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
Dattatrayanagar, At.Post - Pargaon, Via Awasari (BK), Tal. Ambegaon, Dist.Pune. 412 406
Tel.Fax:(02133)284241, 284270, 9975568130 E-mail: bsskltd@gmail.com web site: www.bhimashankarssk.com, www.bsskl.sets.co.in

GSTIN : 27AAAABO949G1ZZ

BSSK/Mfg/ 1114 /2020-21 Date:-02/08/2020

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.
Ref- SEAC-2011/CR-755/TC2 dt.30/06/2012.

Dear Sir,

We are submitting herewith six monthly compliance report of Environmental Clearance for 19 Mw Co-generation plant. (From 1st January 2020 to 30 Jun. 2020) for your reference.

Thanking you.

Yours Faithfully,

(C.G. Dhage)
Managing Director.

Encl-1) Part- A – Data Sheet.
2) Six Monthly EC Compliance Report& Monitoring 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

Government of Maharashtra

SEAC - 2011 /CR -755 /TC2
Environment department
Room No. 217, 2nd floor,
Mantralaya Annexe,
Mumbai- 400 032.
Dated: 30th June, 2012

To,
M/s. Bhimashankar SSK,
Village Dattatraya Nagar, Pargaon,
Tal Ambegaon, Dist Pune

Sub: Environment Clearance for the Proposed Co generation power project of 19 MW capacity at Dattatraya Nagar, Pargaon, Tal Ambegaon, Dist Pune by M/s Bhimashankar Sakhari Karkhana Limited. - Environmental clearance regarding.

Sir,

This has reference to your communication on the above mentioned subject. The proposal was considered as per the EIA Notification - 2006, by the State Level Expert Appraisal Committee, Maharashtra in its 46th & 56th meetings and decided to recommend the project for prior environmental clearance to SEIAA. Information submitted by you has been considered by State Level Environment Impact Assessment Authority in its 48th Meeting held on 26th /27th June, 2012

2. It is noted that the proposal is for grant of Environmental Clearance for Proposed 19MW Co generation power plant to be located at Dattatraya Nagar, Paragaon, Tal Ambegaon, Dist - Pune by M/s Bhimashankar Sakhar Karkhana Limited. SEAC considered the project under screening category 1(d) - B1 of EIA Notification 2006. Project proponent has submitted EIA report.

Project information from submitted & considered documents is summarized as below-

Name of the Project	:	Cogeneration Power Project of 19 MW Capacity				
Project Proponent	:	M/s. Bhimashankar Sakhar Sakhar Karkhana Limited				
Location of the project	:	Village Dattatraya Nagar, Pargaon, Tal Ambegaon, Dist Pune				
Built up area	:	18 Acres				
Project cost	:	4,446.25 Lakhs				
Raw material	:	List of raw Materials to be used	Physical and chemical nature of raw material	Quantity (tonnes/month) full production capacity	Source of material	Means of Transportation (Source to storage Site) with justification
		Bagass	Ash contain		Own	Bagasse will be transport

		(Fuel)	– 1.5 - 2 % Sulphur – absent or in trace Calorific value - 2,300 kcal/kg	967 TPM	sugar factory	from the yard to the furnace by bagasse handling system

Production :

Name of products, Byproducts and Intermediate Products	Existing	Proposed activity (new / modernization / expansion)	Total
Products	Existing consented capacity-MT/M	Proposed additional capacity-MT/M	Total capacity after proposed Expansion-MT/M
Sugar	14490	18000	32490
Molasses	5040	6000	11040
Bagasse	37800	52500	90300
Pressmud	5040	6000	11040

Product: Electricity Generation -19.0 MW

Total Water Requirement :

Total Water Requirement :

(i) Process : Nil
(ii) Cooling water: 810 M3/day
(iii) Boiler feed : 80 M3/day
(iv) Drinking 5 M3day
(v) Others: 5M3/day

Boiler and Steam Turbo Alternator (STG Set) :

Presently the factory is having one boiler of 37 TPH capacity working at 45 ata pressure and 445°C ± 5° C steam temperature. For a new boiler is of 80 TPH capacities at 88 Ata pressure and 515°C± 5°C steam temperature is planned to install. Operating load of the new boiler is estimate to be about 71.50 TPH during normal crushing season including the extraction of steam for process requirement, HP heater and de-aerator heating steam

ETP details :

Effluent generation: 50 m^3/day treated in ETP and reused for gardening and cooling tower make up.

Pollution control measures :

	Existing	Proposed to be installed
Air	ESP / Dust Collector	ESP
Water	ETP Consisting of primary treatment, secondary treatment.	ETP with anaerobic followed by aerobic system with sand and carbon filter.
Noise	Lubricating systems	Proposed noise friendly machines
Solid Waste	Fly ash Sale to Brick manufacturers	Fly ash Sale to Brick manufacturers

Green Belt Development	:	Green belt area: 8000 Sq. mtr. Number trees Existing:6,850 Proposed No.of trees with plant species: 2,000
Fuel Requirement	:	Bagasse – For season - 1074 MT/day During Off season: 305 MT/day.
Environmental Management Plan	:	

Sr. No		Recurring Cost per annum	Capital Cost
1	Air Pollution Control	1.0	275.00
2	Water Pollution Control	1.5	--------
3	Noise Pollution Control	--------	--------
4	Environment Monitoring and Management	0.5	
5	Reclamation borrow/mined area		
6	Occupational Health	1.0	
7	Green Belt	0.5	5.00
8	Solid waste management	0.5	
9	Others (Pl. Specify) ▪ Fire Protection	1.0	20.00
Total		6.0	300.00

3. The proposal has been considered by SEIAA in its 48th meeting & decided to accord environmental clearance to the said project under the provisions of Environment Impact Assessment Notification, 2006 subject to implementation of the following terms and conditions :

(i) Project proponent should take immediate measures to reduce the ambient SPM value due to existing activity as per MPCB directives.

(ii) No land development / construction work preliminary or otherwise relating to the project shall be taken up without obtaining due clearance from respective authorities.

(iii) No additional land shall be used /acquired for any activity of the project without obtaining proper permission.

(iv) For controlling fugitive natural dust, regular sprinkling of water & wind shields at appropriate distances in vulnerable areas of the plant shall be ensured.

(v) Regular monitoring of the air quality, including SPM & SO2 levels both in work zone and ambient air shall be carried out in and around the power plant and records shall be maintained. The location of monitoring stations and frequency of monitoring shall be decided in consultation with Maharashtra Pollution Control Board (MPCB) & submit report accordingly to MPCB.

(vi) Necessary arrangement shall be made to adequate safety and ventilation arrangement in furnace area.

(vii) Proper House keeping programmes shall be implemented.

(viii) In the event of the failure of any pollution control system adopted by the unit, the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieve.

(ix) A stack of adequate height based on DG set capacity shall be provided for control and dispersion of pollutant from DG set.(If applicable)

(x) A detailed scheme for rainwater harvesting shall be prepared and implemented to recharge ground water.

(xi) Arrangement shall be made that effluent and storm water does not get mixed.

(xii) Periodic monitoring of ground water shall be undertaken and results analyzed to ascertain any change in the quality of water. Results shall be regularly submitted to the Maharashtra Pollution Control Board.

(xiii) Leq of Noise level shall be maintained as per standards. For people working in the high noise area, requisite personal protective equipment like earplugs etc. shall be provided.

(xiv) The overall noise levels in and around the plant are shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures, etc. on all sources of noise generation. The ambient noise levels shall confirm to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989.

(xv) Green belt shall be developed & maintained around the plant periphery. Green Belt Development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO/ Agriculture Dept.

(xvi) Adequate safety measures shall be provided to limit the risk zone within the plant boundary, in case of an accident. Leak detection devices shall also be installed at strategic places for early detection and warning.

(xvii) Occupational health surveillance of the workers shall be done on a regular basis and record maintained as per Factories Act.

(xviii) The company shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling.

(xix) The project authorities must strictly comply with the rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Waste (Management and Handling) Rules, 2003 (amended). Authorization from the MPCB shall be obtained for collections/treatment/storage/disposal of hazardous wastes.

(xx) The company shall undertake following Waste Minimization Measures :

- Metering of quantities of active ingredients to minimize waste.
- Reuse of by- products from the process as raw materials or as raw material substitutes in other process.
- Maximizing Recoveries.
- Use of automated material transfer system to minimize spillage..

(xxi) Regular mock drills for the on-site emergency management plan shall be carried out. Implementation of changes / improvements required, if any, in the on-site management plan shall be ensured.

(xxii) A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.

(xxiii) Transportation of ash will be through closed containers and all measures should be taken to prevent spilling of the ash.

(xxiv) Separate silos will be provided for collecting and storing bottom ash and fly ash.

(xxv) Separate funds shall be allocated for implementation of environmental protection measures/EMP along with item-wise breaks-up. These cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year-wise expenditure should reported to the MPCB & this department

(xxvi) The project management shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the marathi language of the local concerned within seven days of issue of this letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the Maharashtra Pollution Control Board and may also be seen at Website at http://ec.maharashtra.gov.in

(xxvii) Project management should submit half yearly compliance reports in respect of the stipulated prior environment clearance terms and conditions in hard & soft copies to the MPCB & this department, on 1st June & 1st December of each calendar year.

(xxviii) A copy of the clearance letter shall be sent by proponent to the concerned Municipal Corporation and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.

(xxix) The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM. SO_2, NOx (ambient levels as well as stack emissions) or critical sectorai parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.

(xxx) The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.

(xxxi) The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.

(xxxii) The environmental clearance is being issued without prejudice to the 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 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.

4. The environmental clearance is being issued without prejudice to the action initiated under EP Act or any court case pending in the court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision under EP Act or of the Hon'ble court will be binding on the project proponent. Hence this clearance does not give immunity to the project proponent in the case filed against him, if any or action initiated under EP Act.

5. The Environment department reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the department or for that matter, for any other administrative reason.

6. **Validity of Environment Clearance**: The environmental clearance accorded shall be valid for a period of 5 years to start of power plant.

7. In case of any deviation or alteration in the project proposed from those submitted to this department for clearance, a fresh reference should be made to the department to assess the adequacy of the condition(s) imposed and to incorporate additional environmental protection measures required, if any.

8. The above stipulations would be enforced among others under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and rules there under, Hazardous Wastes (Management and Handling) Rules, 1989 and its amendments, the public Liability Insurance Act, 1991 and its amendments.

9. Any appeal against this environmental clearance shall lie with the National Green Tribunal , Van Vigyan Bhawan, Sec- 5, R.K. Puram, New Dehli – 110 022, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010

(Valsa R Nair Singh)
Secretary,Environment
department & MS, SEIAA

Copy to:

1. Shri. P.M.A Hakeem, IAS (Retd.), Chairman, SEIAA, 'Jugnu' Kottaram Road, Calicut- 673 006 Kerla.
2. Shri. Dr. S. Devotta, Chairman, SEAC, T2/302 Sky City, Vanagaram –Ambattur Road, Chennai – 600 095
3. Member Secretary, Maharashtra Pollution Control Board, with request to display a copy of the clearance.
4. The CCF, Regional Office, Ministry of Environment and Forest (Regional Office, Western Region, Kendriya Paryavaran Bhavan, Link Road No- 3, E-5, Ravi-Shankar Nagar, Bhopal- 462 016). (MP).
5. Regional Office, MPCB, Pune.
6. Collector, Pune.
7. IA- Division, Monitoring Cell, MoEF, Paryavaran Bhavan, CGO Complex, Lodhi Road, New Delhi-110003.
8. Director (TC-1), Dy. Secretary (TC-2), Scientist-1, Environment department.
9. Select file (TC-3).

SIX MONTHLY COMPLIANCE REPORT

Part-I

DATA SHEET

No.		
1	**Project Type:** River Valley/Mining/Industry/Thermal/Nuclear/Others (Specify)	Industry
2	**Name of the Project**	Bhimashankar Sahakari Sakhar Karkhana Ltd.Dattatrayanagar,Pargaon Tarfe Awasari Bk.,Tal_Ambegaon Dist-Pune Pin- 412406
3	**Clearance letter(S)/OM No.and Date**	SEAC-2011/CR-755/TC2 Date – 30/06/2012
4	**Locationa)** District (s)	Pune
	b) State (s)	Maharashtra
	c) Location latitude / longitude	Latitude $18^0$58' 30.57"N and Longitude 74^o5'31.68"E
5	**Address For Correspondace**	
	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
	b)Address of the Managing Director(with Pin code/Telephone/Telex/Fax/Numbers)	
6	**Salient Features**	
	a) of the Project	This Sugar unit situated at Dattatrayanagar.
	b) of the Environmental Management Plans	Environment Management Plan Includes – Green Belt Development (Plantation with
7	**Break up of the Project Area**	
	a) Submergence area : Forest & Non Forest	N.A.
	b) Others	Plot area -586796 m^2 Total Built up area- 72844 m^2
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. So no population is affected.

	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	N.A.
(b)	Allocation made for environmental management plans with item wise and year wise breakup	O & M cost/ Year- 300.00 Lakhs
c)	Benefit cost ratio / Internal rate of Return and the year of assessment	8 years
d)	Whether (c) includes the cost of environmental management as shown in the above	300.000Lakhs
e)	Actual expenditure incurred on the project so far	4461.250 Lakhs
f)	Actual expenditure incurred on the environmental management plans so far	300.00 Lakhs
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.
a)	Date of commencement (Actual & / or Planned)	June 2012.
b)	Date of completion (Actual & / or Planned)	October 2013.
13	Reasons for the delay if the project is yet to start	N.A.
14	**Dates of the site visits-**	Nil
a)	The dates on which the project was monitored by the	
b)	Date of site visit for this monitoring report	Nil

15 Details of correspondace with project authorities for obatining action plan/information on status of complaince to safeguards other than the routine letters for logistics support for site visit.	There is no plant expansion. No alternation or addition.No show cause or notices of pollution department.We are regularly monitoring both air & water data as per CPCB guidelines & parameters are within limit.

