९ - रु.१७.००) रु.८२.२९ लाख आणि दोन्ही प्रकल्पांकरीता एकत्रित रु.१२३.७१ लाख खर्च करणे आवश्यक आहे.

त्यानुसार सिव्हील विभागाने कारखान्याच्या १० कि.मी. परिसरातील प्राथमिक आणि माध्यमिक शाळांना स्वच्छतागृह देणेकरीता एन्व्हायरनमेंट क्लिअरन्स अंतर्गत करावयाच्या कामांचे सुधारित अंदाजपत्रक एस.एस.आर.२०२२-२३ नुसार केले असून अंदाजपत्रकीय रक्कमेचा तपशील खालीलप्रमाणे.

अ. नं	कामाचे नाव	गावाचे नाव	करावयाच्या कामाचा तपशील	कामासाठी अंदाजित रक्कम (करविरहीत)
१	न्यू इंग्लिश स्कूलकरीता शौचालय युनिट बांधणे.	लाखणगाव	मुलींसाठी १ टॉयलेट ब्लॉक (३ टॉयलेट व चेंजिंग रूम-१, वॉशबेसिन) व मुलांसाठी १ टॉयलेट ब्लॉक (२ टॉयलेट व युरीनल-३, वॉशबेसिन - १)	८,६१,००८/-
२	संगमेश्वर माध्य. व उच्च माध्यमिक विद्यालयासाठी शौचालय युनिट बांधणे.	पारगाव	मुलींसाठी १ टॉयलेट ब्लॉक (३ टॉयलेट व चेंजिंग रूम-१, वॉशबेसिन) व मुलांसाठी १ टॉयलेट ब्लॉक (२ टॉयलेट व युरीनल-३, वॉशबेसिन - १)	८,६१,००८/-
३	भैरवनाथ माध्य. व उच्च माध्यमिक विद्यालयासाठी शौचालय युनिट बांधणे.	लोणी	मुलींसाठी १ टॉयलेट ब्लॉक (३ टॉयलेट व चेंजिंग रूम-१, वॉशबेसिन) व मुलांसाठी १ टॉयलेट ब्लॉक (२ टॉयलेट व युरीनल-३, वॉशबेसिन - १)	८,६१,००८/-
४	शिवाजी विद्यालय व जुनियर कॉलेजसाठी शौचालय युनिट.	धामणी	मुलींसाठी १ टॉयलेट ब्लॉक (३ टॉयलेट व चेंजिंग रूम-१, वॉशबेसिन)	५,००,०००/-
५	आदर्श विद्यालयकरीता शौचालय युनिट बांधणे.	जारकरवाडी	मुलींसाठी १ टॉयलेट ब्लॉक (३ टॉयलेट व चेंजिंग रूम-१, वॉशबेसिन) व मुलांसाठी १ टॉयलेट ब्लॉक (२ टॉयलेट व युरीनल-३, वॉशबेसिन - १)	८,६१,००८/-
६	मामासाहेब मोहोळ माध्यमिक विद्यालयासाठी शौचालय युनिट बांधणे.	पोंदेवाडी	मुलींसाठी १ टॉयलेट ब्लॉक (३ टॉयलेट व चेंजिंग रूम-१, वॉशबेसिन) व मुलांसाठी १ टॉयलेट ब्लॉक (२ टॉयलेट व युरीनल-३, वॉशबेसिन - १)	८,६१,००८/-

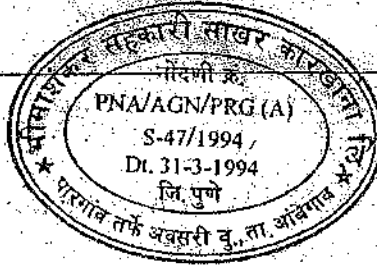
७	नरसिंह विद्यालय राजणी भाग शाळा वळती येथे शौचालय युनिट बांधणे.	वळती	मुलींसाठी १ टॉयलेट ब्लॉक (३ टॉयलेट व चेंजिंग रूम-१, वाशबेसिन) व मुलांसाठी १ टॉयलेट ब्लॉक (२ टॉयलेट व युरीनल-३, वाशबेसिन - १)	८,६१,००८/-
८	विद्या विकास मंदीर माध्यमिक विद्यालयासाठी शौचालय युनिट बांधणे.	अवसरी बु.	मुलींसाठी १ टॉयलेट ब्लॉक (३ टॉयलेट व चेंजिंग रूम-१, वाशबेसिन) व मुलांसाठी १ टॉयलेट ब्लॉक (२ टॉयलेट व युरीनल-३, वाशबेसिन - १)	८,६१,००८/-
९	काळभैरवनाथ माध्यमिक (सौ. लक्ष्मीबाई बाबुराव बांगर) विद्यालयासाठी शौचालय युनिट बांधणे.	खडकी	मुलींसाठी १ टॉयलेट ब्लॉक (३ टॉयलेट व चेंजिंग रूम-१, वाशबेसिन) व मुलांसाठी १ टॉयलेट ब्लॉक (२ टॉयलेट व युरीनल-३, वाशबेसिन - १)	८,६१,००८/-
१०	पंडीत जवाहरलाल नेहरू माध्य. व द.गो.वळसे पाटील उच्च माध्यमिक विद्यालया साठी शौचालय युनिट बांधणे.	निरगुडसर	इमारतीचे पत्रे बदलणे, कलरिंग करणे, फरशी बसविणे इ.सुधारणा करणे.	१०,००,०००/-
११	जिल्हा परिषद शाळा	नागापूर	वृक्षारोपण करणे.	१०,००,०००/-
एकूण रक्कम				९३,८८,०६४/-

वरीलप्रमाणे एन्वॉयरमेंट विलअरन्स अंतर्गत करावयाच्या कामांचे रक्कम रु. ९३,८८,०६४/- अंदाजपत्रकास मान्यता देवून मा. जिल्हाधिकारी, पुणे यांची मान्यता घेणे आवश्यक आहे. अशी रसायन विभागाची टिपणी सभेत वाचून दाखविण्यात आली. त्यावर सविस्तर चर्चा होवून एन्वॉयरमेंट विलअरन्स अंतर्गत करावयाच्या कामांचे रक्कम रु. ९३,८८,०६४/- अंदाजपत्रकास मान्यता देवून मा. जिल्हाधिकारी, पुणे यांची मान्यता घेण्यात यावी असे सर्वानुमते ठरले.

सुचक : मा. देवदत्त जयवंतराव निकम
अनुमोदक : मा. बाजीराव गोपाळा बारवे
ठराव सर्वानुमते मंजूर.

सत्यप्रत.

(चंद्रकांत ढगे)
कार्यकारी संचालक



F.No.22-65/2017-IA.III

Government of India

Ministry of Environment, Forest and Climate Change
Impact Assessment Division

Indira Paryavaran Bhawan
Jor Bagh Road, Aliganj
New Delhi - 110003Dated: 1st May, 2018**Office Memorandum****Sub: Corporate Environment Responsibility (CER) - reg.**

The Environment Impact Assessment (EIA) Notification, 2006, issued under the Environment (Protection) Act, 1986, as amended from time to time, prescribes the process for granting prior environment clearance (EC) in respect of certain development projects/activities listed out in the Schedule to the Notification.

2. Sustainable development has many important facets/components like social, economic, environmental, etc. All these components are closely inter-related and mutually re-enforcing. Therefore, the general structure of EIA document, under Appendix-III to the notification, prescribes inter-alia public consultation, social impact assessment and R&R action plan besides environment management plan (EMP).

3. Section 135 of the Companies Act, 2013 deals with Corporate Social Responsibility (CSR) and Schedule-VII of the Act lists out the activities which may be included by companies in their CSR Policies. The concept of CSR as provided for in the Companies Act, 2013 and covered under the Companies (Corporate Social Responsibility Policy) Rules, 2014 comes into effect only in case of companies having operating projects and making net profit as also subject to other stipulations contained in the aforesaid Act and Rules. The environment clearance given to a project may involve a situation where the concerned company is yet to make any net profit and/or is not covered under the purview of the aforesaid Act and Rules. In such cases, the provisions of aforesaid act and Rules will not apply.

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4. In the past, it has been observed that different Expert Appraisal Committees / State Expert Appraisal Committees (EACs/SEACs) have been prescribing different formulation of the Corporate Environment Responsibility (CER) and no common principles are followed. Several suggestions have also been received in this regard which inter-alia states that Greenfield projects and Brownfield projects should be treated differently; no CER should be prescribed whereas there is no increase in air pollution load, R&R, etc., besides streamlining percentage of CER.

5. The Ministry has carried out a detailed stakeholder consultation which inter-alia included meeting with Ministry of Petroleum & Natural Gas, Ministry of Power, Chairmen EACs, FICCI, ASSOCHAM, Gujarat Chamber of Commerce and Industry amongst others.

6. In order to have transparency and uniformity while recommending CER by Expert Appraisal Committee (EAC) / State level Expert Appraisal Committee (SEAC) / District level Expert Appraisal Committee (DEAC), the following guidelines are issued:

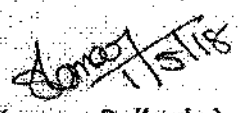
- (I) The cost of CER is to be in addition to the cost envisaged for the implementation of the EIA/EMP which includes the measures for the pollution control, environmental protection and conservation, R&R, wildlife and forest conservation/protection measures including the NPV and Compensatory Aforestation, required, if any, and any other activities, to be derived as part of the EIA process.
- (II) The fund allocation for the CER shall be deliberated in the EAC or SEAC or DEAC, as the case may be, with a due diligence subject to **maximum percentage** as prescribed below for different cases:

S.No	Capital Investment / Additional Capital Investment (in Rs)	Greenfield Project - % of Capital Investment	Brownfield Project - % of Additional Capital Investment
I	II	III	IV
1.	≤ 100 crores	2.0%	1.0%
2.	> 100 crores to ≤ 500 crores	1.5%	0.75%
3.	> 500 crores to ≤ 1000 crores	1.0%	0.50%
4.	> From 1000 crores to ≤ 10000 crores	0.5%	0.25%
5.	> 10000 crores	0.25%	0.125%

- (III) The activities proposed under CER shall be worked out based on the issues raised during the public hearing, social need assessment, R&R plan, EMP, etc.
- (IV) The proposed activities shall be restricted to the affected area around the project.
- (V) Some of the activities which can be carried out in CER, are infrastructure creation for drinking water supply, sanitation, health, education, skill development, roads, cross drains, electrification including solar power, solid waste management facilities, scientific support and awareness to local farmers to increase yield of crop and fodder, rain water harvesting, soil moisture conservation works, avenue plantation, plantation in community areas, etc.
- (VI) The entire activities proposed under the CER shall be treated as project and shall be monitored. The monitoring report shall be submitted to the regional office as a part of half-yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.
- (VII) The District Collector may add or delete the activities as per the requirement of the District.
- (VIII) The EAC can vary the above percentage of CER subject to proper diligence, quantification and justification. The EAC based on appraisal, should clearly suggest the activities to be carried out under CER.
- (IX) This CER is not applicable in name change, transfer and amendment involving no additional project investment. In case of amendment in EC involving additional expenditure, CER will be applicable only on the additional expenditure as per column-IV of the table given in para 6(II) above.

7. This issues in supersession of all earlier OMs and guidelines issued in this regard.

8. This issues with the approval of competent authority.


(Sharath Kumar Pallerla)
Director (IA-III-Policy)

1. Chairman, CPCB
2. Chairmen of all the Expert Appraisal Committees
3. Chairperson/Member Secretaries of all the SEIAA/SEACs
4. Chairpersons/Member Secretaries of all SPCBs/UTPCCs
5. All the officers of IA Division

Copy for information to:

1. PS to Minister for Environment, Forest and Climate Change
2. PS to MoS (EF&CC)
3. PPS to Secretary (EF&CC)
4. PPS to AS(AKJ) / AS(AKM)
5. PPS to JS(GB) / JS(JT)
6. Website, MoEF&CC
7. Guard File.



वन परिक्षेत्र अधिकारी, मंचर(प्रा) यांचे कार्यालय
वनसावित्री उद्यान, अवसरी घाट तालुका आंबेगाव, जिल्हा पुणे

E- Mail rfomanchar@gmail.com



विषय - झाडांमधील अंतर प्रमाणित करून
मिळणेबाबत..

जा./क्र./संकिर्ण/ १७६८/२०१९ - २०

मंचर ४१०५०३ दिनांक - ०२/१२/२०१९

संदर्भ - भीमाशंकर सहकारी साखर कारखाना लि. दिनांक- २९/११/२०१९.

वरील विषयी वनपाल धामणी व वनरक्षक लाखनगाव यांनी भीमाशंकर राहकारी साखर कारखाना परिसरात व संभावताली १९.५३ हे.क्षेत्रात ६५०२ वृक्ष लागवड केलेल्या सोबत दर्शविलेल्या यादीतील फळझाडे इ.आंबा, नारळ, चिक्कू, जांभुळ, सीताफळ, आवळा, फणस इ.वृक्षांमधील सरासरी अंतर ९ ते १० मी असून इतर प्रजातीतील ३ ते ४ मी. आहे.

तसेच शोभेच्या झाडांतील अंतर २ ते ३ मी. आहे. लागवड केलेल्या वृक्षांतील अंतर योग्य आहे.



(योगेश एस. महाजन)
वनपरिक्षेत्र अधिकारी
मंचर.

जाक्र/ताकृअ/ विस्तार/३६१५/२०१९
तालुका कृषि अधिकारी ,आंबेगाव
(घोडेगाव) दि. २ /१२ /२०१९

प्रति ,

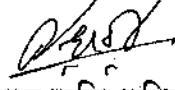
मा.कार्यकारी संचालक ,
भिमाशंकर सहकारी साखर कारखाना ,
पारगाव त.अवसरी बु .

विषय --झांडामधील अंतर प्रमाणित करून मिळणेबाबत .

संदर्भ -- भिमाशंकर सहकारी साखर कारखाना पारगाव त.अवसरी बु यांचे कडील
पत्र जाक्र /शेतकरी /२३८९/१९ दिनांक २७/११/१९.

उपरोक्त संदर्भीय विषयान्वये कळविण्यात येते की , भिमाशंकर सहकारी साखर कारखाना
परिसरातील कार्यक्षेत्रामध्ये जास्तीत जास्त झाडे लावून परिसर हरीत करणेसाठी सोबत जोडलेल्या
यादीप्रमाणे १९.५३ हे.आर क्षेत्रात ६५०२ वृक्ष लागवड केलेबाबतचे सहपत्र प्राप्त झाले आहे.

सदर सहपत्राचे अवलोकन केले असता सोबतच्या दोन झाडांमधील अंतर संयुक्तीक असलेले
प्रमाणित करणेत येत आहे.


तालुका कृषि अधिकारी
आंबेगाव (घोडेगाव) जि.पुणे

भीमाशंकर सहकारी साखर कारखाना लि., दत्तात्रयनगर

पारगाव तर्फे अवसरी बु.११., ता.आंबेगाव, जि.पुणे.

झाडांची नावे व अंतर तपशिल

अ.क्र.	झाडांची नावे	वृक्ष लागवड (संख्या)				प्रति वृक्ष आवश्यक अंतर (मी. X मी.)	प्रति वृक्ष (स्क्वेअर मी.)	वृक्ष लागवड क्षेत्र (हे.आर.)
		२०१७-१८ (पुर्वीची)	२०१८-१९	२०१९-२०	आज अखेर एकूण			
१	नारळ	१७०	०	०	१७०	५ X ५	२५	०.४३
२	आंबा	१९	१०५	५५	१७९	१० X १०	१००	१.७९
३	चिक्कु	५८	०	०	५८	९ X ९	८१	०.४७
४	आवळा	३	५	०	८	६ X ६	३६	०.०३
५	फणस	७	०	०	७	८ X ८	६४	०.०४
६	कागदी लिंबू	२२	०	०	२२	५ X ५	२५	०.०६
७	सिताफळ	१३९	०	०	१३९	४ X ४	१६	०.२२
८	पेरु	२९	०	०	२९	६ X ६	३६	०.१०
९	जांभुळ	२८	०	२५	५३	६ X ६	३६	०.१९
१०	चिंच	७	४०	६५०	६९७	८ X ८	६४	४.४६
११	डाळींब	५	०	०	५	४ X ४	१६	०.०१
१२	कौठ	६	०	०	६	६ X ६	३६	०.०२
१३	बोर	११	०	०	११	४ X ४	१६	०.०२
१४	गुलमोहर	२३	५०	०	७३	८ X ८	६४	०.४७
१५	रेनट्री	१६	११०	०	१२६	८ X ८	६४	०.८१
१६	बॉटल पाग	२४१	२२	५०	३१३	५ X ५	२५	०.७८
१७	फिलोशिया पाग	१४	३	०	१७	५ X ५	२५	०.०४
१८	सप्लपर्णी	५२	४८	०	१००	८ X ८	६४	०.६४
१९	पित्त मोहर	१७	५६	०	७३	८ X ८	६४	०.४७
२०	वड	१२०	६	०	१२६	१० X १०	१००	१.२६
२१	अर्जुन	२९	२०	०	४९	८ X ८	६४	०.३१
२२	सिल्वर ओक	६	०	०	६	५ X ५	२५	०.०२
२३	काशिद	३५	३५	१०५	१७५	८ X ८	६४	१.१२
२४	सिसम	१२५	२०	०	१४५	८ X ८	६४	०.९३
२५	पिंपळ	१७	०	०	१७	८ X ८	६४	०.११
२६	फायकस	०	५०	०	५०	४ X ४	१६	०.०८
२७	बांबू	१२	०	०	१२	४ X ४	१६	०.०२
२८	करंज	३३	०	९०	१२३	८ X ८	६४	०.७९
२९	बॉटल ब्रश	१९	०	०	१९	४ X ४	१६	०.०३
३०	कडूलिंब	२००	०	९५	२९५	६ X ६	३६	१.०६
३१	बदाम	३०	०	०	३०	६ X ६	३६	०.११
३२	सुरु	३१	०	०	३१	६ X ६	३६	०.११
३३	अशोक	९९	०	०	९९	४ X ४	१६	०.१६
३४	स्पॅथोडिया	६	०	०	६	८ X ८	६४	०.०४
३५	कांचन (आपटा)	३९	०	१००	१३९	८ X ८	६४	०.८९
३६	सोनचाफा	५	०	०	५	४ X ४	१६	०.०१
३७	पांढरा चाफा	२१	०	०	२१	४ X ४	१६	०.०३
३८	जंबर	११	०	०	११	८ X ८	६४	०.०७
३९	निलगिरी	३४	०	०	३४	३ X ३	९	०.०३
४०	रामफळ	१४	०	०	१४	५ X ५	२५	०.०४
४१	सुवामळ	२१३	०	०	२१३	४ X ४	१६	०.३४
४२	शेवगा	१४	०	०	१४	३ X ३	९	०.०१
४३	अंजीर	२	०	०	२			
४४	पांगारा	३	०	०	३			
४५	चंदनी	७	०	०	७	४ X ४	१६	०.०१
४६	भेंडी	४	०	०	४	३ X ३	९	०.००
४७	बामुळ	६४	०	०	६४	६ X ६	३६	०.२३
४८	गोकर	१	०	०	१			

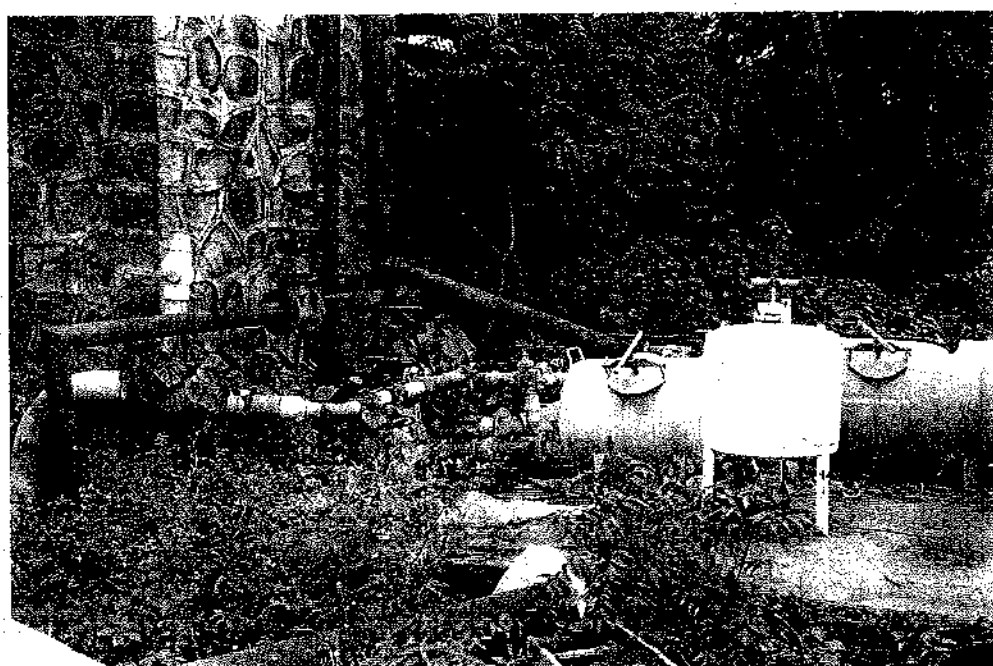
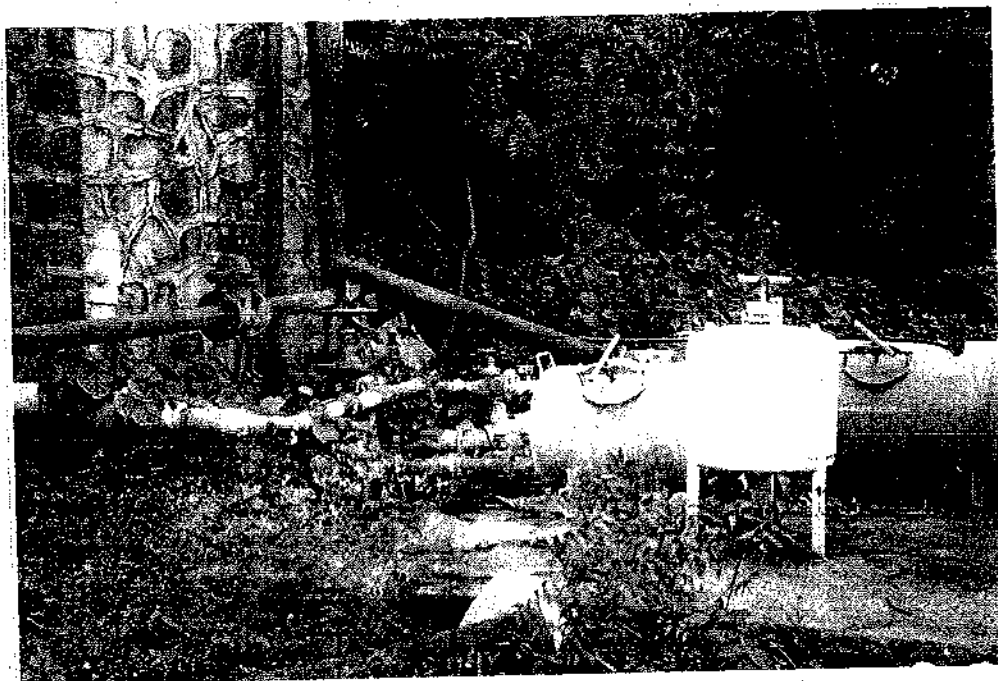
अ.क्र.	झांडाची नावे	वृक्ष लागवड (संख्या)				प्रति वृक्ष आवश्यक अंतर (मी. X मी.)	प्रति वृक्ष (स्क्वेअर मी.)	वृक्ष लागवड क्षेत्र (हे.आर)
		२०१७-१८ (पूर्वीची)	२०१८-१९	२०१९-२०	आज अखेर एकूण			
४९	पपई	८	०	०	८	३ X ३	९	०.०१
५०	बेल	३	०	०	३	६ X ६	३६	०.०१
५१	शेवरी	१२	०	०	१२	४ X ४	१६	०.०२
५२	देवदार	२७	०	०	२७	८ X ८	६४	०.१७
५३	हिमालया	२	०	०	२			
५४	बकवान	४	०	०	४			
५५	चेडुफळी	१	०	०	१			
५६	येहळा	२	०	०	२			
५७	पिचकारी	३६	०	०	३६	२ X २	४	०.०१
५८	सायर	५	०	०	५			
५९	करवंद	२	०	०	२			
६०	हिरडा	०	०	२५	२५	५ X ५	२५	०.०६
	एकूण	२१६३	५७०	११९५	३९२८			१९.१४
	बुशंस							
६१	जास्वंद	२८	०	०	२८	२ X २	४	०.०१
६२	तगर पांढरा	७१	०	०	७१	२ X २	४	०.०३
६३	बोगन वेल	४०२	०	०	४०२	२ X २	४	०.१६
६४	मोरपंखी	१३	०	०	१३	२ X २	४	०.०१
६५	रातराणी	३	०	०	३			
६६	प्राजक्ता	२	०	०	२			
६७	खिसमस	२	०	०	२			
	एकूण	५२१	०	०	५२१			०.२१
	फुलझाडे/ शोभेची झाडे							
६८	गुलाब	८८	०	०	८८	२ X १.५	३	०.०३
६९	लिली	४३	०	०	४३	२ X १.५	३	०.०१
७०	क्रोटॉन	५०	०	०	५०	२ X १.५	३	०.०२
७१	गोल्डन डोरांटा	५३८	०	०	५३८	१.५ X १.५	०	०.००
७२	लॅन्टीना व्हेरीगेटेड	८५	०	०	८५	१.५ X १.५	२.२५	०.०२
७३	क्रिपरवडेलिया	१००	०	०	१००			
७४	हिमेलिया	६३	०	०	६३	१.५ X १.५	२.२५	०.०१
७५	मोगरा	१२	०	०	१२	१ X १	१	०.००
७६	आबोली	३	०	०	३			
७७	कॅलेंडरा	२१२	०	०	२१२	१ X १	१	०.०२
७८	ऑर्कलीफा	२३०	०	०	२३०	१ X १	१	०.०२
७९	डबल तगर	५८	०	०	५८	१ X १	१	०.०१
८०	अलॅमॅंडा	४१	०	०	४१	१ X १	१	०.००
८१	साबर कांडी	३०	०	०	३०	१ X १	१	०.००
८२	रेवीन ग्रास	७५	०	०	७५	१ X १	१	०.०१
८३	मंकी ग्रास	२५	०	०	२५			
८४	केना	५०	०	०	५०			
८५	एक्यालिफा	३५०	०	०	३५०	१ X १	१	०.०४
	एकूण	२०५३	०	०	२०५३			०.१९
	एकूण एकंदर	४७३७	५७०	११९५	६५०२			१९.५३

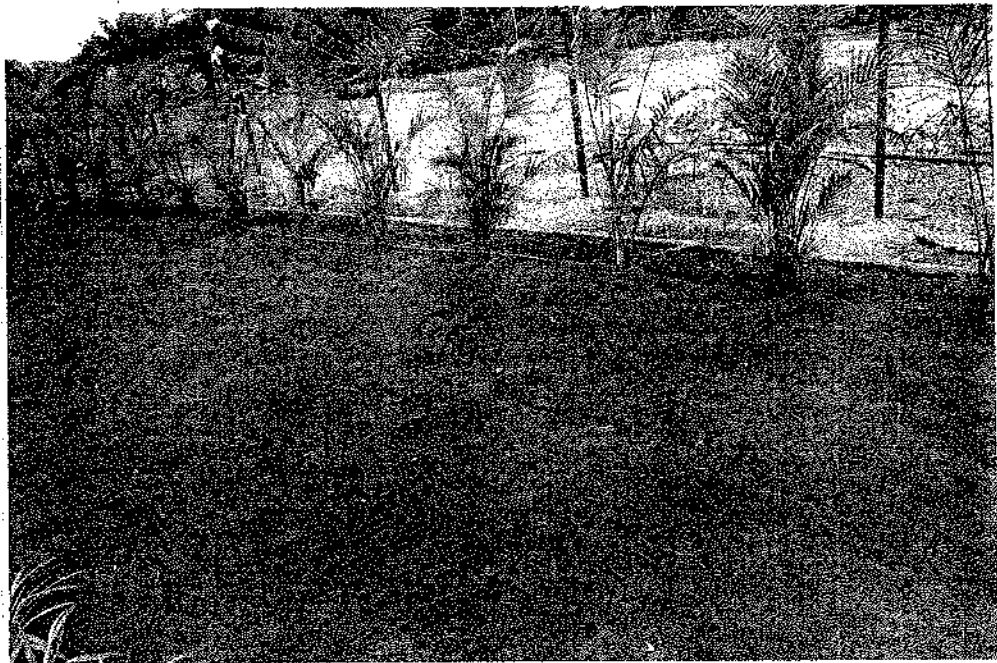
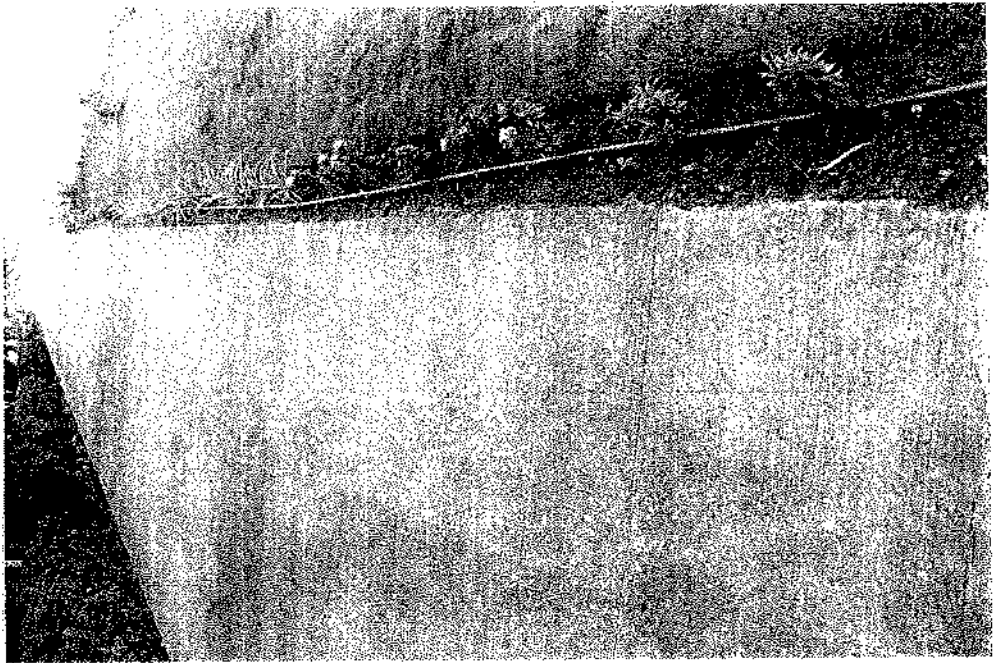
मुख्य विकास अधिकारी
मुख्य शेतकी अधिकारी

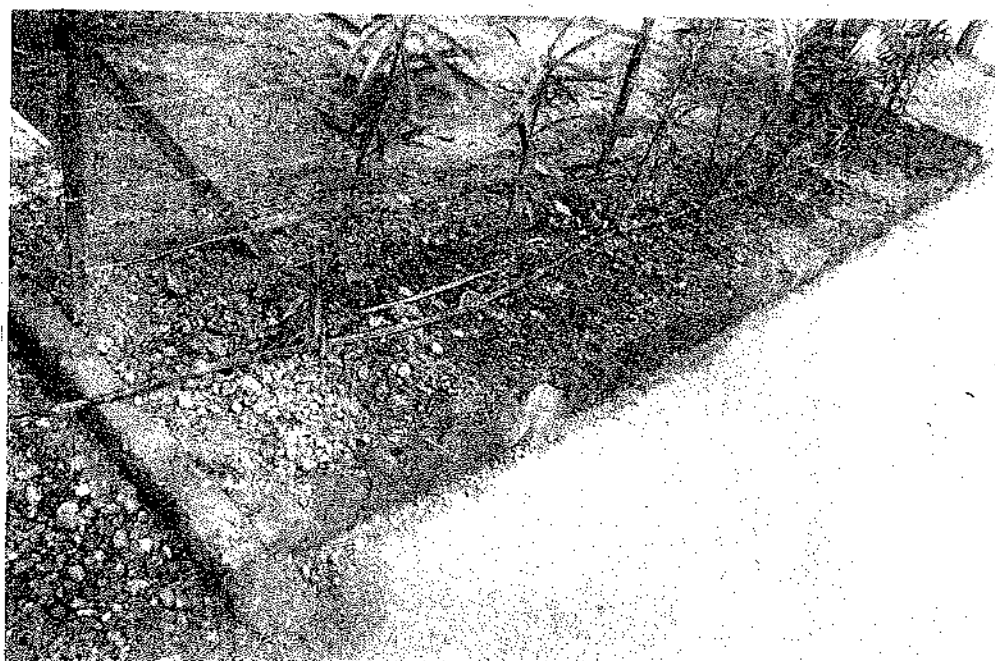
कार्यकारी संचालक

ग्रामतुका कृषि अधिकारी
आंबेगाव (घोडेगाव), जि.पुणे

Plantation & Drip Irrigation Photographs







Area Statement of Bhimashankar

Sr. No.	Details	Area in Sq. M.	Avg Rainfall	Runoff Coeff	Total Water Collected	
1	Main Building and around shed	9883	849.32	0.8	6715.06365	9883
2	Godown 5 Nos.	14233	849.32	0.8	9670.69725	14233
3	English School	3266	849.32	0.8	2219.1033	
4	College Bldg	2500	849.32	0.8	1698.64	
5	Office Bldg	964	849.32	0.8	654.995584	964
6	Gust House & Rest Room	628.5	849.32	0.8	427.038096	628.5
7	Laboure Qurter (105 to 107)	512	849.32	0.8	347.881472	512
8	Laboure Qurter (114 to 118)	1966.28	849.32	0.8	1336.00074	1966.28
9	Laboure Qurter (114 to 118)	1295.4	849.32	0.8	880.167302	1295.4
10	Banglow Quarter (102 to 104)	621	849.32	0.8	421.942176	621
	Effective Catchment Area	35869.18	849.32	0.8	24371.5296	

RAIN WATER HARVESTING FEASIBILITY REPORT FOR

Project

BHIMASHANKAR SUGAR FACTORY

At

DATTATRAY NAGAR, PARGAON, PUNE

By



M/S. RAINBOW GROUP

ADD: NEAR BALAJI LAW COLLEGE,

A/P- TATHWADE, PUNE

PH. NO. 020/65000337,

AIM OF THE PROJECT –

- To implement 'Rain Water harvesting' to store and recharge water to achieve maximum self-sufficiency.
- To recharge excess water in the ground in methodical way to improve 'ground water table'.
- To recharge, reuse and recycle water in every possible way and achieve minimum water discharge to take care of natural resource.
- To plan all 'water management' in sustainable way without disturbing the natural balance.

1. TITLE OF THE PROJECT :- A Project report on Rain water harvesting at Industrial Project
"Bhimashankar Sugar Factory, Dattatray Nagar, Pargaon, Pune

2. SUBMITTED BY :- **M/s. RAINBOW GROUP**
S. No. 1/1/1, Near Balaji law College,
Ravet-Aundh BRT Road, Tathwade, Pune – 411033
Phone: 020-65000337
E-mail: Rainbow.rainwaterharvesting@gmail.com
Web: www.rainbowgroup.org.in

3. RAINFALL PATTERN:-

The normal annual rainfall over the district varies from about 468 mm to 4659 mm. It is minimum in the eastern part of the district around Daund (468 mm), Baramati (486 mm) and Jujuri (494 mm). This increases towards west and reaches a maximum around Khandala (4659 mm) in the western ghat. The Chances of receiving normal rainfall are maximum (50 to 55%) in eastern part around Indapur and Daund, in the central part around Pune city and small area around Junnar in northern part of the district. Rainfall analysis also indicates occurrence of drought prone area in eastern, southern, south-eastern, central and north western part around Indapur, Baramati, Jujuri, Daund, Talegaon, Damdhare ,Alandi, Shirur and Bhore covering about 50% area of the district. Taluka wise average annual rainfall for the period 2003 to 2012 ranges from about 474 mm (Daund) to 2668 mm (Velhe)

Table-3 Annual Rainfall Data for Year 2003-2012 (Rainfall in mm)

Taluka	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	Decadal Average
Pune City	335.3	652.4	1239.5	1246	779.44	689.29	909.7	1169	979.9	492.7	849.32
Haveli	452.2	890.6	1250.36	1247.5	859.04	706.09	938.3	1147.8	979.6	505.4	897.67
Mulshi	1251	1878	2875.8	2804	1834	1602	1838.7	1592	1792	1438	1890.35
Bhor	712	1380.1	1714	1762	1423.4	998	1213	1121	1129.3	833	1229.18
Mayal	1026	1466	2561	2252	1442.6	1399.5	1364.8	1168	1482	1013	1571.14
Velhe	1420	2051.4	3320.6	3997	3263	2409	1405	2043	2695.1	2070.4	2667.7
Junnar	648.2	771.8	1344.4	1237	880	747.4	706	862.3	769	557.1	852.32
Khed	386.2	775	973.1	1461.1	756.5	692.66	639.6	1018.4	637.7	436.2	777.65
Ambedgaon	421.8	735.1	1025	1338.3	830.9	735	732.3	823.4	836	616.6	809.44
Shirur	266	374	460	760	374	492	859.6	849.5	441.8	321	549.69
Baramati	113.2	521	711	567	622	454	738.8	804.6	291	235	505.76
Indapur	163.3	651.9	696.1	668	640.3	345.4	932.4	805.8	399	250.6	555.28
Daund	156.3	522	742.2	594	604.85	326.7	474.3	639.3	347.6	337.4	474.46
Purandhar	215	710	1158	1476	519	497	806	602	609.4	371	696.34
District Average	540.46	995.87	1647.9	1529.2	1081	814.62	968.3	1046.1	956.38	676.9	

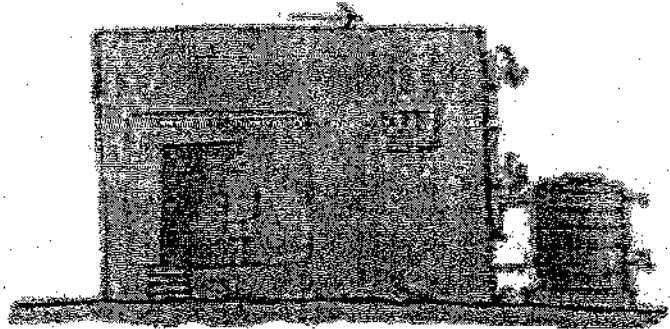
4. METHODS OF RAIN WATER HARVESTING –

Rain water harvesting can be done by two methods –

1) Direct storage method

a. In closed / Underground tank

In direct storage method, the roof water will flow from down take pipe through sand filters. Sand filters to be installed on every down take pipe, and then will flow to the storage tank. Though it is costly preposition we can store some part of volume of water by this method. We can store some water in underground tank and some part can be utilized for Ground Water Recharge.



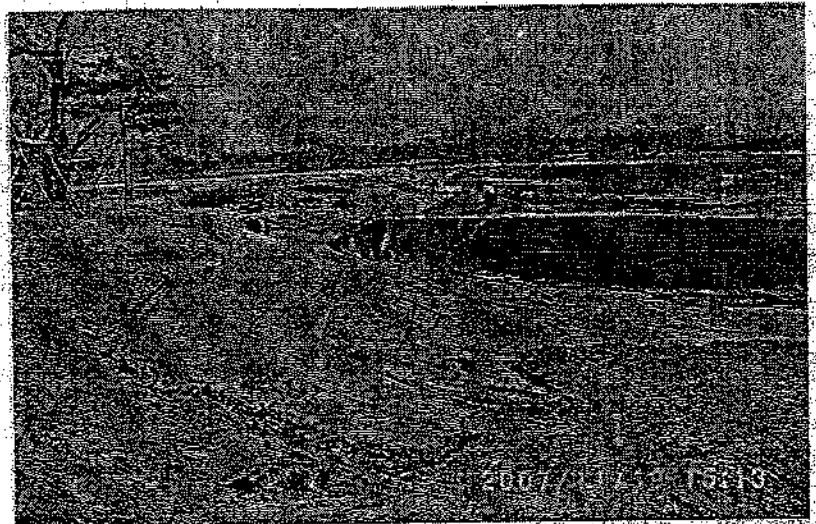
RAINWATER CAN BE STORED IN TANKS

b. Percolation pond -

Developing percolation pond is another important method of Rain Water Harvesting.

Percolation pond can be prepared by bare stone pitching /using HDPE sheets. Laying HDPE sheets will require murum filling underneath.

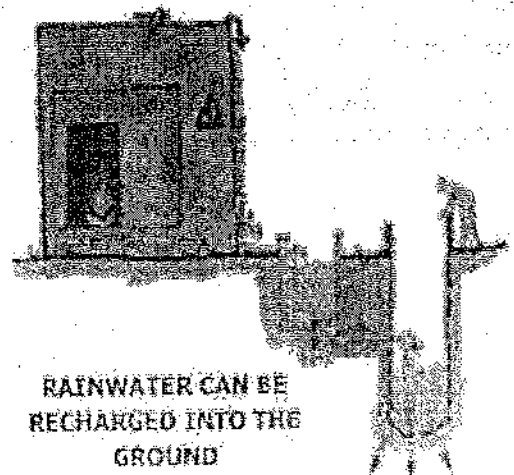
However if we want to recharge maximum water in the ground, we do not propose HDPE sheet layer in



the percolation pond. So more & more water will seep in & after maximum silling at bottom, water will get stored.

2) Ground water recharge

Another method is using roof water and Storm water for ground water recharge. In that case the roof water can



RAINWATER CAN BE RECHARGED INTO THE GROUND

be filtered through sand filters but storm water needs Desilting chamber and auxiliary bore wells or recharge pit. The storm water can be collected through channel and gutters according to the existing topography. The physical, chemical and biological contamination can be taken care by desilting chamber. This water can be used for ground water recharge by putting it in auxiliary bore well. By this the ground water table will improve substantially along with water table of the area. We can also use soak away pits, infiltration trenches, oil & grit separators to purify water. This is comparatively cheaper option.

Rainwater harvesting Calculation

Rainwater Collected before development

$$\text{Total terrace Area} = 35869.18 \text{ Sq. M. (Appo.)}$$

$$= 35817.18 \times 849.32 \times 0.3$$

$$= 9126.07 \text{ Cum per year}$$

$$= 182.52 \text{ Cum Per Day}$$

We consider the 50 day of rainy season in one year

Rainwater Collected after development

$$1. \text{ Total Terrace area (A)} \quad - 35869.18 \text{ Sq. M.}$$

$$2. \text{ Average Rainfall in Pune (I)} \quad - 849.26 \text{ MM}$$

(Ref: Ground water information)

$$3. \text{ Runoff Coefficient Factor for hard Space (F)} \quad - 0.8$$

Surface water collected by rainwater will be

$$= \text{Area in Sq. M.} \times \text{Average Rainfall} \times \text{Runoff Coefficient}$$

$$= A \times I \times F$$

$$= 35869.18 \times 849.26 \times 0.8$$

$$= 24369.80 \text{ Cum per year}$$

$$= 487.39 \text{ cum per day}$$

We consider the 50 day of rainy season in one year

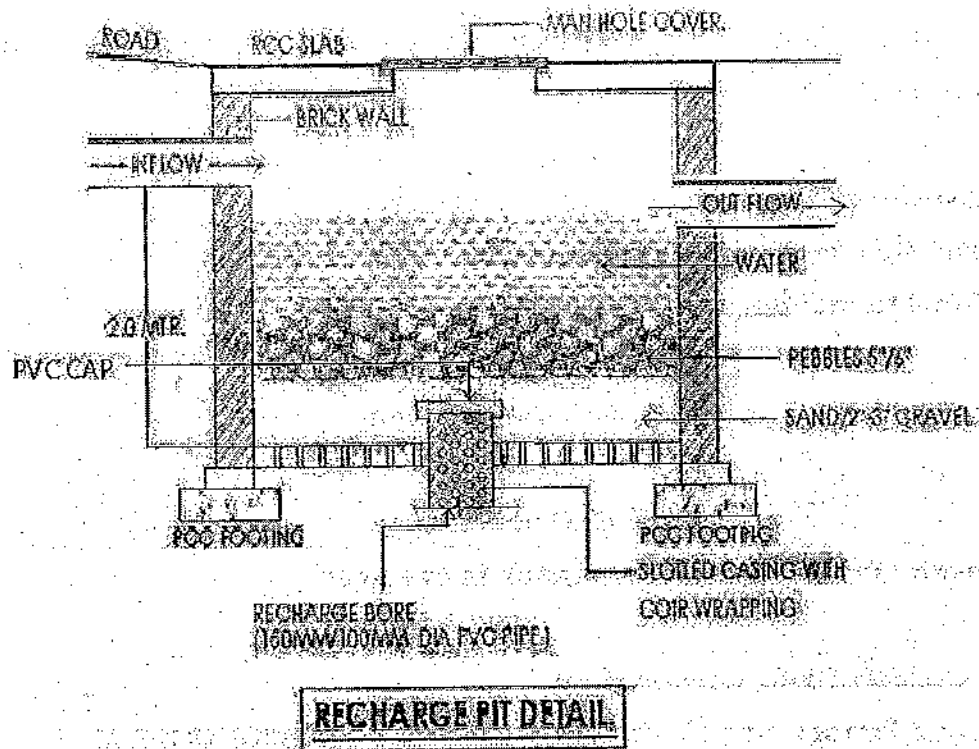
Surplus Water will be calculated

$$\text{Total Surplus water} = \text{Rainwater After Development} - \text{Rainwater Before Development}$$

$$= 487.39 - 182.52$$

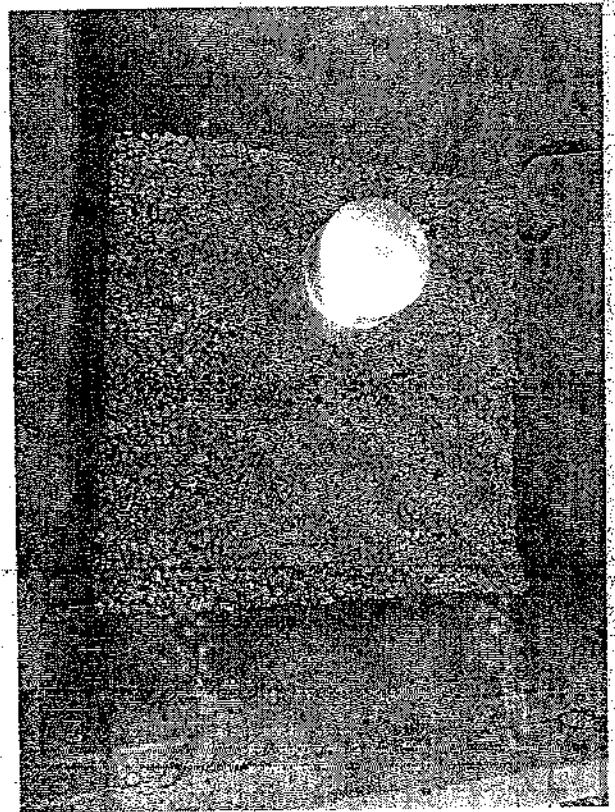
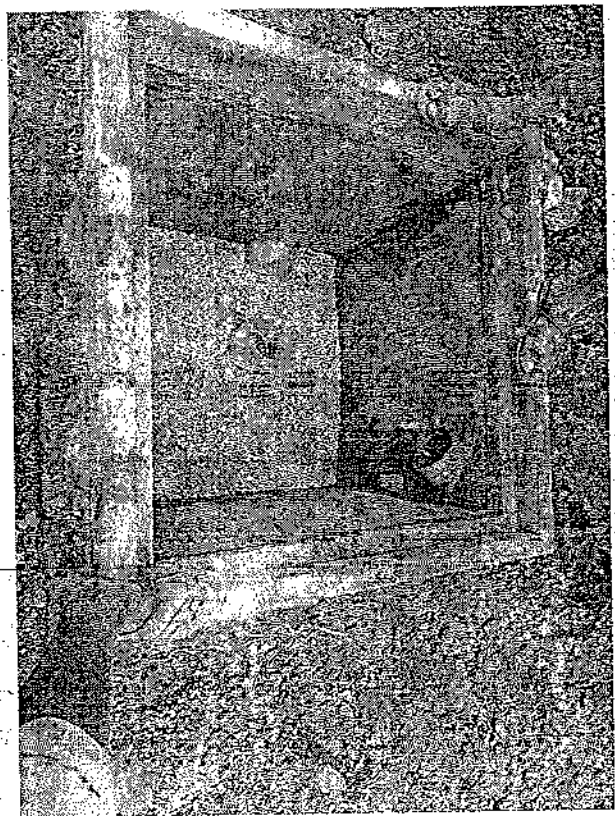
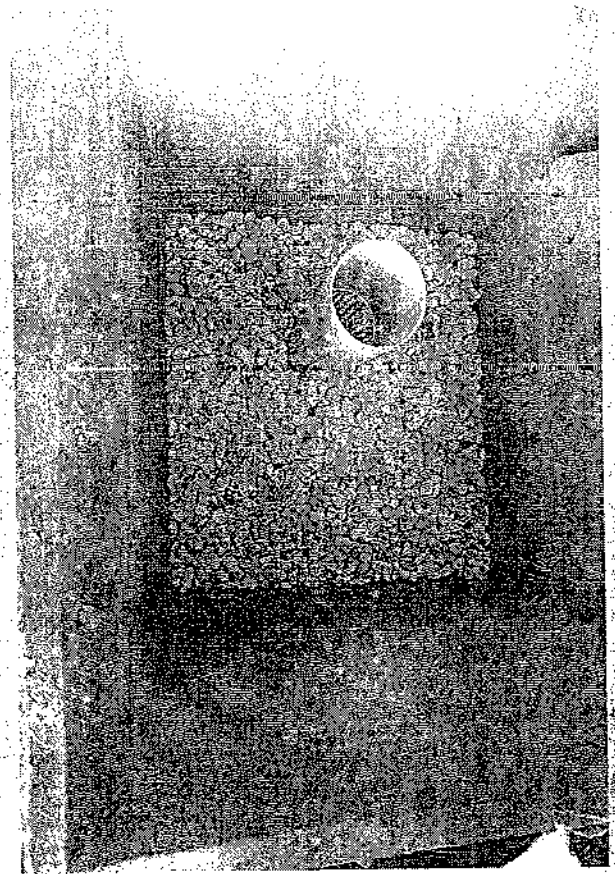
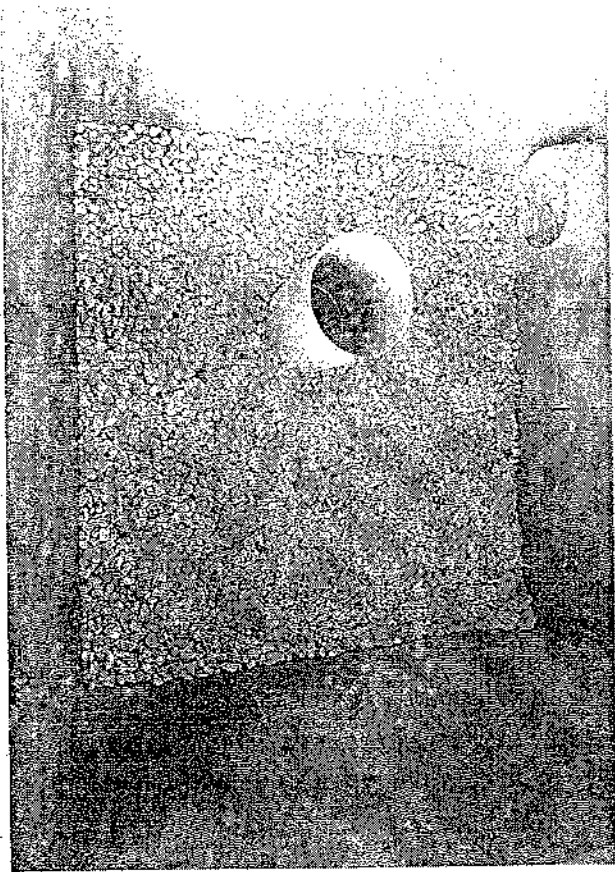
$$= 304.87 \text{ Cum Per Day}$$

Recharge pits – Drawing of recharge pit

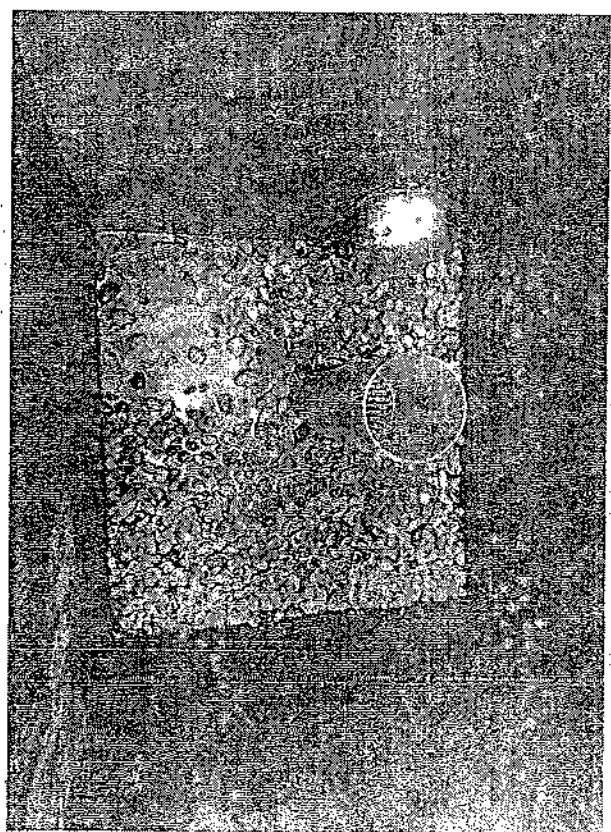
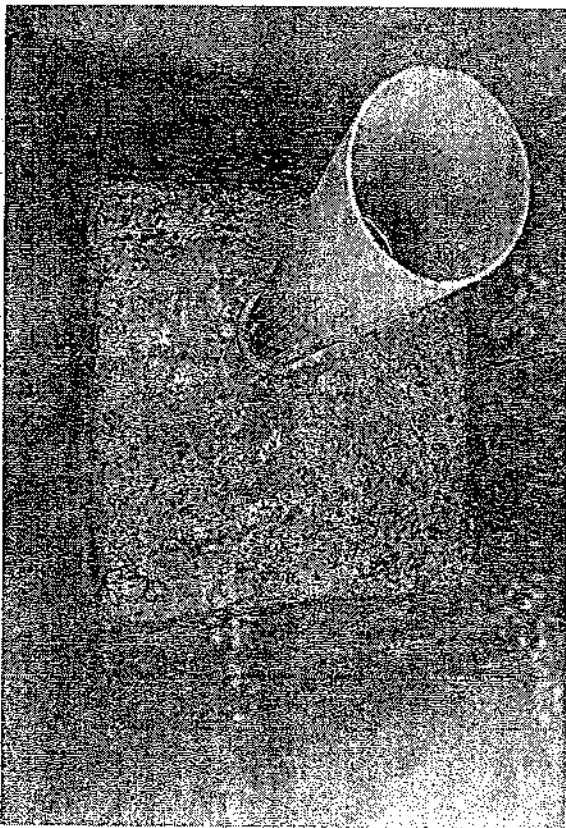
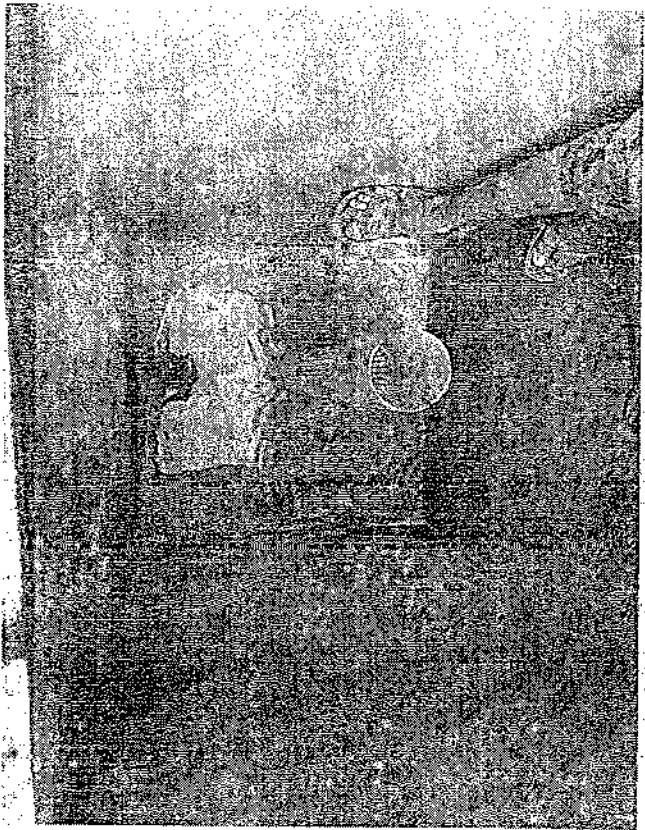
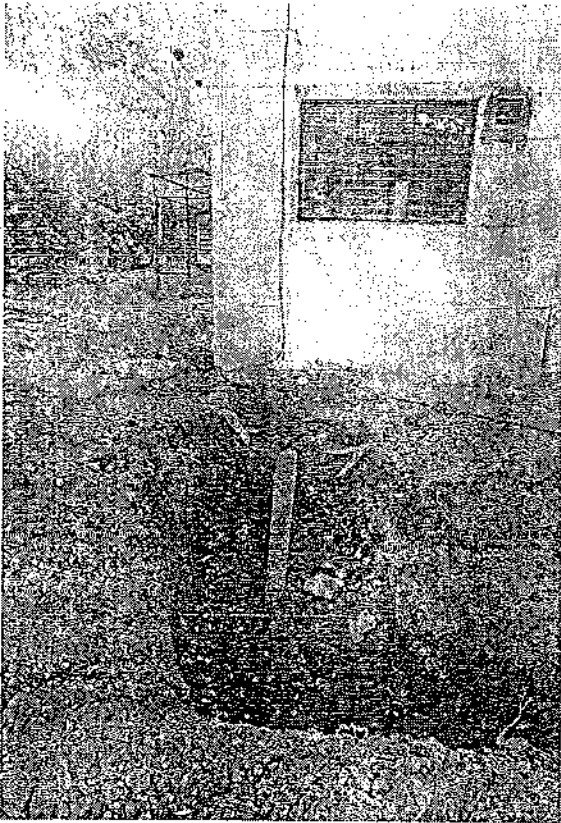


We are recharge with 2m x 2m in which Vee –Wire screen filter installed from this filtration will recharge water in to percolation borewell.

Vee wire screen filter is having filtration in micron level, also its used for rainwater harvesting purpose.



Actual Photos of Rainwater Harvesting



Phone : (020) 26902100 - 30 lines
Fax : (020) 26902244
E-mail : admin@vssisugar.org.in
Web site : www.vssisugar.com



VASANTDADA SUGAR INSTITUTE
Manjari (Bk.) Tal. : Haveli, Dist. : Pune - 412 307, Maharashtra, India.

2231
15/6/2022

PM
Rup
15/6

Thorat
15.6.2022

Dr. Preeti Deshmukh
Head, Soil Science Section

Ref.No.VSI/AGRI/SS/TC/2708/2022-23

Date: 15th June 2022

E-Mail: bssktd@gmail.com

To,
The Managing Director
Bhimashankar SSK Ltd, Dattatrayanagar,
Parganah Via. Awasari (Bk) Tal. Ambegaon,
Dist. Pune 412406

Sub.: Regarding ETP sludge analysis.
Ref.: Bhimashankar /sheet/670/2022-23 dt. 3/6/2022

Dear Sir,

As desired by you, we have analyzed the sample of ETP Sludge. Analysis report for the same is enclosed herewith.

Thanking you,

Yours faithfully,

P. Deshmukh

(Preeti Deshmukh)

Encl. Analysis report

Reply to be sent on the name of Institute and not on individual's name.



VASANTADADA SUGAR INSTITUTE

CONTINUATION SHEET

This test report pertains only to the samples actually tested at VSI laboratory in the presented condition based on the documents/sample submitted by the customer.

Ref.No.VSI/AGRI/SS/PC/2708/2022-23

Date: 15th June 2022

Analysis Report

Name of the Sample : ETP Sludge Sample

Ref.: Bhimashankar /shetki/670/2022-23 dt.3/6/2022

Sr.No.	Parameters	Result
1.	pH	7.08
2.	Electrical Conductivity ds/m	3.67
3.	Organic Carbon, % by wt.	15.00
4.	Total Nitrogen, % by wt.	2.34
5.	Phosphate (as P ₂ O ₅), % by wt.	2.30
6.	Potassium (as K ₂ O), % by wt.	0.32
7.	Magnesium (as Mg), % by wt.	0.28
8.	Calcium (as Ca), % by wt.	7.46
9.	Boron(asB), % by wt.	ND
10.	Sulphur (as SO ₄), % by wt.	3.42
11.	Copper (as Cu) mg/kg	101.6
12.	Moisture %	0.55
13.	Fe % by wt.	5.09
14.	Mn (mg/kg)	401
15.	Zn (mg/kg)	149.6
16.	Cd (mg/kg)	ND
17.	Cr (mg/kg)	816
18.	Ni (mg/kg)	112.2
19.	Pb (mg/kg)	89.2

ND: Not detected


(S.K.Sable)
Scientist

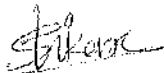


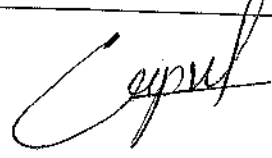
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- ISO 45001 : 2018 Certified Organization

ANALYSIS REPORT FOR AMBIENT AIR QUALITY MONITORING				Page 1 of 1
NAME OF COMPANY:- M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon, Dist. - Pune-412 406		Report No	AL/TR/76-468/23-23	
		Report Date	09/12/2023	
		Sampling Date	AL/8-492/06/23-24	
		Inward Date	30/11/2023	
Sample Location	Bagasse Yard {Fugitive Sample}	Sampling Time	01:10 PM	
Sample Collected By	AARL	Time duration	08 Hr	

SR.NO.	PARAMETER	UNIT	RESULT	METHOD
1.	Particulate matter-PM ₁₀ (less than 10 micron)	µg/m ³	78.36	IS:5182(Part-23):2006
2.	Particulate matter-PM _{2.5} (less than 2.5 micron)	µg/m ³	23.96	IS:5182(Part-23):2006


Verified by
(Analyst)


Authorized Signatory

...End of test report...