K. P Ware
(Process Manager)
Bhimashankar Sahakari Sakhar Karkhana Ltd
Dattatrayanagar, Pargaon Via - Awasari Bk
Tal.Ambegaon, Dist.Pune - 412 406

ANNEXURE - 2
EC COMPLIANCE CONDITIONS

Sr.No	Condition	Compliance Status
i	Project proponent should take immediate measures to reduce the ambient SPM value due to existing activity as per MPCB directives.	Stack Height for 37 TPH Boiler -60 mtrs. & 80 TPH Boiler -72 mtrs.We have provided ESP to 80 TPH boiler & Wet scrubber for 37 TPH boiler & Ambient SPM is within limit given by MPCB.(Photograph is enclosed - Ann.I)
ii	No land development / construction work preliminary or otherwise relating to the project shall be taken up without obtaining due clearance from respective authorities.	No land development or any construction is done & in future also we will not entertain any activity without MPCB permission.
iii	No additional land shall be used/acquired for an activity of the project without obtaining proper permission.	We are agree ,No additional land will be acquired /used for any activity without pollution Board permission.
iv	For controlling fugitive natural dust,regular sprinkling of water & wind shields at appropriate distances in vulnerable areas of the shall be ensured.	For dust control we have provided.ESP& wet scubber,for Boiler & Dust cature in sugar house.Further we regularly sprinkle water by spray nozzle fitted to tanker to control dust in the factory permises.(Photograph is enclosed - & Reports Attached -Ann:II)
v	Regular monitoring of the air quality,including SPM & SO2 levels both in work zone and ambient air shall be carried out in and around the records shall be maintained. The location of monitoring stations and frequency of monitoring shall be decided in consultation with Maharashtra Pollution Control Board (MPCB) & submit report accordingly to MPCB.	We are monitoring air & water pollution data regularly by OCMS & online data is submitted to CPCB & reports to MPCB. (Report & photographs is enclosed-Ann.III)
vi	Necessary arrangement shall be made adequate safety and ventilation arrangement in furnace area.	We have made provision for proper ventilation system in the process area.(Photographs is enclosed Ann.IV)
vii	Proper House keeping pro grammes shall be implemented.	We regularly maintain the proper house keeping.
viii	In the event of the failure of any pollution control system adopted by the unit,the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieve .	After failure of pollution control device,We immediately stop the Boiler operation & restart after activation of polltuion controlling device.We intimate both CPCB & MPCB time to time by mail in this regard without any delay.

ix	A Stack of adequate height based on DG set capacity shall be provided for control and dispersion of pollutant from DG set.(If applicable)	Appx. 15 mtrs stack height is given for existing 500 KVA D.G.set.
x	A detailed scheme for rain water harvesting shall be prepared and implemented to recharge ground water.	*Factory building & offices roof rain water is collected by down take pipes in campus water body. (Details of Construction of Rain harvesting structure is enclosed.Ann.V)
xi	Arrangement shall be made that effluent and storm water does not get mixed.	We have proper drainge for storm water & effluent & there is no mixing of waste water & storm water.
xii	Periodic monitoring of ground water shall be undertaken and results analyzed to ascertain any change in quality of water. Results shall be submitted to the Maharashtra Pollution Control Board	Ground water within 5 Km radius ground karkhana is checked,found ok.Reports are attached. (Ann.VI)
xiii	Leq of Noise level shall be maintained as per standards. For people working in the high noise area,requisite personal protective equipment like earplugs etc. shall be provided.	*Noise proof cabnis are provided to operators wherever is possible . *The air compressor,process air blower,pneumatic valves are kept in the closed cabis. * Noise level – within limit. (Report Attached-VII)
xiv	The overall noise levels in and around the plant are shall be kept well within the standards by providing noise control measures including acoustic hoods,silencers,enclosures ,etc. on all sources of noise generation. The ambient noise levels shall confirm to the standards prescribed under Environment (Protection) Act.1986 Rules,1989.	* Noise controlling measures are as per EMP are taken including tree barriers. * Noise level is within standard limits & we are agree with the same for future also.
xv	Green belt shall be developed & maintained around the plant periphery. Green Belt Development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO / Agriculture Dept.	* We have planted on 19.52 heactres factory land.. *For bio-diversity ,appx. 25 number of species are planted. *Species are selected as per CPCB publication,MPCB circular and in consultation with Botanical Department of local Institute.The Species selection is intimated to DFO for suggestionss,if any. (Photographs & List enclosed.AnnVIII)

xvi	Adequate safety measures shall be provided to limit the risk zone within the plant boundary,in case of an accident. Leak detection devices shall be installed at strategic places for early detection and warning.	*Adequate safety measures are provided.
xvii	Occupational health surveillance of the workers shall be done on a regular basis and record maintained as per Factories Act.	*We arrange health checkup of all the employees once in every year and records is maintained as per Factory Act. * Pre & post medical check-ups were organised for all employees. Employees are regularly examined and the medical records is maintained for each employee. *All precautionary measures are adopted by the company to reduce the risk of employees for occupational safety and health hazardous.(Photographs Attached- IXA)
xviii	The company shall make the arrangement for protection of possible fire hazardous during manufacturing processes in the material handling.	*The system is provided as per guidelines of DISH. *This is regularly inspected by Factory Inspectors during visit. *Hydrant System ,High velocity water spray system,medium velocity water system,Foam systemPortable and mobile fire extinguishrs etc. are different types of fire protection /dection sysetm are installed in the plant.
xix	The project authorities must strictly comply with the rules & regulations with regard to handling and disposal of hazardous waste in accordance with the Hazardous Waste (Management and Handling) Rules,2003(amended).Authorization from the MPCB shall be obtained for collections/treatment/storage /disposal of hazardous wastes.	We are regularly follow guidelines given by MPCB .

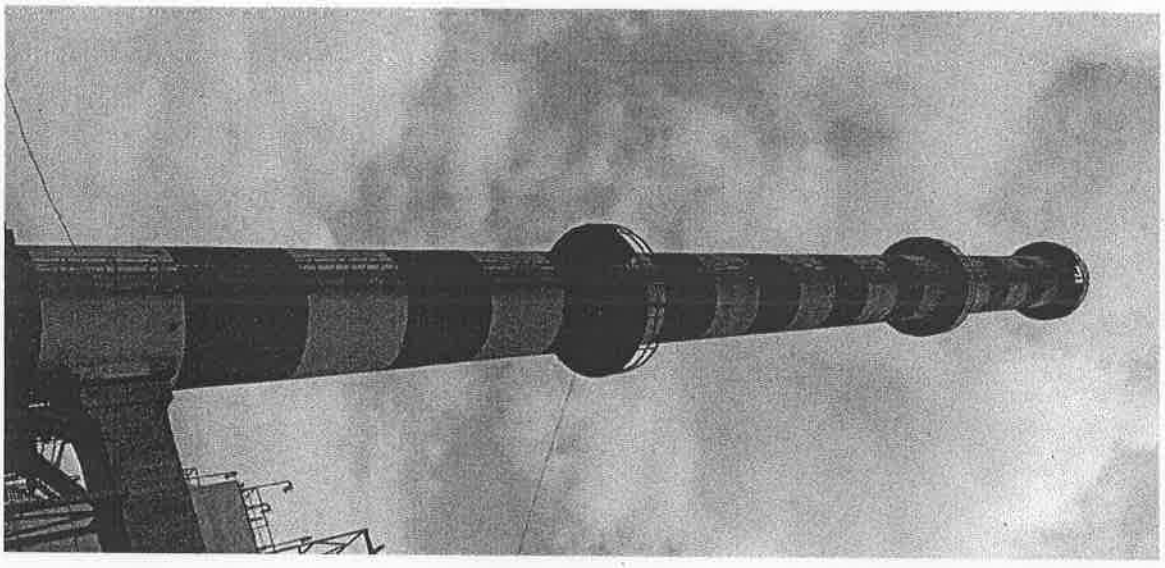
xx	The company shall undertake following Waste Minimization Measures: Metering of quantites of active ingredients to minimize wastes. Reuse of by-products from the process as raw materials or as raw material substitutes in other process.Maximizing Recoveries. Use of automated material transfer system to minimize spillage.	We have minimised the waste water generation by proper monitoring & Reuse of condensate water by cooling in cooling towers. (ETP Outlet Report Attached) (OCMS report attached) (Ann-IX B)
xxi	Regular mock drills for the on site emergency management plans shall be carried out. Implementation of changes / improvement required,if any,in the on site management plans shall be ensured.	We arrange regularly. It is part of our routine pracise. (Photographs Attached-X)
xxii	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 a qualified and experienced environmental officer having experiance more than 10 years. *Environment Management cell - Environment Officer-(M.Sc.(Env.Sci.)-1 No. ETP Chemist(B.Sc.)-3 Nos., ETP operators (12 th) - 7 Nos. *For additional work he has an approach to MoEF approved laboratory and NABET approved FAE. for quidance & trainings.
xxiii	Transportation of ash will be through closed containers and all measures should be taken to prevent spilling of the ash.	Transportation of ash is always carried out in closed tractors.
xxiv	Separate silos will be provided for collecting and storing bottom ash and fly ash.	Provided separate silos & ash collection sand filters for the collection & storage of bottom ash & fly ash. *Ash generated from the co-gen plant is used for compost.
xxv	Separate funds shall be allocated for implementation of environmental protection measures/EMP along with item-wise breaks-up. These cost shall be included as part of the project cost. The funds earmarked for the environmental protection measures shall not be diverted for other purposes and year-wise expendture should reported to the MPCB & this department.	*We have received the EC in 2012 and all the basic works required to fulfill the condotions are alredy completed. * We utilized Rs.300.00Lakhs for capital investment on environment as specified in EMP. * Management is very committed for the same. * The funds earmarked for Environment are not diverted to any other acoount head. * We have made 16 lakhs provision for the operational expenditure of EMP for the current year.

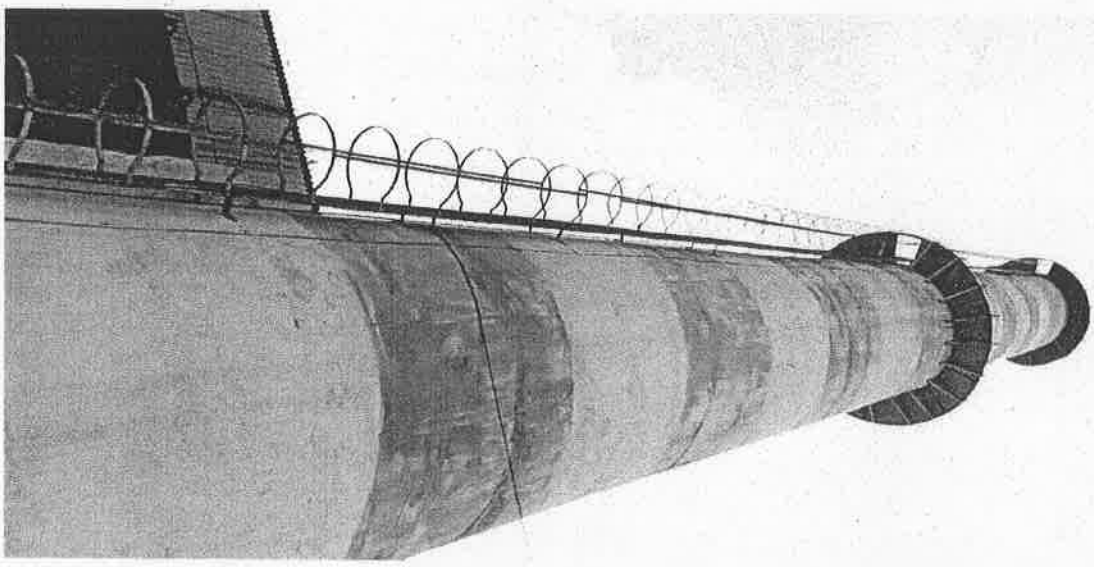
xxvi	The project management shall advertise at least in two local newpapers widely circulated in the region around the project,one of which shall be in the marathi language of the local concerned within seven days of issue of this letter,informing that the project has been accorded environmental clearance and copies of clearance letter are avaliable with the Maharashtra Pollution Control Board and may also be seen at Website at	Karkhana were published advertise in local newpapers - 1) Pudhari(English)–13 July 2012 2) Sakal (Marathi) - 14 July 2012 (Ann.XI)
xxvii	Project management should submit half yearly compliance reports in respect of the stipulated prior environment clearance terms and conditions in hard & soft copies to the MPCB & this department ,on 1 st June & 1st December of each calender year.	Regularly Submitted. (Website Screeshot Attached Ann XII)
xxviii	A copy of the clearance letter shall be sent by proponent to the concerned Municipal Corporation and the local NGO,if any,from whom suggestions/representations,if any,were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.	*Complinace of EC granted by MoEF is conveyed to local authority,MPCB,villagers,NGO and is already displayed on gate . .
xxix	The proponent shall upload the compliance of the stipulated EC conditions,including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF,the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM,So2, Nox (ambient levels as well as stack emissions) or critical	Regularly Submitted.
xxx	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data(both in hard copies as well as by e-mail) to the respective Regional Office of MoEF,the respective Zonal Office CPCB and the SPCB.	*We have uploaded lastest complaince report of conditions stipulated in the Environmental clearance along with analytical reports. *Half yearly complaince report are submitted twice since 2012.

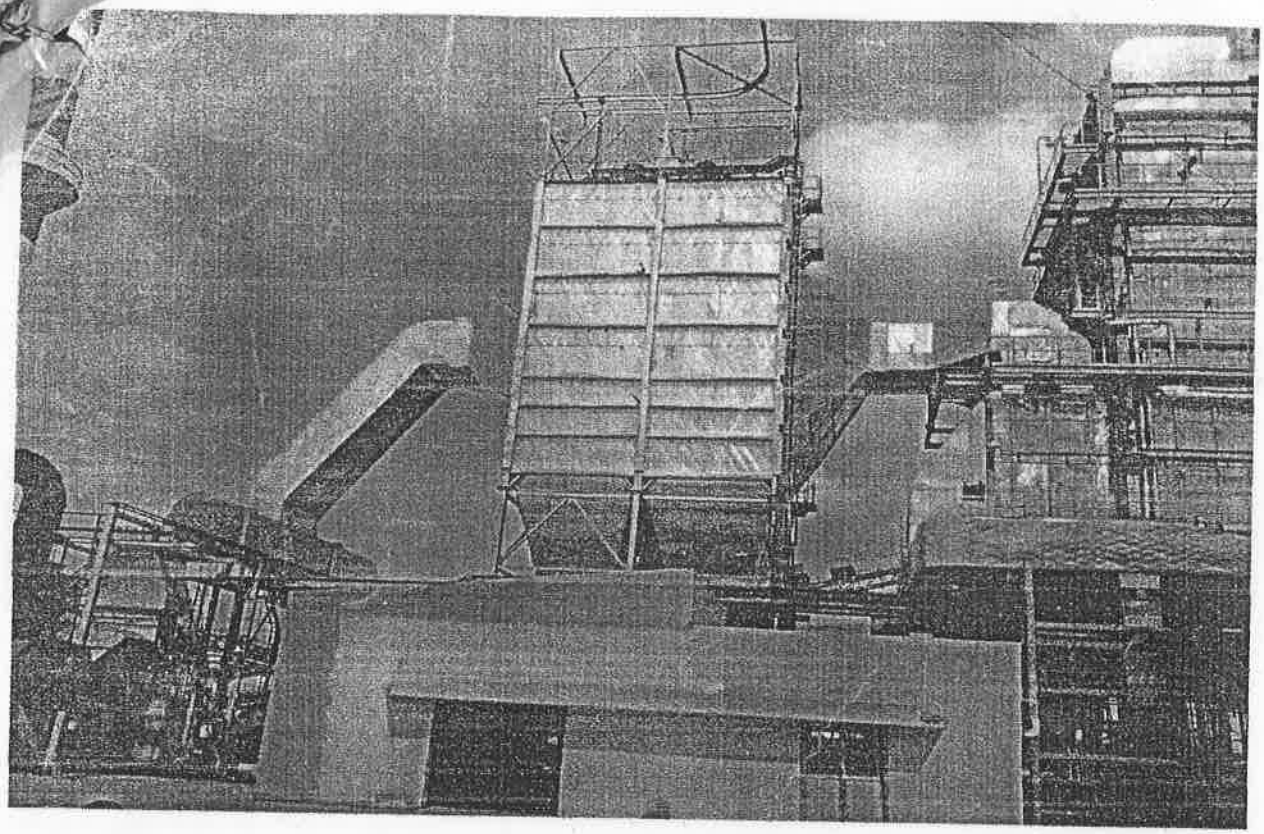
xxxii	The environmental statement for each financial year ending 31 st march in Form-V is mandated to be submitted by the project proponent to the concerned State pollution Control Board as prescribed under the Environment (Protection) Rules,1986,as amended subsequently,shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be send to the respective Regional Offices of MoEF by e-mail.	*We are already submitting the annual,statuatory Environmental statement in Form V every year to MPCB. *In future we shall also endorse a copy each to CPCB and MoEF RO Office& upload it on web site. *The latest recent annual,statutory Environmetal statement on Form V is enclosed herewith. (Ann. XIII)
xxxii	The environmental clearance is being issued without prejudice to the 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 of the Hon'ble court will be bindng on the project proponent. Hence this clearance does not give immunity to the project proponent in the case filed	There is no any environmental issues & cases regarding pollution.