130



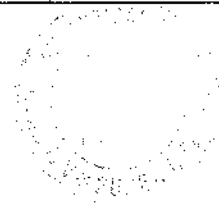
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ANALYSIS REPORT FOR AMBIENT AIR QUALITY MONITORING			Page 1 of 1
NAME OF COMPANY:- M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon, Dist. - Pune-412 406	Report No		AL/TR/77-295/23-24
	Report Date		05/01/2024
	Sampling Date		AL/8-566/06/23-24
	Sampling Date		27/12/2023
Sample Location	Bagasse Yard {Fugitive Sample}	Sampling Time	02:05 PM
Sample Collected By	AARL	Time duration	08 Hr

SR.NO.	PARAMETER	UNIT	RESULT	METHOD
1.	Particulate matter-PM ₁₀ (less than 10 micron)	µg/m ³	75.26	IS:5182(Part-23):2006
2.	Particulate matter-PM _{2.5} (less than 2.5 micron)	µg/m ³	24.23	IS:5182(Part-23):2006

[Signature]
Verified by
(Analyst)



[Signature]

Authorized Signatory

...End of test report...

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AKANKSHA ANALYTICAL & RESEARCH LAB

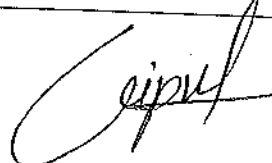
- Recognized by Central Pollution Control Board, M/o Environment, Forest & Climate Change, Govt. of India.
- ISO 9001: 2015 Certified Organization
- ISO 45001: 2018 Certified Organization

ANALYSIS REPORT FOR AMBIENT AIR QUALITY MONITORING				Page 1 of 1
NAME OF COMPANY:- M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon, Dist. - Pune-412 406		Report No	AL/TR/78-008/23-24	
		Report Date	05/02/2024	
		Sampling Date	AL/8-641/06/23-24	
		Sampling Date	27/01/2024	
Sample Location	Bagasse Yard {Fugitive Sample}	Sampling Time	01:00 PM	
Sample Collected By	AARL	Time duration	08 Hr	

SR.NO.	PARAMETER	UNIT	RESULT	METHOD
1.	Particulate matter-PM ₁₀ (less than 10 micron)	µg/m ³	74.26	IS:5182(Part-23):2006
2.	Particulate matter-PM _{2.5} (less than 2.5 micron)	µg/m ³	25.63	IS:5182(Part-23):2006


Verified by
(Analyst)

...End of test report...


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ANALYSIS REPORT FOR AMBIENT AIR QUALITY MONITORING		Page 1 of 1	
NAME OF COMPANY:- M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon, Dist. - Pune-412 406		Report No	AL/TR/78-550/23-24
		Report Date	28/02/2024
		Sampling Date	AL/8-698/06/23-24
		Sampling Date	22/02/2024
Sample Location	Bagasse Yard {Fugitive Sample}	Sampling Time	12:10 PM
Sample Collected By	AARL	Time duration	08 Hr

SR.NO.	PARAMETER	UNIT	RESULT	METHOD
1.	Particulate matter-PM ₁₀ (less than 10 micron)	µg/m ³	72.36	IS:5182(Part-23):2006
2.	Particulate matter-PM _{2.5} (less than 2.5 micron)	µg/m ³	28.45	IS:5182(Part-23):2006

Caipul

Authorized Signatory

...End of test report...



AKANKSHA ANALYTICAL & RESEARCH LAB

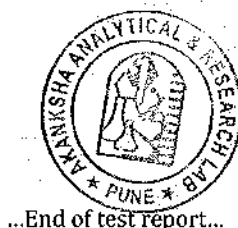
- Recognized by Central Pollution Control Board, M/o Environment, Forest & Climate Change, Govt. of India.
- ISO 9001: 2015 Certified Organization
- ISO 45001 : 2018 Certified Organization

ANALYSIS REPORT FOR AMBIENT AIR QUALITY MONITORING			Page 1 of 1
NAME OF COMPANY:- M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon, Dist. - Pune-412 406		Report No	AL/TR/79-651/2024-25
		Report Date	06/04/2024
		Sampling Date	AL/8-787/06/2024-25
		Sampling Date	30/03/2024
Sample Location	Bagasse Yard {Fugitive Sample}	Sampling Time	01:30 PM
Sample Collected By	AARL	Time duration	08 Hr

SR.NO.	PARAMETER	UNIT	RESULT	METHOD
1.	Particulate matter-PM ₁₀ (less than 10 micron)	µg/m ³	68.95	IS:5182(Part-23)RA 2022
2.	Particulate matter-PM _{2.5} (less than 2.5 micron)	µg/m ³	32.45	IS:5182(Part-24):2019

Details of equipment used and its Calibration Certificate			
Name of Equipment	Lab ID No.	Calibration Certificate No.	Validity
Ambient Air Quality Machine	AK-AAQ-02	2250147	30/07/2024
Digital Weighing Balance	AL-DWB-01	2023/60146/01	27/06/2024
Spectrophotometer	AARL/SPM/02	2250120	01/08/2024
Atomic Absorption Spectrometer	AARL/AA/01	2250106	01/08/2024


Verified by
(Analyst)




Authorized Signatory

...End of test report...

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महाराष्ट्र शासन

औद्योगिक सुरक्षा व आरोग्य संचालनालय (कामगार विभाग)

परवाना क्र : १८१५३

नमूना क्रमांक ४

(नियम ६ व ८ पाहणे)

कारखान्याची नोंदणी व कारखाना चालविण्याचा संबंधीचा परवाना

नोंदणी क्रमांक : १२२१०१०७२१००६४६



कारखाने अधिनियम, १९४८ आणि त्यासंबंधी असलेले नियम यांच्या तरतुदीप्रमाणे भीमाशंकर सहकारी साखर कारखाना लीमीटेड यांना खाली वर्णन केलेल्या जागेत कारखाना चालविण्यास परवाना देण्यात आला आहे.

या परवान्यान्वये या जागेत कोणत्याही एका दिवशी १००० पर्यंत कामगार लावण्यास आणि २००० पेक्षा जास्त अश्वशक्ति उपयोगात आणण्यास परवानगी आहे.

या परवान्याची मुदत ३१ डिसेंबर २०२४ पर्यंत आहे.

Digitally Signed by
SHARADA HONDULE
Date: 10/17/2023 12:04:28 PM

शुल्क रु. - १४७००३.६० पोहोचले

दिनांक : १७-१०-२०२३

Signature valid



अपर संचालक
औद्योगिक सुरक्षा व आरोग्य,
महाराष्ट्र राज्य, पुणे ३

परवाना दिलेल्या जागेचे वर्णन

परवाना दिलेल्या कारखान्याचे

भीमाशंकर सहकारी साखर कारखाना लीमीटेड

Factory Name :

BHIMASHANKAR SAHAKARI SAKHAR KARKHANA LTD

पत्ता :

भीमाशंकर एस.एस.के. लीमीटेड, ADMINISTRATIVE BUILDING, मंचर

शिरूर रोड, दत्तात्रय नगर, दत्तात्रय नगर, आंबेगाव, पुणे, महाराष्ट्र, ४१२४०६

Address :

BHIMASHANKAR S.S.K LTD, ADMINISTRATIVE BUILDING, MANCHAR SHIRUR ROAD, DATTATRAY NAGAR, DATTATRAY NAGAR, Ambegaon, Pune, MAHARASHTRA, 412406

कलम :

२(ग)(१)

औद्योगिक वर्गीकरण :

१०७२१

कारखान्याच्या इमारतीचे नकाशे दिनांक २९.०६.२०२२ च्या जावक क्रमांक PLN/४७७/१५/SLC/RRV/७७५६/१५ खाली मंजूर केले गेले आहेत.

This Certificate is digitally signed by on. 17-10-2023

टिप : हा कारखान्याची नोंदणी व कारखाना चालविण्याचा परवाना आहे. हा परवाना देण्यात आल्यामुळे ज्या जागेत हा कारखाना स्थित आहे, त्या जागेस कोणतीही वैधता आपोआप बहाल होत नाही तसेच ज्या जागेत हा कारखाना स्थित आहे ती जागा आज दिनांक वेळेस अस्तित्वात असल्या संबंधात या परवान्यामुळे कोणताही हक्क व स्वामित्व सदरहू भोगवटदारास प्राप्त होत नाही



भीमाशंकर
सहकारी साखर कारखाना लि.

SAFETY AUDIT

FOR

Bhimashankar Sahakari Sakhar Karkhana Ltd.
A/P-Pargaon Tarfe, Awasari Bk, Taluka-Ambegaon,

District-Pune,
(Maharashtra)



Feb - 2022



P. N. KULKARNI & CO.

- * B.E. (Mech), M.B.A., F.I.V., F.I.E. Chartered Engineer
- * Ex-Scientist B.A.R.C., Competent Person (As per MFR), OISH
- * Competent Person Authority (S.M.P.V. 2016) PESO
- * Govt. Approved Safety Auditor, Valuer & Energy Auditor
- * Boiler Proficiency Engineer, NDT, Third Party Inspection

Flat No. 304, Sudha Kalash, Kalpataru Estate, Sharda Colony, Pimpale Nilakh, Pune - 411 027, Mobile: 9422460893, 9899997481,
Office Mobile: 7685047481, Tel.: 020-27240344, E-mail: pnkulkarni_1961@rediffmail.com, Website: www.hightechconsultancy.co.in

SCHEDULE - II

(See rule 3 & 9)

Proforma of Safety Audit Report

1. Name and Address of the Factory: **Bhimashankar Sahakar Sakhar Karkhana Ltd.**
Dattatraynagar, Pargaon Tarfe
Awasari Bk., Tal-Ambegaon, Dist-Pune.
2. Name of the Occupier: **Mr. Chandrakant G. Dhage**
3. Name of the Plant Head: **Mr. Shirish B. Surve (Factory Manager)**
4. Date of Audit: **8th February 2022**
5. List of raw material with maximum quantity storage quantity: **Enclosed**
6. List of finished products with maximum quantity storage quantity: **Enclosed**
7. Manufacturing process flow chart: **Enclosed**
8. P.I. Diagram of all plants (Chemical Factories): **Not Applicable**
9. Name of the Safety Auditor and Certificate No. and Name of the person who has carried out safety Audit: **P. N. Kulkarni - MS/DISH/SL/K-001/2020**
10. Whether enclosed Safety Report as per IS 14489, or any such standards prevailing at the relevant time, whichever is latest: **Yes**
Date: 15/01/2021



Pramod N. Kulkarni

Signature of Safety Auditor/
person or employee of an
Institution authorized to carry
out Safety Audit

I Plant Head undertake to submit the action taken report on recommendations
of Safety Audit on or Before _____

Date: **07/03/2022**

महेश्वर धगे
Signature of Occupier/Plant Head
P. Pargaon, Tal-Ambegaon Bk.,
Tal-Ambegaon, (Pune) 412406

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AUDIT REPORT AS PER

IS 14489: 1998

- 01 Occupational Safety and Health policy
- 02 O S & H Organizational set up
- 03 Education & Training
- 04 Employees Participation in OS&H Management
- 05 Motivational & Promotional measures for OS&H
- 06 Safety manual & rules
- 07 Compliance with statutory requirements
- 08 New equipment review/ inspections
- 09 Accident Reporting, analysis, Investigation & Implementation of Recommendations
- 10 Risk Assessment including Hazard Identification
- 11 Safety Inspections
- 12 Health & Safety improvement plan/ target
- 13 First aid facilities, Occupational Health centre
- 14 Personal protective equipments
- 15 Good Housekeeping
- 16 Machine and general guarding
- 17 Material handling equipments
- 18 Electrical & personal Safeguarding
- 19 Ventilation, illumination and noise
- 20 Work Environment Monitoring
- 21 Prevention of occupational diseases including Periodic medical examination
- 22 Safe operating procedures
- 23 Work permit system
- 24 Fire Prevention, Protection and fighting system
- 25 Emergency Preparedness plan (on site / off site)
- 26 Process / plant modification procedure
- 27 Transportation of Hazardous substances
- 28 Hazardous waste treatment & disposal

- 29 Safety in storage & warehouse
- 30 Contractor safety system
- 31 Safety for customers (including Material Safety Data Sheets)

1. PREFACE

The enclosed Safety Audit report of M/s. Bhimashankar Sahakari Sakhar Karkhana Ltd. A/P-Pargaon Tarfe, Awasari Bk., Taluka-Ambegaon, District-Pune, Maharashtra Was carried out as per Indian Standard IS 14489 : 2018 Code of Practice on Occupational Safety and Health Audit Conducted on 05 & 08/02/2022 by P.N.Kulkarni (Safety Auditor) along with Mr. Kapil Thorat & Team.

Before starting the Audit, the scope and methodology was discussed with M.D, Chief Engineer & Factory Manager Unit Head, HOD of Mechanical, Electrical, Security, Safety officer gave the detailed presentation of Safety & Health aspects of the various plants and departments. During interaction, the hazards associated in storage, handling & use of Sulphur, Acid, machine guarding, civil works, Electrical sub-station, working at height, general safety & health of workers were discussed and the safety systems incorporated by management were informed. Visits were made along with concerned HOD and Safety officer to see the vulnerable areas and extensive discussions were held with few workers, supervisors and officers. The Audit report gives the detailed observations and recommendations for necessary action. Time bound implementations of recommendations made in this Audit would further strengthen the Safety system & help in achieving excellence in the field of Occupational Safety & Health.

We are pleased to mention that management has taken keen interest in Safety, Health & Environment matters hence carried out this Safety Audit Since this plant is old.

P.N.Kulkarni Safety Auditor Pune extends sincere thanks to the Management of M/s. Bhimashankar Sahakari Sakhar Karkhana Ltd. A/P-Pargaon Tarfe, Awasari Bk, Taluka-Ambegaon, District-Pune, Particularly to Mr. Chandrakant Dhage (Managing Director), Mr. Shirish Surve (Tech Manager), Mr. Kishor Tijare (Process Manager) Mr. Chandrashekhar Magar (Labor & Welfare Officer), Mr. Kapil Thorat (Safety Officer) H.O.D of various department, other officers and supervisors in the plant.

2. ABOUT THE ORGANIZATION

Company Profile

2. (A) COMPANY PROFILE:

2.1 Bhimashankar Sahakari Sakhar Karkhana Ltd. a manufacturer of Sugar & Power located at Dattatraynagar, A/P Pargaon Via Awasari Bk, Tal - Ambegaon, Dist - Pune of Maharashtra State (India.). The land area of the Sugar & Co-gen power Plant facility is 145 Acre) The site is easily accessible by road. The site is about 22 km from town Manchar and Pune railway station 85 km.

Bhimashankar Sahakari Sakhar Karkhana Ltd. has existing cane crushing capacity of 6000 TCD & 19 MW bases cogeneration power plant.

There is no change in capacity of the cogeneration power plant. The operational season is 160 days.

(B) MANUFACTURING PROCESS (IN BRIEF)

The detailed process / Process flow diagram is enclosed in Annexure.

(C) Man Power

The Factory works in three shift in season. The Karkhana & Contact Workers total number of people working in the factory is app. 1000 nos.

(D) List of the Key Personnel: To execute the on-site plan with their Contact numbers is enclosed in Annexure

(E) List of Raw Material, Finished Product: List is enclosed

3. NEED OF SAFETY AUDIT & STATUTORY PROVISION

Safety Audit is an important tool for identifying falling standards, areas of risks or vulnerability, hazards and potential accidents in proposed and existing plants and processes, for determining the action necessary to remove hazards before personnel injuries or damages occur and for ensuring that the whole safety efforts is meaningful and the objectives understood as under :

1. RULE 73 -L (4) (e) FACTORIES RULES 1963.
2. It is also obligatory on the part of an occupier of the factory under section 2(n) and y-A (1) (Factories Act. 1948) to provide a safe system of work and hence to carry out periodic safety audit and to implement its recommendations.
3. The management has keen interest in keeping high standards of safety and health in plant and firmly believes that all accidents are preventable, being aware of this, has decided to carry out Safety Audit to fulfill social obligations.

4. SAFETY AUDIT METHODOLOGY

We have adopted the reference standards IS: 14489: 2018 prepared by Bureau of Indian Standards, New Delhi for conducting the safety audit.

The following are the stages/ steps used while conducting the Safety Audit.

- 1) Collecting the Preliminary information & data on the existing safety system & programme of the company through a system of questionnaire for assessment of the existing system.
- 2) Planning the audit exercise including the time frame, special focus on identified areas, collection and study of relevant standards.
- 3) Field visits of the Auditor's team along with HOD & safety officer.

Comprises of following:

- (a) Pre Audit meeting with the Plant Executive and all departmental heads to explain objectives and methodology and also obtain their support. Factory manager should issue a clear directive to all personnel in the plant regarding co-operation with the audit team.
- (b) Inspection of all plant areas & following the product flow.
- (c) Inspection of all supporting services like substation, plants, and compressor house, stores, maintenance workshops etc.
- (d) Discussions with managers, supervisors and workers in all these areas.
- (e) Persual of records and study of key documents (Licenses) in all these areas.
- (f) Study of activities, records and discussions with personnel of fire, safety and medical departments.
- (g) Discussion with factory manager highlighting the broad findings and preliminary conclusions of the Audit.
- 4) Analysis of the data collected and report writing.
- 5) Submission of draft report, if necessary and discussion on it with the company management.
- 6) Presentation of final report with recommendations.
- 7) Preparation of an action plan for implementation of the audit report's recommendations.

- 8) Follow up by top management to ensure implementation.
- 9) The report takes a 'holistic' approach in critically apprising each of safety, with reference to all departments in the company.
- 10) Compliance of statutory requirements.

5. SCOPE OF SAFETY AUDIT:

The following would be the broad areas of inspection, examination and verification of documents decided by the Auditors for conducting the Audit for aforesaid Company.

- Management philosophy on Safety, Health & Environment policy including the roll of existing safety dept. & organizational set up.
- Existing layouts details of the plant.
- Existing safety procedure & safe work permit systems.
- Fire prevention and protection system & use of Personnel Protective Equipment (P.P.E.)
- Safety in Storage handling and Transportation of hazardous liquid chemicals in the plant.
- Existing electrical safety system
- Existing safety education, training systems and budget.
- Review of operating procedure- operating conditions, hazard identification & control systems, safe operating procedures, disposal of waste, fire protection system, emergency preparedness.
- General hazards and their control system.]

Viz - covering of machine guarding, material handling system and equipments, working surfaces and drainage system, means of access, electrical hazards, housekeeping etc.

Roll of safety management / safety training / motivation.

6. TYPES OF RECORDS EXAMINED DURING SAFETY AUDIT

- 1) Occupational Safety & Health Policy.
- 2) Safety Organization Chart
- 3) Training Records on Safety, Fire Fighting & First Aid.
- 4) Records of Plant Safety Inspections.
- 5) Accident investigation Reports.
- 6) Records of Tests and Examinations of Equipments and Structures Reports as per Statutes.
- 7) Safe Operating Procedures for various operations.
- 8) Work Permit.
- 9) Maintenance and Testing, Records of Fire Detection and Fire Fighting Equipments.
- 10) Record of Industrial Hygiene Surves (Noise, Ventilation And Illuminating Levels, Etc)
- 11) Medical Records of Employees.
- 12) M.S.D.S.
- 13) On Site Emergency Plans and Mock Drills.
- 14) Waste Disposal Records, Effluent Discharges to Environment.
- 15) Housekeeping inspection Records
- 16) Minutes of Safety Committee Meetings.
- 17) Approval of Layout and other Approvals from Statutory Authorities.
- 18) Records of any Modifications Carried out in Plant Process.
- 19) Maintenance of Procedure Records.

7. AIMS AND OBJECTIVES

Safety Audit is important tool for identifying failing standards areas of risks or vulnerability, hazards and potential of accidents in proposed and existing plants and process; for determining the action necessary to remove hazards before personnel injuries or damages occur and for ensuring that the whole safety efforts is effective meaningful and objectives understood.

- This is an important and useful technique for industrial management for Accident prevention.
- Safety Audit subjects each of a company's activity to a systematic critical examination with the object of minimizing loss. Every component of the total system including layout and construction of the plant, operating and emergency procedures, plans PPE standards, accident records etc.
- An Audit aims to disclose the strengths and weaknesses of the main areas of vulnerability or risk and is carried out by appropriately qualified personnel including safety professionals.
- It is normal part of good business practice to initiate and carryout systems of inspection and checking to ensure that operations are performed in an efficient way and profitable way.
- Particularly for any chemical industry safety is of ultimate importance, taking into account the hazards associated with it. Safety Audit is the probably only one, which can be applied at all steps and operations to identify the potential hazards. It covers all aspects of the Safety, while other techniques deal with process and storage hazards only.

The board objective of safety audit is to critically evaluate the 'Safety management system' particularly to identify and control the hazards.

8. THE FOLLOWING OBJECTIVES WERE SET FOR THE SAFETY AUDIT

- To analyze the safety procedures, systems and practices.
- To analyze the proposed procedure drawings and adequacy of the built in safety devices provided in the proposed plant/equipment and its layout.
- To observe the present work conditions, operating methods, including storage/ handling of raw material/ finished products etc.
- To check the fire fighting arrangements for the factory.
- To comment upon various statutory compliances.
- To assess adequacy of Emergency Plan & Emergency Preparedness.
- To make suggestions for improvement of Safety Management Systems.

9. METHOD OF SAFETY AUDIT REPORT WRITING

The method and style of reporting is qualitative and relies to a considerable extent on the professional judgment, skill and knowledge of the auditors. This is useful for the management since it gives specific recommendations for the improvement in the existing safety standards apart from the notified deficiencies in the specific areas.

The safety audit report generally represents its findings not separately for each department, but in relation to the safety systems and subject areas listed in the scope of work.

The report is presented in the format of brief description of working process, possible potential hazards and consequences, observations and findings, suggestions and recommendations rating etc.

The observations and findings also give the strength and weakness of the various activities. The observations of deficiencies of specific areas/ locate are brought to the notice of concern officials for further improvement. The recommendations given are based on the relevant statutory provision/ requirements, standards codes and practices and also try to give guidance regarding the implementation and effectiveness of the safety system with example from other state and industries. In conclusion, it is clear that implementing suggestions and recommendations of safety audit system is an important means for management to have an effective self-regulatory safety programme.

The report is presented in the format of brief description of layout, process, fire protection system, electrical system, loading / unloading handling/ storage/ movement of liquid chemicals, observations and findings, suggestions and recommendations etc.

REPORT

- This report is prepared based on the information provided and observations carried during the plant visits in the month of Feb - 2022.
- The Safety Audit Report has been prepared on the guidelines given in the IS: 14489: 2018 [Code of Practices on Occupational Safety and Health Audit.
- In the following pages the points, items, facts, which were observed during the Safety Audit, are presented in the form of a report many useful and practical suggestions / recommendations have given, which when plant, and achieving the ultimate goals set. Hence it is suggested to prepare an action plan for the corrective actions to be taken and review it periodically.

Occupational Health and Safety Audit — Code of Practice
IS 14489 : 2018
ANNEX C
(Clause 5.3.4)
SAMPLE CHECKLIST FOR SAFETY AUDIT

C-1 OH & S MANAGEMENT	Remarks
C-1.1 OH & S Policy	
a) Does the organization have OH & S policy?	Yes
b) Who has signed the OH & S policy?	Managing Director
c) Whether the OH & S policy is per guidelines of the statutory provisions?	Yes
d) When was the OH & S policy declared and adopted?	11-12-2019
e) Whether the OH & S policy reviewed periodically?	Yes
f) Whether the OH & S policy is available in local language and made known to all?	Yes
g) What was the last date of updation?	11-12-2019
h) Does the policy find a place in the annual report?	Yes
C-2 OH & S ORGANIZATIONAL SETUP	
C-2.1 Safety Department	
a) Does the factory have a safety department and what is strength of safety department?	Yes
b) Whether the strength and qualifications of Safety Officers are as per the statutes?	Yes
c) Does the head of safety department report to the Chief Executive?	Yes
d) How often are the safety officers retrained in the latest techniques of total safety management? What is the frequency of retraining?	Regularly
e) What additional duties the safety officer is required to do?	No
f) What is the power of safety officer vis-a-vis unsafe condition or unsafe act?	Own Charge
C-2.2 Safety Committee(s)	
a) Does the factory has a safety committee(s)? What are the types, structures and terms of reference of the committees?	Yes
b) Is the constitution of the safety committee(s) as per the statute?	Yes
c) How are the members of safety committee(s) selected? (elected / nominated)	Nominated
d) How often are the meetings of safety committee(s) held?	Monthly
e) Are the recommendations of the committees(s) implemented?	Yes
f) Are the minutes of the safety committee(s) meetings circulated among the members?	Yes
g) Are the minutes forwarded to the trade union(s) and chief executive and occupier?	Yes
h) Whether the management and trade union play their active roles in supporting and accepting the committee(s) recommendations?	Yes

j) How are the safety committee(s) members apprised of the latest development in safety, health and environment?	Regularly
C-2.3 Safety Budget	
a) What is the annual safety budget?	Rs.10 Lakh
b) How much percentage is this budget of the total turnover of the company?	Annual Budget
c) How much budget has been utilized till date?	Annual Utilized
d) Is the safety budget adequate?	Yes
e) How is the safety budget arrived at?	Yes
f) What is the pattern of expenditure for the last five years?	Annual Expenditure
g) What are the approved sanctions for the expenditure in this budget?	Yes
h) Does this budget get reflected in the annual report of the company?	Yes
C-3 SAFETY MANUAL	
a) What is the periodicity of updation / review of safety manual?	Yes
b) Does the safety manual adequately address all the hazards in the plant?	Yes
c) Are the employee made aware of safety rules / instruction mentioned in the safety manual?	Yes
C-4 STANDARD OPERATING PROCEDURES (SOP)	
a) Are written Standard / safe operating procedures available for all operations and processes?	Yes
b) Whether the written Standard / safe operating procedures are displayed or made available and explained in the local language to the workers?	Yes
c) Whether concerned section and safety department prepares standard / safe operating procedure jointly?	Yes
d) Are standard / safe operating procedures reviewed and updated?	Yes
e) Have the workers been informed of the consequences of failure to observe the standard / safe operating procedures?	Yes
C-5 PLANT MODIFICATION PROCEDURES	
a) What is the system for effecting any change in the existing plant, equipment or process?	After Permission of Sugar Commissioner
b) Whether the P & I diagrams and other related documents are updated accordingly?	Yes
c) Whether hazard assessment done before implementation of modification?	Yes
C-6 WORK PERMIT SYSTEM	
a) What types of work permits exist in the factory?	
b) Are the necessary forms detailing required safety precautions have been prepared and used for each type of work-permit?	Yes
c) Is the responsibility assigned to authorized person for issuing of safety work permit? --	Yes
d) Is the copy of safe work permit sent to safety officer before execution of the job?	Yes

e) Is validity period specified in the safety work permit?	Yes
f) Are the records of work permit available and maintained in proper order?	Yes
C-6.1 Control Measures for Work at Height	
a) Is adequate safe access provided to all places where workers need to work?	Yes
b) Are all such access in good condition?	Yes
c) Are all scaffolds are properly designed and erected?	Yes
d) Are scaffolds inspected every day before work begins?	Yes
e) Are ladders securely clamped or lashed in place?	
f) Are planks in good condition?	Yes
g) Are scaffold walkways, platforms, runs or stairs free of debris, grease, any unnecessary obstruction and projecting nails?	Yes
h) Are the scaffolds higher than 20 m.? If yes, is a netting or intermediate railing provided between toe-boards and hand railings?	No
j) Are folding stepladders properly used?	Yes
k) Are ladders set up at the proper slope of about 1:4?	Yes
m) Do workers use hand lines to lift tools or materials?	Yes
n) Are proper ladders used around electrical hazards?	Yes
p) On sloping roofs, are crawling boards, lifelines, safety belts and edge protection provided where needed?	Yes
q) Whether the weak spots, skylights, or deteriorated asbestos-cement boards through which a worker might fall while working in the roof has been identified and safety net provided appropriately?	Yes
r) Are the workers being medically examined for their fitness to work at height?	Yes
C-6.2 Work in Confined Space	
a) Is work permit system followed for working in confined space?	Yes
b) Whether monitoring of the atmosphere inside the confined space is carried out and ensured that there is no flammable or toxic gas in the area?	Yes
c) Whether the person entering the confined space is using suitable personal protective equipment (PPE)?	Yes
d) Is rescue team available in case of any emergency?	Yes
C-7 CONTRACTORS' SAFETY SYSTEM	
a) Is there any system for selection of contractors?	Yes
b) Are there any guidelines on contractor's safety and training?	Yes
c) Whether contract document includes necessary safety and welfare clauses as per statutes?	Yes
d) Is there any programme to ensure use of PPE by contractors personnel?	Yes
e) Do the contractors have their own safety organization?	Yes
f) Are the contractors reporting all accidents and injuries?	Yes
g) Are contractor workers trained to observe safety at work place?	Yes
h) Whether contractor workers are engaged in process / operations? If yes, are they aware of safe operating procedures?	Yes
C-8 PLANT DESIGN AND LAYOUT	
a) Whether hazardous operations in the plant are segregated?	
b) Whether occupational health & safety aspects are considered during the	Yes

design?	
c) Are all the equipment provided with adequate space for working, maintenance etc.?	Yes
d) Are the storage tanks provided with enough space / clearance between them?	Yes
e) Whether the plant layout has taken care of the movement of firefighting equipment and emergency exits?	Yes
C-9 MEDICAL MANAGEMENT OF ACCIDENTS	
a) Are medical facilities available with trained first aid staff and equipment in round the clock shift for all including contractors?	Yes
b) Is the ambulance van available for round the clock basis with the dedicated driver?	Yes
c) Is there any mutual aid scheme available with the nearest hospitals to manage and treat injuries during emergency?	Yes
d) Are the workers / contractor workers aware of emergency medical facilities?	Yes
C-10 MANAGEMENT OF EMERGENCIES (NATURAL / MAN-MADE)	
a) Does the system exist to detect and control these Emergencies?	Yes
b) Are the employees aware of the measures to be taken during emergencies?	Yes
C-11 EMPLOYEES SELECTION AND PLACEMENT	
a) Whether norms are available for selection of different category of employees?	Std. Norms
b) Whether pre-employment medical examination is being conducted for employees?	Yes
c) Is there any procedure to evaluate safety awareness and record of the employees during their promotion?	Yes
C-12 SAFETY CULTURE	
C-12.1 Attitudes of Managers	
a) Do the managers follow the plant safety rules at all times?	Yes
b) What are their attitudes towards safety reviews and audits?	Yes
c) What is the response of management to safety violation?	Good
d) Whether safety related decisions are taken in consultation with the workers?	Yes
e) What is the attitude of the managers towards non use of personal protective equipment?	No any .
C-12.2 Attitudes of Workers	
a) Whether workers are aware of the consequences of their wrong actions?	Yes
b) Are laid down safe working procedures followed strictly?	Yes
c) What is the attitude of the workers towards their own mistake, which can prejudice safety?	No any .
d) Do the workers report near miss incidents and suggest safety improvements?	Yes
e) Are the workers aware of the system of rewards and sanctions relating to safety matters?	Yes
f) What is the attitude of workers towards use of personal protective equipment?	No any .
C-13 STATUTORY LICENSES, APPROVALS AND RECORDS	