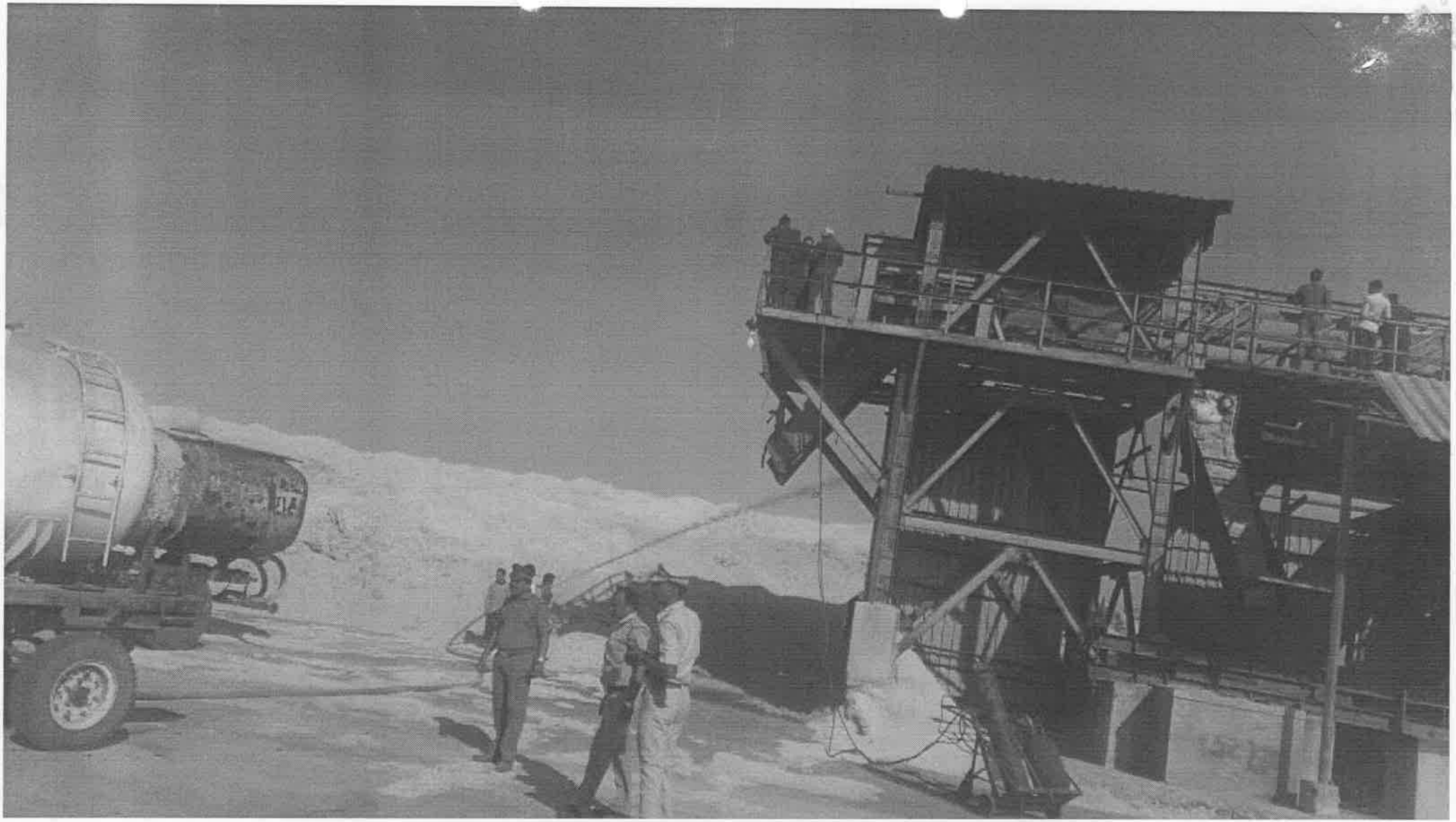
K. P Mare
(Process Manager)
Bhimashankar Sahakari Sakhar Karkhana Ltd
Dattatrayanagar, Pargaon Via - Awasari Bk
Tal.Ambegaon, Dist.Pune - 412 40[illegible]

Ahn I









Ann.II


BAGASSE HANDLING SYSTEM
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AKANKSHA ANALYTICAL & RESEARCH LAB

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ANALYSIS REPORTS FOR AMBIENT AIR QUALITY MONITORING			
NAME OF COMPANY: **M/s. Bhima Sahankar Sahakari Sakhar Karkhana Ltd.** Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon, Dist. – Pune-412 406		TR NO	AL/TR/AM/52-975/19-20
		DATE	23/12/2019
		INWARD NO.	AL/6-492/06/19-20
SAMPLE :-	**COLLECTED BY**	**SAMPLE REF.**	**RECEIVED ON :**
Ambient Air	AARL	Fugititive Sample Bagasse Yard	14/12/2019

Sr. No.	Parameter	Unit	RESULT	Limits Max.
5.	Particulate matter (PM_{10})	$\mu g/m^3$	54.2	100
6.	Particulate matter ($PM_{2.5}$)	$\mu g/m^3$	47.9	60

For Akanksha Analytical & Research Lab

Authorized Signatory

Chemist

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ANALYSIS REPORT FOR AMBIENT AIR QUALITY MONITORING			Page 1 of 1
NAME OF COMPANY:- **M/s. Bhima Sahankar Sahakari Sakhar Karkhana Ltd.** Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon,Dist. - Pune-412 406		**Report No**	AL/TR/53-772/19-20
		Report Date	29/01/2020
		Inward No	AL/6-565/02/19-20
		Inward Date	21/01/2020
Sample Location	Near New Boiler Area (Fugititive Sample)	**Sampling Time**	11:00 AM
Sample Collected By	AARL	**Time duration**	24 Hr

SR.NO.	PARAMETER	UNIT	RESULT	LIMITS	METHOD
1.	Ambient Temperature	°C	29.9	N.S.	EPA -454/R-99-005
2.	Relative Humidity	% rh	39	N.S.	EPA -454/R-99-005
3.	Sulphur Dioxide (SO_2)	µg/m³	11.91	≤ 80	IS:5182(Part-2):2001
4.	Oxides of Nitrogen (NO_X)	µg/m³	13.65	≤ 80	IS:5182(Part-6):2006
5.	Particulate matter-PM_{10} (less than 10 micron)	µg/m³	55.98	≤ 100	IS:5182(Part-23):2006
6.	Particulate matter-$PM_{2.5}$ (less than 2.5 micron)	µg/m³	36.68	≤ 60	IS:5182(Part-23):2006
7.	Ozone (O_3)	µg/m³	18.11	≤ 180	IS:5182(Part-9):1974
8.	Lead (Pb)	µg/m³	BDL	≤ 1.0	IS:5182(Part-22):2004
9.	Carbon Monoxide (CO)	mg/m³	01.03	≤ 04	IS:5182(Part-10):1999
10.	Ammonia as (NH_3)	µg/m³	BDL	≤ 400	Method No.401,(Indophenols method)Method Of Air Sampeling,3rd Edition
11.	Benzene (C_6H_6)	µg/m³	BDL	≤ 05	IS:5182 (Part 11):2006
12.	Benzo(a)Pyrene (BaP)	ng/m³	BDL	≤ 01	IS:5182 (Part 12):2004
13.	Arsenic (As)	ng/m³	BDL	≤ 06	IS:3025 (PART-37)
14.	Nickel (Ni)	ng/m³	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**

Aishwarya

Verified by
(Analyst)

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 Sahankar Sahakari Sakhar Karkhana Ltd.** Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon,Dist. – Pune-412 406		**Report No**	AL/TR/54-303/19-20
		Report Date	27/02/2020
		Inward No	AL/6-606/06/19-20
		Inward Date	20/02/2020
Sample Location	Near Old Stack (Fugitative Sample)	**Sampling Time**	12:20 PM
Sample Collected By	AARL	**Time duration**	08 Hr

SR.NO.	PARAMETER	UNIT	RESULT	LIMITS	METHOD
1.	Ambient Temperature	°C	33.9	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/m³	17.25	≤ 80	IS:5182(Part-2):2001
4.	Oxides of Nitrogen (NO_X)	µg/m³	15.74	≤ 80	IS:5182(Part-6):2006
5.	Particulate matter-PM_{10} (less than 10 micron)	µg/m³	79.36	≤ 100	IS:5182(Part-23):2006
6.	Particulate matter-$PM_{2.5}$ (less than 2.5 micron)	µg/m³	26.74	≤ 6 0	IS:5182(Part-23):2006
7.	Ozone (O_3)	µg/m³	18.14	≤ 180	IS:5182(Part-9):1974
8.	Lead (Pb)	µg/m³	BDL	≤ 1.0	IS:5182(Part-22):2004
9.	Carbon Monoxide (CO)	mg/m³	01.22	≤ 04	IS:5182(Part-10):1999
10.	Ammonia as (NH_3)	µg/m³	BDL	≤ 400	Method No.401,(Indophenols method)Method Of Air Sampeling,3rd Edition
11.	Benzene (C_6H_6)	µg/m³	BDL	≤ 05	IS:5182 (Part 11):2006
12.	Benzo(a)Pyrene (BaP)	ng/m³	BDL	≤ 01	IS:5182 (Part 12):2004
13.	Arsenic (As)	ng/m³	BDL	≤ 06	IS:3025 (PART-37)
14.	Nickel (Ni)	ng/m³	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)

Authorized Signatory

...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 | **Email :** akankshalab2007@gmail.com

Ann. III

EnviroConnect Forbes Marshall Multi Station Report

From Date	01/11/2019 00:00
To Date	30/11/2019 23:59
Interval	Daily
Function	Average
Plant	BSSK
Analyzer	STACK1
Parameter	PM
Unit	mg/Nm3
Limit	0.00 - 150.00

21/11/2019 00:00	60 < M
22/11/2019 00:00	50.6 < M
23/11/2019 00:00	47.88 < M
24/11/2019 00:00	39.63 < M
25/11/2019 00:00	36.49 < M
26/11/2019 00:00	48.94 < M
27/11/2019 00:00	59.42 < M
28/11/2019 00:00	60 < M
29/11/2019 00:00	60 < M
30/11/2019 00:00	60 < M
Average	52.3
Geom.Mean	51.5
Maximum	60
Median	55
Minimum	36.5
Mode	60
Std.Deviation	9
Total Active Duration	

EnviroConnect Forbes Marshall Multi Station Report

From Date	01/11/2019 00:00
To Date	30/11/2019 23:59
Interval	Daily
Function	Average
Plant	BSSK
Analyzer	STACK2
Parameter	PM
Unit	mg/Nm3
Limit	0.00 - 150.00

21/11/2019 00:00	98.22 < M
22/11/2019 00:00	91 < M
23/11/2019 00:00	90.84 < M
24/11/2019 00:00	91 < M
25/11/2019 00:00	91 < M
26/11/2019 00:00	91 < M
27/11/2019 00:00	91 < M
28/11/2019 00:00	91 < M
29/11/2019 00:00	91 < M
30/11/2019 00:00	90.94 < M
Average	91.7
Geom.Mean	91.7
Maximum	98.2
Median	91
Minimum	90.8
Mode	91
Std.Deviation	2.3
Total Active Duration	

EnviroConnect Forbes Marshall Multi Station Report

From Date	01/12/2019 00:00
To Date	31/12/2019 23:59
Interval	Daily
Function	Average
Plant	BSSK
Analyzer	STACK1
Parameter	PM
Unit	mg/Nm3
Limit	0.00 - 150.00

01/12/2019 00:00	57.3 < M
02/12/2019 00:00	55.59 < M
03/12/2019 00:00	60 < M
04/12/2019 00:00	60 < M
05/12/2019 00:00	60 < M
06/12/2019 00:00	60 < M
07/12/2019 00:00	60 < M
08/12/2019 00:00	60 < M
09/12/2019 00:00	60 < M
10/12/2019 00:00	60 < M
11/12/2019 00:00	60 < M
12/12/2019 00:00	60 < M
13/12/2019 00:00	60 < M
14/12/2019 00:00	60 < M
15/12/2019 00:00	60 < M
16/12/2019 00:00	60 < M
17/12/2019 00:00	60 < M
18/12/2019 00:00	60 < M
19/12/2019 00:00	60 < M
20/12/2019 00:00	60 < M
21/12/2019 00:00	60 < M
22/12/2019 00:00	60 < M
23/12/2019 00:00	60 < M
24/12/2019 00:00	60 < M
25/12/2019 00:00	60 < M
26/12/2019 00:00	60 M
27/12/2019 00:00	60 M
28/12/2019 00:00	60 < M
30/12/2019 00:00	60 < M
31/12/2019 00:00	60 M
Average	59.8
Geom.Mean	59.8
Maximum	60
Median	60
Minimum	55.6
Mode	60
Std.Deviation	0.9
Total Active Duration	

EnviroConnect Forbes Marshall Multi Station Report

From Date	01/12/2019 00:00
To Date	31/12/2019 23:59
Interval	Daily
Function	Average
Plant	BSSK
Analyzer	STACK2
Parameter	PM
Unit	mg/Nm3
Limit	0.00 - 150.00

01/12/2019 00:00	91 < M
02/12/2019 00:00	91 < M
03/12/2019 00:00	91 < M
04/12/2019 00:00	91 < M
05/12/2019 00:00	91 < M
06/12/2019 00:00	91 < M
07/12/2019 00:00	91 < M
08/12/2019 00:00	91 < M
09/12/2019 00:00	91 < M
10/12/2019 00:00	91 < M
11/12/2019 00:00	91 < M
12/12/2019 00:00	91 < M
13/12/2019 00:00	91 < M
14/12/2019 00:00	91 < M
15/12/2019 00:00	91 < M
16/12/2019 00:00	91 < M
17/12/2019 00:00	91 < M
18/12/2019 00:00	91 < M
19/12/2019 00:00	91 < M
20/12/2019 00:00	91 < M
21/12/2019 00:00	91 < M
22/12/2019 00:00	91 < M
23/12/2019 00:00	91 < M
24/12/2019 00:00	91 < M
25/12/2019 00:00	91 < M
26/12/2019 00:00	91 < M
27/12/2019 00:00	91 < M
28/12/2019 00:00	91 < M
30/12/2019 00:00	91 < M
31/12/2019 00:00	91 M
Average	91
Geom.Mean	91
Maximum	91
Median	91
Minimum	91
Mode	91
Std.Deviation	0
Total Active Duration	

EnviroConnect Forbes Marshall Multi Station Report

From Date	01/01/2020 00:00
To Date	31/01/2020 23:59
Interval	Daily
Function	Average
Plant	BSSK
Analyzer	STACK1
Parameter	PM
Unit	mg/Nm3
Limit	0.00 - 150.00

02/01/2020 00:00	60 <
03/01/2020 00:00	60 <
04/01/2020 00:00	60 <
05/01/2020 00:00	60 <
06/01/2020 00:00	60
07/01/2020 00:00	60
08/01/2020 00:00	60 <
09/01/2020 00:00	60 <
10/01/2020 00:00	60 <
11/01/2020 00:00	60 <
12/01/2020 00:00	60 <
13/01/2020 00:00	60 <
14/01/2020 00:00	60
15/01/2020 00:00	60 <
16/01/2020 00:00	60 <
17/01/2020 00:00	60 <
18/01/2020 00:00	60
19/01/2020 00:00	60
20/01/2020 00:00	60
21/01/2020 00:00	60
22/01/2020 00:00	60
23/01/2020 00:00	60
24/01/2020 00:00	60
25/01/2020 00:00	60
26/01/2020 00:00	60
27/01/2020 00:00	60
28/01/2020 00:00	60
29/01/2020 00:00	60
30/01/2020 00:00	60
31/01/2020 00:00	60
Average	60
Geom.Mean	60
Maximum	60
Median	60
Minimum	60
Mode	60
Std.Deviation	0
Total Active Duration	

EnviroConnect Forbes Marshall Multi Station Report

From Date	01/01/2020 00:00
To Date	31/01/2020 23:59
Interval	Daily
Function	Average
Plant	BSSK
Analyzer	STACK2
Parameter	PM
Unit	mg/Nm3
Limit	0.00 - 150.00

01/01/2020 00:00	91
02/01/2020 00:00	91 <
03/01/2020 00:00	91 <
04/01/2020 00:00	91
05/01/2020 00:00	91
06/01/2020 00:00	91 <
07/01/2020 00:00	91 <
08/01/2020 00:00	91
09/01/2020 00:00	91
10/01/2020 00:00	91
11/01/2020 00:00	91
12/01/2020 00:00	91
13/01/2020 00:00	91 <
14/01/2020 00:00	91 <
15/01/2020 00:00	91 <
16/01/2020 00:00	91
17/01/2020 00:00	91
18/01/2020 00:00	91
19/01/2020 00:00	91
20/01/2020 00:00	91
21/01/2020 00:00	91
22/01/2020 00:00	91
23/01/2020 00:00	91
24/01/2020 00:00	91
25/01/2020 00:00	91
26/01/2020 00:00	91
27/01/2020 00:00	91
28/01/2020 00:00	91
29/01/2020 00:00	91
30/01/2020 00:00	91
31/01/2020 00:00	91
Average	91
Geom.Mean	91
Maximum	91
Median	91
Minimum	91
Mode	91
Std.Deviation	0

EnviroConnect Forbes Marshall Multi Station Report

From Date	01/02/2020 00:00
To Date	29/02/2020 23:59
Interval	Daily
Function	Average
Plant	BSSK
Analyzer	STACK1
Parameter	PM
Unit	mg/Nm3
Limit	0.00 - 150.00

01/02/2020 00:00	60
02/02/2020 00:00	60
03/02/2020 00:00	60
04/02/2020 00:00	60
05/02/2020 00:00	60 <
10/02/2020 00:00	60 <
11/02/2020 00:00	60 <
12/02/2020 00:00	60 <
13/02/2020 00:00	60 <
14/02/2020 00:00	60 <
15/02/2020 00:00	60 <
17/02/2020 00:00	60 <
21/02/2020 00:00	60 <
22/02/2020 00:00	56.47 < D
23/02/2020 00:00	60
24/02/2020 00:00	60 <
25/02/2020 00:00	60 <
26/02/2020 00:00	60 <
27/02/2020 00:00	60 <
28/02/2020 00:00	60 <
29/02/2020 00:00	60 <
Average	59.8
Geom.Mean	59.8
Maximum	60
Median	60
Minimum	56.5
Mode	60
Std.Deviation	0.8
Total Active Duration	

EnviroConnect Forbes Marshall Multi Station Report

From Date	01/02/2020 00:00
To Date	29/02/2020 23:59
Interval	Daily
Function	Average
Plant	BSSK
Analyzer	STACK2
Parameter	PM
Unit	mg/Nm3
Limit	0.00 - 150.00

01/02/2020 00:00	91
02/02/2020 00:00	91
03/02/2020 00:00	91
04/02/2020 00:00	91
05/02/2020 00:00	91 <
06/02/2020 00:00	91 <
10/02/2020 00:00	91 <
11/02/2020 00:00	91 <
12/02/2020 00:00	91 <
14/02/2020 00:00	91 <
16/02/2020 00:00	91 <
20/02/2020 00:00	91 <
21/02/2020 00:00	43.03 <
23/02/2020 00:00	91 <
24/02/2020 00:00	91 <
25/02/2020 00:00	90.96 <
26/02/2020 00:00	90 <
28/02/2020 00:00	91 <
29/02/2020 00:00	91 <
Average	88.4
Geom.Mean	87.4
Maximum	91
Median	91
Minimum	43
Mode	91
Std.Deviation	11
Total Active Duration	

EnviroConnect Forbes Marshall Multi Station Report

From Date	01/03/2020 00:00
To Date	31/03/2020 23:59
Interval	Daily
Function	Average
Plant	BSSK
Analyzer	STACK1
Parameter	PM
Unit	mg/Nm3
Limit	0.00 - 150.00

01/03/2020 00:00	60
02/03/2020 00:00	60 <
03/03/2020 00:00	60 <
04/03/2020 00:00	60 <
05/03/2020 00:00	60 <
06/03/2020 00:00	60 <
07/03/2020 00:00	60 <
08/03/2020 00:00	60 <
09/03/2020 00:00	60
10/03/2020 00:00	60
11/03/2020 00:00	60
12/03/2020 00:00	60 <
13/03/2020 00:00	60 <
14/03/2020 00:00	60 <
17/03/2020 00:00	60 < D
18/03/2020 00:00	60
19/03/2020 00:00	60
20/03/2020 00:00	60
21/03/2020 00:00	60
22/03/2020 00:00	60
23/03/2020 00:00	60 <
24/03/2020 00:00	60 <
25/03/2020 00:00	60
26/03/2020 00:00	60 <
27/03/2020 00:00	60 <
28/03/2020 00:00	60 <
29/03/2020 00:00	60 <
30/03/2020 00:00	60 <
31/03/2020 00:00	60 <
Average	60
Geom.Mean	60
Maximum	60
Median	60
Minimum	60
Mode	60
Std.Deviation	0
Total Active Duration	

EnviroConnect Forbes Marshall Multi Station Report

From Date	01/03/2020 00:00
To Date	31/03/2020 23:59
Interval	Daily
Function	Average
Plant	BSSK
Analyzer	STACK2
Parameter	PM
Unit	mg/Nm3
Limit	0.00 - 150.00

01/03/2020 00:00	91
02/03/2020 00:00	91 <
03/03/2020 00:00	91 <
04/03/2020 00:00	91 <
05/03/2020 00:00	91 <
06/03/2020 00:00	91 <
07/03/2020 00:00	91 <
08/03/2020 00:00	91 <
09/03/2020 00:00	91
10/03/2020 00:00	91
11/03/2020 00:00	91
12/03/2020 00:00	91 <
13/03/2020 00:00	91 <
14/03/2020 00:00	91 <
15/03/2020 00:00	91 <
16/03/2020 00:00	91 <
17/03/2020 00:00	91 < D
18/03/2020 00:00	91
19/03/2020 00:00	91
20/03/2020 00:00	91 <
21/03/2020 00:00	91
22/03/2020 00:00	91
23/03/2020 00:00	91 <
24/03/2020 00:00	91 <
25/03/2020 00:00	90.81 <
27/03/2020 00:00	91 <
28/03/2020 00:00	91 <
29/03/2020 00:00	91 <
30/03/2020 00:00	91
31/03/2020 00:00	91
Average	91
Geom.Mean	91
Maximum	91
Median	91
Minimum	90.8
Mode	91
Std.Deviation	0
Total Active Duration	

EnviroConnect Forbes Marshall Multi Station Report

From Date	01/04/2020 00:00
To Date	30/04/2020 23:59
Interval	Daily
Function	Average
Plant	BSSK
Analyzer	STACK1
Parameter	PM
Unit	mg/Nm3
Limit	0.00 - 150.00

01/04/2020 00:00	60
02/04/2020 00:00	60
03/04/2020 00:00	60
04/04/2020 00:00	60
05/04/2020 00:00	60 <
06/04/2020 00:00	60 <
07/04/2020 00:00	60
08/04/2020 00:00	60
09/04/2020 00:00	60 <
10/04/2020 00:00	60 <
11/04/2020 00:00	60
12/04/2020 00:00	60
13/04/2020 00:00	60
14/04/2020 00:00	60
15/04/2020 00:00	60 <
16/04/2020 00:00	60 <
17/04/2020 00:00	60 <
18/04/2020 00:00	60 <
Average	60
Geom.Mean	60
Maximum	60
Median	60
Minimum	60
Mode	60
Std.Deviation	0
Total Active Duration	

EnviroConnect Forbes Marshall Multi Station Report

From Date	01/04/2020 00:00
To Date	30/04/2020 23:59
Interval	Daily
Function	Average
Plant	BSSK
Analyzer	STACK2
Parameter	PM
Unit	mg/Nm3
Limit	0.00 - 150.00

01/04/2020 00:00	91
02/04/2020 00:00	91
03/04/2020 00:00	91
04/04/2020 00:00	91
05/04/2020 00:00	91
06/04/2020 00:00	91
07/04/2020 00:00	91
08/04/2020 00:00	91
09/04/2020 00:00	91
10/04/2020 00:00	91
11/04/2020 00:00	91
12/04/2020 00:00	91
13/04/2020 00:00	90.9
14/04/2020 00:00	91
15/04/2020 00:00	91
16/04/2020 00:00	91
17/04/2020 00:00	91
18/04/2020 00:00	91 <
Average	91
Geom.Mean	91
Maximum	91
Median	91
Minimum	90.9
Mode	91
Std.Deviation	0
Total Active Duration	

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- Authorized by "AGMARK"
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ANALYSIS REPORTS FOR AMBIENT AIR QUALITY MONITORING.

NAME OF COMPANY: **M/s. Bhima Sahankar Sahakari Sakhar Karkhana Ltd.** Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon, Dist. – Pune-412 406		TR NO	AL/TR/AM/52-970/19-20
		DATE	23/12/2019
		INWARD NO.	AL/6-492/01/19-20
SAMPLE :-	**COLLECTED BY**	**SAMPLE REF.**	**RECEIVED ON :**
Ambient Air	AARL	**Dnyaneshwar Raghunath Dhobale (East)**	14/12/2019

Sr. No.	Parameter	Unit	RESULT	Limits Max.
1.	Time duration	08 hrs.		
2.	Ambient Temperature	°C	29.1	---
3.	Sulphur Dioxide (SO_2)	µg/m³	6.42	80
4.	Oxides of Nitrogen (NOx)	µg/m³	8.68	80
5.	Particulate matter (PM_{10})	µg/m³	50.6	100
6.	Particulate matter ($PM_{2.5}$)	µg/m³	15.4	60
7.	Ozone (O_3)	µg/m³	17.7	180
8.	Lead (Pb)	µg/m³	Absent	1.0
9.	Carbon Monoxide (CO)	mg/m³	0.48	04
10.	Ammonia as (NH_3)	µg/m³	Absent	400
11.	Benzene (C_6H_6)	µg/m³	Absent	05
12	Benzo (a)Pyrene (BaP)	ng/m³	BDL	01
13.	Arsenic (As)	ng/m³	Absent	06
14.	Nickel (Ni)	ng/m³	Absent	20

REMARKS / OBSERVATIONS:
All above results are within limits **(NAAQS)** National Ambient Air Quality Standards 2009.
BDL = Below Detectable Limit

For Akanksha Analytical & Research Lab

Authorized Signatory

Chemist

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

AKANKSHA ANALYTICAL & RESEARCH LAB

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ANALYSIS REPORTS FOR AMBIENT AIR QUALITY MONITORING

NAME OF COMPANY: **M/s. Bhima Sahankar Sahakari Sakhar Karkhana Ltd.** Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon, Dist. – Pune-412 406		TR NO	AL/TR/AM/52-971/19-20
		DATE	23/12/2019
		INWARD NO.	AL/6-492/02/19-20
SAMPLE :-	**COLLECTED BY**	**SAMPLE REF.**	**RECEIVED ON :**
Ambient Air	AARL	**Sandeep Popat Dhobale (North)**	14/12/2019

Sr. No.	Parameter	Unit	RESULT	Limits Max.
1.	Time duration	08 hrs.		
2.	Ambient Temperature	°C	29.5	---
3.	Sulphur Dioxide (SO_2)	µg/m³	7.74	80
4.	Oxides of Nitrogen (NOx)	µg/m³	6.68	80
5.	Particulate matter (PM_{10})	µg/m³	52.4	100
6.	Particulate matter ($PM_{2.5}$)	µg/m³	14.9	60
7.	Ozone (O_3)	µg/m³	17.8	180
8.	Lead (Pb)	µg/m³	Absent	1.0
9.	Carbon Monoxide (CO)	mg/m³	0.50	04
10.	Ammonia as (NH_3)	µg/m³	Absent	400
11.	Benzene (C_6H_6)	µg/m³	Absent	05
12	Benzo (a)Pyrene (BaP)	ng/m³	BDL	01
13.	Arsenic (As)	ng/m³	Absent	06
14.	Nickel (Ni)	ng/m³	Absent	20

REMARKS / OBSERVATIONS:

All above results are within limits **(NAAQS)** National Ambient Air Quality Standards 2009.
BDL = Below Detectable Limit

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ANALYSIS REPORTS FOR AMBIENT AIR QUALITY MONITORING

NAME OF COMPANY: **M/s. Bhima Sahankar Sahakari Sakhar Karkhana Ltd.** Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon, Dist. – Pune-412 406		TR NO	AL/TR/AM/52-972/19-20
		DATE	23/12/2019
		INWARD NO.	AL/6-492/03/19-20
SAMPLE :-	**COLLECTED BY**	**SAMPLE REF.**	**RECEIVED ON :**
Ambient Air	AARL	**Rama Nivrutti Dhobale (West)**	14/12/2019

Sr. No.	Parameter	Unit	RESULT	Limits Max.
1.	Time duration	08 hrs.		
2.	Ambient Temperature	°C	29.7	---
3.	Sulphur Dioxide (SO_2)	µg/m³	09.1	80
4.	Oxides of Nitrogen (NOx)	µg/m³	9.80	80
5.	Particulate matter (PM_{10})	µg/m³	52.8	100
6.	Particulate matter ($PM_{2.5}$)	µg/m³	14.3	60
7.	Ozone (O_3)	µg/m³	18.4	180
8.	Lead (Pb)	µg/m³	Absent	1.0
9.	Carbon Monoxide (CO)	mg/m³	0.52	04
10.	Ammonia as (NH_3)	µg/m³	Absent	400
11.	Benzene (C_6H_6)	µg/m³	Absent	05
12	Benzo (a)Pyrene (BaP)	ng/m³	BDL	01
13.	Arsenic (As)	ng/m³	Absent	06
14.	Nickel (Ni)	ng/m³	Absent	20

REMARKS / OBSERVATIONS:

All above results are within limits **(NAAQS)** National Ambient Air Quality Standards 2009.
BDL = Below Detectable Limit

For Akanksha Analytical & Research Lab

Authorized Signatory

Aishwarya
Chemist

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ANALYSIS REPORTS FOR AMBIENT AIR QUALITY MONITORING

NAME OF COMPANY: **M/s. Bhima Sahankar Sahakari Sakhar Karkhana Ltd.** Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon, Dist. – Pune-412 406		TR NO	AL/TR/AM/52-973/19-20
		DATE	23/12/2019
		INWARD NO.	AL/6-492/04/19-20
SAMPLE :-	**COLLECTED BY**	**SAMPLE REF.**	**RECEIVED ON :**
Ambient Air	AARL	**Maruti Vaidya , Vaidyawadi phata (South)**	14/12/2019

Sr. No.	Parameter	Unit	RESULT	Limits Max.
1.	Time duration	08 hrs.		
2.	Ambient Temperature	°C	29.9	---
3.	Sulphur Dioxide (SO_2)	µg/m³	06.52	80
4.	Oxides of Nitrogen (NOx)	µg/m³	08.48	80
5.	Particulate matter (PM_{10})	µg/m³	54.60	100
6.	Particulate matter ($PM_{2.5}$)	µg/m³	11.41	60
7.	Ozone (O_3)	µg/m³	17.75	180
8.	Lead (Pb)	µg/m³	Absent	1.0
9.	Carbon Monoxide (CO)	mg/m³	00.56	04
10.	Ammonia as (NH_3)	µg/m³	Absent	400
11.	Benzene (C_6H_6)	µg/m³	Absent	05
12	Benzo (a)Pyrene (BaP)	ng/m³	BDL	01
13.	Arsenic (As)	ng/m³	Absent	06
14.	Nickel (Ni)	ng/m³	Absent	20

REMARKS / OBSERVATIONS:
All above results are within limits **(NAAQS)** National Ambient Air Quality Standards 2009.
BDL = Below Detectable Limit

For Akanksha Analytical & Research Lab

Authorized Signatory

Chemist

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ANALYSIS REPORTS FOR AMBIENT AIR QUALITY MONITORING

NAME OF COMPANY: **M/s. Bhima Sahankar Sahakari Sakhar Karkhana Ltd.** Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon, Dist. – Pune-412 406		TR NO	AL/TR/AM/52-974/19-20
		DATE	23/12/2019
		INWARD NO.	AL/6-492/05/19-20
SAMPLE :-	COLLECTED BY	SAMPLE REF.	RECEIVED ON :
Ambient Air	AARL	**Factory Main Gate**	14/12/2019

Sr. No.	Parameter	Unit	RESULT	Limits Max.
1.	Time duration	08 hrs.		
2.	Ambient Temperature	°C	29.9	---
3.	Sulphur Dioxide (SO_2)	µg/m³	06.58	80
4.	Oxides of Nitrogen (NOx)	µg/m³	08.79	80
5.	Particulate matter (PM_{10})	µg/m³	57.90	100
6.	Particulate matter ($PM_{2.5}$)	µg/m³	14.71	60
7.	Ozone (O_3)	µg/m³	17.68	180
8.	Lead (Pb)	µg/m³	Absent	1.0
9.	Carbon Monoxide (CO)	mg/m³	00.54	04
10.	Ammonia as (NH_3)	µg/m³	Absent	400
11.	Benzene (C_6H_6)	µg/m³	Absent	05
12	Benzo (a)Pyrene (BaP)	ng/m³	BDL	01
13.	Arsenic (As)	ng/m³	Absent	06
14.	Nickel (Ni)	ng/m³	Absent	20

REMARKS / OBSERVATIONS:
All above results are within limits **(NAAQS)** National Ambient Air Quality Standards 2009.
BDL = Below Detectable Limit

For Akanksha Analytical & Research Lab

Authorized Signatory

Chemist

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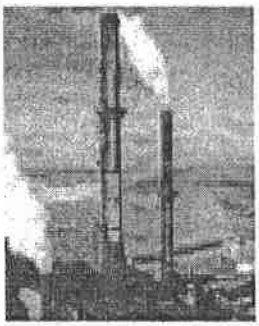
SOURCE EMISSION MONITORING REPORT

Sample Report No.	AL/TR/AM/52-977/19-20		
Name of company	**M/s. Bhima Sahankar Sahakari Sakhar Karkhana Ltd.** Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon, Dist. – Pune-412 406		
Sample Collected By	Akanksha Analytical and Research Lab		
Date Of Sampling	14/12/2019	Time of Sampling: Daytime	
Report Date	23/12/2019	Inward No	Al/6-492/08/19-20

PARTICULARS OF STACK



Attached to	**Boiler Stack (37 T/Hr.)**
Diameter	4.00 mtr
Height	60 Mtr.
Area	12.56 m2
Temperature	145°C
Differential Pressure	0.85 mmWG
Material of Construction	RCC
Velocity of Gases	3.57 m/s
Volume of gas	115374.26NM3/Hr.