a) Whether all the safety related Acts / Rules (with latest amendments) applicable to your organization identified, informed to all employees and complied?	Yes
b) Whether the licences have been validated?	Yes
C-14 MOTIVATIONAL AND PROMOTIONAL MEASURES FOR OH & S	
a) Does the factory have occupational health and safety suggestion scheme?	Yes
b) Are occupational health and safety contests organized in the factory?	Yes
c) Does the factory participate in National Awards?	No
d) Has the factory been awarded during last five years?	No
e) Does the organization publish safety bulletin / newsletters?	No
f) Whether the safety bulletins are widely distributed?	No
g) How is the occupational health and safety information including accident statistics disseminated in the factory? (Bulletin boards, Newsletter etc.)	NO
h) What are the activities conducted during National Safety day / week?	Yes
j) What is the percentage of Workers participating in the various safety promotional activities?	Yes
C-15 HAZARD IDENTIFICATION AND JOB SAFETY ANALYSIS	
a) Was an initial process hazard analysis (PHA) completed?	Yes
b) What are the stages of PHA? Whether a dedicated group is identified for PHA?	Yes
c) Was the PHA appropriate for the complexity of the process and identify, evaluate, and control the hazards involved in the process?	Yes
d) Does the hazard evaluation use one or more of the following PHA methodologies: What-If Analysis, Process Checklist, Hazard and Operability Study (HAZOP), Failure Mode and Effects Criticality Analysis (FMECA), Fault Tree Analysis (FTA) or any other appropriate equivalent methodology?	Yes
e) Does PHA assures addressing issues of inherent safety features with respect to material and their properties?	Yes
f) Does the PHA address the hazard identification, incidents history, consequences of failures (engineering and administrative controls), human factors, consequent analysis with respect to possible safety and health effects of failure of controls?	Yes
g) What are the stages of PHA? Whether a dedicated group is identified for PHA?	Yes
h) Does the system exists to promptly address findings and recommendations of PHA?	Yes
j) Are the PHA's updated and revalidated at least every five years by a qualified team to assure that the PHA is consistent with the current process?	Yes
k) Whether the activities requiring Job Safety Analysis have been identified?	Yes
m) Whether the identified jobs for Hazard Identification have been carried out by trained and experienced persons?	Yes
n) Whether the checklists have been prepared on each Job Safety Analysis and are being used while carrying out the job?	Yes
C-16 PRODUCT SAFETY	
a) Whether hazards arising from use of the products are identified?	Yes

b) Whether material safety data sheet prepared for the products?	Yes
c) Are all the products labeled and packed appropriately?	Yes
d) Whether safety instructions are given along with products?	Yes
e) Whether policy exists for recall of products?	Yes
C-17 SAFETY TRAINING	
a) Whether training needs have been identified?	Yes
b) Is there any programme of induction training, its duration and topics covered?	Yes
c) Whether the assessment of the trainees has been carried out?	Yes
d) What are the infra-structural facilities available for training?	Yes
e) Whether training is conducted by qualified person?	Yes
f) Whether trainers are being re-trained from time to time?	Yes
g) Whether proper records of training program conducted are maintained?	YES
h) How training programs are evaluated?	Yes
j) Whether schedule for training on occupational health and safety is available and maintained?	Yes
k) Whether the training programmes are reviewed?	Yes
m) Are all the employees periodically trained / retrained and what is the frequency of such training?	Yes
n) Are the retraining needs identified whenever a new process / products and change in existing process introduced?	Yes
p) Whether training covers top management?	Yes
q) How many hours of safety training is given to different employees?	Yes
C-18 CHANGE MANAGEMENT	
C-18.1 Management of Change	
a) Are there written-procedures for managing change to process chemicals, technology, equipment and procedures and changes to facilities that affect the plant process / system operation?	Yes
b) Do the procedures assure that the technical basis for the proposed change addressed prior to any change?	Yes
c) Do the procedures assure that the impact of the change on safety and health addressed prior to any change?	Yes
d) Do the procedures assure that modifications to operating procedures are addressed prior to any change?	Yes
e) Do the procedures assure that the necessary time period for the change is addressed prior to any change?	Yes
f) Do the procedures assure that the authorization requirements for the proposed change are addressed prior to any change?	Yes
g) Are employees involved in operating a process, and maintenance and contract employees whose job tasks will be affected by change informed of, and trained in, the change prior to the start-up of process or affected part of process / operations?	Yes
h) Is the safety information is reviewed and updated on changes?	Yes
j) Are the operating procedures or practices updated?	Yes
C-18.2 Mechanical Integrity	

a) Does the mechanical integrity program include for all mechanical equipment including pressure vessels and storage tanks, piping and components, relief devices and vent systems, emergency shutdown systems, pumps, control systems?	Yes
b) Are there written procedures to maintain the on- going integrity of process equipment?	Yes
c) Whether training been provided to each employee involved in maintaining the on-going integrity of process equipment?	Yes
d) Are inspections and tests performed on each item of process equipment included in the program?	Yes
e) Does the inspection and test frequencies meet the manufacturer's recommendation and good engineering practice?	Yes
f) Are inspections and tests performed more frequently if determined necessary by operating experience?	Yes
g) Are deficiencies in equipment that are outside limits corrected before further use so as to assure safe operation?	Yes
h) In the construction of new plants and equipment, whether quality assurance programme is implemented to ensure that equipment fabricated is suitable for the process?	Yes
j) Are appropriate checks and inspections made during equipment installation stage?	Yes
k) Are the suitability of maintenance materials, spare parts and equipment ensured during maintenance?	Yes
C-19: PHYSICAL HAZARD	
C-19.1 Housekeeping	
a) Are all the passages, floors and the stairways in good condition?	Yes
b) Is glass door taped or otherwise marked to make it visible to workers?	Yes
c) Do you have the system to deal with the spillage?	Yes
d) Do you have sufficient disposable bins clearly marked and whether these are suitably located? Are containers of refuse (waste) and trash emptied at the end of every day or soon after they are full? Are the containers or bins regularly cleaned?	Yes
e) Are drip trays positioned wherever necessary?	Yes
f) Do you have adequate localized extraction and scrubbing facilities for dust, fumes and gases? Please specify.	Yes
g) Whether walkways are clearly marked and free from obstruction?	Yes
h) Do you have any inter-departmental competition for good housekeeping?	Yes
j) Has your organization elaborated good housekeeping practices and standards and made them known to the employees?	Yes
k) Are there any working conditions, which make the floors slippery? If so, what measures are taken to make them safe?	Yes
m) Does the company have adequate measures to suppress polluting dust arising out of materials stored on the roadside?	Yes
C-19.2 Machine and General Area Guarding	
a) Whether machinery and equipment which can cause physical injuries to operator have been identified?	Yes
b) Are all moving parts and point of operation of machinery adequately guarded?	Yes
c) Are all fixed guards securely bolted in position and in good condition?	Yes

d) Are all interlock guards for prevention of physical injury in good condition?	Yes
e) Are all emergency stop buttons effective and clearly labeled?	Yes
f) Are the operators for machines having moving parts aware of the danger of working with loose clothing?	Yes
g) Are the openings where there is free fall hazard covered or fenced securely?	Yes
C-19.3 Material Handling	
a) Are adequate equipment available for handling materials?	Yes
b) Are the workers aware of the hazards associated with material being handled?	Yes
c) Where manual handling is necessary, are the workers been trained? Do they practice this? Are workers warned for lifting of excessive weight? (Maximum weight of material for adult male and female are 55 Kg and 30 Kg respectively)	Yes
d) Do workers follow safe procedures for storage of materials?	Yes
e) Is the register maintained to record particulars of examination of all lifting machines, tools and tackles?	Yes
f) Are all the statutory examinations and tests carried out and certified by competent person(s)?	Yes
g) Are the operators of crane, lifts, hoists and other mechanized operations adequately qualified?	Yes
h) Is the safe working load clearly marked?	Yes
j) Has the person employed to operate crane, forklift, or to give signals to crane been medically examined for eyesight and colour vision?	
k) Is the frequency of eyesight and colour vision examination as per the latest rules?	Yes
C-19.4 Electrical Safeguarding	
a) Are licensed electricians available for electrical work?	Yes
b) Whether area classification for electrical equipment has been carried out?	Yes
c) Do the electrical fittings conform to area classification for electrical equipment?	Yes
d) Is a ground fault current interrupter system (ELCB) in use?	Yes
e) Are all connections made by using appropriate plugs, receptacles or enclosures? Are fuses provided?	Yes
f) Are there any make shift connection bare wires or damaged cables?	No
g) Is there a system of ensuring periodical inspection of hand tools, extension boards used for electrical work?	Yes
h) Do the workers use proper types of PPE during the working on live line?	Yes
j) Is the separate work permit issued for working on high voltage line?	Yes
k) Whether the process(s) and equipment that generate and accumulate static charge have been identified?	Yes
m) Whether all such equipment including pipelines for flammable materials are properly bonded and earthed?	Yes
n) Whether earth pit resistance is measured and the record maintained?	Yes
p) Whether lightning arrestor has been installed and is adequate?	Yes
C-19.5 Safety in Storage and Warehousing	
a) Whether the Material Safety Data Sheet for all chemicals is available?	Yes

b) Are the chemicals stored as per their hazardous properties including the incompatibility?	Yes	
c) Are all containers clearly, indelibly labelled? Are all chemicals stored as per safety regulations?	Yes	
d) Whether all racks and steel cages have sufficient load bearing capacity?	Yes	
e) Is adequate natural ventilation provided to store room? Is there any emergency exit?	Yes	
f) Whether adequate firefighting arrangement existing in flammable chemical storage?	Yes	
g) Whether methodology for handling spillages of hazardous chemical available along with the equipment required handling the spillage?	Yes	
h) Whether aisles are marked and emergency exits displayed?	Yes	
C-19.6 Hazard Assessment for New Equipment		
a) What is the system for effecting any change in the existing plant, equipment?	No	
b) Is there system for evaluating hazards from new equipment?	No	
c) Whether the P and I diagrams and other related documents are updated accordingly?	Yes	
d) Is any Job Hazard Analysis (JHA) carried out after installation of new equipment?	Yes	
C-19.7 Hazards from Radiation Sources		
a) Whether licences have been obtained for storage / handling of radioactive material?	NO Any Radiation Sources	
b) Whether approved Radiological Safety Officer appointed?		
c) Whether appropriate PPEs are used against radiation hazards?		
d) Is the flooring of the radioactive material handling area amenable for proper decontamination?		
e) Is the storage room of radiation source as per the licence condition?		
f) Are all persons working in the facility have radiation safety training?		
g) Is the operators handling devices using radioactive materials qualified and possess the necessary certificate?		
h) Is the periodical radiation monitoring carried out?		
j) Are the records of inventory of radioactive material maintained in the standard format and submitted to the competent authority as per the period specified?		
k) Are emergency handling tools available?		
m) Are the personnel monitoring badges (TLD, Pocket dosimeter etc.) assigned and worn by each radiation worker?		
n) Are the radiation symbol and red light displayed as required?		
C-20 CHEMICAL HAZARD		
C-20.1 Transportation of Hazardous Substances		
a) What potentially hazardous materials are transported to or from the site (including wastes)	By Road	
b) What mode of transport are used?	By Road	
1) Road,	By Road	
2) Rail, and	Yes	
3) Pipelines		
1) Road		

i) Does the company employ licence vehicle of its own / outside sources?	Yes
ii) Are the loading / unloading procedures in place and safety precautions displayed?	Yes
iii) Is there a provision to check the healthiness of road tanker with respect to explosives rules?	Yes
iv) Are loaded tankers or trucks parked in a specific area on-site?	Yes
v) Do all truck and tanker drivers carry transport emergency (TREM) card or instruction booklet?	Yes
vi) Do all truck and tanker drivers get training in handling emergencies during transport?	Yes
vii) Are all the tankers marked for proper Hazchem code?	Yes
2) Rail	
i) What hazardous materials are transported by rail?	Yes
ii) Does the company have a direct siding on site?	Yes
iii) Are tankers or other wagons used in transportation?	Yes
3) Pipelines	
i) What materials are transported to and from the site by pipelines?	Yes
ii) Are the pipelines underground or over ground?	Over ground
iii) Are corrosion protection measures employed in pipelines?	Yes
iv) Whether intermediate booster pumps are used?	Yes
v) What is the maximum, minimum and average transfer rates?	Yes
vi) Are the pipelines extended in the public domain?	Yes
vii) Are the pipelines dedicated for each type of chemicals?	Yes
viii) Are the pipelines fitted with safety equipment such as leak detectors, automatic shut-off valves etc.?	Yes
ix) What is the frequency and method of testing of the pipeline?	Regularly
x) Is there written procedure for tackling leakages in pipeline?	Yes
C-20.2 Handling of Hazardous Substances	
a) What are the hazardous substance handled in the factory?	Yes
b) Whether quantity of hazardous substances is above the threshold limit specified in the Manufacture, Storage and Handling of <i>Hazardous Substances Rule, 1989</i> ? If yes, then required documentation is available as per the rule.	Yes
c) Whether written procedure for handling the hazardous substance is available and operators are trained for handling such substances including actions required in case of leakages and spillages?	Yes
d) Are the employees aware of the hazards arising from hazardous substances and safety precautions to be taken during handling of these?	
C-20.3 Material Safety Data Sheets (MSDS)	
a) Are the material safety data sheets available for all the chemicals handled, used and manufactured in the factory?	Yes
b) Whether the latest MSDS are displayed at strategic locations?	Yes
c) Is it available in local language?	Yes
C-20.4 Spill Control Measures	
a) Whether spill control procedure is available?	Yes
b) Whether spill collection pit / sump is available at the workplace?	Yes
c) Whether methodology for recovery / disposal of collected material has been	Yes

established?

C-20.5 Storage of Hazardous Substances

a) Whether storage vessels are identified with the capacity as required under *MSIHC, Rules 1989*.

Yes

b) What are the storage pressure and temperature?

Yes

c) Whether vessels are above ground / underground?

Yes

d) If any of the tanks storing flammable material, whether electrical equipment and fittings are as per electrical area classification?

Yes

e) Is the bunded area takes into account the total quantity of the largest tank?

Yes

f) Whether the bund perimeter takes into consideration of trajectory of leak from tank?

Yes

g) Are the vessels properly bonded and earthed and whether periodically checked and record maintained?

Yes

h) Are the vessels fitted with remotely controlled isolation valves?

Yes

j) Are vessels provided with emergency vent, relief valve, bursting disc, level indicator, pressure gauge, overflow line?

Yes

k) Where do such vents discharge?

Yes

m) Are the vessels provided with alarms for high level, high temperature and high pressure?

Yes

n) Are standby empty tanks or any other alternate systems provided for emptying / transfer in case of emergencies?

Yes

p) What are the provisions made for firefighting / tackling emergency situations around the storage vessels?

Yes

q) Has any consequence analysis for loss of containment been carried out?

Yes

r) Whether the vessels are tested as per statute?

Yes

s) Whether log sheets are filled up on daily basis for recording the parameters of these vessels?

Yes

t) Whether monitors for detection of leakage of flammable / toxic material installed?

Yes

u) Whether the chemicals stored are as per their compatibility?

Yes

C-20.6 Gas Cylinders

a) What are the various gas cylinders used in the plant?

Yes

b) Are valid licenses available for storing all these cylinders?

Yes

c) Are the cylinders stored and segregated as per their compatibility?

Yes

d) What are the measures taken for combating any emergency in the cylinders storage area?

Yes

e) Whether integrity test certificates are obtained from the suppliers of the cylinders?

Yes

f) Are the cylinders chained and secured properly along with the valve caps and proper identification colour code?

Yes

g) Are the cylinders protected from heat or sun and rain?

Yes

h) Whether monitors for detection of leakage of flammable / toxic gas installed?

Yes

C-20.7 Labeling and Colour Coding

a) Are all the containers, vessels and storage tanks labeled for its content and capacity?

Yes

b) Whether the pipelines are colour coded as per IS 2379?	Yes
c) Is any plant specific colour code followed?	Yes
d) Whether the colour codes are displayed conspicuously in the working areas?	Yes
C-20.8 Hazardous Waste Management	
a) Is identification done for various types of hazardous wastes?	Yes
b) Are these quantities less than those specified by the Hazardous Wastes (Management & Handling) Rules, 1989?	Yes
c) What are their disposal modes?	Yes
d) What are the systems / measures adopted for controlling air / water / land pollution?	Yes
e) Whether the solid waste like combustibles, plastic, metals etc. segregated?	Yes
C-21 FIRE AND EXPLOSION HAZARD	
C-21.1 Organisational Set-up for Fire Fighting	
a) What is the total strength of fire station and fire crew?	Ten
b) How many fire crews are available in each shift?	Regularly
c) Is there fire squad identified in each shift?	Yes
d) Standing fire order is available with latest revision	Yes
e) How is the communication with fire station?	Yes
f) Does fire safety inspections carried out?	Yes
g) Does emergency procedure available for leakage or combustion of flammables?	Yes
h) What measures are available to control the fire load in the plant area?	Yes
j) Whether technical knowledge and skills of the manager and staff responsible for overall fire safety of the plant is adequate?	Yes
k) How many major and minor incidents / fires were there in the factory during the last five years? Give department / plant wise.	Yes
m) Have all the fires / incidents been investigated and corrective actions taken? Give break-up.	Yes
n) Resources:	Yes
1) Adequacy of protective clothing (coat, trouser, gloves, boots and helmets);	Yes
2) Availability of SCBA for firefighting operations and spare cylinders (at least 2 for each SCBA);	Yes
3) Adequacy of hose, nozzles, ladders, lighting equipment and pumps; and	Yes
4) Communication facility at fire station, walkie talkie sets during firefighting.	Yes
C-21.2 Built in Safety in Civil Design and Construction	
a) Whether the two safe means of escape available? Are they in separate directions?	Yes
b) Is emergency exits provided to the building handling flammables?	Yes
c) Whether emergency lights are provided?	Yes
d) Whether fire / smoke detectors are installed in fire prone areas?	Yes
e) Whether fire call points are provided in different areas?	Yes
f) Whether Fire hydrants are provided near the buildings?	Yes
g) Is ventilation system in plant handling flammables is adequate to prevent formation of flammable mixtures?	Yes

h) Is adequate separation is provided between combustible / flammable materials and other material to restrict the fire growth?	Yes
j) Access routes for fire fighting operations is available for areas having high fire load	Yes
k) Whether building changes interferes with fire detection and / or fire suppression systems?	Yes
m) Whether building changes cause unreasonable fire loading / openings in the fire rated walls?	Yes
C-21.3 Built-in Safety in Electric Circuits and Equipment	
a) Are the electrical equipment in areas where flammables mixture is likely to be present of flame-proof type?	Yes
b) Are lightning arrestors are provided to the buildings / structures storing flammable materials?	Yes
c) Whether adequate bonding and grounding of electrical equipment / pipelines provided?	Yes
C-21.4 Explosive Substances	
a) Whether necessary license / approval taken from concerned statutory bodies?	Yes
b) Whether systems for explosion suppression, high speed fire detection with deluge, sprinklers, explosion venting etc. are provided?	
c) Whether explosion resistant walls or barricades are provided around explosive storage?	Yes
d) Whether explosive substance storage areas are restricted for entry?	Yes
e) Whether only trained persons are handling explosive substances?	Yes
f) Whether explosive substances are stored and transported in approved containers only?	Yes
g) Whether electrical fixtures in areas handling explosives are explosion proof type?	Yes
h) Whether adequate measures are taken to prevent any sources of ignition where explosive substances are handled?	Yes
C-21.5 Fire Safety in Handling Flammable and Explosive materials	
a) Whether emergency procedure is available for control of leakage?	Yes
b) Whether emergency measures are displayed locally in case of accidental spillage / leakage?	Yes
c) Whether facility is provided for safe drainage of combustible or flammable liquids in case of leakages?	Yes
d) Whether highly flammable liquids are stored under inert atmosphere?	Yes
e) Whether flammable storage tanks are provided with flame arrestors?	Yes
f) Whether suitable PPEs are provided?	Yes
C-21.6 Fire Detection and Alarm System	
a) What type of fire detection and alarm system provided?	Yes
b) Whether all fire prone areas of the plant are covered with fire detection system?	Yes
c) Whether fire detection equipment and smoke alarms in good operating condition?	Yes
d) Whether the number of fire call points are adequate and free from obstruction?	Yes
e) Whether regular inspection / maintenance / testing of fire detection and alarm system carried out and records maintained	Yes

f) Whether any atmospheric monitoring is carried out for explosive mixture of gases or vapours?	Yes
g) Whether emergency power supplies are provided to fire detection and fire alarm system?	Yes
h) Whether smoke detectors are located considering ventilation pattern?	Yes
j) Whether annunciation of fire is local or in the control room or in both places?	Yes
k) Whether fire panel is constantly attended?	Yes
C-21.7 Passive and Active Fire Protection System	
a) What are the passive fire protection measures available? (barriers, doors, dampers etc.)	Yes
b) Are the areas requiring fire barriers identified?	Yes
c) Whether the fire barrier provided is of adequate ratings?	Yes
d) Whether ventilation ducts in flammable areas have been provided with isolation dampers of suitable fire rating?	Yes
e) Whether sprinklers / deluge are installed wherever necessary?	Yes
f) Whether regular inspection / maintenance / testing of fire protection system carried out and records maintained?	Yes
C-21.8 Fixed Fire Extinguishing System	
a) What are the sources of firewater and whether they are dedicated to the fire extinguishing system?	Yes
b) Whether the capacity of dedicated water reservoir is adequate to supply to hydrants for minimum 2 h?	Yes
c) Whether un-interrupted power supply is provided to the firewater pumps?	Yes
d) Whether the extinguishing medium selected is appropriate to the class of fire (water, gaseous, foam, dry powder)?	Yes
e) Whether fire hydrants layout is available?	Yes
f) Whether additional (over minimum requirement) fire hoses, nozzles are available?	Yes
g) Whether the hydrants lines are kept pressurized?	Yes
h) Whether regular inspection / maintenance / testing of fixed fire extinguishing systems carried out and records maintained?	Yes
C-21.9 Portable Fire Extinguishing System	
a) Whether suitable type and numbers of fire extinguishers provided?	Yes
b) Whether the fire extinguishers are located at conspicuous position and easily accessible? Are they fully charged and tagged?	Yes
c) Whether fire extinguishers periodically inspected, tested, refilled and records maintained?	Yes
d) Whether defective / unchecked fire extinguishers present at site?	Yes
e) Whether additional fire extinguishers are available?	Yes
C-21.10 Fire Fighting Equipment and Facilities	
a) Whether fire tenders (water / foam) are available?	Yes
b) Whether the fire-fighting system and equipment approved, tested and maintained as per relevant standard?	Yes
c) Whether the SCBA / fire suit provided to fire fighting team for immediate action?	Yes
d) What is system for maintenance / recharge of SCBA?	Yes
e) Is proper access available for fire fighting equipment?	Yes

f) Whether fire hose cabinets are in good condition, easily visible, and accessible?	Yes
g) Whether drill tower is available? Are fire personnel carrying out regular fire drill?	Yes
h) What is the communication facility at fire station? Is it adequate?	Yes
C-21.11 Fire Drill	
a) Whether mock fire drills are conducted? What is the frequency of drills?	Yes
b) Whether fire drills are also performed in night shift?	Yes
c) Whether feedback of fire drill is documented?	Yes
d) What is the system of mutual-aid scheme?	Yes
C-21.12 Fire Fighting Training	
a) Whether there is a system of providing fire-fighting training to plant personnel?	Yes
b) What is the frequency and duration of such training? Whether training records are maintained?	Yes
c) Whether fire squads are identified for different areas for first-aid fire fighting and rescue, and suitably trained?	Yes
d) Are all personnel conversant with the fire prevention and protection measures?	Yes
e) Whether the fire staff are sent for refresher / advanced training courses?	Yes
C-21.13 Static Electricity and Lightning	
a) Whether all vessels and pipes are provided with suitable bonding and grounding?	Yes
b) Whether arrangement has been made for grounding the tanker containing flammable liquid during loading / unloading?	Yes
c) Whether spark resistant tools are provided?	Yes
d) Whether lightning protection is provided and is adequate?	Yes
e) Whether antistatic clothing, hand gloves and footwear are provided?	Yes
C-21.14 Pressure Relief System	
a) Whether the listing of all 'pressure plants' [as defined under <i>Factories Act</i>] has been done?	Yes
C-22. INDUSTRIAL HYGIENE & OCCUPATIONAL HEALTH	
C-22.1 Ventilation, Illumination, Noise, Vibration, Heat stress and Non-ionizing Radiations	
C-22.1.1 Ventilation	
a) Whether any ventilation study has been carried out?	Yes
b) Whether natural ventilation is adequate or not?	Yes
c) Whether dust / fumes / hot air is generated in the process?	Yes
d) Is there any exhaust ventilation system in any section of the plant?	Yes
e) Is periodic / preventive maintenance of ventilation system carried out and record is maintained?	Yes
f) Does any ventilation system re-circulate the exhausted air in work areas?	Yes
g) Is the work environment assessed and monitored for chemical and physical hazards?	Yes
h) Whether PPE are provided to workers exposed to dust / fumes and gases?	Yes
C-22.1.2 Illumination	

a) Whether illumination study has been carried out for the assessment of illumination level?	Yes
b) Is there any system of periodical cleaning and replacing the light fittings / lamps in order to ensure that they give the intended illumination levels?	Yes
c) Are the workers subject to periodic optometry tests and records maintained?	Yes
d) Are emergency lighting available at first aid centre.	Yes
C-22.1.3 Noise	
a) Whether any noise study conducted?	Yes
b) Are there any machines / processes generating high-noise?	Yes
c) Whether engineering and administrative controls been implemented to reduce noise exposure below the permissible limits?	Yes
d) Is there a system of subjecting all those employees to periodic audiometric test who work in high- level noise areas?	Yes
e) Whether the workers are made aware of the ill effects of high noise?	Yes
f) Whether ear muffs / plugs are provided and used?	Yes
C-22.1.4 Vibration	
a) Are there equipment which contribute excess level of vibrations and whether they are identified?	Yes
b) Whether any vibration study has been carried out?	Yes
c) Are the measures taken to combat vibration to acceptable levels?	Yes
d) What is the frequency for measurements of vibration?	Yes
e) Are the records of measurements and maintenance of equipment / system maintained?	Yes
C-22.1.5 Heat Stress / Cold stress (Extremes of Temperature)	
a) Are there sources from equipment increasing the heat load in work places?	Yes
b) Whether evaluation of heat stress is carried out?	Yes
c) Whether natural ventilation is adequate to minimize the heat stress in work environment?	Yes
d) Are resources available to deal with very hot or very cold conditions (drinking water, lined gloves, insulated boots)?	Yes
e) Do workers know the symptoms of heat cramps / heatstroke or frost bite / hypothermia?	Yes
f) Are the personal protective equipment suitable for reducing the effects of heat stress available?	Yes
C-22.1.6 Non-ionising Radiations	
a) Does the work involve likely exposure to non-ionising radiations (ultraviolet, infrared, radiofrequency, microwaves, lasers, etc.)	
b) Whether risk assessment have been done for all work areas involving presence of non-ionising radiations?	Yes
c) Are the work areas displayed with relevant safety signs?	Yes
d) Are the employees aware about the hazards of non-ionising radiations?	Yes
e) Does written procedures exists for working in non-ionising radiations?	Yes
f) Is the work environment monitored periodically for physical hazards and control measures initiated whenever deviation from permissible values is observed?	Yes

g) Whether suitable personal protective equipment are provided to workers exposed to non-ionising radiations?	Yes
C-22.2 Work Place Monitoring for Hazardous Chemicals	
a) Whether the dust, fumes, smoke aerosols and mist are monitored as per statute and records maintained?	Yes
b) What are the types of detectors used for monitoring concentration of hazardous chemicals?	Yes
c) Is any alarm system installed for any leakage of hazardous chemicals?	Yes
d) Are antidotes available for toxic chemicals?	Yes
e) Are control measures initiated whenever deviation from permissible values is observed?	Yes
C-22.3 First Aid Facilities and Occupational Health Centre (OHC)	
a) Are adequate numbers of first aid boxes provided? Give location details?	Yes
b) Are qualified / trained first aiders available in each shift?	Yes
c) How many qualified / trained first aiders are available at each plant / department?	Yes
d) How many persons are trained / given refreshers training in first aid in a year?	Yes
e) Whether occupational health center is provided?	Yes
f) Does OHC conform to the provisions of the existing statutes?	Yes
g) Are the Medical Attendants / Doctors available in each shift?	Yes
h) What facilities are available for transportation of the injured to hospital?	Yes
j) Are the names of the trained first aiders displayed?	Yes
k) Are the name of nearest hospitals and its telephone number available in OHC?	Yes
m) Does the plant have any special preventive medicine program?	Yes
n) Is ambulance posted in proper place and is it available whenever required?	Yes
p) Are sufficient numbers of anti-dotes available in case of any emergency?	Yes
q) Are fire safety measures provided in first aid centre?	Yes
r) Are emergency lighting arrangements available at first aid centre?	Yes
C-22.4 Periodic Medical Examination	
a) Whether the periodical medical examination of employees, required under relevant statute is carried out?	Yes
b) Whether it is ensured that contractors employee are medically examined during pre-employment as well as during the course of employment?	Yes
c) During the periodical medical examination of the workers, are they examined as per the hazardous process in which they work? (First schedule of <i>The Factories Act, 1948</i>)	Yes
d) Are the records of all such examination maintained?	Yes
C-22.5 Personal Protective Equipment and Emergency Equipment	
a) Whether list of required PPE for each hazardous activity is available?	Yes
b) Whether feedback from workers obtained during selection of PPE?	Yes
c) Have the workers been trained in proper use of PPE including BA sets?	Yes
d) What is the system of procurement, inspection, issue, maintenance and replacement of PPE?	Yes
e) Whether qualitative and quantitative fit-check for respirators is ensured	Yes

prior to use?	
f) What are the arrangements for safe custody and storage of PPE?	Yes
g) Are the contractor's workers provided with the required PPE?	Yes
h) Do the PPE conform to any standard?	Yes
j) Are sufficient eye wash fountains and safety showers available?	Yes
k) Whether appropriate respiratory protective devices are available in accordance to the hazard potential?	Yes
m) Are the staff members trained in the right uses of respiratory protective devices?	Yes
C-22.6 Occupational Diseases	
a) Whether pre-employment medical checkup data available?	Yes
b) During the medical checkup, is any person found having occupational diseases mentioned in 3 rd schedule of <i>The Factories Act, 1948</i> ?	Yes
c) Whether the medical practitioner informed the Chief Inspector of Factories about the occurrence of the occupational disease?	Yes
C-23 ACCIDENT / INCIDENT REPORTING, INVESTIGATION AND ANALYSIS	
C-23.1 Accident Reporting and Database Management	
a) What is the procedure for accident / incident / dangerous occurrence reporting?	Yes
b) Whether the accident data for the last five years for reportable and non-reportable accidents are available?	Yes
C-23.2 Accident Investigation	
a) Are all the accidents investigated?	Yes
b) Whether accident investigation procedure is documented?	Yes
c) Whether accident investigation reports are submitted to top management?	Yes
d) How are the findings from accident investigation reports communicated to workers?	Yes
C-23.3 Analysis of Accidents	
a) Whether accident analysis is done as per IS 3786?	Yes
b) Whether root causes of accidents are analysed?	Yes
c) Is the accident statistics effectively utilized? If yes, how?	Yes
d) What nature of injuries occurred during the last five years?	Yes
C-23.4 Implementation of Recommendations	
a) How does the management ensure implementation of the recommendations to avoid recurrence of accidents and incidents?	Yes
C-23.5 Reporting and Investigation of Near-miss Incidents	
a) Are all near-miss incidents reported and investigated?	Yes
b) Is there any system of classifying and analyzing the near-miss incidents?	Yes
C-24 EMERGENCY PREPAREDNESS	
C-24.1 Site Specific Details	
a) Are the site area maps (including layout, access roads and assembly points) available in control room / emergency control centre?	Yes
C-24.2 Duties and Responsibilities of Key Personnel	
a) Is the hierarchy of emergency response personnel right from site emergency controller downward, and alternative officials identified?	

b) Are the duties and responsibilities assigned to the designated officials during emergency, both during and outside normal working hours clearly identified and understood by them?	Yes
C-24.3 Identification of Emergencies and Accident Scenario	
a) Are the possible accident scenarios leading to emergency identified and known to the operating personnel?	Yes
b) Are approved emergency preparedness plans (on-site and off-site) in place?	
C-24.4 Declaration and Termination of Emergency	
a) Is the list of designated officials who are to be communicated about declaration and termination of emergency available in the control room / emergency control centre?	Yes
b) Are the methods of communication (siren, public address system etc.) for declaration and termination of an emergency known to all the workers?	Yes
C-24.5 Resources-evacuation / Transport	
a) Are the following resources (equipment, personnel and procedures) required to handle emergency available?	Yes
1) Communications,	Yes
2) Public announcement systems	Yes
3) Monitoring of hazardous releases into the environment,	Yes
4) Emergency shelters at the facility,	Yes
5) Emergency exits with proper illumination, with uninterrupted power supply,	Yes
6) Direction for emergency exit / escape route marked in haulage / Alleyways,	Yes
7) Transport for evacuation of plant personnel,	Yes
8) Medical care including administration of antidotes.	Yes
9) Security / maintenance of law and order.	Yes
C-24.6 Communication Facilities	
a) Does the emergency control centre have direct communication links with the fire station and the plant control room?	Yes
b) Are there adequate alarm points from which an emergency alarm can be raised?	Yes
c) Is there infrastructure available for ensuring backup electric power supply for communication links where required	Yes
C-24.7 Medical Care	
a) Is the procedure for emergency medical care available?	Yes
b) Whether the system has been tested at regular frequency through mock drill / exercises for its adequacy?	Yes
c) Does the system of periodic replacement of antidotes and medicines required in emergency exist?	Yes
C-24.8 Updation of Emergency Plan	
a) Is the emergency plan updated based on the feedback from the periodic drills / exercises?	Yes
b) Are the contact details of all concerned officials kept updated in the emergency plan?	Yes
C-24.9 Periodic Drills / Exercises	
a) Are mock-exercises conducted at stipulated intervals?	Yes

b) Are the scenarios varied in the mock-exercises to ensure that all possible factors including meteorological conditions, affected plant personnel covered?	Yes
c) Whether emergency preparedness Plans have been tested and reviewed at regular frequency through mock drill for its adequacy	Yes
C-24.10 Training of Plant Personnel	
a) Are the plant personnel trained in handling emergency equipment?	Yes
C-24.11 Public Awareness Programmes	
a) Are public awareness programs conducted for the people around the site regarding the actions to be taken in case of off-site emergency?	
C-24.12 Mutual aid Programme	
a) Are the types of accidents where external organizations would be involved in remedial actions identified? Are their responsibilities defined?	Yes
b) Is the plant responsible for rendering mutual aid assistance to any other external organizations? Does this assistance effect the plant's emergency preparedness?	Yes
c) Whether the communication channels for mutual assistance identified and known with and between two organizations?	Yes
C-24.13 Emergency Control Centre	
a) Is the emergency control center located beyond the effective distances of identified emergency scenarios?	Yes
b) If the emergency control center is located within the effect distance, is it suitably protected that it will be available in case of emergency?	
C-25 SAFETY INSPECTION	
C-25.1 Inspection Programme	
Are checklists available for inspections? For example availability of checklists like:	
a) Handling, Storage and Transportation of hazardous chemicals;	Yes
b) Electrical hazards;	Yes
c) Fire safety;	Yes
d) Hand and portable power tools;	Yes
e) Machine hazards;	Yes
f) Lifting equipment;	Yes
g) Ladders and scaffolding;	Yes
h) Environmental Monitoring;	Yes
j) Civil structure;	Yes
k) House keeping;	Yes
m) Emergency equipment; and	Yes
n) Gas cylinder and other pressure vessels used / available in the organization.	Yes
C-25.2 Safety Related Deficiency (SRD) Report	
a) Are SRDs generated based on the area wise checklists?	Yes
b) What is the procedure for resolving the SRDs?	Yes
c) Whether the procedure exists for notification and root cause analysis of non-conformities and action taken on them?	Yes
C-25.3 Safety Inspection Records	

Are the safety inspection records maintained?	Yes
C-25.4 Methodology and Inspection Team	
a) Is there written procedure for safety inspection?	Yes
b) Whether safety inspection is carried out by a designated team?	Yes
c) What is the frequency of safety inspections?	Regularly
d) Whether an inspection report is generated?	Yes
C-25.5 Compliance of Recommendations	
a) To whom the recommendations are submitted	Yes
b) Are recommendations of safety inspections complied in time?	Yes
c) Is compliance of recommendations sent to top management?	Yes
d) Is compliance of recommendations reviewed by safety committee?	Yes
e) Does top management follows-up the compliance?	Yes

Disclaimer:

This Safety Audit is conducted in the month of Feb - 2022. It is general in nature and within the preview of IS 14489: 1998, but do not endorse occupational Safety & Health system and Procedures, Plant, Premises & records. The actual fact & findings, observations are noted on the basis of access of information provided by management of factory.

In case of change in process, equipment, S.O.P's, buildings layout or premises, Safety Auditor is not accountable. Occupier is solicited to abide all rules & regulations of Safety & Health as per the Statutory provisions under various laws.



A handwritten signature in black ink, appearing to be 'P. N. Kulkarni', written over a horizontal line.

Annexure

भीमाशंकर सहकारी साखर कारखाना लि.

वत्सत्रयनगर, पारगाव तर्फे अपसरी बु. ता. आंबेगाव, जि. पुणे.

मा. संचालक मंडळ सभा दि. ११/१२/२०१९ मधील ठराव क्र. १९ ची सत्यप्रत,

विषय क्र. १९ :- पर्यावरण, आरोग्य व सुरक्षा विषयक धोरण निश्चित करणे.

ठराव क्र. १९ :- मा. संचालक मंडळ व सर्व कर्मचारी पर्यावरण, आरोग्य व सुरक्षा तपक्रमाला सहभागी होतील. पर्यावरण, आरोग्य व सुरक्षेविषयक धोरण आवश्यक असून धोरणातील मुद्दे खालीलप्रमाणे.

- १) पर्यावरण संवर्धन व वाढीसाठी सकारात्मक दृष्टीकोन बाळगून नियोजनबद्ध कार्यक्रम राबवून प्रत्येकवेळी त्यात सुधारणा करण्यासाठी सातत्याने प्रयत्न करण्यात येईल.
- २) पर्यावरण संबंधीत कायदे, नियम व अटीचे तंतोतंत पालन करण्याच्या दृष्टीकोनातून कक्षबाहेर जाऊन अधिकाधिक प्रयत्न करण्यात येतील.
- ३) नैसर्गिक स्त्रोतांचा मर्यादीत वापर, पुनर्वापर व वाया जाणाऱ्या पाणी व घनकचऱ्यावर योग्य सी प्रक्रिया करून फेरवापर करण्यात येईल.
- ४) बॉयलर चिमणी मधून उत्सर्जित धुरावर नियंत्रण राहणेसाठी योग्य नियंत्रण प्रणाली बसवून ती कार्यक्षमरित्या चालविण्यासाठी प्रयत्न करण्यात येतील.
- ५) हवा, पाणी व विजेचा सुयोग्य वापर करून सुनियोजित पद्धतीने राबविणेसाठी कटीबद्ध आहे.
- ६) उत्सर्जित कार्बन डायऑक्साईड चे उत्सर्जन नियंत्रणात राहणेसाठी कारखाना परीसरात योग्य त्या प्रमाणात हरितपट्टा तयार करून त्यात सातत्याने वाढ होणेसाठी प्रयत्न करण्यात येतील.
- ७) सर्व कर्मचारी, सभासद व ग्रामस्थांच्या वेळोवेळी मार्गदर्शन मेळावे घेवून स्वच्छ व सुंदर परीसर करणेसाठी सांडपाणी व घनकचरा कमीत कमी होणेसाठी मार्गदर्शन करण्यात येईल.
- ८) सर्व सभासद, कर्मचारी व ऊस तोडणी कामगारांचे आरोग्य चांगले राखणेसाठी वेळोवेळी आरोग्य निदान शिबीरे घेण्यात येतील. अशी सभेस माहिती देण्यात आली. त्यावर सविस्तर चर्चा होवून बरीलप्रमाणे पर्यावरण, आरोग्य व सुरक्षा विषयक धोरण सर्वानुमते निश्चित करण्यात आले.

सुचक :- मा. प्रदीप प्रतापराव वळसे पाटील

अनुमोदक :- मा. दगडू मारुती शिंदे
ठराव सर्वानुमते मंजूर.

सत्यप्रत



(चंद्रकांत ढगे)

कार्यकारी संचालक

**Bhimashankar Sahakari Sakhar Karkhana Ltd.,
Dattatrayanagar, Tal-Ambegaon, Dist-Pune**

LIST OF PRODUCTS AND BY-PRODUCTS MANUFACTURED

Sr.No	Product /By-Product Name	Maximum Quantity in MT/Day	Maximum Quantity in MT/M
1	Sugar	720	21600
2	Molasses	240	7200
3	Bagasse	1800	54000
4	Press mud	240	7200
5	Electricity Generation (Co-Gen.)	19.0 MW	19.0 MW

LIST OF RAW MATERIALS

Sr.No	Raw Material	Quantity in MT/Day	Quantity in MT/M
1	Sugar Cane	6000	180000

LIST OF PROCESS CHEMICALS

Sr.No	Raw Material	Quantity in MT/Day	Quantity in MT/M
1	Lime	12.00	360
2	Sulphur	3.60	108

Process Flow Chart for Manufacturing of Plantation white Sugar



Sugar Manufacturing Process

Sugar cane after being harvested and cleaned from trash, tops and mud etc. is transported by the factory either by trucks, Trailers & bullock carts to the factory sites.

The transported cane to the factory sites is first weighed on the weighing bridges. There are two weighing bridges of capacity 15000 kgs for bullock carts weightment and two weighing bridges of capacity 30000 kgs for the weightment of trucks and trolleys. Net weight of cane found from gross and empty weight of trucks, Trailers, or bullock cart etc.

Cane from the trucks, trailers is unloaded by means of cane unloaders i.e. cranes driven by electric Motor. There are two cane unloading cranes of capacity 5Ton/lift & 20 Lifts/Hrs. The cranes unload the cane bundles from the truck, Trolleys & put on the feeder table moving at the speed of 1 to 3 Mtr/Min. Which continuously feed the cane to the cane carrier as per requirement. Cane carrier is then carrying the cane to the preparatory devices for preparation. In order to extract Max. juice from cane it has to be cut in to longitude shired. There are cane kicker, leveler & fibrizer. The cane preparatory devices preperated cane is then led into the Mill.

crusher ground various mat eg - grain, ore, plastic
There are four set of Mills. Each Mill consists of three roller where all the cane are crushed fully. Mill rollers are of size dia. 33"x 66" Long. Each set of Mill is driven with an independent steam turbine of 500 BHP. Initials two Mills, 1st & 2nd are operated at 170 Kg/cm² & remaining two, 3rd & 4th Mills are operated at 180 Kg/cm² hydraulic pressure. Mill speed ranges from 5 rpm. to 6 rpm. depends upon availability of coming cane. Juice extracted by each Mill is drained in juice trays & residue of cane is passed into the successive Mill for Max. extraction of juice to insure complete extraction of juice. Weighed hot water of about 80°C is macerated before 4th mill. The juice from 4th or last mill is added before 3rd mill, the juice from 3rd mill is added before 2nd mill and so on. All the juice extracted in the milling is then pumped to the weighing tank for weighing & processing and exhausted bagasse with very low sugar content is led by bagasse carrier to the boiler where it is used as fuel.

Donner is used to generate steam. Generated steam is used for heating to generate Electricity for process & grid.

The quantity of bagasse is not weighing Practically but it can be calculated from fundamental equation i.e. cane + water maccrated = juice weighed + bagasse. The extracted raw juice of 15 to 16 °Bx. After being weighted in automatic scale of capacity 6.5 T/ Tip. As the raw juice contains appx. 150 to 200 PPM of P_2O_5 & therefore it is necessary to increase this level to 300-350 PPM by adding P_2O_5 for better ppt of Tricalcium phosphate in lime of sulphitation tank by the action of milk of lime of SO_2 gas. It is then passed through one set of juice heater where the raw juice is heated to 70°C by means of steam /vapour of temp. Ranging from 94 to 120 °C. The heating of Juice is indirectly, the steam and Juice direct contact is avoided.

This heated juice is then led into liming & sulphitation tank where milk of lime of brix SO_2 gas are added in a continually. The flow of lime & gas is adjusted according to the rate of flow of incoming juice & better nonsugars in the form of Tricalcium phosphate precipitate ppt & setting of mud at the p^H Of 7.0 - 7.2.

Milk of lime is prepared in a rotatory drum called as slaker & SO_2 gas is prepared by burning pure sulphur in sulphur burner in which dried air is passed by means of air compressor. The treated juice of about 7.0 to 7.2 pH then passed from juice sulphitation tank to the 2nd set of juice heater where it is heated upto 100 to 102°C which is then led to the clarifier consisting of four compartments of a cap 410 HL here treated or sulphited juice is allowed to settle. The maximum nonsugar precipitated in the treated juice settle down and get separated in the form of mud and very light golden yellow colour clear juice of a good quality in respect of colour transparency and brilliancy with less Cao & less ICUMSA colour is obtained.

The clear juice obtained from clarifier is thin and therefore to remove some water from clear juice and to convert it into thick juice i.e. Syrup the decanted juice or clear juice of 15° Bx & P.H. 6.9 to 7.0 From clarifier is then with drawn and preheated in plate type heat exchanger up to 110°C & then send to evaporator set of DEVC quadriples. In DEVC set clear Juice is boiled at a normal atmospheric pressure

boiling the juice in DEVC steam / vapour of about $1\text{Kg}/\text{Cm}^2$ at temperature of 120°C is required. While the quadruple set (set having 4 evaporator bodies in series & hence called as quadruple) are boiling juice at different Vacuum & Pressure. Last body of quadruple should have Minimum 25-26" of vacuum.

Vacuum boiling increase the total difference in temp. between steam and juice by a quantity equal to the drop in B.P. of juice and between pressure of 1st and that of last body, further it permits. Evaporation to be carried out at temp. proportionally less injurious from the point to inversion of sucrose and destruction of Reducing Sugar in juice and caramelisation in juice due to high temperature. The muddy juice, which is left in clarifier, is passed to the mud mixture where bagacillo is mixed with the mud to increase porosity of the Mud for maximum filtration. The mixture is then passed through the vacuum filter, which is nothing, but rotatory drum operated under vacuum. There are two drums of $8 \times 16'$ having filtering area 36m^2 (18-20" of Hg). Due to vacuum it catches mud, where it is washed by spraying of hot water (70 to 72°C) in order to insure less loss of sugar in mud. Mud with very low sugar content escapes out of the drum where there is no vacuum (about $1/12^{\text{th}}$ portion of drum is not under vacuum). The filtrate catches in low vacuum zone (6-12" of Hg) of drum called as heavy & filtrate catches in high vacuum zone (18-20" of Hg) called as light filtrate. The filtered juice (heavy & light) is again led to the weighed raw juice receiving tank for further reprocessing. The mud is known as filter Cake as by-product, which is thrown out side by means of belt conveyor. This filter Cake is weighed for chemical & it is used as fertilizer.

The thick juice (pH, 6.5 to 6.6) received from last body of evaporator called as Unsulphited Syrup it is again sulphited SO_2 gas to pH 5.0 to 5.2 in Syrup sulphiter SO_2 gas bleaches juice by acting on colouring matters, neutralized extra CaO & reduces the viscosity of thick juice. The sulphited syrup of 60°Bx & pH 5.0 to 5.2 is then pumped to pan floor for sugar crystallization.

While quadruple juice is boiled under vacuum by boiling the juice in DEVC steam / vapour of about $1\text{Kg}/\text{Cm}^2$ at temperature of 120°C is required. While the quadruple set (set having 4 evaporator bodies in series & hence called as quadruple) are boiling juice at deferent Vacuum & Pressure. Last body of quad should have Minimum 25-26" of vacuum.

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We adopt three Massecuite boiling three type of Massecuite boiled in pans which are operated under vacuum (24" to 26" of Hg) & at a steam / vapour pressure of appx. 5lb/inch² & temperature 98 to 113°C for Syrup, Melt & Molasses.

Objective of crystallisation are

- 1) Maximum recovery of sugar in crystalline from as commercial sugar and minimum loss in waste molasses and
- 2) Production and development of crystals at lowest temp. in pans syrup and molasses are boiled in there different zones of supersaturated coefficient zones, i.e. metastable zone.

All the pans are boiled under vacuum of 24 -26 of Hg and at a steam /vapour pressure of appx. 5 lb/inch² and temp.98 to 113° c. We adopt three masscuite boiling.

A Massecuite is boiled on sulphated syrup, B-Sugar, A-light Molasses & melt from B & C sugar.

B/Mc. Is boiled on molasses which we get from A/Mc. i.e. A/H molasses. While C/Mc is boiled on Am/c & B/mc molasses generated & C.L. generated . While double curing of C/Mc, B/Mc and C/Mc are low grade massecuites. For boiling of these low grade massecuites grain is required grain is prepared for B/Mc. in A.H.& for C/Mc. grain A.H.&C.L.is used . For crystallisation the sugar crystals in the grain act as a nuclic & proceeds deposition of sugar from mother liquor used much faster.The grain is prepared by using sugar seed slurry having 5 micron size.For B/Mc.---5---6gm/Ton of M/C & for C/Mc.- 10-12 gm/Ton of M/C is required for graining purpose.

Massecuites are the mixtures of crystalised sugar & mother liquor having nonsugar to very great extent.

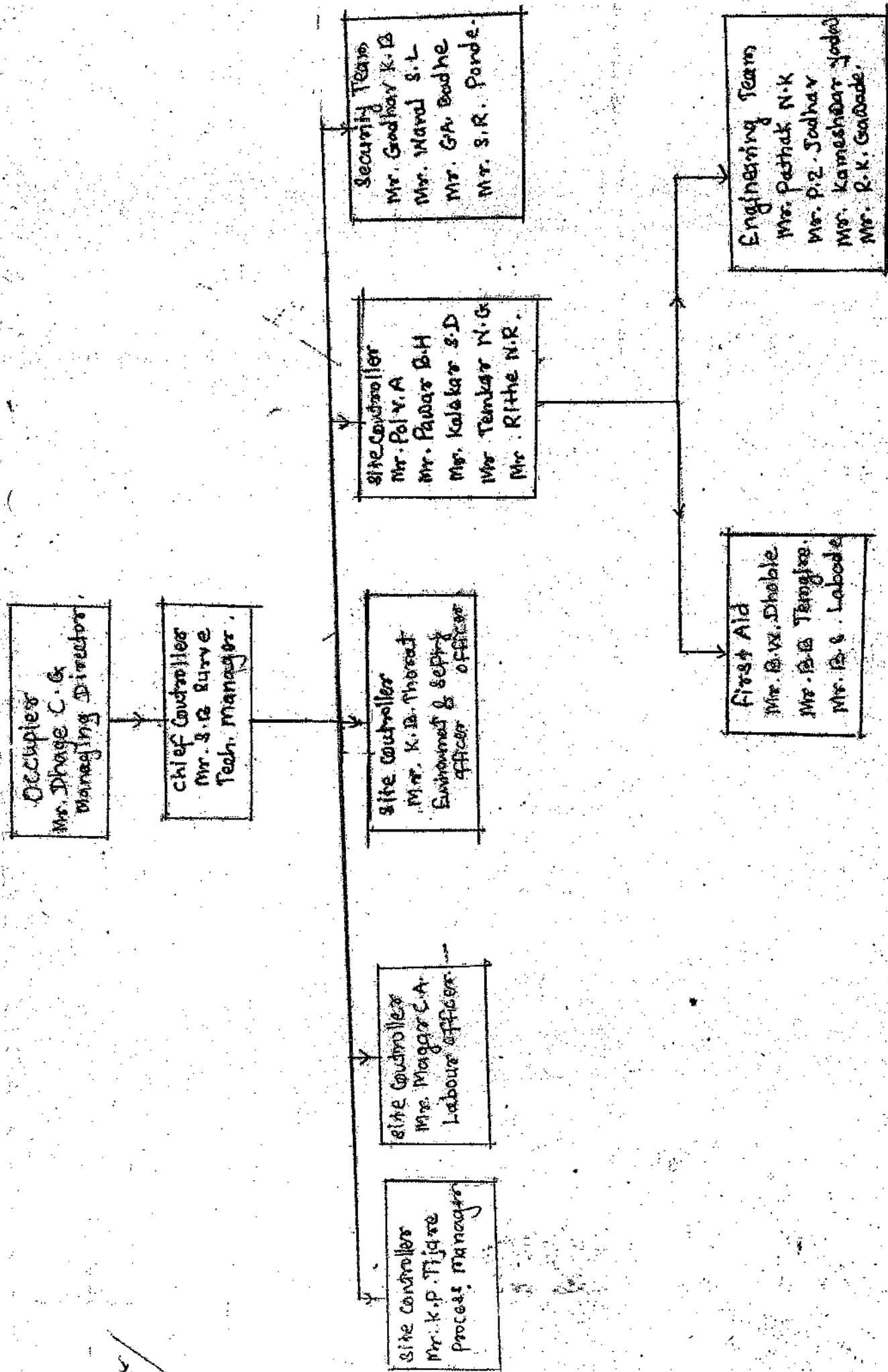
From the pans M/C are discharged in the crystallisers for crystallisation by cooling &

Stirring of the Massecuite after maximum exhaustion of sucrose it is reheated

Existing Fire Extinguisher Details

Sr. No.	Houses	Types of Extinguisher	Capacity	Qty (Nos)
1.	Mill House	NIL	-	-
2	Co-Generation- 6 MW	Co2	4.5 Kg.	02
3	Turbine -13 MW	Co2	4.5 Kg.	01
4	Store House	Co2	4.5 Kg.	08
5	EDPM dept.	Co2	4.5 Kg.	01
6	Power House (Switch yard)	Co2	22.50 Kg.	04
		Co2	9 Kg.	02
7	Sugar House	DCP Type Fir Ex. Co2 gas Cartidage	10 Kg.	08
8	Security Store	Mechanical Foam	9 Lit.	04
9	Security Store	Water Co2	9 Lit.	10
10	Security Store	DCP	4.5 Kg.	08
11	Security Store	Co2	9 Kg.	01

Raw Water Reservoir Capacity: —



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 Plaza
Chema, Near Sign Circle, Sion
(E), Mumbai-400022

No. Form 1.0/CO/UAN No. MPCB-
CONSENT-0000092460/CO-200900030

Date: 07/07/2020

To,
Bhimashankar Sahakar Sakhar Karkhana Ltd.
148, Dattatrayanagar, Pargaon Tarfe Awasari Bk.
Ambegaon, Pune.

Sub: Renewal of sugar unit of 6000 TCD sugar unit & 19 MW Cogeneration
unit Under L.S.I RED Category

Ref: 1. Renewal of consent granted by the Board vide no. BO/CAC-
CELL/UAN No. 0000064013/0/CAC-1907000849 dtd. 23.07.2019.
2. Minutes of CAC Meeting dtd. 24.07.2020.

Your application No. MPCB-CONSENT-0000092460 Dated 24.05.2020

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

1. The Consent to Operate is granted upto 31.07.2023.
2. The capital investment of the industry is Rs. 281.7401 Crs. (As per C.A
Certificate submitted by industry).
3. Consent is valid for the manufacture of:

Sr No	Product	Maximum Quantity	UOM
1	Sugar	21600	MT/M
2	Bagasse	46800	MT/M
3	Pressmud	7200	MT/M
4	Molasses	7200	MT/M
5	Co-generation Power	19	MW

The Cane crushing capacity of Sugar unit shall not exceed 6000 TCD
4. Conditions under Water (P&CP) Act, 1974 for discharge of effluent:

Sr No	Description	Permitted in CMD	Standards to	Disposal
1.	Trade effluent	650	As per Schedule - I	50 CMD is recycled and 500 CMD on land for irrigation
2.	Domestic effluent	55	As per Schedule - I	on land for gardening / irrigation

Bhimashankar Sahakar Sakhar Karkhana Ltd./CO/UAN No. MPCB-CONSENT-0000092460

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Kindly verify Maharashtra Pollution Control Board's document on Blockchain by scanning the QR code.
<https://blockchain.ecmpcb.in/docs/5067e21ea8de77d05db1e70c2ee2c094ac3d8b943de08ce2293ed93163cccef3>



महाराष्ट्र शासन

औद्योगिक सुरक्षा व आरोग्य संचालनालय (कामगार विभाग)

नमूना क्रमांक ४

(नियम ६ व ८ पाहणे)

परवाना क्र. : १०००४५४९

कारखान्याची नोंदणी व कारखाना चालविण्याचा संबंधीचा परवाना

नोंदणी क्रमांक : १२२५०१०७२१०००००



कारखाने अधिनियम, १९४८ आणि त्यासंबंधी असलेले नियम यांच्या तत्सुदीप्रमाणे भीमाशंकर सहकारी साखर कारखाना लीमिटेड यांना खाली वर्णन केलेल्या जागेत कारखाना चालविण्यास परवाना देण्यात आला आहे.

या परवान्यान्वये या जागेत कोणत्याही एका दिवशी १००० पर्यंत कामगार लावण्यास आणि २००० पेक्षा जास्त अश्वशक्ति उपयोगात आणण्यास परवानगी आहे.

या परवान्याची मुदत ३१ डिसेंबर २०२२ पर्यंत आहे.

Digitally Signed by
Ashok D Khot
Date: 12/28/2021 4:53:55 PM

शुल्क रु. - १४७००३.६० पोहोचले

दिनांक : २८-१२-२०२१

Signature valid



अपर संचालक
औद्योगिक सुरक्षा व आरोग्य,
महाराष्ट्र राज्य, पुणे ३

परवाना दिलेल्या जागेचे वर्णन

परवाना दिलेल्या कारखान्याचे

History Name :

पत्ता :

Address :

कलम :

औद्योगिक वर्गीकरण :

भीमाशंकर सहकारी साखर कारखाना लीमिटेड

BHIMASHANKAR SAHAKARI SAKHAR KARKHANA LTD

भीमाशंकर स.स. का. ली., DATTATRAYNAGAR, Administrative

Building, मंचर शिरूर

रोड, दत्तात्रयनगर, दत्तात्रयनगर, अंबेगाव, पुणे, महाराष्ट्र, ४१२४०६

BHIMASHANKAR S S K LTD, DATTATRAYNAGAR, Administrative
Building, manchar Shirur

Road, Dattatraynagar, Dattatraynagar, Ambegaon, Pune, MAHARASHTRA, 412406

२६/१०

१०७२१

कारखान्याच्या इमारतीचे नकाशे दिनांक ३१.१२.२०१५ च्या जावक क्रमांक PLN/४७७/१५/SLC/RFV/७७५६ खाली मंजूर केले गेले आहेत.

This Certificate is digitally signed by on.

टिप : हा कारखान्याची नोंदणी व कारखाना चालविण्याचा परवाना आहे. हा परवाना देण्यात आल्यामुळे ज्या जागेत हा कारखाना स्थित आहे, त्या जागेस कोणतीही वेधता आपोआप बंद होत नाही तसेच ज्या जागेत हा कारखाना स्थित आहे ती जागा आज दिनांक वळेस अस्तित्वात असल्या संबंधात या परवान्यामुळे कोणताही हक्क व स्वामित्व सदरहू भोगवट्यास प्राप्त होत नाही

पुणे नगरी २६/०४/२०२२



भीमाशंकर सहकारी साखर कारखाना लि.

पत्ता: वसनागर, पारगाव तर्फे अवसरी बु. ता. आंबेगाव, जि. पुणे ४१२४०६
मोबा. क्र. ९९७५६८९३०, ८८८८८४६९९० ई-मेल - bssktd@gmail.com

जाहीर सुचना

राज्यस्तरीय पर्यावरण प्रभाव मुल्यांकन समिती, महाराष्ट्र राज्य, पर्यावरण विभाग, खोली क्र. २१७, दुसरा मजला, मंत्रालय, मुंबई यांच्याकडून भीमाशंकर सहकारी साखर कारखाना लि., पत्ता: वसनागर, पारगाव तर्फे अवसरी बु. ता. आंबेगाव, जि. पुणे यास प्रस्तावित १९ ते २९ मेगावॉट को-जनरेशन प्रकल्पास SIA/MH/THE/७००६४/२०२१ दि. २१/०४/२०२२ या पत्राव्यये पर्यावरण विषयक परवानगी देण्यात आली आहे.

सदर पर्यावरण मंजूरी पत्राची प्रत महाराष्ट्र प्रदूषण नियंत्रण मंडळे यांच्या कार्यालयामध्ये तसेच वेबसाईट <http://parivesh.nic.in> येथे उपलब्ध आहे.