POLLUTIONAL PARAMETERS

PARAMETER	RESULTS	LIMITS	UNITS
Particulate Matter	122.4	<150	mg/Nm³
Sulphur Dioxide	39.89	< 3886	Kg/day
Oxide of Nitrogen	266	--	mg/Nm³
Carbon Monoxide	2954	--	ppm

REMARK & OBSERVATIONS:
All above results are within limits prescribed in the MPCB Consent.

For **AKANKSHA ANALYTICAL & RESEARCH LAB**

Authorized Signatory

Aishwarya
Chemist

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

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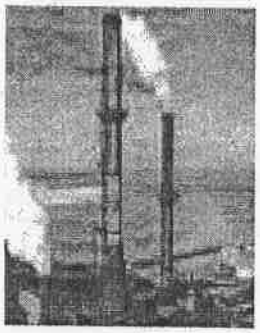
SOURCE EMISSION MONITORING REPORT

Sample Report No.	AL/TR/AM/52-976/19-20		
Name of company	**M/s. Bhima Sahankar Sahakari Sakhar Karkhana Ltd.** Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon, Dist. – Pune-412 406		
Sample Collected By	Akanksha Analytical and Research Lab		
Date Of Sampling	14/12/2019	Time of Sampling: Daytime	
Report Date	23/12/2019	Inward No	Al/6-492/07/19-20

PARTICULARS OF STACK



Attached to	**Boiler Stack (80 T/Hr.)**
Diameter	3.54 Mtr
Height	73 Mtr.
Area	9.837 m2
Temperature	130 °C
Differential Pressure	1.30 mmWG
Material of Construction	RCC
Velocity of Gases	4.34 m/s
Volume of gas	113813.38NM3/Hr.

POLLUTIONAL PARAMETERS

PARAMETER	RESULTS	LIMITS	UNITS
Particulate Matter	132	<150	mg/Nm³
Sulphur Dioxide	1648	< 3886	Kg/day
Oxide of Nitrogen	322	--	mg/Nm³
Carbon Monoxide	3195	--	ppm

REMARK & OBSERVATIONS:
All above results are within limits prescribed in the MPCB Consent.

For **AKANKSHA ANALYTICAL & RESEARCH LAB**

Authorized Signatory

Aishwarya
Chemist

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ANALYSIS REPORT FOR AMBIENT AIR QUALITY MONITORING			Page 1 of 1
NAME OF COMPANY:- **M/s. Bhima Sahankar Sahakari Sakhar Karkhana Ltd.** Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. –Ambegaon, Dist.– Pune-412 406		**Report No**	AL/TR/53-773/19-20
		Report Date	29/01/2020
		Inward No	AL/6-565/03/19-20
		Inward Date	21/01/2020
Sample Location	Popat pingale.(South West)	**Sampling Time**	11:30 AM
Sample Collected By	AARL	**Time duration**	24 Hr

SR.NO.	PARAMETER	UNIT	RESULT	LIMITS	METHOD
1.	Ambient Temperature	°C	30.5	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/m³	08.95	≤ 80	IS:5182(Part-2):2001
4.	Oxides of Nitrogen (NO_x)	µg/m³	07.78	≤ 80	IS:5182(Part-6):2006
5.	Particulate matter-PM_{10} (less than 10 micron)	µg/m³	51.89	≤ 100	IS:5182(Part-23):2006
6.	Particulate matter-$PM_{2.5}$ (less than 2.5 micron)	µg/m³	14.71	≤ 60	IS:5182(Part-23):2006
7.	Ozone (O_3)	µg/m³	17.59	≤ 180	IS:5182(Part-9):1974
8.	Lead (Pb)	µg/m³	BDL	≤ 1.0	IS:5182(Part-22):2004
9.	Carbon Monoxide (CO)	mg/m³	00.78	≤ 04	IS:5182(Part-10):1999
10.	Ammonia as (NH_3)	µg/m³	BDL	≤ 400	Method No.401,(Indophenols method)Method Of Air Sampeling,3rd Edition
11.	Benzene (C_6H_6)	µg/m³	BDL	≤ 05	IS:5182 (Part 11):2006
12.	Benzo(a)Pyrene (BaP)	ng/m³	BDL	≤ 01	IS:5182 (Part 12):2004
13.	Arsenic (As)	ng/m³	BDL	≤ 06	IS:3025 (PART-37)
14.	Nickel (Ni)	ng/m³	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)

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 Sahankar Sahakari Sakhar Karkhana Ltd.** Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon,Dist. – Pune-412 406		**Report No**	AL/TR/53-774/19-20
		Report Date	29/01/2020
		Inward No	AL/6-565/04/19-20
		Inward Date	21/01/2020
Sample Location	Goraksh jadhav (South East)	**Sampling Time**	11:45 AM
Sample Collected By	AARL	**Time duration**	24 Hr

SR.NO.	PARAMETER	UNIT	RESULT	LIMITS	METHOD
1.	Ambient Temperature	°C	30.9	N.S.	EPA -454/R-99-005
2.	Relative Humidity	% rh	34	N.S.	EPA -454/R-99-005
3.	Sulphur Dioxide (SO_2)	µg/m³	07.63	≤ 80	IS:5182(Part-2):2001
4.	Oxides of Nitrogen (NO_X)	µg/m³	06.79	≤ 80	IS:5182(Part-6):2006
5.	Particulate matter-PM_{10} (less than 10 micron)	µg/m³	53.18	≤ 100	IS:5182(Part-23):2006
6.	Particulate matter-$PM_{2.5}$ (less than 2.5 micron)	µg/m³	14.96	≤ 60	IS:5182(Part-23):2006
7.	Ozone (O_3)	µg/m³	17.89	≤ 180	IS:5182(Part-9):1974
8.	Lead (Pb)	µg/m³	BDL	≤ 1.0	IS:5182(Part-22):2004
9.	Carbon Monoxide (CO)	mg/m³	00.71	≤ 04	IS:5182(Part-10):1999
10.	Ammonia as (NH_3)	µg/m³	BDL	≤ 400	Method No.401,(Indophenols method)Method Of Air Sampeling,3rd Edition
11.	Benzene (C_6H_6)	µg/m³	BDL	≤ 05	IS:5182 (Part 11):2006
12.	Benzo(a)Pyrene (BaP)	ng/m³	BDL	≤ 01	IS:5182 (Part 12):2004
13.	Arsenic (As)	ng/m³	BDL	≤ 06	IS:3025 (PART-37)
14.	Nickel (Ni)	ng/m³	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)

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 Sahankar Sahakari Sakhar Karkhana Ltd.** Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon,Dist. – Pune-412 406		**Report No**	AL/TR/53-775/19-20
		Report Date	29/01/2020
		Inward No	AL/6-565/05/19-20
		Inward Date	21/01/2020
Sample Location	Mahadev Dhobale (Nort East)	**Sampling Time**	12:00 PM
Sample Collected By	AARL	**Time duration**	24 Hr

SR.NO.	PARAMETER	UNIT	RESULT	LIMITS	METHOD
1.	Ambient Temperature	°C	30.7	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/m³	09.89	≤ 80	IS:5182(Part-2):2001
4.	Oxides of Nitrogen (NO_X)	µg/m³	08.54	≤ 80	IS:5182(Part-6):2006
5.	Particulate matter-PM_{10} (less than 10 micron)	µg/m³	54.39	≤ 100	IS:5182(Part-23):2006
6.	Particulate matter-$PM_{2.5}$ (less than 2.5 micron)	µg/m³	16.98	≤ 60	IS:5182(Part-23):2006
7.	Ozone (O_3)	µg/m³	18.09	≤ 180	IS:5182(Part-9):1974
8.	Lead (Pb)	µg/m³	BDL	≤ 1.0	IS:5182(Part-22):2004
9.	Carbon Monoxide (CO)	mg/m³	00.37	≤ 04	IS:5182(Part-10):1999
10.	Ammonia as (NH_3)	µg/m³	BDL	≤ 400	Method No.401,(Indophenols method)Method Of Air Sampeling,3rd Edition
11.	Benzene (C_6H_6)	µg/m³	BDL	≤ 05	IS:5182 (Part 11):2006
12.	Benzo(a)Pyrene (BaP)	ng/m³	BDL	≤ 01	IS:5182 (Part 12):2004
13.	Arsenic (As)	ng/m³	BDL	≤ 06	IS:3025 (PART-37)
14.	Nickel (Ni)	ng/m³	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)

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 Sahankar Sahakari Sakhar Karkhana Ltd.** Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon,Dist. – Pune-412 406		**Report No**	AL/TR/53-776/19-20
		Report Date	29/01/2020
		Inward No	AL/6-565/06/19-20
		Inward Date	21/01/2020
Sample Location	Natha Chakkar (North West)	**Sampling Time**	12:15 PM
Sample Collected By	AARL	**Time duration**	24 Hr

SR.NO.	PARAMETER	UNIT	RESULT	LIMITS	METHOD
1.	Ambient Temperature	°C	30.9	N.S.	EPA -454/R-99-005
2.	Relative Humidity	% rh	34	N.S.	EPA -454/R-99-005
3.	Sulphur Dioxide (SO_2)	µg/m³	09.56	≤ 80	IS:5182(Part-2):2001
4.	Oxides of Nitrogen (NO_x)	µg/m³	07.96	≤ 80	IS:5182(Part-6):2006
5.	Particulate matter-PM_{10} (less than 10 micron)	µg/m³	51.98	≤ 100	IS:5182(Part-23):2006
6.	Particulate matter-$PM_{2.5}$ (less than 2.5 micron)	µg/m³	13.38	≤ 6 0	IS:5182(Part-23):2006
7.	Ozone (O_3)	µg/m³	17.65	≤ 180	IS:5182(Part-9):1974
8.	Lead (Pb)	µg/m³	BDL	≤ 1.0	IS:5182(Part-22):2004
9.	Carbon Monoxide (CO)	mg/m³	00.69	≤ 04	IS:5182(Part-10):1999
10.	Ammonia as (NH_3)	µg/m³	BDL	≤ 400	Method No.401,(Indophenols method)Method Of Air Sampeling,3rd Edition
11.	Benzene (C_6H_6)	µg/m³	BDL	≤ 05	IS:5182 (Part 11):2006
12.	Benzo(a)Pyrene (BaP)	ng/m³	BDL	≤ 01	IS:5182 (Part 12):2004
13.	Arsenic (As)	ng/m³	BDL	≤ 06	IS:3025 (PART-37)
14.	Nickel (Ni)	ng/m³	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)

Authorized Signatory

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ANALYSIS REPORT FOR AMBIENT AIR QUALITY MONITORING			Page 1 of 1
NAME OF COMPANY:- **M/s. Bhima Sahankar Sahakari Sakhar Karkhana Ltd.** Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon, Dist. – Pune-412 406		**Report No**	AL/TR/53-771/19-20
		Report Date	29/01/2020
		Inward No	AL/6-565/01/19-20
		Inward Date	21/01/2020
Sample Location	Kata Gate	**Sampling Time**	10:40 AM
Sample Collected By	AARL	**Time duration**	24 Hr

SR.NO.	PARAMETER	UNIT	RESULT	LIMITS	METHOD
1.	Ambient Temperature	°C	30.2	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/m³	34.24	≤ 80	IS:5182(Part-2):2001
4.	Oxides of Nitrogen (NO_x)	µg/m³	30.68	≤ 80	IS:5182(Part-6):2006
5.	Particulate matter-PM_{10} (less than 10 micron)	µg/m³	72.88	≤ 100	IS:5182(Part-23):2006
6.	Particulate matter-$PM_{2.5}$ (less than 2.5 micron)	µg/m³	26.46	≤ 60	IS:5182(Part-23):2006
7.	Ozone (O_3)	µg/m³	18.21	≤ 180	IS:5182(Part-9):1974
8.	Lead (Pb)	µg/m³	BDL	1.0	IS:5182(Part-22):2004
9.	Carbon Monoxide (CO)	mg/m³	01.89	≤ 04	IS:5182(Part-10):1999
10.	Ammonia as (NH_3)	µg/m³	BDL	≤ 400	Method No.401,(Indophenols method)Method Of Air Sampeling,3rd Edition
11.	Benzene (C_6H_6)	µg/m³	BDL	≤ 05	IS:5182 (Part 11):2006
12.	Benzo(a)Pyrene (BaP)	ng/m³	BDL	≤ 01	IS:5182 (Part 12):2004
13.	Arsenic (As)	ng/m³	BDL	≤ 06	IS:3025 (PART-37)
14.	Nickel (Ni)	ng/m³	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)

Authorized Signatory

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SOURCE EMISSION MONITORING REPORT			Page 1 of 1
NAME OF COMPANY:- **M/s. Bhima Sahankar Sahakari Sakhar Karkhana Ltd.** Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon,Dist. – Pune-412 406		**Report No**	AL/TR/53-777/19-20
		Report Date	29/01/2020
		Inward No	AL/6-565/07/19-20
		Inward Date	21/01/2020
Sample Location	Old Boiler (37 T/hr)	**Sampling Time**	3:30 PM
Sample Collected By	AARL	**Time duration**	30 Min

SR. NO	DESCRIPTION	UNIT	RESULT	LIMITS	METHOD
A.	**Stack Details**				
1.	Material of stack	--	MS	N.S.	--
2.	Stack Height from G.L.	m	60	N.S.	--
3.	Type of Stack	--	Round	N.S.	--
4.	Dimensions of Stack	m	04.00	N.S.	--
5.	Stack area	m^2	12.56	N.S.	--
B.	**Parameters**				
6.	Flue Gas Temperature	°C	132	N.S.	IS 11255 (PART 3):2008
7.	Differential Pressure	mmwg	04.62	N.S.	IS 11255 (PART 3):2008
8.	Velocity	m/s	08.21	N.S.	IS 11255 (PART 3):2008
9.	Gas volume	$Nm^3/hr.$	273263.17	N.S.	IS 11255 (PART 3):2008
10.	Particulate Matter	mg/Nm^3	126.92	≤ 150	IS 11255 (PART 1):1985
11.	Sulphur Dioxide	kg/day	40.18	≤3886	IS 11255 (PART 2):1985
12.	Oxide of Nitrogen	mg/Nm^3	251.83	N.S.	IS 11255 (PART 7):2005
13.	Carbon Monoxide	ppm	3012.59	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**

Aishwarya

Verified by
(Analyst)

Authorized Signatory

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

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SOURCE EMISSION MONITORING REPORT			Page 1 of 1
NAME OF COMPANY:- **M/s. Bhima Sahankar Sahakari Sakhar Karkhana Ltd.** Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon,Dist. – Pune-412 406		**Report No**	AL/TR/53-778/19-20
		Report Date	29/01/2020
		Inward No	AL/6-565/08/19-20
		Inward Date	21/01/2020
Sample Location	New Boiler (80T/hr)	**Sampling Time**	4:00 PM
Sample Collected By	AARL	**Time duration**	30 Min

SR. NO	DESCRIPTION	UNIT	RESULT	LIMITS	METHOD
A.	**Stack Details**				
1.	Material of stack	--	MS	N.S.	--
2.	Stack Height from G.L.	m	73.00	N.S.	--
3.	Type of Stack	--	Round	N.S.	--
4.	Dimensions of Stack	m	03.54	N.S.	--
5.	Stack area	m^2	09.837	N.S.	--
B.	**Parameters**				
6.	Flue Gas Temperature	°C	139	N.S.	IS 11255 (PART 3):2008
7.	Differential Pressure	mmwg	01.49	N.S.	IS 11255 (PART 3):2008
8.	Velocity	m/s	04.70	N.S.	IS 11255 (PART 3):2008
9.	Gas volume	$Nm^3/hr.$	120508.78	N.S.	IS 11255 (PART 3):2008
10.	Particulate Matter	mg/Nm^3	121.12	≤ 150	IS 11255 (PART 1):1985
11.	Sulphur Dioxide	kg/day	1602.28	≤3886	IS 11255 (PART 2): 1985
12.	Oxide of Nitrogen	mg/Nm^3	343.21	N.S.	IS 11255 (PART 7):2005
13.	Carbon Monoxide	ppm	2824.00	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**

Aishwarya.