कार्यकारी संचालक

THURSDAY, APRIL 26, 2012

BHIMASHANKAR SAMAKARI SAKHAR KARKHANA LTD.
Dattatraynagar, Pargaon Via Awasari Bk., Tal - Ambegaon, Dist - Pune
Mobile No. 9376668130, 8868346990, E-Mail - bsskltd@gmail.com

PUBLIC NOTICE

STATE OF THE ENVIRONMENT IMPACT ASSESSMENT REPORT FOR THE PROPOSED 100000 TPD SUGAR FACTORY AT DATTATRAYNAGAR, PARGAON VIA AWASARI B.K., TAL. AMBEGAON, DIST. PUNE. THE PROJECT IS A 100000 TPD SUGAR FACTORY WITH AN EFFLUENT TREATMENT PLANT (ETP) CAPACITY OF 100000 TPD. THE PROJECT IS A 100000 TPD SUGAR FACTORY WITH AN EFFLUENT TREATMENT PLANT (ETP) CAPACITY OF 100000 TPD. THE PROJECT IS A 100000 TPD SUGAR FACTORY WITH AN EFFLUENT TREATMENT PLANT (ETP) CAPACITY OF 100000 TPD.

Any of the above mentioned details is included in the project report. The report is available for review at the project site. The report is available for review at the project site. The report is available for review at the project site.

Managing Director



≡ MENU



पर्यावरण विभाग

Marathi

English
Marathi

आमच्या विषयी

विभाग

यश

उत्पादने

सामाजिक उपक्रम

गॅलरी

करीयर

अहवाल

निविदा

शेतकरी पोर्टल

ऊस बियारा उपक्रम

स्वतंत्र ऊस विकास विंग

VS1 आणि CSRC Padegaon पासून सुधारित ऊस बियाणे वाण पुरवठा देखील शेतक-यांना वाजवी दर शेतीसाठी लागणारे साहित्य म्हणजे रासायनिक खते, कीटकनाशके कीटकनाशक पुरवठा.

तसेच माती आणि पाणी परीक्षण प्रयोगशाला सुसज्ज.

19 to 29 MW Co-Gen EC Com.01.06.2023to31.12. 2023

45 to 95 KLPD Dist.EC Com.01.06.2023 to 31.12.2023

2500 to 6000 TCDS ugar EC Com.01.06.2023 to 31.12.2023

45 to 95 KLPD Distl. EC Compl.1 Jan.2023 to 30 Jun.2023

2500 to 6000 TCD Sugar EC Compl.1 Jan.2023 to 30 Jun.2023

19 to 29 MW Co-Gen. EC Compl.1 Jan.2023 to 30 Jun.2023

Akanksha Lab Monitoring Report Season 2022-23

Environment Statement Year 2022-23

On Line Monitoring System Season 2022-23

45to95 KLPD Distl.EC Com.Dt.01.07.2022 to31.12.2022

19to29 MW Co-gen.EC Com.Dt.01.07.2022 to31.12.2022

2500 TCD to 6000 TCD EC Com Dt.01.07.2022 to 31.12.2022

45-95 KLPD Distillery EC Letter

Akanksha Lab Report Season 2021-22

Environment Statement 01 Apr 2021 to 31 Mar 2022

2500 to 6000 TCD Sugar EC Compliance 01 Jan 2022 to 30 Jun 2022

45KLPD Distillery EC Compliance 01 Jan 2022 to 30 Jun 2022

19 MW Co-Gen EC Compliance 01 Jan 2022 to 30 Jun 2022

EC 19 TO 29MW Cogen

6000 TCD EC Compliance (1st July 2021 to 31 Dec 2021)

45 KLPD Distillery EC Compliance (1st July 2021 to 31 Dec 2021)

19 MW Co-Gen EC Compliance (1st July 2021 to 31 Dec 2021)

2500 to 6000 MT Sugar EC Comp(01.01.2021 to 30.06.2021)

45 KLPD Dist EC Comp(01.01.2021 to 30.06.2021)

19 MW Co-gen EC Comp (01.01.2021 to 30.06.2021)

Akanksha Lab & On line Monitoring Report Season 2020-21

Environment Statement 2020-21

Environment Statement 2019-20

19 MW Co-Gen EC Compliance Report (1st Jun 2020 to 31st Dec 2020)

45 KLPD Distillery EC Compliance (1st Jun 2020 to 31st Dec 2020)

Sugar 2500TCD To 6000TCD EC Compliance (1st Jun 2020 to 31st Dec 2020)

Akanksha Lab Report (Water,Air,Stack-Season 2019-20)

45 KLPD Distillery Environmental Clearance

Six Monthly Compliance Report 6000 TCD Sugar Unit (1 st January 2020 to 30 June 2020)

Six Monthly Compliance Report 19 MW Co-gen,(1st January 2020 to 30 June 2020)

On Line Monitoring report 2019-20

Environment Statement (1st April 2019 to 31st March 2020)

Part B (19 Mw EC Compliance -01 July 2019 to 31st Dec 2019)

Part A (19 Mw EC compliance -01 July 2019 to 31st Dec 2019)

6000 M.T. E.C. Compliance (1st July to 31 st Dec.2019) Part B

6000 M.T. E.C. Compliance (1st July To 31st December 2019) Part A

19 MW Co-Gen E.C. MoEF Visit Compliance Report

MoEF Approved (Akanksha Lab) Analysis Report Season 2018-19

6000 M.T.Environmental Clearance

On -Line monitoring Report Season 2018-19

6000 MT EC Complianace Jan.to Jun.2019

19 MW Co-gen. EC Compliance Jan. to July 2019

19 MW Co-generation Environment Clearance

19 MW Co-generation Non complaince Report 2018-19

Environmental Statement (Form-V) 2018-19

आवक दुवे

वेब साईट

> मूलावृष्ट

> Select healthy sugar cane plants.

> काढी झेडला

> Split the sugar cane stems into foot-long pieces

> अवाढने

> Dig furrows in a sunny planting spot.

> मरीफ

> Monitor the furrows.

> नवरी

> Fertilize the sugar cane with nitrogen.

> संयक

> Weed the planting bed often



Bhimashankar Sahakari Sakhar Karkhana

पु. इलाहाबाद नगर, जलपिपिपि.
जिहवापु. पो. 412406

☎ (02133)284241

✉ bmr1906@gmail.com



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- ISO 9001 : 2015 Certified Organization
- ISO 45001 : 2018 Certified Organization

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TEST REPORT			Page 1 of 1
NAME OF COMPANY & ADDRESS: M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon Village-Awasari Bk.Tal.-Ambegaon, Dist. - Pune-412406.		Report No	AL/TR/70-189/2023-24
		Report Date	07/12/2023
		Inward No	12-012
		Inward Date	02/12/2023
Sample Testing Location	Laboratory		
Sample Detail	Well Water -Shri Ramesh Gaikwad (East Side)	Analysis Start date	02/12/2023
Sample Collected By	Party	Analysis End date	06/12/2023
Sample Volume	2250 ml	Sample Condition	Fit For Analysis

Sr. No.	Parameter	Unit	Result	Desirable limits as per IS:10500, 2012	Method Ref
A) PHYSICAL ANALYSIS					
1.	Colour	Hazen	BDL	≤5.00	IS3025(Part-4)
2.	Odour	--	Unobjectionable	Unobjectionable	IS3025(Part-5)
3.	Turbidity @ 25°C	NTU	0.59	≤1.00	IS3025(Part-10)
4.	Conductivity	μMHOS/cm	1620	N.S	IS 3025 (Part 14):2013
B) CHEMICAL ANALYSIS					
5.	pH @ 25°C	---	7.85	6.5 to 8.5	IS 3025 (Part 11) RA 2012 Electrometric Method
6.	Total Dissolved Solids	mg/lit	1053	≤500	IS 3025 (Part 16) RA 2012 Gravimetric Method
7.	Chlorides as Cl	mg/lit	141	≤250	IS3025(Part-32) RA 2009 Argentometric Method
8.	Total Alkalinity as CaCO ₃	mg/lit	293	≤200	IS3025(Part-23)RA 2009
9.	Total Hardness as CaCO ₃	mg/lit	624	≤200	IS3025(Part-21) RA 2014 EDTA Titrimetric method
10.	Calcium as Ca	mg/lit	129	≤75.0	IS3025(Part-40) RA 2009 EDTA Method
11.	Magnesium as Mg	mg/lit	72.4	≤30.0	APHA 23 rd Edition 2017 3500- Mg B Calculation method
12.	Sulphate as SO ₄	mg/lit	110	≤200	APHA-23 rd Edition 2017-E-SO ₄ ²⁻
13.	Nitrate as NO ₃	mg/lit	53.3	≤45.0	APHA 23 rd Edition 2017 4500-B-NO ₃
14.	Iron as Fe	mg/lit	0.01	≤0.3	IS3025(Part-53)
C) BACTERIOLOGICAL ANALYSIS					
15.	Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
16.	Fecal Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
17.	E- Coli	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014

REMARK-

- ❖ The above analysis water sample is not within the prescribed limits.
- ❖ Sample will be preserve for seven days after analysis.
- ❖ Above analysis results are related to sample as tested.
- ❖ All the test conducted at permanent location not at out source
- ❖ The contents of this test report shall not be reproduced in part or without written approval of lab incharge.
- ❖ BDL-Below Detectable Limit.
- ❖ N.S. Not Specified
- ❖ Opinion and interpretation - Not applicable

Prepared by
(Mrs.Vrushali kadam-Londhe)

197

Reviewed by
(Mrs.Dhanashri Kadam-Thorat)

Authorized Signatory
(Mr.Vipul Waghmare)

...End of test report...



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- ISO 45001 : 2018 Certified Organization

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TEST REPORT			Page 1 of 1
NAME OF COMPANY & ADDRESS: M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon Village-Awasari Bk.Tal.-Ambegaon, Dist. - Pune-412406.		Report No	AL/TR/70-186/2023-24
		Report Date	07/12/2023
		Inward No	12-009
		Inward Date	02/12/2023
Sample Testing Location	Laboratory		
Sample Detail	Well Water -Shri Nivruti Dhobale (West Side)	Analysis Start date	02/12/2023
Sample Collected By	Party	Analysis End date	06/12/2023
Sample Volume	2250 ml	Sample Condition	Fit For Analysis

Sr. No.	Parameter	Unit	Result	Desirable limits as per IS:10500, 2012	Method Ref
A) PHYSICAL ANALYSIS					
1.	Colour	Hazen	BDL	≤5.00	IS3025(Part-4)
2.	Odour	--	Unobjectionable	Unobjectionable	IS3025(Part-5)
3.	Turbidity@ 25°C	NTU	0.68	≤1.00	IS3025(Part-10)
4.	Conductivity	μMHOs/cm	892	N.S	IS 3025 (Part 14):2013
B) CHEMICAL ANALYSIS					
5.	pH @ 25°C	---	7.53	6.5 to 8.5	IS 3025 (Part 11) RA 2012 Electrometric Method
6.	Total Dissolved Solids	mg/lit	580	≤500	IS 3025 (Part 16) RA 2012 Gravimetric Method
7.	Chlorides as Cl	mg/lit	63.6	≤250	IS3025(Part-32) RA 2009 Argentometric Method
8.	Total Alkalinity as CaCO ₃	mg/lit	237	≤200	IS3025(Part-23)RA 2009
9.	Total Hardness as CaCO ₃	mg/lit	270	≤200	IS3025(Part-21) RA 2014 EDTA Titrimetric method
10.	Calcium as Ca	mg/lit	54.1	≤75.0	IS3025(Part-40) RA 2009 EDTA Method
11.	Magnesium as Mg	mg/lit	32.4	≤30.0	APHA 23 rd Edition 2017 3500- Mg B Calculation method
12.	Sulphate as SO ₄	mg/lit	21.8	≤200	APHA-23 rd Edition 2017-E-SO ₄ ²⁻
13.	Nitrate as NO ₃	mg/lit	7.37	≤45.0	APHA 23 rd Edition 2017 4500-B-NO ₃
14.	Iron as Fe	mg/lit	BDL	≤0.3	IS3025(Part-53)
C) BACTERIOLOGICAL ANALYSIS					
15.	Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
16.	Fecal Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
17.	E- Coli	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014

REMARK:-

- ❖ The above analysis water sample is not within the prescribed limits.
- ❖ Sample will be preserve for seven days after analysis.
- ❖ Above analysis results are related to sample as tested.
- ❖ All the test conducted at permanent location not at out source
- ❖ The contents of this test report shall not be reproduced in part or without written approval of lab incharge.
- ❖ BDL-Below Detectable Limit.
- ❖ N.S. Not Specified
- ❖ Opinion and interpretation - Not applicable

Prepared by
(Mrs.Vrushali kadam-Londhe)

198
Reviewed by
(Mrs.Dhanashri Kadam-Thorat)

Authorized Signatory
(Mr.Vipul Waghmare)

...End of test report...



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TEST REPORT

Page 1 of 1

NAME OF COMPANY & ADDRESS: M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon Village-Awasari Bk.Tal.-Ambegaon, Dist. - Pune-412406.		Report No	AL/TR/70-188/2023-24
		Report Date	07/12/2023
		Inward No	12-011
Sample Testing Location	Laboratory	Inward Date	02/12/2023
Sample Detail	Well Water -Shri Pandurang Walse (South Side)	Analysis Start date	02/12/2023
Sample Collected By	Party	Analysis End date	06/12/2023
Sample Volume	2250 ml	Sample Condition	Fit For Analysis

Sr. No.	Parameter	Unit	Result	Desirable limits as per IS:10500, 2012	Method Ref
A) PHYSICAL ANALYSIS					
1.	Colour	Hazen	BDL	≤5.00	IS3025(Part-4)
2.	Odour	--	Unobjectionable	Unobjectionable	IS3025(Part-5)
3.	Turbidity@ 25°C	NTU	0.72	≤1.00	IS3025(Part-10)
4.	Conductivity	μMHOs/cm	1851	N.S	IS 3025 (Part 14):2013
B) CHEMICAL ANALYSIS					
5.	pH @ 25°C	---	7.80	6.5 to 8.5	IS 3025 (Part 11) RA 2012 Electrometric Method
6.	Total Dissolved Solids	mg/lit	1203	≤500	IS 3025 (Part 16) RA 2012 Gravimetric Method
7.	Chlorides as Cl	mg/lit	141	≤250	IS3025(Part-32) RA 2009 Argentometric Method
8.	Total Alkalinity as CaCO ₃	mg/lit	384	≤200	IS3025(Part-23)RA 2009
9.	Total Hardness as CaCO ₃	mg/lit	676	≤200	IS3025(Part-21) RA 2014 EDTA Titrimetric method
10.	Calcium as Ca	mg/lit	141	≤75.0	IS3025(Part-40) RA 2009 EDTA Method
11.	Magnesium as Mg	mg/lit	77.4	≤30.0	APHA 23 rd Edition 2017 3500- Mg B Calculation method
12.	Sulphate as SO ₄	mg/lit	118	≤200	APHA-23 rd Edition 2017-E-SO ₄ ²⁻
13.	Nitrate as NO ₃	mg/lit	48.0	≤45.0	APHA 23 rd Edition 2017-4500-B-NO ₃
14.	Iron as Fe	mg/lit	0.01	≤0.3	IS3025(Part-53)
C) BACTERIOLOGICAL ANALYSIS					
15.	Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
16.	Fecal Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
17.	E- Coli	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014

REMARK-

- The above analysis water sample is not within the prescribed limits.
- Sample will be preserve for seven days after analysis.
- Above analysis results are related to sample as tested.
- All the test conducted at permanent location not at out source
- The contents of this test report shall not be reproduced in part or without written approval of lab incharge.
- BDL-Below Detectable Limit.
- N.S. Not Specified
- Opinion and interpretation - Not applicable

Prepared by
(Mrs.Vrushali kadam-Londhe)

Reviewed by
(Mrs.Dhanashri Kadam-Thorat)

Authorized Signatory
(Mr.Vipul Waghmare)

...End of test report...

Office and Laboratory : S. No. 613, Plot No. 5, Gangadham Phase-I, Opp. Ganga Landmark Row Houses, Bibvewadi, Pune 411037. | Phone : 020-24240030,08530074787 | Email : akankshalab2007@gmail.com



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TEST REPORT				Page 1 of 1
NAME OF COMPANY & ADDRESS: M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon Village-Awasari Bk.Tal.-Ambegaon, Dist. - Pune-412406.		Report No	AL/TR/70-187/2023-24	
		Report Date	07/12/2023	
		Inward No	12-010	
		Inward Date	02/12/2023	
Sample Testing Location	Laboratory			
Sample Detail	Well Water -Shri Yogesh Pingale (North Side)		Analysis Start date	02/12/2023
Sample Collected By	Party		Analysis End date	06/12/2023
Sample Volume	2250 ml		Sample Condition	Fit For Analysis

Sr. No.	Parameter	Unit	Result	Desirable limits as per IS:10500, 2012	Method Ref
A) PHYSICAL ANALYSIS					
1.	Colour	Hazen	BDL	≤5.00	IS3025(Part-4)
2.	Odour	--	Unobjectionable	Unobjectionable	IS3025(Part-5)
3.	Turbidity@ 25°C	NTU	0.61	≤1.00	IS3025(Part-10)
4.	Conductivity	μMHOs/cm	1841	N.S	IS 3025 (Part 14):2013
B) CHEMICAL ANALYSIS					
5.	pH @ 25°C	---	7.52	6.5 to 8.5	IS 3025 (Part 11) RA 2012 Electrometric Method
6.	Total Dissolved Solids	mg/lit	1197	≤500	IS 3025 (Part 16) RA 2012 Gravimetric Method
7.	Chlorides as Cl	mg/lit	127	≤250	IS3025(Part-32) RA 2009 Argentometric Method
8.	Total Alkalinity as CaCO ₃	mg/lit	565	≤200	IS3025(Part-23)RA 2009
9.	Total Hardness as CaCO ₃	mg/lit	520	≤200	IS3025(Part-21) RA 2014 EDTA Titrimetric method
10.	Calcium as Ca	mg/lit	108	≤75.0	IS3025(Part-40) RA 2009 EDTA Method
11.	Magnesium as Mg	mg/lit	59.9	≤30.0	APHA 23 rd Edition 2017 3500- Mg B Calculation method
12.	Sulphate as SO ₄	mg/lit	76.3	≤200	APHA-23 rd Edition 2017-E-SO ₄ ²⁻
13.	Nitrate as NO ₃	mg/lit	42.7	≤45.0	APHA 23 rd Edition 20174500-B-NO ₃
14.	Iron as Fe	mg/lit	0.01	≤0.3	IS3025(Part-53)
C) BACTERIOLOGICAL ANALYSIS					
15.	Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
16.	Fecal Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
17.	E- Coli	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014

REMARK-

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- ❖ The contents of this test report shall not be reproduced in part or without written approval of lab incharge.
- ❖ BDL-Below Detectable Limit.
- ❖ N.S. Not Specified
- ❖ Opinion and interpretation - Not applicable

Prepared by
(Mrs.Vrushali kadam-Londhe)

200
Reviewed by
(Mrs.Dhanashri Kadam-Thorat)

Authorized Signatory
(Mr.Vipul Waghmare)

...End of test report...



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TEST REPORT

Page 1 of 1

NAME OF COMPANY & ADDRESS: M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon Village-Awasari Bk.Tal.-Ambegaon, Dist. - Pune-412406.		Report No	AL/TR/70-191/2023-24
		Report Date	07/12/2023
Sample Testing Location		Inward No	AL/W/12-12/01/2023-24
		Inward Date	02/12/2023
Sample Detail	Well Water -Shri Vitthal Dhobale (East Side)	Analysis Start date	02/12/2023
Sample Collected By	Party	Analysis End date	06/12/2023
Sample Volume	2250 ml	Sample Condition	Fit For Analysis

Sr. No.	Parameter	Unit	Result	Desirable limits as per IS:10500, 2012	Method Ref
A) PHYSICAL ANALYSIS					
1.	Colour	Hazen	BDL	≤5.00	IS3025(Part-4)
2.	Odour	--	Unobjectionable	Unobjectionable	IS3025(Part-5)
3.	Turbidity@ 25°C	NTU	0.63	≤1.00	IS3025(Part-10)
4.	Conductivity	μMHOS/cm	1634	N.S	IS 3025 (Part 14):2013
B) CHEMICAL ANALYSIS					
5.	pH @ 25°C	---	7.81	6.5 to 8.5	IS 3025 (Part 11) RA 2012 Electrometric Method
6.	Total Dissolved Solids	mg/lit	1065	≤500	IS 3025 (Part 16) RA 2012 Gravimetric Method
7.	Chlorides as Cl	mg/lit	148	≤250	IS3025(Part-32) RA 2009 Argentometric Method
8.	Total Alkalinity as CaCO ₃	mg/lit	296	≤200	IS3025(Part-23)RA 2009
9.	Total Hardness as CaCO ₃	mg/lit	634	≤200	IS3025(Part-21) RA 2014 EDTA Titrimetric method
10.	Calcium as Ca	mg/lit	130	≤75.0	IS3025(Part-40) RA 2009 EDTA Method
11.	Magnesium as Mg	mg/lit	72.0	≤30.0	APHA 23 rd Edition 2017 3500- Mg B Calculation method
12.	Sulphate as SO ₄	mg/lit	116	≤200	APHA-23 rd Edition 2017-E-SO ₄ ²⁻
13.	Nitrate as NO ₃	mg/lit	58.3	≤45.0	APHA 23 rd Edition 20174500-B-NO ₃
14.	Iron as Fe	mg/lit	0.02	≤0.3	IS3025(Part-53)
C) BACTERIOLOGICAL ANALYSIS					
15.	Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
16.	Fecal Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
17.	E- Coli	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014

REMARK-

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- ❖ BDL-Below Detectable Limit.
- ❖ N.S. Not Specified
- ❖ Opinion and interpretation - Not applicable

Prepared by
(Mrs.Vrushali kadam-Londhe)

Reviewed by
(Mrs.Dhanashri Kadam-Thorat)

Authorized Signatory
(Mr.Vipul Waghmare)

...End of test report...

202



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TEST REPORT

NAME OF COMPANY & ADDRESS: M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon Village-Awasari Bk.Tal.-Ambegaon, Dist. - Pune-412406.		Report No	Page 1 of 1
		Report Date	AL/TR/70-446/2023-24
		Inward No	03/01/2024
		Inward Date	12-278
Sample Testing Location	Laboratory		
Sample Detail	Well Water -Shri Rangunath Dobale(South East)	Analysis Start date	28/12/2023
Sample Collected By	Party	Analysis End date	02/01/2024
Sample Volume	2250 ml	Sample Condition	Fit For Analysis

Sr. No.	Parameter	Unit	Result	Desirable limits as per IS:10500, 2012	Method Ref
A) PHYSICAL ANALYSIS					
1.	Colour	Hazen	BDL	≤5.00	IS3025(Part-4)
2.	Odour	--	Unobjectionable	Unobjectionable	IS3025(Part-5)
3.	Turbidity@ 25°C	NTU	0.25	≤1.00	IS3025(Part-10)
4.	Conductivity	μMHOS/cm	1609	N.S	IS 3025 (Part 14):2013
B) CHEMICAL ANALYSIS					
5.	pH @ 25°C	---	7.82	6.5 to 8.5	IS 3025 (Part 11) RA 2012 Electrometric Method
6.	Total Dissolved Solids	mg/lit	992	≤500	IS 3025 (Part 16) RA 2012 Gravimetric Method
7.	Chlorides as Cl	mg/lit	140	≤250	IS3025(Part-32) RA 2009 Argentometric Method
8.	Total Alkalinity as CaCO ₃	mg/lit	330	≤200	IS3025(Part-23)RA 2009
9.	Total Hardness as CaCO ₃	mg/lit	535	≤200	IS3025(Part-21) RA 2014 EDTA Titrimetric method
10.	Calcium as Ca	mg/lit	103	≤75.0	IS3025(Part-40) RA 2009 EDTA Method
11.	Magnesium as Mg	mg/lit	66.7	≤30.0	APHA 23 rd Edition 2017 3500- Mg B Calculation method
12.	Sulphate as SO ₄	mg/lit	230	≤200	APHA- 23 rd Edition 2017-E-SO ₄ ²⁻
13.	Nitrate as NO ₃	mg/lit	47.8	≤45.0	APHA- 23 rd Edition 2017-4500-B-NO ₃
14.	Iron as Fe	mg/lit	0.01	≤0.3	IS3025(Part-53)
C) BACTERIOLOGICAL ANALYSIS					
15.	Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
16.	Fecal Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
17.	E- Coli	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014

REMARK-

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- ❖ BDL-Below Detectable Limit.
- ❖ N.S. Not Specified
- ❖ Opinion and interpretation - Not applicable

Prepared by
(Mrs.Vrushali kadam-Londhe)

263
Reviewed by
(Mrs.Dhanashri Kadam-Thorat)

Authorized Signatory
(Mr.Vipul Waghmare)

...End of test report...

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NAME OF COMPANY & ADDRESS: M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon Village-Awasari Bk.Tal.-Ambegaon, Dist. - Pune-412406.		Report No	Page 1 of 1 AL/TR/70-444/2023-24
Sample Testing Location		Report Date	03/01/2024
Sample Detail		Inward No	12-276
Sample Collected By		Inward Date	28/12/2023
Sample Volume		Analysis Start date	28/12/2023
		Analysis End date	02/01/2024
		Sample Condition	Fit For Analysis

Sr. No.	Parameter	Unit	Result	Desirable limits as per IS:10500, 2012	Method Ref
A) PHYSICAL ANALYSIS					
1.	Colour	Hazen	BDL	≤5.00	IS3025(Part-4)
2.	Odour	--	Unobjectionable	Unobjectionable	IS3025(Part-5)
3.	Turbidity@ 25°C	NTU	0.34	≤1.00	IS3025(Part-10)
4.	Conductivity	μMHOs/cm	1511	N.S	IS 3025 (Part 14):2013
B) CHEMICAL ANALYSIS					
5.	pH @ 25°C	---	7.70	6.5 to 8.5	IS 3025 (Part 11) RA 2012 Electrometric Method
6.	Total Dissolved Solids	mg/lit	750	≤500	IS 3025 (Part 16) RA 2012 Gravimetric Method
7.	Chlorides as Cl	mg/lit	146	≤250	IS3025(Part-32) RA 2009 Argentometric Method
8.	Total Alkalinity as CaCO ₃	mg/lit	399	≤200	IS3025(Part-23)RA 2009
9.	Total Hardness as CaCO ₃	mg/lit	597	≤200	IS3025(Part-21) RA 2014 EDTA Titrimetric method
10.	Calcium as Ca	mg/lit	119	≤75.0	IS3025(Part-40) RA 2009 EDTA Method
11.	Magnesium as Mg	mg/lit	71.7	≤30.0	APHA 23 rd Edition 2017 3500- Mg B Calculation method
12.	Sulphate as SO ₄	mg/lit	180	≤200	APHA-23 rd Edition 2017-E-SO ₄ ²⁻
13.	Nitrate as NO ₃	mg/lit	68.8	≤45.0	APHA 23 rd Edition 2017-4500-B-NO ₃
14.	Iron as Fe	mg/lit	0.01	≤0.3	IS3025(Part-53)
C) BACTERIOLOGICAL ANALYSIS					
15.	Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
16.	Fecal Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
17.	E- Coli	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014

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- N.S. Not Specified
- Opinion and interpretation - Not applicable

Prepared by
(Mrs.Vrushali kadam-Londhe)

Reviewed by
(Mrs.Dhanashri Kadam-Thorat)

Authorized Signatory
(Mr.Vipul Waghmare)

...End of test report...

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TEST REPORT				Page 1 of 1
NAME OF COMPANY & ADDRESS: M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon Village-Awasari Bk.Tal.-Ambegaon, Dist. - Pune-412406.		Report No	AL/TR/70-445/2023-24	
		Report Date	03/01/2024	
		Inward No	12-277	
Sample Testing Location	Laboratory	Inward Date	28/12/2023	
Sample Detail	Well Water -Shri Pravin Sabale (North East)	Analysis Start date	28/12/2023	
Sample Collected By	Party	Analysis End date	02/01/2024	
Sample Volume	2250 ml	Sample Condition	Fit For Analysis	

Sr. No.	Parameter	Unit	Result	Desirable limits as per IS:10500, 2012	Method Ref
A) PHYSICAL ANALYSIS					
1.	Colour	Hazen	BDL	≤5.00	IS3025(Part-4)
2.	Odour	--	Unobjectionable	Unobjectionable	IS3025(Part-5)
3.	Turbidity@ 25°C	NTU	0.13	≤1.00	IS3025(Part-10)
4.	Conductivity	μMHOs/cm	1431	N.S	IS 3025 (Part 14):2013
B) CHEMICAL ANALYSIS					
5.	pH @ 25°C	---	7.60	6.5 to 8.5	IS 3025 (Part 11) RA 2012 Electrometric Method
6.	Total Dissolved Solids	mg/lit	896	≤500	IS 3025 (Part 16) RA 2012 Gravimetric Method
7.	Chlorides as Cl	mg/lit	116	≤250	IS3025(Part-32) RA 2009 Argentometric Method
8.	Total Alkalinity as CaCO ₃	mg/lit	353	≤200	IS3025(Part-23)RA 2009
9.	Total Hardness as CaCO ₃	mg/lit	556	≤200	IS3025(Part-21) RA 2014 EDTA Titrimetric method
10.	Calcium as Ca	mg/lit	107	≤75.0	IS3025(Part-40) RA 2009 EDTA Method
11.	Magnesium as Mg	mg/lit	69.2	≤30.0	APHA 23 rd Edition 2017 3500- Mg B Calculation method
12.	Sulphate as SO ₄	mg/lit	162	≤200	APHA-23 rd Edition 2017-E-SO ₄ ²⁻
13.	Nitrate as NO ₃	mg/lit	51.4	≤45.0	APHA 23 rd Edition 2017 4500-B-NO ₃
14.	Iron as Fe	mg/lit	0.01	≤0.3	IS3025(Part-53)
C) BACTERIOLOGICAL ANALYSIS					
15.	Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
16.	Fecal Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
17.	E- Coli	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014

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- ❖ N.S. Not Specified
- ❖ Opinion and Interpretation - Not applicable

Prepared by
(Mrs.Vrushali kadam-Londhe)

205
Reviewed by
(Mrs.Dhanashri Kadam-Thorat)

Authorized Signatory
(Mr.Vipul Waghmare)

...End of test report...