Verified by
(Analyst)

Authorized Signatory

...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 | **Email :** akankshalab2007@gmail.com

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ANALYSIS REPORT FOR AMBIENT AIR QUALITY MONITORING			Page 1 of 1
NAME OF COMPANY:- **M/s. Bhima Sahankar Sahakari Sakhar Karkhana Ltd.** Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon,Dist. – Pune-412 406		**Report No**	AL/TR/54-301/19-20
		Report Date	27/02/2020
		Inward No	AL/6-606/04/19-20
		Inward Date	20/02/2020
Sample Location	Bharat Shete (East)	**Sampling Time**	11:55 AM
Sample Collected By	AARL	**Time duration**	08 Hr

SR.NO.	PARAMETER	UNIT	RESULT	LIMITS	METHOD
1.	Ambient Temperature	°C	33.7	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/m³	13.44	≤ 80	IS:5182(Part-2):2001
4.	Oxides of Nitrogen (NO_x)	µg/m³	10.71	≤ 80	IS:5182(Part-6):2006
5.	Particulate matter-PM_{10} (less than 10 micron)	µg/m³	54.65	≤ 100	IS:5182(Part-23):2006
6.	Particulate matter-$PM_{2.5}$ (less than 2.5 micron)	µg/m³	17.42	≤ 60	IS:5182(Part-23):2006
7.	Ozone (O_3)	µg/m³	18.03	≤ 180	IS:5182(Part-9):1974
8.	Lead (Pb)	µg/m³	BDL	≤ 1.0	IS:5182(Part-22):2004
9.	Carbon Monoxide (CO)	mg/m³	01.01	≤ 04	IS:5182(Part-10):1999
10.	Ammonia as (NH_3)	µg/m³	BDL	≤ 400	Method No.401,(Indophenols method)Method Of Air Sampeling,3rd Edition
11.	Benzene (C_6H_6)	µg/m³	BDL	≤ 05	IS:5182 (Part 11):2006
12.	Benzo(a)Pyrene (BaP)	ng/m³	BDL	≤ 01	IS:5182 (Part 12):2004
13.	Arsenic (As)	ng/m³	BDL	≤ 06	IS:3025 (PART-37)
14.	Nickel (Ni)	ng/m³	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)

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 Sahankar Sahakari Sakhar Karkhana Ltd.** Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon, Dist. – Pune-412 406		**Report No**	AL/TR/54-298/19-20
		Report Date	27/02/2020
		Inward No	AL/6-606/01/19-20
		Inward Date	20/02/2020
Sample Location	Sunil Changan (West)	**Sampling Time**	11:00 AM
Sample Collected By	AARL	**Time duration**	08 Hr

SR.NO.	PARAMETER	UNIT	RESULT	LIMITS	METHOD
1.	Ambient Temperature	°C	33.4	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/m³	13.41	≤ 80	IS:5182(Part-2):2001
4.	Oxides of Nitrogen (NO_x)	µg/m³	11.56	≤ 80	IS:5182(Part-6):2006
5.	Particulate matter-PM_{10} (less than 10 micron)	µg/m³	52.74	≤ 100	IS:5182(Part-23):2006
6.	Particulate matter-$PM_{2.5}$ (less than 2.5 micron)	µg/m³	18.65	≤ 60	IS:5182(Part-23):2006
7.	Ozone (O_3)	µg/m³	17.92	≤ 180	IS:5182(Part-9):1974
8.	Lead (Pb)	µg/m³	BDL	1.0	IS:5182(Part-22):2004
9.	Carbon Monoxide (CO)	mg/m³	01.44	≤ 04	IS:5182(Part-10):1999
10.	Ammonia as (NH_3)	µg/m³	BDL	≤ 400	Method No.401,(Indophenols method)Method Of Air Sampeling,3rd Edition
11.	Benzene (C_6H_6)	µg/m³	BDL	≤ 05	IS:5182 (Part 11):2006
12.	Benzo(a)Pyrene (BaP)	ng/m³	BDL	≤ 01	IS:5182 (Part 12):2004
13.	Arsenic (As)	ng/m³	BDL	≤ 06	IS:3025 (PART-37)
14.	Nickel (Ni)	ng/m³	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)

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 Sahankar Sahakari Sakhar Karkhana Ltd.** Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon,Dist. – Pune-412 406		**Report No**	AL/TR/54-299/19-20
		Report Date	27/02/2020
		Inward No	AL/6-606/02/19-20
		Inward Date	20/02/2020
Sample Location	Ashok Jadhav (South)	**Sampling Time**	11:15 AM
Sample Collected By	AARL	**Time duration**	08 Hr

SR.NO.	PARAMETER	UNIT	RESULT	LIMITS	METHOD
1.	Ambient Temperature	°C	33.6	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/m³	14.74	≤ 80	IS:5182(Part-2):2001
4.	Oxides of Nitrogen (NO_x)	µg/m³	12.68	≤ 80	IS:5182(Part-6):2006
5.	Particulate matter-PM_{10} (less than 10 micron)	µg/m³	54.74	≤ 100	IS:5182(Part-23):2006
6.	Particulate matter-$PM_{2.5}$ (less than 2.5 micron)	µg/m³	18.47	≤ 60	IS:5182(Part-23):2006
7.	Ozone (O_3)	µg/m³	17.68	≤ 180	IS:5182(Part-9):1974
8.	Lead (Pb)	µg/m³	BDL	≤ 1.0	IS:5182(Part-22):2004
9.	Carbon Monoxide (CO)	mg/m³	01.16	≤ 04	IS:5182(Part-10):1999
10.	Ammonia as (NH_3)	µg/m³	BDL	≤ 400	Method No.401,(Indophenols method)Method Of Air Sampeling,3rd Edition
11.	Benzene (C_6H_6)	µg/m³	BDL	≤ 05	IS:5182 (Part 11):2006
12.	Benzo(a)Pyrene (BaP)	ng/m³	BDL	≤ 01	IS:5182 (Part 12):2004
13.	Arsenic (As)	ng/m³	BDL	≤ 06	IS:3025 (PART-37)
14.	Nickel (Ni)	ng/m³	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)

Authorized Signatory

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ANALYSIS REPORT FOR AMBIENT AIR QUALITY MONITORING			Page 1 of 1
NAME OF COMPANY:- **M/s. Bhima Sahankar Sahakari Sakhar Karkhana Ltd.** Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. –Ambegaon, Dist.– Pune-412 406		**Report No**	AL/TR/54-300/19-20
		Report Date	27/02/2020
		Inward No	AL/6-606/03/19-20
		Inward Date	20/02/2020
Sample Location	Mahadu chakkar (North)	**Sampling Time**	11:35 AM
Sample Collected By	AARL	**Time duration**	08 Hr

SR.NO.	PARAMETER	UNIT	RESULT	LIMITS	METHOD
1.	Ambient Temperature	°C	33.5	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/m³	11.84	≤ 80	IS:5182(Part-2):2001
4.	Oxides of Nitrogen (NO_x)	µg/m³	09.97	≤ 80	IS:5182(Part-6):2006
5.	Particulate matter-PM_{10} (less than 10 micron)	µg/m³	52.47	≤ 100	IS:5182(Part-23):2006
6.	Particulate matter-$PM_{2.5}$ (less than 2.5 micron)	µg/m³	17.82	≤ 60	IS:5182(Part-23):2006
7.	Ozone (O_3)	µg/m³	17.82	≤ 180	IS:5182(Part-9):1974
8.	Lead (Pb)	µg/m³	BDL	≤ 1.0	IS:5182(Part-22):2004
9.	Carbon Monoxide (CO)	mg/m³	00.88	≤ 04	IS:5182(Part-10):1999
10.	Ammonia as (NH_3)	µg/m³	BDL	≤ 400	Method No.401,(Indophenols method)Method Of Air Sampeling,3rd Edition
11.	Benzene (C_6H_6)	µg/m³	BDL	≤ 05	IS:5182 (Part 11):2006
12.	Benzo(a)Pyrene (BaP)	ng/m³	BDL	≤ 01	IS:5182 (Part 12):2004
13.	Arsenic (As)	ng/m³	BDL	≤ 06	IS:3025 (PART-37)
14.	Nickel (Ni)	ng/m³	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)

Authorized Signatory

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ANALYSIS REPORT FOR AMBIENT AIR QUALITY MONITORING			Page 1 of 1
NAME OF COMPANY:- **M/s. Bhima Sahankar Sahakari Sakhar Karkhana Ltd.** Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon,Dist. – Pune-412 406		**Report No**	AL/TR/54-302/19-20
		Report Date	27/02/2020
		Inward No	AL/6-606/05/19-20
		Inward Date	20/02/2020
Sample Location	Near Khandoba Mandir (Factory Premises)	**Sampling Time**	12:10 PM
Sample Collected By	AARL	**Time duration**	08 Hr

SR.NO.	PARAMETER	UNIT	RESULT	LIMITS	METHOD
1.	Ambient Temperature	°C	33.2	N.S.	EPA -454/R-99-005
2.	Relative Humidity	% rh	38	N.S.	EPA -454/R-99-005
3.	Sulphur Dioxide (SO_2)	µg/m³	12.45	≤ 80	IS:5182(Part-2):2001
4.	Oxides of Nitrogen (NO_x)	µg/m³	11.69	≤ 80	IS:5182(Part-6):2006
5.	Particulate matter-PM_{10} (less than 10 micron)	µg/m³	64.52	≤ 100	IS:5182(Part-23):2006
6.	Particulate matter-$PM_{2.5}$ (less than 2.5 micron)	µg/m³	22.52	≤ 60	IS:5182(Part-23):2006
7.	Ozone (O_3)	µg/m³	17.79	≤ 180	IS:5182(Part-9):1974
8.	Lead (Pb)	µg/m³	BDL	≤ 1.0	IS:5182(Part-22):2004
9.	Carbon Monoxide (CO)	mg/m³	00.67	≤ 04	IS:5182(Part-10):1999
10.	Ammonia as (NH_3)	µg/m³	BDL	≤ 400	Method No.401,(Indophenols method)Method Of Air Sampeling,3rd Edition
11.	Benzene (C_6H_6)	µg/m³	BDL	≤ 05	IS:5182 (Part 11):2006
12.	Benzo(a)Pyrene (BaP)	ng/m³	BDL	≤ 01	IS:5182 (Part 12):2004
13.	Arsenic (As)	ng/m³	BDL	≤ 06	IS:3025 (PART-37)
14.	Nickel (Ni)	ng/m³	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)

Authorized Signatory

...End of test report...

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SOURCE EMISSION MONITORING REPORT			Page 1 of 1
NAME OF COMPANY:- **M/s. Bhima Sahankar Sahakari Sakhar Karkhana Ltd.** Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon,Dist. – Pune-412 406		**Report No**	AL/TR/54-304/19-20
		Report Date	27/02/2020
		Inward No	AL/6-606/07/19-20
		Inward Date	20/02/2020
Sample Location	Old Boiler (37 T/hr)	**Sampling Time**	02:50 PM
Sample Collected By	AARL	**Time duration**	30 Min

SR. NO	DESCRIPTION	UNIT	RESULT	LIMITS	METHOD
A.	**Stack Details**				
1.	Material of stack	--	MS	N.S.	--
2.	Stack Height from G.L.	m	60	N.S.	--
3.	Type of Stack	--	Round	N.S.	--
4.	Dimensions of Stack	m	04.00	N.S.	--
5.	Stack area	m^2	12.56	N.S.	--
B.	**Parameters**				
6.	Flue Gas Temperature	°C	141	N.S.	IS 11255 (PART 3):2008
7.	Differential Pressure	mmwg	04.60	N.S.	IS 11255 (PART 3):2008
8.	Velocity	m/s	08.28	N.S.	IS 11255 (PART 3):2008
9.	Gas volume	$Nm^3/hr.$	269690.95	N.S.	IS 11255 (PART 3):2008
10.	Particulate Matter	mg/Nm^3	124.84	≤ 150	IS 11255 (PART 1):1985
11.	Sulphur Dioxide	kg/day	44.36	≤3886	IS 11255 (PART 2):1985
12.	Oxide of Nitrogen	mg/Nm^3	242.65	N.S.	IS 11255 (PART 7):2005
13.	Carbon Monoxide	ppm	3036.74	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...

AKANKSHA ANALYTICAL & RESEARCH LAB

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- ISO 9001:2015, OHSAS 18001:2007 Certified Organization

SOURCE EMISSION MONITORING REPORT			Page 1 of 1
NAME OF COMPANY:- **M/s. Bhima Sahankar Sahakari Sakhar Karkhana Ltd.** Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon,Dist. – Pune-412 406		**Report No**	AL/TR/54-305/19-20
		Report Date	27/02/2020
		Inward No	AL/6-606/08/19-20
		Inward Date	20/02/2020
Sample Location	New Boiler (80T/hr)	**Sampling Time**	02:10 PM
Sample Collected By	AARL	**Time duration**	30 Min

SR. NO	DESCRIPTION	UNIT	RESULT	LIMITS	METHOD
A.	**Stack Details**				
1.	Material of stack	--	MS	N.S.	--
2.	Stack Height from G.L.	m	73.00	N.S.	--
3.	Type of Stack	--	Round	N.S.	--
4.	Dimensions of Stack	m	03.54	N.S.	--
5.	Stack area	m^2	09.837	N.S.	--
B.	**Parameters**				
6.	Flue Gas Temperature	°C	132	N.S.	IS 11255 (PART 3):2008
7.	Differential Pressure	mmwg	01.45	N.S.	IS 11255 (PART 3):2008
8.	Velocity	m/s	04.60	N.S.	IS 11255 (PART 3):2008
9.	Gas volume	$Nm^3/hr.$	119903.16	N.S.	IS 11255 (PART 3):2008
10.	Particulate Matter	mg/Nm^3	117.36	≤ 150	IS 11255 (PART 1):1985
11.	Sulphur Dioxide	kg/day	1584.36	≤3886	IS 11255 (PART 2): 1985
12.	Oxide of Nitrogen	mg/Nm^3	351.41	N.S.	IS 11255 (PART 7):2005
13.	Carbon Monoxide	ppm	2791.02	N.S.	IS 13270 :1992

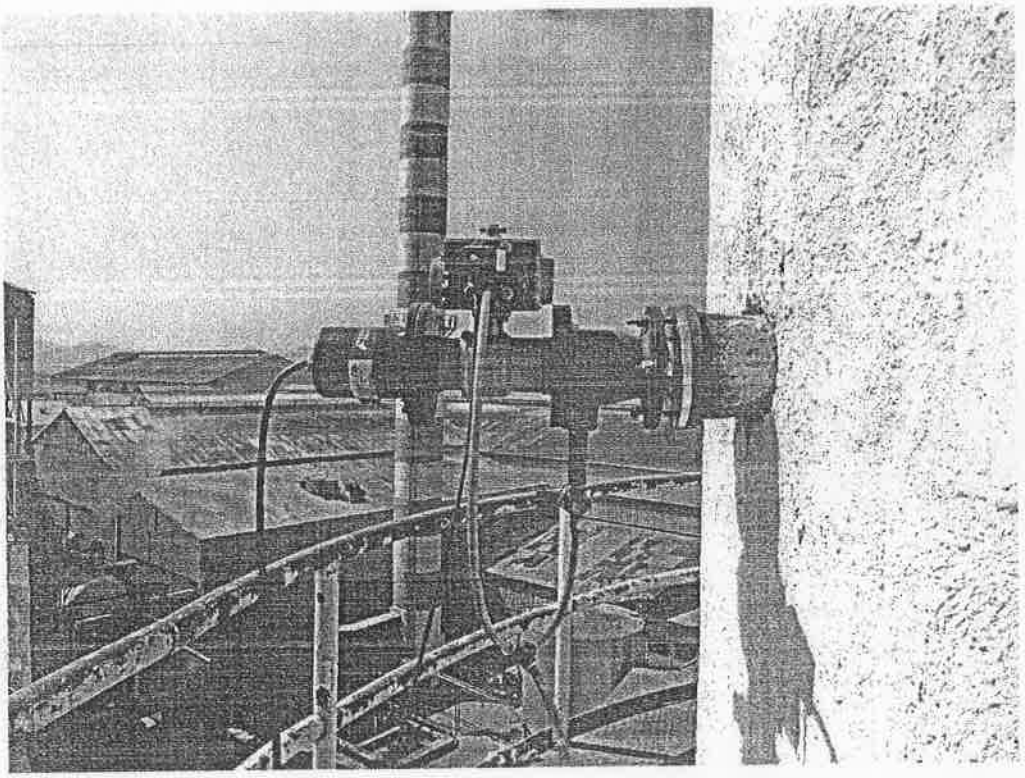
REMARK,OPINION & INTERPRITATION-

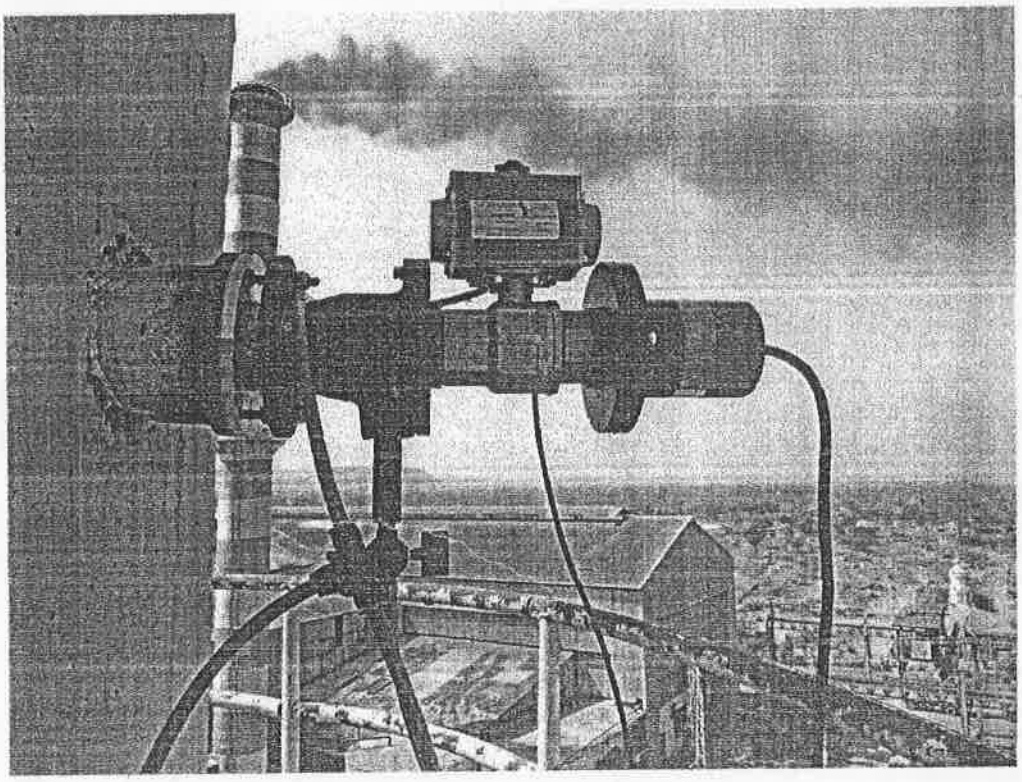
- **All above results are within limits as per MPCB Consent.**
- **BDL-Below Detectable Limit. .**
- **N.S. – Not Specified**

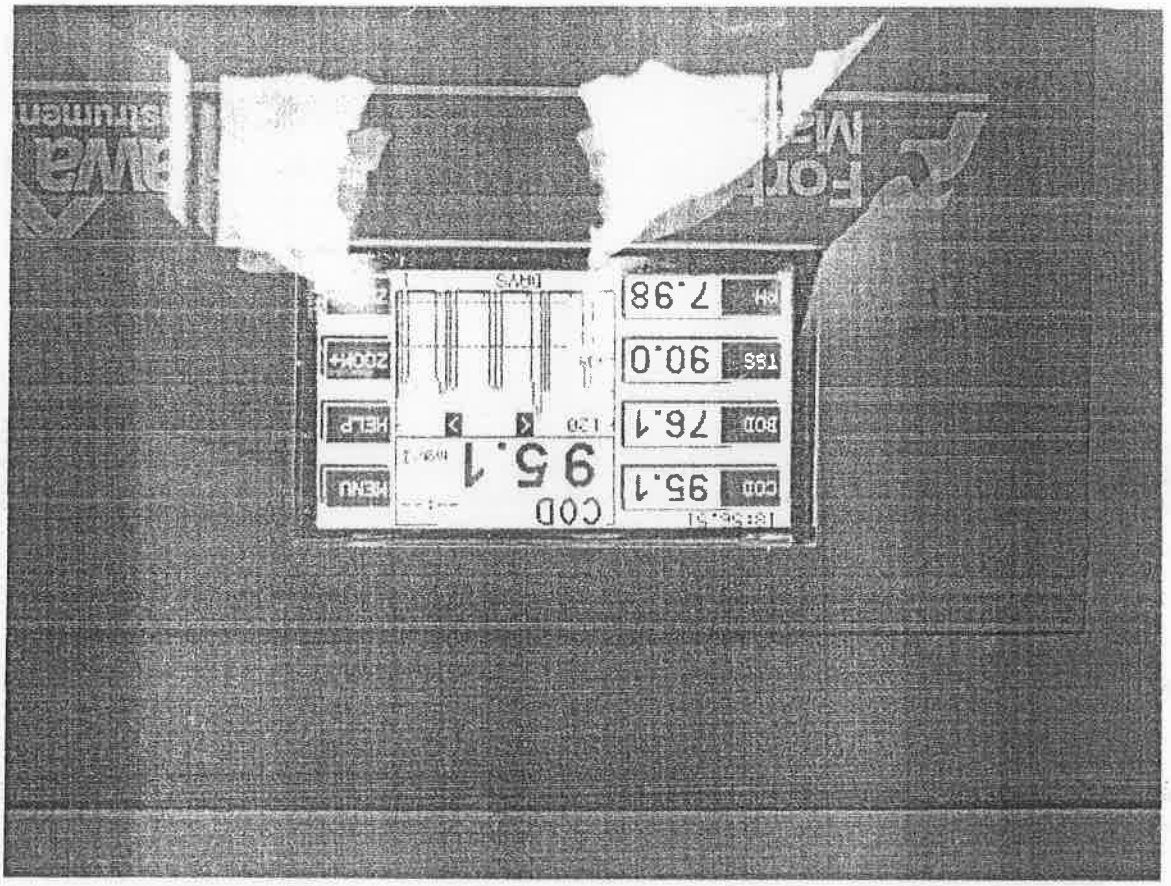
Verified by
(Analyst)

Authorized Signatory

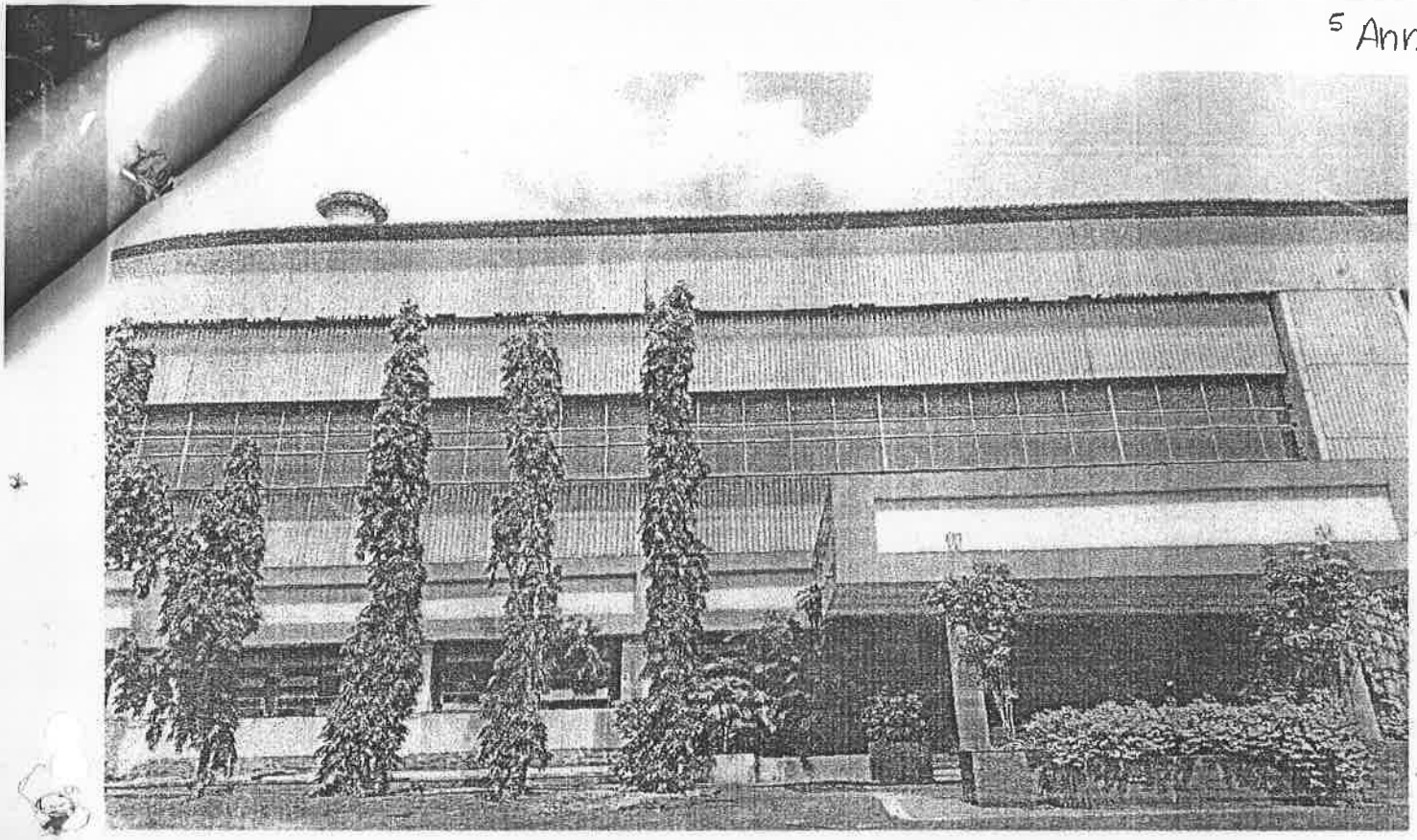
...End of test report...

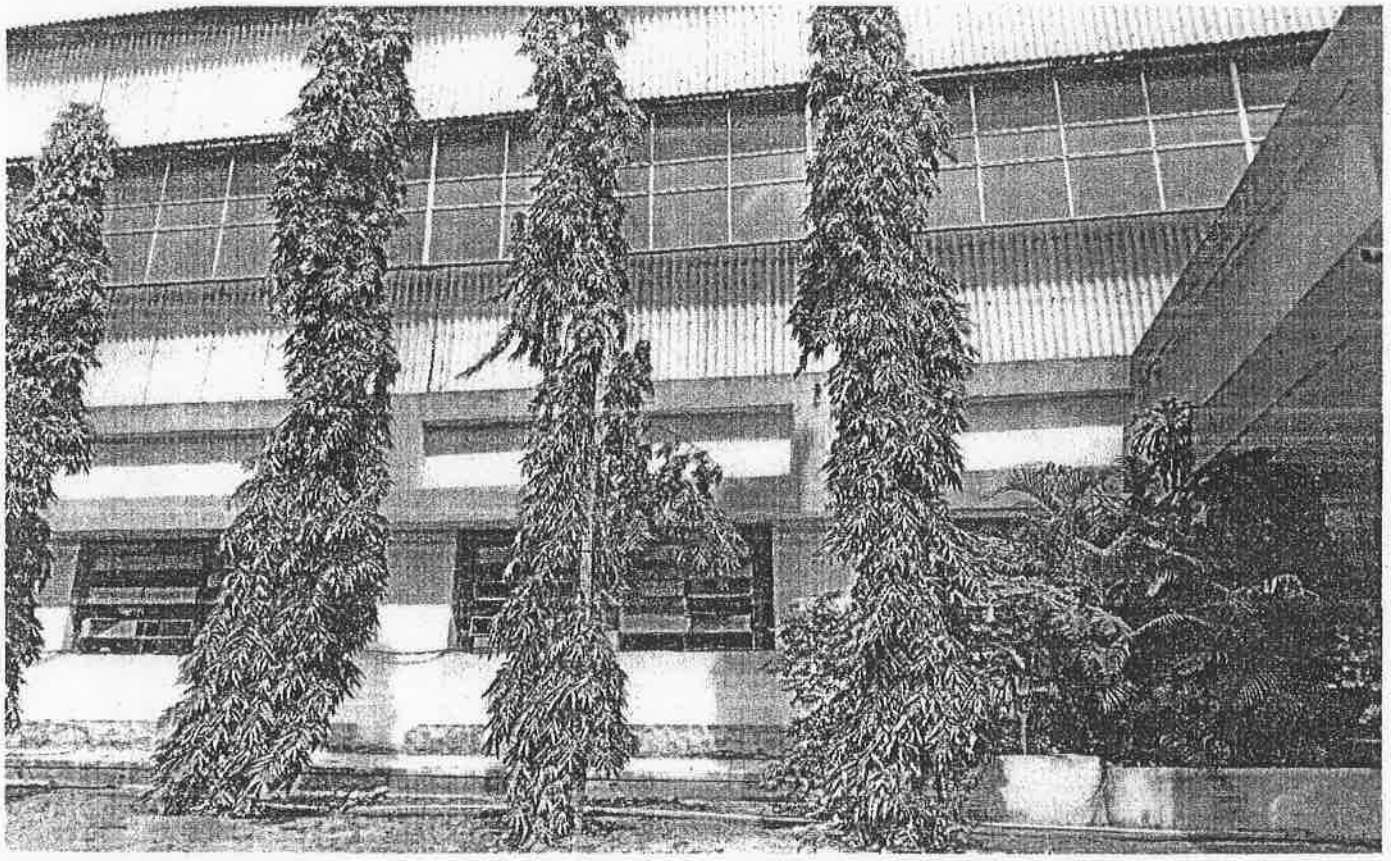





pH 7.98
TSS 90.0
BOD 76.1
COD 95.1
95.1
COD
ZOOM+
HELP
MENU


MICRON
MICROSCOPE
A PRODUCT OF
KROHNE





DOCUMENT NO. – SHR/O- 301/20-21

RAIN WATER HARVESTING PLAN FOR BHIMASHANKAR SSK LTD AT DATTATRAYANAGAR AT POST PARGAON TARF, AWASARI BK, TAL. AMBEGAON, DIST. PUNE.

Prepared by:
Shrashtaa AECC Pvt.Ltd
1st Floor, Kshitij Business Center,
Off Law college Road, DG Dani Road
Pune 411004.

SHRASHTAA
Empowering Creation

Introduction: -

The **Bhīmashankar SSK Ltd**. industrial project is a sugar factory, Dist- Pune. The purpose of this report is to provide the basis for developing the detail rain water harvesting plan for the entire development. It is to propose the general considerations, recommended practices and specific precautions based on referenced standards and industry practices in order to achieve the most efficient, economic & reliable design and minimize future costs.

The Systems of the building has been conceptualized with the plans, design standards and criteria parameters to produce a concept which shall be integrated as a whole. the report spells out the design in conjunction with the regional specifications through the following section of Storm water and Rain water Harvesting Systems.

Objectives: -

1) To access rain water potential of the total 145 Acres land of sugar factory.
2) To calculate rain water considering existing and proposed development in the factory area.
3) To calculate runoff of all the areas such as constructed area, open area, roads (paved, un-paved) and vegetation areas.
4) To suggest appropriate rain water harvesting methods.
5) To prepare concrete plan for rain water harvesting for the entire industrial factory areas.
6) Prepare storm water network system considering 100mm rainfall as per suggestions of SEAC-I Mumbai Maharashtra.