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TEST REPORT

NAME OF COMPANY & ADDRESS: M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon Village-Awasari Bk.Tal.-Ambegaon, Dist. - Pune-412406.		Report No	Page 1 of 1
		Report Date	AL/TR/70-443/2023-24
		Inward No	03/01/2024
		Inward Date	12-275
Sample Testing Location	Laboratory	Analysis Start date	28/12/2023
Sample Detail	Well water-Shri Suresh Giri House (North West)	Analysis End date	02/01/2024
Sample Collected By	Party	Sample Condition	Fit For Analysis
Sample Volume	2250 ml		

Sr. No.	Parameter	Unit	Result	Desirable limits as per IS:10500, 2012	Method Ref
A) PHYSICAL ANALYSIS					
1.	Colour	Hazen	BDL	≤5.00	IS3025(Part-4)
2.	Odour	--	Unobjectionable	Unobjectionable	IS3025(Part-5)
3.	Turbidity@ 25°C	NTU	0.32	≤1.00	IS3025(Part-10)
4.	Conductivity	μMHOS/cm	1437	N.S	IS 3025 (Part 14):2013
B) CHEMICAL ANALYSIS					
5.	pH @ 25°C	---	7.70	6.5 to 8.5	IS 3025 (Part 11) RA 2012 Electrometric Method
6.	Total Dissolved Solids	mg/lit	921	≤500	IS 3025 (Part 16) RA 2012 Gravimetric Method
7.	Chlorides as Cl	mg/lit	155	≤250	IS3025(Part-32) RA 2009 Argentometric Method
8.	Total Alkalinity as CaCO ₃	mg/lit	365	≤200	IS3025(Part-23)RA 2009
9.	Total Hardness as CaCO ₃	mg/lit	659	≤200	IS3025(Part-21) RA 2014 EDTA Titrimetric method
10.	Calcium as Ca	mg/lit	124	≤75.0	IS3025(Part-40) RA 2009 EDTA Method
11.	Magnesium as Mg	mg/lit	84.0	≤30.0	APHA 23 rd Edition 2017 3500- Mg B Calculation method
12.	Sulphate as SO ₄	mg/lit	198	≤200	APHA-23 rd Edition 2017-E-SO ₄ ²⁻
13.	Nitrate as NO ₃	mg/lit	72.5	≤45.0	APHA 23 rd Edition 2017-4500-B-NO ₃
14.	Iron as Fe	mg/lit	0.01	≤0.3	IS3025(Part-53)
C) BACTERIOLOGICAL ANALYSIS					
15.	Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
16.	Fecal Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
17.	E- Coli	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014

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- N.S. Not Specified
- Opinion and interpretation - Not applicable

Prepared by
(Mrs.Vrushali kadam-Londhe)

206
Reviewed by
(Mrs.Dhanashri Kadam-Thorat)

Authorized Signatory
(Mr.Vipul Waghmare)

...End of test report...

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TEST REPORT

NAME OF COMPANY & ADDRESS: M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon Village-Awasari Bk.Tal.-Ambegaon, Dist. - Pune-412406.		Report No	Page 1 of 1
		Report Date	AL/TR/70-447/2023-24
		Inward No	03/01/2024
		Inward Date	12-279
Sample Testing Location	Laboratory	Analysis Start date	28/12/2023.
Sample Detail	Ghod Menna River Sangam	Analysis End date	28/12/2023
Sample Collected By	Party	Sample Condition	02/01/2024
Sample Volume	2250 ml		Fit For Analysis

Sr. No.	Parameter	Unit	Result	Desirable limits as per IS:10500, 2012	Method Ref
A) PHYSICAL ANALYSIS					
1.	Colour	Hazen	BDL	≤5.00	IS3025(Part-4)
2.	Odour	--	Unobjectionable	Unobjectionable	IS3025(Part-5)
3.	Turbidity@ 25°C	NTU	0.15	≤1.00	IS3025(Part-10)
4.	Conductivity	μMHOs/cm	1255	N.S	IS 3025 (Part 14):2013
B) CHEMICAL ANALYSIS					
5.	pH @ 25°C	---	8.49	6.5 to 8.5	IS 3025 (Part 11) RA 2012 Electrometric Method
6.	Total Dissolved Solids	mg/lit	803	≤500	IS 3025 (Part 16) RA 2012 Gravimetric Method
7.	Chlorides as Cl	mg/lit	233	≤250	IS3025(Part-32) RA 2009 Argentometric Method
8.	Total Alkalinity as CaCO ₃	mg/lit	23.9	≤200	IS3025(Part-23)RA 2009
9.	Total Hardness as CaCO ₃	mg/lit	144	≤200	IS3025(Part-21) RA 2014 EDTA Titrimetric method
10.	Calcium as Ca	mg/lit	54.4	≤75.0	IS3025(Part-40) RA 2009 EDTA Method
11.	Magnesium as Mg	mg/lit	1.98	≤30.0	APHA 23 rd Edition 2017 3500- Mg B Calculation method
12.	Sulphate as SO ₄	mg/lit	150	≤200	APHA-23 rd Edition 2017-E-SO ₄ ²⁻
13.	Nitrate as NO ₃	mg/lit	24.9	≤45.0	APHA 23 rd Edition 2017-4500-B-NO ₃
14.	Iron as Fe	mg/lit	0.01	≤0.3	IS3025(Part-53)
C) BACTERIOLOGICAL ANALYSIS					
15.	Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
16.	Fecal Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
17.	E- Coli	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014

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- N.S. Not Specified
- Opinion and Interpretation - Not applicable

Prepared by
(Mrs.Vrushali kadam-Londhe)

207
Reviewed by
(Mrs.Dhanashri Kadam-Thorat)

Authorized Signatory
(Mr.Vipul Waghmare)

...End of test report...

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- ISO 9001: 2015 Certified Organization
- ISO 45001: 2018 Certified Organization

TEST REPORT

Page 1 of 1

NAME OF COMPANY & ADDRESS: M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon Village-Awasari Bk.Tal.-Ambegaon, Dist. - Pune-412406.		Report No	AL/TR/70-653/2023-24
		Report Date	03/02/2024
		Inward No	01-185
		Inward Date	27/01/2024
Sample Testing Location	Laboratory	Analysis Start date	29/01/2024
Sample Detail	Well Water -Shri Ramesh Gaikwad (East Side)	Analysis End date	02/02/2024
Sample Collected By	Party	Sample Condition	Fit For Analysis
Sample Volume	2250 ml		

Sr. No.	Parameter	Unit	Result	Desirable limits as per IS:10500, 2012	Method Ref
A) PHYSICAL ANALYSIS					
1.	Colour	Hazen	BDL	≤5.00	IS3025(Part-4)
2.	Odour	--	Unobjectionable	Unobjectionable	IS3025(Part-5)
3.	Turbidity@ 25°C	NTU	0.16	≤1.00	IS3025(Part-10)
4.	Conductivity	μMHOs/cm	1307	N.S	IS 3025 (Part 14):2013
B) CHEMICAL ANALYSIS					
5.	pH @ 25°C	---	7.71	6.5 to 8.5	IS 3025 (Part 11) RA 2012 Electrometric Method
6.	Total Dissolved Solids	mg/lit	850	≤500	IS 3025 (Part 16) RA 2012 Gravimetric Method
7.	Chlorides as Cl	mg/lit	106	≤250	IS3025(Part-32) RA 2009 Argentometric Method
8.	Total Alkalinity as CaCO ₃	mg/lit	390	≤200	IS3025(Part-23)RA 2009
9.	Total Hardness as CaCO ₃	mg/lit	367	≤200	IS3025(Part-21) RA 2014 EDTA Titrimetric method
10.	Calcium as Ca	mg/lit	106	≤75.0	IS3025(Part-40) RA 2009 EDTA Method
11.	Magnesium as Mg	mg/lit	24.5	≤30.0	APHA 23 rd Edition 2017 3500- Mg B Calculation method
12.	Sulphate as SO ₄	mg/lit	81.6	≤200	APHA-23 rd Edition 2017-E-SO ₄ ²⁻
13.	Nitrate as NO ₃	mg/lit	41.2	≤45.0	APHA 23 rd Edition 2017-4500-B-NO ₃
14.	Iron as Fe	mg/lit	0.02	≤0.3	IS3025(Part-53)
C) BACTERIOLOGICAL ANALYSIS					
15.	Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
16.	Fecal Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
17.	E- Coli	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014

REMARK-

- ❖ The above analysis water sample is not within the prescribed limits.
- ❖ Sample will be preserve for seven days after analysis.
- ❖ Above analysis results are related to sample as tested.
- ❖ All the test conducted at permanent location not at out source
- ❖ The contents of this test report shall not be reproduced in part or without written approval of lab incharge.
- ❖ BDL-Below Detectable Limit.
- ❖ N.S. Not Specified
- ❖ Opinion and interpretation - Not applicable

Prepared by
(Mrs.Vrushali kadam-Londhe)

209
Reviewed by
(Mrs.Dhanashri Kadam-Thorat)

Authorized Signatory
(Mr.Vipul Waghmare)

...End of test report...

Office and Laboratory : S. No. 613, Plot No. 5, Gangadham Phase-I, Opp. Ganga Landmark Row Houses, Bibvewadi, Pune 411037. | Phone : 020-24240030,08530074787 | Email : akankshalab2007@gmail.com



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TEST REPORT

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NAME OF COMPANY & ADDRESS: M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon Village-Awasari Bk.Tal.-Ambegaon, Dist. - Pune-412406.		Report No	AL/TR/70-654/2023-24
		Report Date	03/02/2024
		Inward No	01-186
Sample Testing Location	Laboratory	Inward Date	27/01/2024
Sample Detail	Borewell Water - Shri Nivruti Dhobale (West Side)	Analysis Start date	29/01/2024
Sample Collected By	Party	Analysis End date	02/02/2024
Sample Volume	2250 ml	Sample Condition	Fit For Analysis

Sr. No.	Parameter	Unit	Result	Desirable limits as per IS:10500, 2012	Method Ref
A) PHYSICAL ANALYSIS					
1.	Colour	Hazen	BDL	≤5.00	IS3025(Part-4)
2.	Odour	--	Unobjectionable	Unobjectionable	IS3025(Part-5)
3.	Turbidity@ 25°C	NTU	0.07	≤1.00	IS3025(Part-10)
4.	Conductivity	μMHOs/cm	640	N.S	IS 3025 (Part 14):2013
B) CHEMICAL ANALYSIS					
5.	pH @ 25°C	---	7.62	6.5 to 8.5	IS 3025 (Part 11) RA 2012 Electrometric Method
6.	Total Dissolved Solids	mg/lit	416	≤500	IS 3025 (Part 16) RA 2012 Gravimetric Method
7.	Chlorides as Cl	mg/lit	34.0	≤250	IS3025(Part-32) RA 2009 Argentometric Method
8.	Total Alkalinity as CaCO ₃	mg/lit	173	≤200	IS3025(Part-23)RA 2009
9.	Total Hardness as CaCO ₃	mg/lit	214	≤200	IS3025(Part-21) RA 2014 EDTA Titrimetric method
10.	Calcium as Ca	mg/lit	53.0	≤75.0	IS3025(Part-40) RA 2009 EDTA Method
11.	Magnesium as Mg	mg/lit	19.6	≤30.0	APHA 23 rd Edition 2017 3500- Mg B Calculation method
12.	Sulphate as SO ₄	mg/lit	24.3	<200	APHA 23 rd Edition 2017-E-SO ₄ ²⁻
13.	Nitrate as NO ₃	mg/lit	7.26	≤45.0	APHA 23 rd Edition 2017-4500-B-NO ₃
14.	Iron as Fe	mg/lit	BDL	≤0.3	IS3025(Part-53)
C) BACTERIOLOGICAL ANALYSIS					
15.	Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
16.	Fecal Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
17.	E- Coli	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014

REMARK-

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- ❖ BDL-Below Detectable Limit.
- ❖ N.S. Not Specified
- ❖ Opinion and interpretation - Not applicable

Prepared by
(Mrs.Vrushali kadam-Londhe)

Reviewed by
(Mrs.Dhanashri Kadam-Thorat)

Authorized Signatory
(Mr.Vipul Waghmare)

...End of test report...

Office and Laboratory : S. No. 613, Plot No. 5, Gangadham Phase-I, Opp. Ganga Landmark Row Houses, Bibvewadi, Pune 411037. | Phone : 020-24240030, 08530074787 | Email : akankshalab2007@gmail.com



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NAME OF COMPANY & ADDRESS: M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon Village-Awasari Bk.Tal.-Ambegaon, Dist. - Pune-412406.		Report No	AL/TR/70-652/2023-24
		Report Date	03/02/2024
		Inward No	01-184
Sample Testing Location	Laboratory	Inward Date	27/01/2024
Sample Detail	Well Water -Shri Pandhurang Walse (South Side)	Analysis Start date	29/01/2024
Sample Collected By	Party	Analysis End date	02/02/2024
Sample Volume	2250 ml	Sample Condition	Fit For Analysis

Sr. No.	Parameter	Unit	Result	Desirable limits as per IS:10500, 2012	Method Ref
A) PHYSICAL ANALYSIS					
1.	Colour	Hazen	BDL	≤5.00	IS3025(Part-4)
2.	Odour	--	Unobjectionable	Unobjectionable	IS3025(Part-5)
3.	Turbidity@ 25°C	NTU	0.25	≤1.00	IS3025(Part-10)
4.	Conductivity	μMHOs/cm	1898	N.S	IS 3025 (Part 14):2013
B) CHEMICAL ANALYSIS					
5.	pH @ 25°C	---	7.43	6.5 to 8.5	IS 3025 (Part 11) RA 2012 Electrometric Method
6.	Total Dissolved Solids	mg/lit	1234	≤500	IS 3025 (Part 16) RA 2012 Gravimetric Method
7.	Chlorides as Cl	mg/lit	160	≤250	IS3025(Part-32) RA 2009 Argentometric Method
8.	Total Alkalinity as CaCO ₃	mg/lit	260	≤200	IS3025(Part-23)RA 2009
9.	Total Hardness as CaCO ₃	mg/lit	816	≤200	IS3025(Part-21) RA 2014 EDTA Titrimetric method
10.	Calcium as Ca	mg/lit	126	≤75.0	IS3025(Part-40) RA 2009 EDTA Method
11.	Magnesium as Mg	mg/lit	120	≤30.0	APIHA 23 rd Edition 2017 3500- Mg B Calculation method
12.	Sulphate as SO ₄	mg/lit	156	≤200	APHA-23 rd Edition 2017-E-SO ₄ ²⁻
13.	Nitrate as NO ₃	mg/lit	50.8	≤45.0	APHA 23 rd Edition 20174500-B-NO ₃
14.	Iron as Fe	mg/lit	0.03	≤0.3	IS3025(Part-53)
C) BACTERIOLOGICAL ANALYSIS					
15.	Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
16.	Fecal Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
17.	E- Coli	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014

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- BDL-Below Detectable Limit.
- N.S. Not Specified
- Opinion and interpretation - Not applicable

Prepared by
(Mrs.Vrushali kadam-Londhe)

Reviewed by
(Mrs.Dhanashri Kadam-Thorat)

Authorized Signatory
(Mr.Vipul Waghmare)

...End of test report...

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NAME OF COMPANY & ADDRESS: M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon Village-Awasari Bk.Tal.-Ambegaon, Dist. - Pune-412406.		Report No	AL/TR/70-655/2023-24
		Report Date	03/02/2024
		Inward No	01-187
Sample Testing Location	Laboratory	Inward Date	27/01/2024
Sample Detail	Well Water -Shri Yogesh Pingale (North side)	Analysis Start date	29/01/2024
Sample Collected By	Party	Analysis End date	02/02/2024
Sample Volume	2250 ml	Sample Condition	Fit For Analysis

Sr. No.	Parameter	Unit	Result	Desirable limits as per IS:10500, 2012	Method Ref
A) PHYSICAL ANALYSIS					
1.	Colour	Hazen	BDL	≤5.00	IS3025(Part-4)
2.	Odour	--	Unobjectionable	Unobjectionable	IS3025(Part-5)
3.	Turbidity@ 25°C	NTU	0.10	≤1.00	IS3025(Part-10)
4.	Conductivity	µMHOs/cm	1227	N.S	IS 3025 (Part 14):2013
B) CHEMICAL ANALYSIS					
5.	pH @ 25°C	---	7.70	6.5 to 8.5	IS 3025 (Part 11) RA 2012 Electrometric Method
6.	Total Dissolved Solids	mg/lit	798	≤500	IS 3025 (Part 16) RA 2012 Gravimetric Method
7.	Chlorides as Cl	mg/lit	92.3	≤250	IS3025(Part-32) RA 2009 Argentometric Method
8.	Total Alkalinity as CaCO ₃	mg/lit	325	≤200	IS3025(Part-23)RA 2009
9.	Total Hardness as CaCO ₃	mg/lit	387	≤200	IS3025(Part-21) RA 2014 EDTA Titrimetric method
10.	Calcium as Ca	mg/lit	110	≤75.0	IS3025(Part-40) RA 2009 EDTA Method
11.	Magnesium as Mg	mg/lit	27.0	≤30.0	APHA 23 rd Edition 2017 3500- Mg B Calculation method
12.	Sulphate as SO ₄	mg/lit	79.4	≤200	APHA-23 rd Edition 2017-E-SO ₄ ²⁻
13.	Nitrate as NO ₃	mg/lit	40.9	≤45.0	APHA 23 rd Edition 20174500-B-NO ₃
14.	Iron as Fe	mg/lit	0.02	≤0.3	IS3025(Part-53)
C) BACTERIOLOGICAL ANALYSIS					
15.	Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
16.	Fecal Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
17.	E- Coli	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014

REMARK-

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- ❖ BDL-Below Detectable Limit.
- ❖ N.S. Not Specified
- ❖ Opinion and interpretation - Not applicable

Prepared by
(Mrs.Vrushali kadam-Londhe)

Reviewed by
(Mrs.Dhanashri Kadam-Thorat)

Authorized Signatory
(Mr.Vipul Waghmare)

...End of test report...

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NAME OF COMPANY & ADDRESS: M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon Village-Awasari Bk.Tal.-Ambegaon, Dist. - Pune-412406.		Report No	AL/TR/70-656/2023-24
		Report Date	03/02/2024
		Inward No	01-188
		Inward Date	27/01/2024
Sample Testing Location	Laboratory	Analysis Start date	29/01/2024
Sample Detail	Well Water - Shri Santosh Shinde (East Side)	Analysis End date	02/02/2024
Sample Collected By	Party	Sample Condition	Fit For Analysis
Sample Volume	2250 ml		

Sr. No.	Parameter	Unit	Result	Desirable limits as per IS:10500, 2012	Method Ref
A) PHYSICAL ANALYSIS					
1.	Colour	Hazen	BDL	≤5.00	IS3025(Part-4)
2.	Odour	--	Unobjectionable	Unobjectionable	IS3025(Part-5)
3.	Turbidity @ 25°C	NTU	0.21	≤1.00	IS3025(Part-10)
4.	Conductivity	μMHOs/cm	1456	N.S	IS 3025 (Part 14):2013
B) CHEMICAL ANALYSIS					
5.	pH @ 25°C	---	7.55	6.5 to 8.5	IS 3025 (Part 11) RA 2012 Electrometric Method
6.	Total Dissolved Solids	mg/lit	947	≤500	IS 3025 (Part 16) RA 2012 Gravimetric Method
7.	Chlorides as Cl	mg/lit	116	≤250	IS3025(Part-32) RA 2009 Argentometric Method
8.	Total Alkalinity as CaCO ₃	mg/lit	260	≤200	IS3025(Part-23) RA 2009
9.	Total Hardness as CaCO ₃	mg/lit	550	≤200	IS3025(Part-21) RA 2014 EDTA Titrimetric method
10.	Calcium as Ca	mg/lit	179	≤75.0	IS3025(Part-40) RA 2009 EDTA Method
11.	Magnesium as Mg	mg/lit	24.5	≤30.0	APHA 23 rd Edition 2017 3500- Mg B Calculation method
12.	Sulphate as SO ₄	mg/lit	158	≤200	APHA-23 rd Edition 2017-E-SO ₄ ²⁻
13.	Nitrate as NO ₃	mg/lit	51.3	≤45.0	APHA 23 rd Edition 2017-4500-B-NO ₃
14.	Iron as Fe	mg/lit	0.03	≤0.3	IS3025(Part-53)
C) BACTERIOLOGICAL ANALYSIS					
15.	Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
16.	Fecal Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
17.	E- Coli	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014

REMARK-

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- ❖ N.S. Not Specified
- ❖ Opinion and Interpretation - Not applicable

Prepared by
(Mrs.Vrushali kadam-Londhe)

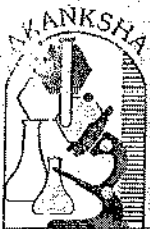
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Reviewed by
(Mrs.Dhanashri Kadam-Thorat)

Authorized Signatory
(Mr.Vipul Waghmare)

...End of test report...

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NAME OF COMPANY & ADDRESS: M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon Village-Awasari Bk.Tal.-Ambegaon, Dist. - Pune-412406.		Report No	AL/TR/70-868/2023-24
		Report Date	28/02/2024
		Inward No	02-181
		Inward Date	22/02/2024
Sample Testing Location	Laboratory		
Sample Detail	Borewell Water - Shri Rohidas Dhobale	Analysis Start date	23/02/2024
Sample Collected By	Party	Analysis End date	27/02/2024
Sample Volume	2250 ml	Sample Condition	Fit For Analysis

Sr. No.	Parameter	Unit	Result	Desirable limits as per IS:10500, 2012	Method Ref
A) PHYSICAL ANALYSIS					
1.	Colour	Hazen	BDL	≤5.00	IS3025(Part-4)
2.	Odour	--	Unobjectionable	Unobjectionable	IS3025(Part-5)
3.	Turbidity@ 25°C	NTU	0.15	≤1.00	IS3025(Part-10)
4.	Conductivity	µMHOs/cm	1146	N.S	IS 3025 (Part 14):2013
B) CHEMICAL ANALYSIS					
5.	pH @ 25°C	---	7.38	6.5 to 8.5	IS 3025 (Part 11) RA 2012 Electrometric Method
6.	Total Dissolved Solids	mg/lit	745	≤500	IS 3025 (Part 16) RA 2012 Gravimetric Method
7.	Chlorides as Cl	mg/lit	97.8	≤250	IS3025(Part-32) RA 2009 Argentometric Method
8.	Total Alkalinity as CaCO ₃	mg/lit	364	≤200	IS3025(Part-23)RA 2009
9.	Total Hardness as CaCO ₃	mg/lit	400	≤200	IS3025(Part-21) RA 2014 EDTA Titrimetric method
10.	Calcium as Ca	mg/lit	84.0	≤75.0	IS3025(Part-40) RA 2009 EDTA Method
11.	Magnesium as Mg	mg/lit	45.0	≤30.0	APHA 23 rd Edition 2017 3500- Mg B Calculation method
12.	Sulphate as SO ₄	mg/lit	75.3	≤200	APHA-23 rd Edition 2017-E-SO ₄ ²⁻
13.	Nitrate as NO ₃	mg/lit	43.9	≤45.0	APHA 23 rd Edition 20174500-B-NO ₃
14.	Iron as Fe	mg/lit	0.01	≤0.3	IS3025(Part-53)
C) BACTERIOLOGICAL ANALYSIS					
15.	Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
16.	Fecal Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
17.	E- Coli	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014

REMARK-

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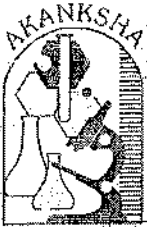
Prepared by
(Mrs.Vrushali kadani-Londhe)

Reviewed by
Mrs.Dhanashree Thorat)

Authorized Signatory
(Mr.Vipul Waghmare)

...End of test report...

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NAME OF COMPANY & ADDRESS: M/s. Bhūma Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon Village-Awasari Bk.Tal.-Ambegaon, Dist. - Pune-412406.		Report No	AL/TR/70-869/2023-24	
		Report Date	28/02/2024	
		Inward No	02-182	
		Inward Date	22/02/2024	
Sample Testing Location	Laboratory		Analysis Start date	23/02/2024
Sample Detail	Borewell Water -Shri. Machindra Kute		Analysis End date	27/02/2024
Sample Collected By	Party		Sample Condition	Fit For Analysis
Sample Volume	2250 ml			

Sr. No.	Parameter	Unit	Result	Desirable limits as per IS:10500, 2012	Method Ref
A) PHYSICAL ANALYSIS					
1.	Colour	Hazen	BDL	≤5.00	IS3025(Part-4)
2.	Odour	--	Unobjectionable	Unobjectionable	IS3025(Part-5)
3.	Turbidity@ 25°C	NTU	0.22	≤1.00	IS3025(Part-10)
4.	Conductivity	µMHOs/cm	1155	N.S	IS 3025 (Part 14):2013
B) CHEMICAL ANALYSIS					
5.	pH @ 25°C	---	7.23	6.5 to 8.5	IS 3025 (Part 11) RA 2012 Electrometric Method
6.	Total Dissolved Solids	mg/lit	751	≤500	IS 3025 (Part 16) RA 2012 Gravimetric Method
7.	Chlorides as Cl	mg/lit	103	≤250	IS3025(Part-32) RA 2009 Argentometric Method
8.	Total Alkalinity as CaCO ₃	mg/lit	364	≤200	IS3025(Part-23)RA 2009
9.	Total Hardness as CaCO ₃	mg/lit	400	≤200	IS3025(Part-21) RA 2014 EDTA Titrimetric method
10.	Calcium as Ca	mg/lit	84.0	≤75.0	IS3025(Part-40) RA 2009 EDTA Method
11.	Magnesium as Mg	mg/lit	45.6	≤30.0	APHA 23 rd Edition 2017 3500- Mg B Calculation method
12.	Sulphate as SO ₄	mg/lit	71.2	≤200	APHA-23 rd Edition 2017-E-SO ₄ ²⁻
13.	Nitrate as NO ₃	mg/lit	43.2	≤45.0	APHA 23 rd Edition 2017 4500-B-NO ₃
14.	Iron as Fe	mg/lit	0.01	≤0.3	IS3025(Part-53)
C) BACTERIOLOGICAL ANALYSIS					
15	Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
16.	Fecal Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
17.	E- Coli	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014

REMARK-

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- ❖ N.S. Not Specified
- ❖ Opinion and interpretation - Not applicable

Prepared by
(Mrs.Vrushali kadam-Londhe)

Reviewed by
Mrs.Dhanashree Thorat)

Authorized Signatory
(Mr.Vipul Waghmare)

...End of test report...



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NAME OF COMPANY & ADDRESS: M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon Village-Awasari Bk.Tal.-Ambegaon, Dist. - Pune-412406.		Report No	AL/TR/70-870/2023-24
		Report Date	28/02/2024
		Inward No	02-183
		Inward Date	22/02/2024
Sample Testing Location	Laboratory		
Sample Detail	Borewell Water - Shri. Vishwanath Narhe	Analysis Start date	23/02/2024
Sample Collected By	Party	Analysis End date	27/02/2024
Sample Volume	2250 ml	Sample Condition	Fit For Analysis

Sr. No.	Parameter	Unit	Result	Desirable limits as per IS:10500, 2012	Method Ref
A) PHYSICAL ANALYSIS					
1.	Colour	Hazen	BDL	≤5.00	IS3025(Part-4)
2.	Odour	--	Unobjectionable	Unobjectionable	IS3025(Part-5)
3.	Turbidity@ 25°C	NTU	0.19	≤1.00	IS3025(Part-10)
4.	Conductivity	μMHOs/cm	1458	N.S	IS 3025 (Part 14):2013
B) CHEMICAL ANALYSIS					
5.	pH @ 25°C	---	7.61	6.5 to 8.5	IS 3025 (Part 11) RA 2012 Electrometric Method
6.	Total Dissolved Solids	mg/lit	948	≤500	IS 3025 (Part 16) RA 2012 Gravimetric Method
7.	Chlorides as Cl	mg/lit	127	≤250	IS3025(Part-32) RA 2009 Argentometric Method
8.	Total Alkalinity as CaCO ₃	mg/lit	250	≤200	IS3025(Part-23)RA 2009
9.	Total Hardness as CaCO ₃	mg/lit	580	≤200	IS3025(Part-21) RA 2014 EDTA Titrimetric method
10.	Calcium as Ca	mg/lit	128	≤75.0	IS3025(Part-40) RA 2009 EDTA Method
11.	Magnesium as Mg	mg/lit	62.4	≤30.0	APHA 23 rd Edition 2017 3500- Mg B Calculation method
12.	Sulphate as SO ₄	mg/lit	207	≤200	APHA-23 rd Edition 2017-E-SO ₄ ²⁻
13.	Nitrate as NO ₃	mg/lit	53.5	≤45.0	APHA 23 rd Edition 2017 4500-B-NO ₃
14.	Iron as Fe	mg/lit	0.02	≤0.3	IS3025(Part-53)
C) BACTERIOLOGICAL ANALYSIS					
15.	Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
16.	Fecal Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
17.	E- Coli	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014

REMARK-

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- ❖ Sample will be preserve for seven days after analysis.
- ❖ Above analysis results are related to sample as tested.
- ❖ All the test conducted at permanent location not at out source
- ❖ The contents of this test report shall not be reproduced in part or without written approval of lab incharge.
- ❖ BDL-Below Detectable Limit.
- ❖ N.S. Not Specified
- ❖ Opinion and interpretation - Not applicable

Prepared by
(Mrs.Vrushali kadam-Londhe)

Reviewed by
Mrs.Dhanashree Thorat)

Authorized Signatory
(Mr.Vipul Waghmare)

...End of test report...

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NAME OF COMPANY & ADDRESS: M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon Village-Awasari Bk.Tal.-Ambegaon, Dist. - Pune-412406.		Report No	AL/TR/70-871/2023-24
		Report Date	28/02/2024
		Inward No	02-184
		Inward Date	22/02/2024
Sample Testing Location	Laboratory		
Sample Detail	Borewell Water -Shri. Vitthal Dhobale	Analysis Start date	23/02/2024
Sample Collected By	Party	Analysis End date	27/02/2024
Sample Volume	2250 ml	Sample Condition	Fit For Analysis

Sr. No.	Parameter	Unit	Result	Desirable limits as per IS:10500, 2012	Method Ref
A) PHYSICAL ANALYSIS					
1.	Colour	Hazen	BDL	≤5.00	IS3025(Part-4)
2.	Odour	--	Unobjectionable	Unobjectionable	IS3025(Part-5)
3.	Turbidity@ 25°C	NTU	0.57	≤1.00	IS3025(Part-10)
4.	Conductivity	μMHOS/cm	858	N.S	IS 3025 (Part 14):2013
B) CHEMICAL ANALYSIS					
5.	pH @ 25°C	---	7.69	6.5 to 8.5	IS 3025 (Part 11) RA 2012 Electrometric Method
6.	Total Dissolved Solids	mg/lit	558	≤500	IS 3025 (Part 16) RA 2012 Gravimetric Method
7.	Chlorides as Cl	mg/lit	78.3	≤250	IS3025(Part-32) RA 2009 Argentometric Method
8.	Total Alkalinity as CaCO ₃	mg/lit	302	≤200	IS3025(Part-23)RA 2009
9.	Total Hardness as CaCO ₃	mg/lit	260	≤200	IS3025(Part-21) RA 2014 EDTA Titrimetric method
10.	Calcium as Ca	mg/lit	56.0	≤75.0	IS3025(Part-40) RA 2009 EDTA Method
11.	Magnesium as Mg	mg/lit	28.0	≤30.0	APHA 23 rd Edition 2017 3500- Mg B Calculation method
12.	Sulphate as SO ₄	mg/lit	44.2	≤200	APHA-23 rd Edition 2017-E-SO ₄ ²⁻
13.	Nitrate as NO ₃	mg/lit	21.5	≤45.0	APHA 23 rd Edition 20174500-B-NO ₃
14.	Iron as Fe	mg/lit	0.01	≤0.3	IS3025(Part-53)
C) BACTERIOLOGICAL ANALYSIS					
15.	Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
16.	Fecal Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
17.	E- Coli	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014

REMARK-

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- ❖ All the test conducted at permanent location not at out source
- ❖ The contents of this test report shall not be reproduced in part or without written approval of lab incharge.
- ❖ BDL-Below Detectable Limit.
- ❖ N.S. Not Specified
- ❖ Opinion and interpretation - Not applicable

Prepared by
(Mrs.Vrushali kadam-Londhe)

Reviewed by
Mrs.Dhanashree Thorat)

Authorized Signatory
(Mr.Vipul Waglimare)

...End of test report...

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NAME OF COMPANY & ADDRESS: M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon Village-Awasari Bk.Tal.-Ambegaon, Dist. - Pune-412406.		Report No	AL/TR/70-872/2023-24
		Report Date	28/02/2024
		Inward No	02-185
Sample Testing Location	Laboratory	Inward Date	22/02/2024
Sample Detail	Well Water - Shri Balasaheb Dhobale	Analysis Start date	23/02/2024
Sample Collected By	Party	Analysis End date	27/02/2024
Sample Volume	2250 ml	Sample Condition	Fit For Analysis

Sr. No.	Parameter	Unit	Result	Desirable limits as per IS:10500, 2012	Method Ref
A) PHYSICAL ANALYSIS					
1.	Colour	Hazen	BDL	≤5.00	IS3025(Part-4)
2.	Odour	--	Unobjectionable	Unobjectionable	IS3025(Part-5)
3.	Turbidity@ 25°C	NTU	0.48	≤1.00	IS3025(Part-10)
4.	Conductivity	μMHOs/cm	1353	N.S	IS 3025 (Part 14):2013
B) CHEMICAL ANALYSIS					
5.	pH @ 25°C	---	8.07	6.5 to 8.5	IS 3025 (Part 11) RA 2012 Electrometric Method
6.	Total Dissolved Solids	mg/lit	880	≤500	IS 3025 (Part 16) RA 2012 Gravimetric Method
7.	Chlorides as Cl	mg/lit	88.1	≤250	IS3025(Part-32) RA 2009 Argentometric Method
8.	Total Alkalinity as CaCO ₃	mg/lit	499	≤200	IS3025(Part-23)RA 2009
9.	Total Hardness as CaCO ₃	mg/lit	390	≤200	IS3025(Part-21) RA 2014 EDTA Titrimetric method
10.	Calcium as Ca	mg/lit	60.0	≤75.0	IS3025(Part-40) RA 2009 EDTA Method
11.	Magnesium as Mg	mg/lit	57.6	≤30.0	APHA 23 rd Edition 2017 3500- Mg B Calculation method
12.	Sulphate as SO ₄	mg/lit	93.0	≤200	APHA-23 rd Edition 2017-E-SO ₄ ²⁻
13.	Nitrate as NO ₃	mg/lit	31.7	≤45.0	APHA 23 rd Edition 20174500-B-NO ₃
14.	Iron as Fe	mg/lit	0.01	≤0.3	IS3025(Part-53)
C) BACTERIOLOGICAL ANALYSIS					
15.	Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
16.	Fecal Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
17.	E- Coli	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014

REMARK-

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- ❖ The contents of this test report shall not be reproduced in part or without written approval of lab incharge.
- ❖ BDL-Below Detectable Limit.
- ❖ N.S. Not Specified
- ❖ Opinion and interpretation - Not applicable

Prepared by
(Mrs.Vrushali kadam-Londhe)

Reviewed by
Mrs.Dhanashree Thorat]

Authorized Signatory
(Mr.Vipul Waghmare)

...End of test report...





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NAME OF COMPANY & ADDRESS: M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon Village-Awasari Bk.Tal.-Ambegaon, Dist. - Pune-412406.		Report No	Page 1 of 1
		Report Date	AL/TR/80-218/2024-25
		Inward No	06/04/2024
		Inward Date	03-275
Sample Testing Location	Laboratory	Analysis Start date	30/03/2024
Sample Detail	Well Water Shri Bharat Dhobale(South -East)	Analysis End date	01/04/2024
Sample Collected By	Party	Sample Condition	05/04/2024
Sample Volume	2250 ml		Fit For Analysis

Sr. No.	Parameter	Unit	Result	Desirable limits as per IS:10500, 2012	Method Ref
A) PHYSICAL ANALYSIS					
1.	Colour	Hazen	BDL	≤5.00	IS3025(Part-4)
2.	Odour	--	Unobjectionable	Unobjectionable	IS3025(Part-5)
3.	Turbidity@ 25°C	NTU	0.19	≤1.00	IS3025(Part-10)2023
4.	Conductivity	μMHOs/cm	1413.85	N.S	IS 3025 (Part 14):2013
B) CHEMICAL ANALYSIS					
5.	pH @ 25°C	---	8.41	6.5 to 8.5	IS 3025 (Part 11) RA 2022 Electrometric Method
6.	Total Dissolved Solids	mg/l	919	≤500	IS 3025 (Part 16) RA 2023 Gravimetric Method
7.	Chlorides as Cl	mg/l	121.42	≤250	IS3025(Part-32) RA 2019 Argentometric Method
8.	Total Alkalinity as CaCO ₃	mg/l	447.3	≤200	IS3025(Part-23)RA 2023
9.	Total Hardness as CaCO ₃	mg/l	393	≤200	IS3025(Part-21) RA 2009 EDTA Titrimetric method
10.	Calcium as Ca	mg/l	48.0	≤75.0	IS3025(Part-40) RA 2019 EDTA Method
11.	Magnesium as Mg	mg/l	65.0	≤30.0	APHA 24 th Edition 2023 - 3500- Mg B Calculation method
12.	Sulphate as SO ₄	mg/l	72.88	≤200	APHA-24 th Edition 2023 4500-E- SO ₄ ²⁻
13.	Nitrate as NO ₃	mg/l	51.71	≤45.0	APHA 24 th Edition 2023 4500 B - NO ₃
14.	Iron as Fe	mg/l	BDL	≤0.3	IS3025(Part-53)
C) BACTERIOLOGICAL ANALYSIS					
15.	Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
16.	Fecal Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
17.	E- Coli	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014

REMARK-

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- ❖ The contents of this test report shall not be reproduced in part or without written approval of lab incharge.
- ❖ BDL-Below Detectable Limit.
- ❖ N.S. Not Specified
- ❖ Opinion and interpretation - Not applicable

Prepared by
(Mrs.Vrushali kadam-Iondhe)

Reviewed by
(Ms.Sonali Mohite)
...End of test report...



Authorized Signatory
(Mr.Vipul Waghmare)



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NAME OF COMPANY & ADDRESS: M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon Village-Awasari Bk.Tal.-Ambegaon, Dist. - Pune-412406.		Report No	AL/TR/80-219/2024-25	
		Report Date	06/04/2024	
		Inward No	03-276	
Sample Testing Location	Laboratory	Inward Date	30/03/2024	
Sample Detail	Borewell Water - Shri Mayur Dhobale(South -West)	Analysis Start date	01/04/2024	
Sample Collected By	Party	Analysis End date	05/04/2024	
Sample Volume	2250 ml	Sample Condition	Fit For Analysis	

Sr. No.	Parameter	Unit	Result	Desirable limits as per IS:10500, 2012	Method Ref
A) PHYSICAL ANALYSIS					
1.	Colour	Hazen	BDL	≤5.00	IS3025(Part-4)
2.	Odour	--	Unobjectionable	Unobjectionable	IS3025(Part-5)
3.	Turbidity@ 25°C	NTU	0.24	≤1.00	IS3025(Part-10)2023
4.	Conductivity	μMHOs/cm	1512.31	N.S	IS 3025 (Part 14):2013
B) CHEMICAL ANALYSIS					
5.	pH @ 25°C	---	8.23	6.5 to 8.5	IS 3025 (Part 11) RA 2022 Electrometric Method
6.	Total Dissolved Solids	mg/l	983	≤500	IS 3025 (Part 16) RA 2023 Gravimetric Method
7.	Chlorides as Cl	mg/l	121.42	≤250	IS3025(Part-32) RA 2019 Argentometric Method
8.	Total Alkalinity as CaCO ₃	mg/l	319.5	≤200	IS3025(Part-23)RA 2023
9.	Total Hardness as CaCO ₃	mg/l	555	≤200	IS3025(Part-21) RA 2009 EDTA Titrimetric method
10.	Calcium as Ca	mg/l	157	≤75.0	IS3025(Part-40) RA 2019 EDTA Method
11.	Magnesium as Mg	mg/l	38.0	≤30.0	APHA 24 th Edition 2023 - 3500- Mg B Calculation method
12.	Sulphate as SO ₄	mg/l	156.38	≤200	APHA-24 th Edition 2023 4500-E-SO ₄ ²⁻
13.	Nitrate as NO ₃	mg/l	47.42	≤45.0	APHA 24 th Edition 2023 4500 B - NO ₃
14.	Iron as Fe	mg/l	BDL	≤0.3	IS3025(Part-53)
C) BACTERIOLOGICAL ANALYSIS					
15.	Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
16.	Fecal Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
17.	E- Coli	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014

REMARK-

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- ❖ BDL-Below Detectable Limit.
- ❖ N.S. Not Specified
- ❖ Opinion and interpretation - Not applicable

Prepared by
(Mrs.Vrushali kadam-londhe)

Reviewed by
(Ms.Sonali Mohite)
...End of test report



Authorized Signatory
(Mr.Vipul Waghmare)



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NAME OF COMPANY & ADDRESS: M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon Village-Awasari Bk.Tal.-Ambegaon, Dist. - Pune-412406.		Report No	Page 1 of 1 AL/TR/80-220/2024-25
		Report Date	06/04/2024
		Inward No	03-277
Sample Testing Location	Laboratory	Inward Date	30/03/2024
Sample Detail	Borewell Water - Shri Pandurang Karande (North -East)	Analysis Start date	01/04/2024
Sample Collected By	Party	Analysis End date	05/04/2024
Sample Volume	2250 ml	Sample Condition	Fit For Analysis

Sr. No.	Parameter	Unit	Result	Desirable limits as per IS:10500, 2012	Method Ref
A) PHYSICAL ANALYSIS					
1.	Colour	Hazen	BDL	≤5.00	IS3025(Part-4)
2.	Odour	--	Unobjectionable	Unobjectionable	IS3025(Part-5)
3.	Turbidity@ 25°C	NTU	0.35	≤1.00	IS3025(Part-10)2023
4.	Conductivity	μMHOS/cm	767.69	N.S	IS 3025 (Part 14):2013
B) CHEMICAL ANALYSIS					
5.	pH @ 25°C	---	8.47	6.5 to 8.5	IS 3025 (Part 11) RA 2012 Electrometric Method
6.	Total Dissolved Solids	mg/l	499	≤500	IS 3025 (Part 16) RA 2012 Gravimetric Method
7.	Chlorides as Cl	mg/l	48.57	≤250	IS3025(Part-32) RA 2009 Argentometric Method
8.	Total Alkalinity as CaCO ₃	mg/l	159.7	≤200	IS3025(Part-23)RA 2009
9.	Total Hardness as CaCO ₃	mg/l	121	≤200	IS3025(Part-21) RA 2014 EDTA Titrimetric method
10.	Calcium as Ca	mg/l	24.0	≤75.0	IS3025(Part-40) RA 2009 EDTA Method
11.	Magnesium as Mg	mg/l	14.0	≤30.0	APHA 23 rd Edition 2017 3500- Mg B Calculation method
12.	Sulphate as SO ₄	mg/l	9.33	≤200	APHA-23 rd Edition 2017-E-SO ₄ ²⁻
13.	Nitrate as NO ₃	mg/l	1.44	≤45.0	APHA 23 rd Edition 20174500-B-NO ₃
14.	Iron as Fe	mg/l	0.01	≤0.3	IS3025(Part-53)
C) BACTERIOLOGICAL ANALYSIS					
15.	Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
16.	Fecal Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
17.	E- Coli	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014

REMARK-

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- ❖ BDL-Below Detectable Limit.
- ❖ N.S. Not Specified
- ❖ Opinion and interpretation - Not applicable

Prepared by
(Mrs.Vrushali kadam-londhe)

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Reviewed by
(Ms.Sonali Mohite)

...End of test report...



Authorized Signatory
(Mr.Vipul Waghmare)

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NAME OF COMPANY & ADDRESS: M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon Village-Awasari Bk.Tal.-Ambegaon, Dist. - Pune-412406.		Report No	AL/TR/80-221/2024-25
		Report Date	06/04/2024
		Inward No	03-278
Sample Testing Location	Laboratory	Inward Date	30/03/2024
Sample Detail	Borewell Water - Shri Pransant asware (North -West)	Analysis Start date	01/04/2024
Sample Collected By	Party	Analysis End date	05/04/2024
Sample Volume	2250 ml	Sample Condition	Fit For Analysis

Sr. No.	Parameter	Unit	Result	Desirable limits as per IS:10500, 2012	Method Ref
A) PHYSICAL ANALYSIS					
1.	Colour	Hazen	BDL	≤5.00	IS3025(Part-4)
2.	Odour	--	Unobjectionable	Unobjectionable	IS3025(Part-5)
3.	Turbidity@ 25°C	NTU	0.24	≤1.00	IS3025(Part-10)2023
4.	Conductivity	μMHOs/cm	789.23	N.S	IS 3025 (Part 14):2013
B) CHEMICAL ANALYSIS					
5.	pH @ 25°C	---	8.50	6.5 to 8.5	IS 3025 (Part 11) RA 2012 Electrometric Method
6.	Total Dissolved Solids	mg/l	513	≤500	IS 3025 (Part 16) RA 2012 Gravimetric Method
7.	Chlorides as Cl	mg/l	48.57	≤250	IS3025(Part-32) RA 2009 Argentometric Method
8.	Total Alkalinity as CaCO ₃	mg/l	159.7	≤200	IS3025(Part-23)RA 2009
9.	Total Hardness as CaCO ₃	mg/l	131	≤200	IS3025(Part-21) RA 2014 EDTA Titrimetric method
10.	Calcium as Ca	mg/l	20.0	≤75.0	IS3025(Part-40) RA 2009 EDTA Method
11.	Magnesium as Mg	mg/l	19.0	≤30.0	APHA 23 rd Edition 2017 3500- Mg B Calculation method
12.	Sulphate as SO ₄	mg/l	9.65	≤200	APHA-23 rd Edition 2017-E-SO ₄ ²⁻
13.	Nitrate as NO ₃	mg/l	1.43	≤45.0	APHA 23 rd Edition 20174500-B-NO ₃
14.	Iron as Fe	mg/l	BDL	≤0.3	IS3025(Part-53)
C) BACTERIOLOGICAL ANALYSIS					
15.	Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
16.	Fecal Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
17.	E- Coli	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014

REMARK-

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- ❖ BDL-Below Detectable Limit.
- ❖ N.S. Not Specified
- ❖ Opinion and interpretation - Not applicable

Prepared by
(Mrs.Vrushali kadam-londhe)

224

Reviewed by
(Ms.Sonali Mohite)



Authorized Signatory
(Mr.Vipul Waghmare)

...End of test report...



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NAME OF COMPANY & ADDRESS: M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon Village-Awasari Bk.Tal.-Ambegaon, Dist. - Pune-412406.			Report No	AL/TR/80-222/2024-25
			Report Date	06/04/2024
			Inward No	03-279
			Inward Date	30/03/2024
Sample Testing Location	Laboratory			
Sample Detail	well Water - Shri Ramdas Chavan (South side)		Analysis Start date	01/04/2024
Sample Collected By	Party		Analysis End date	05/04/2024
Sample Volume	2250 ml		Sample Condition	Fit For Analysis

Sr. No.	Parameter	Unit	Result	Desirable limits as per IS:10500, 2012	Method Ref
A) PHYSICAL ANALYSIS					
1.	Colour	Hazen	BDL	≤5.00	IS3025(Part-4)
2.	Odour	--	Unobjectionable	Unobjectionable	IS3025(Part-5)
3.	Turbidity@ 25°C	NTU	0.11	≤1.00	IS3025(Part-10)
4.	Conductivity	μMHOS/cm	1416.92	N.S	IS 3025 (Part 14):2013
B) CHEMICAL ANALYSIS					
5.	pH @ 25°C	---	8.24	6.5 to 8.5	IS 3025 (Part 11) RA 2012 Electrometric Method
6.	Total Dissolved Solids	mg/l	921	≤500	IS 3025 (Part 16) RA 2012 Gravimetric Method
7.	Chlorides as Cl	mg/l	131.13	≤250	IS3025(Part-32) RA 2009 Argentometric Method
8.	Total Alkalinity as CaCO ₃	mg/l	308.8	≤200	IS3025(Part-23)RA 2009
9.	Total Hardness as CaCO ₃	mg/l	525	≤200	IS3025(Part-21) RA 2014 EDTA Titrimetric method
10.	Calcium as Ca	mg/l	96.0	≤75.0	IS3025(Part-40) RA 2009 EDTA Method
11.	Magnesium as Mg	mg/l	67.0	≤30.0	APHA 23 rd Edition 2017 3500- Mg B Calculation method
12.	Sulphate as SO ₄	mg/l	139.20	≤200	APHA-23 rd Edition 2017-E-SO ₄ ²⁻
13.	Nitrate as NO ₃	mg/l	48.31	≤45.0	APHA 23 rd Edition 20174500-B-NO ₃
14.	Iron as Fe	mg/l	0.01	≤0.3	IS3025(Part-53)
C) BACTERIOLOGICAL ANALYSIS					
15.	Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
16.	Fecal Coliform	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014
17.	E- Coli	MPN/100ml	Present	Absent	IS1622:1981 Reaff.2014

REMARK-

- ❖ The above analysis water sample is not within the prescribed limits.
- ❖ Sample will be preserve for seven days after analysis.
- ❖ Above analysis results are related to sample as tested.
- ❖ All the test conducted at permanent location not at out source
- ❖ The contents of this test report shall not be reproduced in part or without written approval of lab incharge.
- ❖ BDL-Below Detectable Limit.
- ❖ N.S. Not Specified
- ❖ Opinion and interpretation - Not applicable

Prepared by
(Mrs.Vrushali kadam-londhe)

Reviewed by
(Ms.Sonali Mohi)

Authorized Signatory
(Mr.Vipul Wagimare)



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...End of test report...





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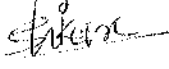
- Recognized by Ministry of Environment Forest and Climate Change (MoEFCC), New Delhi
- ISO 9001 : 2015 Certified Organization
- ISO 45001 : 2018 Certified Organization

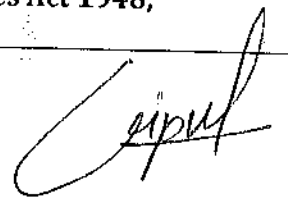
AMBIENT & WORK ZONE NOISE LEVEL MONITORING REPORT				Page 1 of 1
NAME OF COMPANY:- M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon, Dist. - Pune-412 406		Report No	AL/TR/76-471/23-24	
		Report Date	09/12/2023	
		Inward No	AL/8-492/09/23-24	
		Sampling Date	30/11/2023	
Sample Location	Company Premises	Sampling Time	02:00 PM To 02:30 PM	
Sample Collected By	AARL	Time duration	30 Min	

SR. NO	LOCATIONS	UNIT	RESULT	LIMITS	METHOD
A. Outside of Shop					
1.	Near Guest House	dB(A)	62.3	≤ 75 dB(A)	IS 4758-1968 (PART 10) RA 2002
2.	Near Kandoba Temple	dB(A)	60.2		
3.	Near switch yard	dB(A)	61.2		
B. Inside of Shop					
4.	Mill House	dB(A)	71.2	≤ 90 dB(A)	IS 9989-1981 (RA 2001)
5.	Boiling House	dB(A)	73.5		
6.	Near 80 TPH Boiler	dB(A)	74.2		

REMARK, OPINION & INTERPRITATION-

- ❖ All above results are within limits as per MPCB Consent The Factories Act 1948, standards.


Verified by
(Analyst)


Authorized Signatory

...End of test report...

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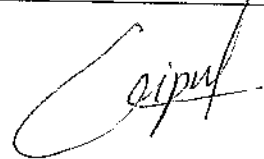
AMBIENT & WORK ZONE NOISE LEVEL MONITORING REPORT		Page 1 of 1	
NAME OF COMPANY:- M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon, Dist. - Pune-412 406		Report No	AL/TR/77-298/23-24
		Report Date	05/01/2024
		Inward No	AL/8-566/09/23-24
		Sampling Date	27/12/2023
Sample Location	Company Premises	Sampling Time	01:00 PM To 01:30 PM
Sample Collected By	AARL	Time duration	30 Min

SR. NO	LOCATIONS	UNIT	RESULT	LIMITS	METHOD
A. Outside of Shop					
1.	Near Sakhar Shala	dB(A)	61.2	≤ 75 dB(A)	IS 4758-1968 (PART 10) RA 2002
2.	Near Senior College	dB(A)	62.5		
3.	Near Copy Yard	dB(A)	63.6		
B. Inside of Shop					
4.	Near Workshop	dB(A)	72.2	≤ 90 dB(A)	IS 9989-1981 (RA 2001)
5.	Near 13 MW Turbine	dB(A)	74.6		
6.	Near Sugar House	dB(A)	73.2		

REMARK, OPINION & INTERPRITATION-

- ❖ All above results are within limits as per MPCB Consent The Factories Act 1948, standards.


Verified by
(Analyst)


Authorized Signatory

...End of test report...

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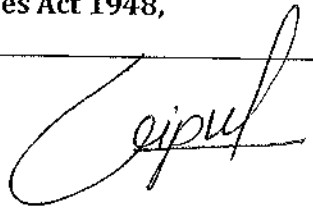
AMBIENT & WORK ZONE NOISE LEVEL MONITORING REPORT		Page 1 of 1
NAME OF COMPANY:- M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon, Dist. - Pune-412 406		Report No
		Report Date
		Inward No
		Sampling Date
Sample Location	Company Premises	Sampling Time
Sample Collected By	AARL	Time duration

SR. NO	LOCATIONS	UNIT	RESULT	LIMITS	METHOD
A. Outside of Shop					
1.	Near Switch Yard	dB(A)	68.1	≤ 75 dB(A)	IS 4758-1968 (PART 10) RA 2002
2.	Near Petrol Pump	dB(A)	69.2		
3.	Near Colony	dB(A)	64.6		
B. Inside of Shop					
4.	Near Mill House	dB(A)	74.3	≤ 90 dB(A)	IS 9989-1981 (RA 2001)
5.	Near Boiling House	dB(A)	76.2		
6.	Near 45 TPH Boiler	dB(A)	77.3		

REMARK, OPINION & INTERPRITATION-

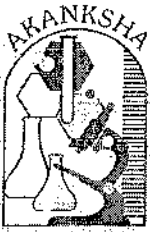
- ❖ All above results are within limits as per MPCB Consent The Factories Act 1948, standards.


Verified by
(Analyst)


Authorized Signatory

...End of test report...

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AMBIENT & WORK ZONE NOISE LEVEL MONITORING REPORT			Page 1 of 1
NAME OF COMPANY:- M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon, Dist. - Pune-412 406		Report No	AL/TR/78-553/23-24
		Report Date	28/02/2024
		Inward No	AL/B-698/09/23-24
		Sampling Date	22/02/2024
Sample Location	Company Premises	Sampling Time	01:30 PM To 02:00 PM
Sample Collected By	AARL	Time duration	30 Min

SR. NO	LOCATIONS	UNIT	RESULT	LIMITS	METHOD
A. Outside of Shop					
1.	Near chichgai road	dB(A)	66.5	≤ 75 dB(A)	IS 4758-1968 (PART 10) RA 2002
2.	Near Petrol Pump	dB(A)	70.8		
3.	Near sakhar shala	dB(A)	71.7		
B. Inside of Shop					
4.	Near Sugar House	dB(A)	76.3	≤ 90 dB(A)	IS 9989-1981 (RA 2001)
5.	Near work shop	dB(A)	74.5		
6.	Near 80 TPH Boiler	dB(A)	78.4		

REMARK, OPINION & INTERPRITATION-

- ❖ All above results are within limits as per MPCB Consent The Factories Act 1948, standards.

Cooper

Authorized Signatory

...End of test report...



AKANKSHA ANALYTICAL & RESEARCH LAB

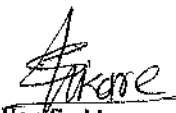
- Recognized by Central Pollution Control Board, M/o Environment, Forest & Climate Change, Govt. of India.
- ISO 9001: 2015 Certified Organization
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AMBIENT & WORK ZONE NOISE LEVEL MONITORING REPORT		Page 1 of 1	
NAME OF COMPANY:- M/s. Bhima Shankar Sahakari Sakhar Karkhana Ltd. Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon, Dist. - Pune-412 406		Report No	AL/TR/79-655/2024-25
		Report Date	06/04/2024
		Inward No	AL/8-787/10/2024-25
		Sampling Date	30/03/2024
Sample Location	Company Premises	Sampling Time	12:00 PM To 12:30 PM
Sample Collected By	AARL	Time duration	30 Min

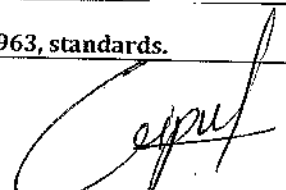
SR. NO	LOCATIONS	UNIT	RESULT	LIMITS	METHOD
A. Outside of Shop					
1.	Near khandoba mandir	dB(A)	68.6	≤ 75 dB(A)	IS 4758-1968 (PART 10) RA 2017
2.	Near college	dB(A)	72.5		
3.	Near petrol pump	dB(A)	70.4		
B. Inside of Shop					
4.	Near mill house	dB(A)	77.5	≤ 90 dB(A)	IS 9989-1981 (RA 2020)
5.	Near boiling house	dB(A)	72.3		
6.	Near workshop	dB(A)	71.4		
Details of equipment used and its Calibration Certificate					
Name of Equipment		Lab ID No.	Calibration Certificate No.		Validity
Sound Level Meter		AK-SLM-05	2250141		30/07/2024

REMARK, OPINION & INTERPRITATION-

- ❖ All above results are within limits as per MPCB Consent The Factories Rule 1963, standards.


Verified by
(Analyst)




Authorized Signatory



Maharashtra Pollution Control Board

महाराष्ट्र प्रदूषण नियंत्रण मंडळ

FORM V

(See Rule 14)

Environmental Audit Report for the financial Year ending the 31st March 2024

Unique Application Number

MPCB-ENVIRONMENT_STATEMENT-0000065827

Submitted Date

10-06-2024

PART A

Company Information

Company Name

Bhimashankar Sahakari Sakhar Karkhana Ltd.

Application UAN number

00000170265

Address

Dattatraynagar, Pargaon Tarfe Awasari Bk.

Plot no

Taluka

Ambegaon

Village

Pargaon Tarfe Awasari Bk.

Capital Investment (In lakhs)

31832.06

Scale

Red

City

Pargaon Tarfe Awasari Bk.

Pincode

412406

Person Name

Mr. Chandrakant G. Dhage

Designation

Managing Director

Telephone Number

9975568130

Fax Number

0213328270

Email

bsskltd@gmail.com

Region

SRO-Pune II

Industry Category

Red

Industry Type

R12 Sugar (excluding Khandsari)

Last Environmental statement submitted online

yes

Consent Number

Format1.0/CAC/UAN No.MPCB-
CONSENT-0000170265/CR/2309000334

Consent Issue Date

2023-09-05

Consent Valid Upto

2026-07-31

Establishment Year

2000

Date of last environment statement submitted

Apr 9 2023 12:00:00:000AM

Industry Category Primary (STC Code) & Secondary (STC Code)

Product Information

Product Name

Sugar

Consent Quantity

21600

Actual Quantity

24641

UOM

By-product Information

By Product Name

Bagasse

Consent Quantity

46800

Actual Quantity

57013

UOM

Molasses

7200

9212

Pressmud	7200	8432
Co-Generation	19	19

Part-B (Water & Raw Material Consumption)

1) Water Consumption in m3/day

Water Consumption for Process	Consent Quantity in m3/day	Actual Quantity in m3/day
Cooling	1694.00	1264.00
Domestic	48.00	16.00
All others	96.00	62.00
Total	0.00	0.00
	1838.00	1342.00

2) Effluent Generation in CMD / MLD

Particulars	Consent Quantity	Actual Quantity	UOM
Trade Effluent	817	570	CMD

2) Product Wise Process Water Consumption (cubic meter of process water per unit of product)

Name of Products (Production)	During the Previous financial Year	During the current Financial year	UOM
Sugar	0	0.008	CMD

3) Raw Material Consumption (Consumption of raw material per unit of product)

Name of Raw Materials	During the Previous financial Year	During the current Financial year	UOM
Sugarcane	1076959.00	1050115.00	MT/A

4) Fuel Consumption

Fuel Name	Consent quantity	Actual Quantity	UOM
Bagasse	46800	57013	

Part-C

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

[A] Water

Pollutants Detail	Quantity of Pollutants discharged (kL/day)	Concentration of Pollutants discharged (Mg/Lit) Except PH, Temp, Colour	Percentage of variation from prescribed standards with reasons	Standard	Reason
pH	7.4	7.0	00	5.5 to 9.0	Nil

[B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day)	Concentration of Pollutants discharged (Mg/NM3)	Percentage of variation from prescribed standards with reasons	Standard	Reason
SPM	117	105	00	105	Nil

Part-D

1) From Process

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
5.1 Used or spent oil	0.300	0.05	KL/A

2) From Pollution Control Facilities

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	00	00	MT/A

Part-E

SOLID WASTES

1) From Process

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
Boiler Ash	3460	4015	MT/A
ETP Sludge	4	6	MT/A

2) From Pollution Control Facilities

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
-	00	00	MT/A

3) Quantity Recycled or Re-utilized within the unit

Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
0	00	00	MT/A

Part-F

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

1) Hazardous Waste

Type of Hazardous Waste Generated	Qty of Hazardous Waste	UOM	Concentration of Hazardous Waste
5.1 Used or spent oil	0.05	KL/A	-

2) Solid Waste

Type of Solid Waste Generated	Qty of Solid Waste	UOM	Concentration of Solid Waste
Boiler Ash	4015	MT/A	-
ETP Sludge	6	MT/A	-

Part-G

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

Description	Reduction in Water Consumption (M3/day)	Reduction in Fuel & Solvent Consumption (KL/day)	Reduction in Raw Material (Kg)	Reduction in Power Consumption (KWH)	Capital Investment (in Lacs)	Reduction in Maintenance (in Lacs)
Trade Effluent	6.25	515	16	1390	2.90	0.50

Part-H

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

[A] Investment made during the period of Environmental Statement

Detail of measures for Environmental Protection

Environmental Protection Measures

Capital Investment (Lacks)

1)Online Monitoring system for Effluent & Stack 2) Annual Maintenance of Effluent treatment plant Control Air & Water Pollution

3.15

[B] Investment Proposed for next Year

Detail of measures for Environmental Protection

Environmental Protection Measures

Capital Investment (Lacks)

1)Plantation Programme 2) Annual Maintenance Contract for On Line Monitoring System. Tree plantation & Control Air & Water Pollution

0.50

Part-I

Any other particulars for improving the quality of the environment.

Particulars

Adopt New technology for Air & Water Pollution

Name & Designation

Mr.Chandrakant G.Dhage

UAN No:

MPCB-ENVIRONMENT_STATEMENT-0000065827

Submitted On:

10-06-2024