We have studied the topography slope and contour of the 145 Acres and of the factory. The collected the information on rainfall from last 10 years, land use break up, built-up area, existing structures in the factory premises etc. Calculated harvesting potential as per standards NBC 2016, Volume II. Suggested suitable methods of rain water harvesting. Designed of storm water drain, water collection tanks and ground water recharge pits. Designed total storm water network system for the entire premise.

About The Project: -

Bhimashankar SSK Ltd. Is register as a co-operative factory located at Dattatraynagar at post-paragon tarf Avasari (Bk), Tal – Ambegaon, Dist – Pune. The crushing capacity of factory is 6000Tcd and 19 MW co-generation. The total area of the factory is about 145 Acre i.e 5,80,000 Sqm. The detail area statement is given below

Area statement of the project as below: -

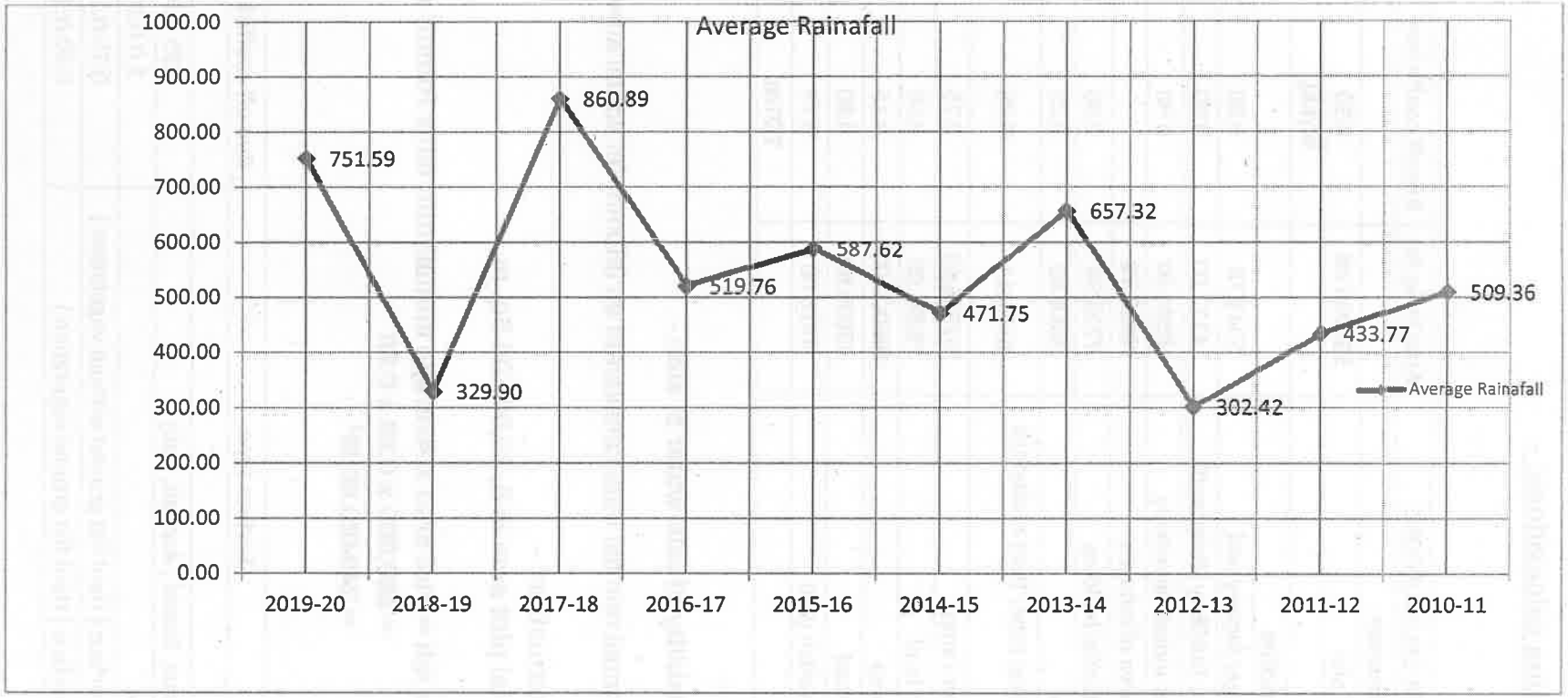
SR.NO	AREA CALCULATIONS	Area in Sq mt
1	Total area of plot	**5,80,000.00**
2	A) Area of sugar factory unit	5341.78
	B) Area under Distillery (Proposed)	14112.00
	C) Area under industrial activity	60503.00
	(A+B) Total area of industry	**79956.78**
3	Area of residential building	7218.94
4	Parking Area	3064.80
5	Area of building other than residential & industry	5571.13
6	Area of labor camp -1	35133.00
7	Area of labor camp -2	127433.63
8	Area of open land	78205.00
9	Green belt area existing	100000.00
10	Green belt area proposed	96000.00
11	Area under road	43000.00
12	Area under switch yard	4416.00

Rainfall at Project Site: -

Year	January	February	March	April	May	June	July	August	September	October	November	December	Annual Total
2019-20	0	0	0	0	0	129.49	155.33	87.92	129.87	203.2	45.78	0	751.6
2018-19	0	0	0	1.84	0	162.08	90.52	40.12	7.01	11.43	16.9	0	329.9
2017-18	0	0	0	0	4.58	240.17	93.17	206.25	182.12	134.3	0.3	0	**860.9**
2016-17	0	0	0	0	0	66.17	187.97	75.28	129.69	60.65	0	0	519.8
2015-16	0	0	0	0	0	118.89	30.21	22.92	249.59	111.86	54.15	0	587.6
2014-15	0	33.41	35.98	1.49	4.822	28.84	88.67	164.43	66.6	12.32	33.05	2.14	471.8
2013-14	0.14	0	29.078	3.18	5.72	180.8	109.52	11.47	238.32	53.97	13.84	11.28	657.3
2012-13	0	0	0	0	0	39.48	91.51	56.61	35.6	79.22	0	0	302.42
2011-12	0	0	0	0	0	33.11	87.25	85.6	158.68	69.13	0	0	433.77
2010-11	0	0	0	0	0.7	144.51	76.75	83.05	113.74	16.91	73.7	0	509.36
Average Rain Fall (ten years)													**542.44**

Source: Data Provided by PP.

Yearly Rainfall Graph for 10 years.



Rain water harvesting calculations: -

SR.NO	AREA CALCULATIONS	Area in Sq.mt	Runoff coefficient	Rainfall In M3
	Before Construction			
1	Total area of plot	**580000.00**	**0.50**	249400.00
			TOTAL	**249400.00**
	After Construction			
2	A) Area of sugar factory unit	5341.78	0.90	4134.54
	B) Area under Distillery (Proposed)	14112.00	0.90	10922.69
	C) Area under industrial activity	60503.00	0.90	46829.32
	(A+B) Total area of industry	**79956.78**		0.00
3	Area of residential building	7218.94	0.90	5587.46
4	Parking Area	3064.80	0.75	1976.80
5	Area of building other than residential & industry	5571.13	0.75	3593.38
6	Area of labour camp	162566.63	0.75	104855.48
8	Area of open land	78205.00	0.60	40353.78
9	Green belt area	196000.00	0.15	25284.00
11	Area under road	43000.00	0.80	29584.00
12	Area under switch yard	4416.00	0.75	2848.32
			TOTAL	**275969.76**

Total annual availability of rain water at site: -

1) Based on annual rain fall data considered as 860mm (at actual survey)

A) Before Construction: -
Geographical plot area is 5, 80,000.00 Sq. m

Annual rain fall = Plot area x Average annual rain fall x Runoff coefficient
= 580,000 x 0.86 x 0.50
= 249400.00 M^3

SR.NO	Surface type	Run off coefficient range
1	Roof (Metal, Gravel , Asphalt, slab)	0.95-0.90
2	Pavement	1.0-0.90
3	Ground surface (Hard flat ground without vegetation)	0.75-0.25
4	Ground surface (Hard flat ground vegetation)	0.60-0.15

5	Lawns	0.30.-0.15

B) After construction: -

1) Total Area under industrial:

Area of industry x Average annual rain fall x Runoff coefficient

= 79956.78x 0.86 x 0.90
= 61886.54 M³

2) Area under residential building:

Area of building x Average annual rain fall x Runoff coefficient
= 7218.94 x 0.86 x 0.90
= 5587.45 M³

3) Area under parking & other than residential building:

Area of building x Average annual rain fall x Runoff coefficient
= 8635.93 x 0.86 x 0.75
= 5570.17 M³

4) Area under labor camp:

Area of building x Average annual rain fall x Runoff coefficient
= 162,566.63 x 0.86 x 0.75
= 104,855.47 M³

5) Area of open land:

Area of building x Average annual rain fall x Runoff coefficient
= 78205 x 0.86 x 0.60
= 40353.78 M³

6) Area of green belt:-

Area of building x Average annual rain fall x Runoff coefficient
= 196000 x 0.86 x 0.15
= 25284.00 M³

7) Area of under road: -

Area of building x Average annual rain fall x Runoff coefficient
= 43000 x 0.86 x 0.80
= 29584.0 M^3

8) Area of under switch yard: -

Area of building x Average annual rain fall x Runoff coefficient
= 4416 x 0.86 x 0.75
= 2848.32 M^3

Total rain water available – (1+2+3+4+5+6+7+8) **= 2,75,969.76 M^3**

Anticipations of efficiency of RWH scheme: -

Above calculations and following is very crude estimate. It is impossible to exactly predict the annual recharge as well as harvesting takes place due to large variations in intensities, concentration and spread out of the monsoon and rain spells. Exact quantification of recharge is varying year to year.

- The recharge system alone will accommodate runoff from roof 69.29 M^3/Min (after landscape area developed) at maximum intensity.
- As per average daily rainfall in the area which is 50mm/day, the system can accommodate 100% of the roof top runoff at max rainfall intensity.
- During 60days, out of 100 days the rain fall is less than 10-15mm /day or so infiltration and subsequent filling accompanied by evaporation can be anticipated in a cyclic manner.
- During maximum rainfall intensity of 50mm/hr as denied by NBC, the rain water harvesting design will be accommodate almost all the incremental runoff.

RAIN WATER HARVESTING

With burgeoning population and rising demands the pressure on the existing water resources has grown many folds. Large scale construction and urban development projects catering to the need of growing urbanization lead to land use modification increasing exploitation of scarce water resources and subsequent increase in generation of waste water discharges and surface runoff. Rainwater harvesting is the age-old concept, which holds immense potential in the current times in controlling runoff and resulting water logging problems besides assuring an alternative source of water and a supplement to existing natural resources in a wide variety of circumstances.

Rainwater harvesting is a method for conservation of water for various purposes. The basic aim of the method is to force percolation of rainwater in the monsoon season into the soil. The rainwater from roofs, as well as surface runoff from open spaces is diverted using down take pipes and gutters, to a specially designed collection chamber.

The water percolates through the gravel in this chamber, leaving the silt behind. This water first fills the depths of the bore well and then finds its way to natural underground aquifers. Any excess water from the collection chamber may be diverted to the natural pond/nala, to avoid the rare possibility of over flooding and backwash.

The recharge bore wells complement the natural water cycle and helps to augment the maximum possible groundwater reserves by active groundwater movement. As and when water is pumped out for use from production bore wells, this retained water from aquifers and subsoil strata percolates into the bore wells, maintaining a steady static water level. This increases availability and reliability of groundwater resources in our land.

Field Work

In order to acquire data for rainwater harvesting, we have to use latest technology in identifying hydro geologically potential zones. We will have to conduct extensive studies to identify such zones in and around the premises. Topographical studies are done to thoroughly delineate groundwater favourable zones based on lineaments, shallow prospective zones etc. Geophysical survey needs to be conducted to study the sub-surface geological formation and the thickness of porous and permeable zones to accommodate the recharge.

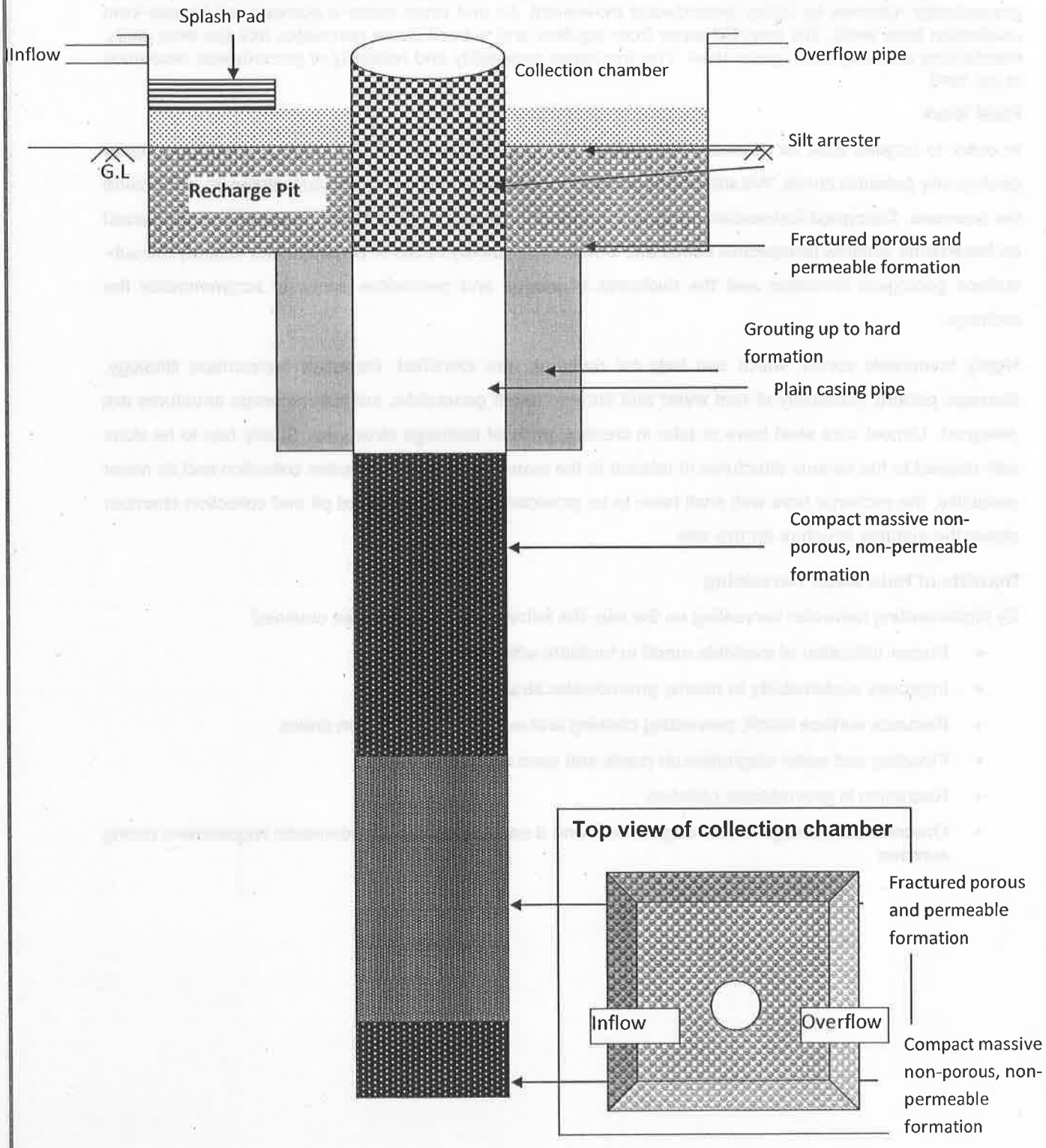
Highly favourable zones, which can help for recharge, are identified. Based on subsurface lithology, drainage pattern, possibility of roof water and surface runoff generation, suitable recharge structures are designed. Utmost care shall have to take in creating artificial recharge structures. Study has to be done with respect to the various structures in relation to the average expected rainwater collection and its minor variability, the recharge bore well shall have to be provided with gravel packed pit and collection chamber above the suitable structure for this site.

Benefits of Rain Water Harvesting

By implementing rainwater harvesting on the site, the following benefits may be obtained:

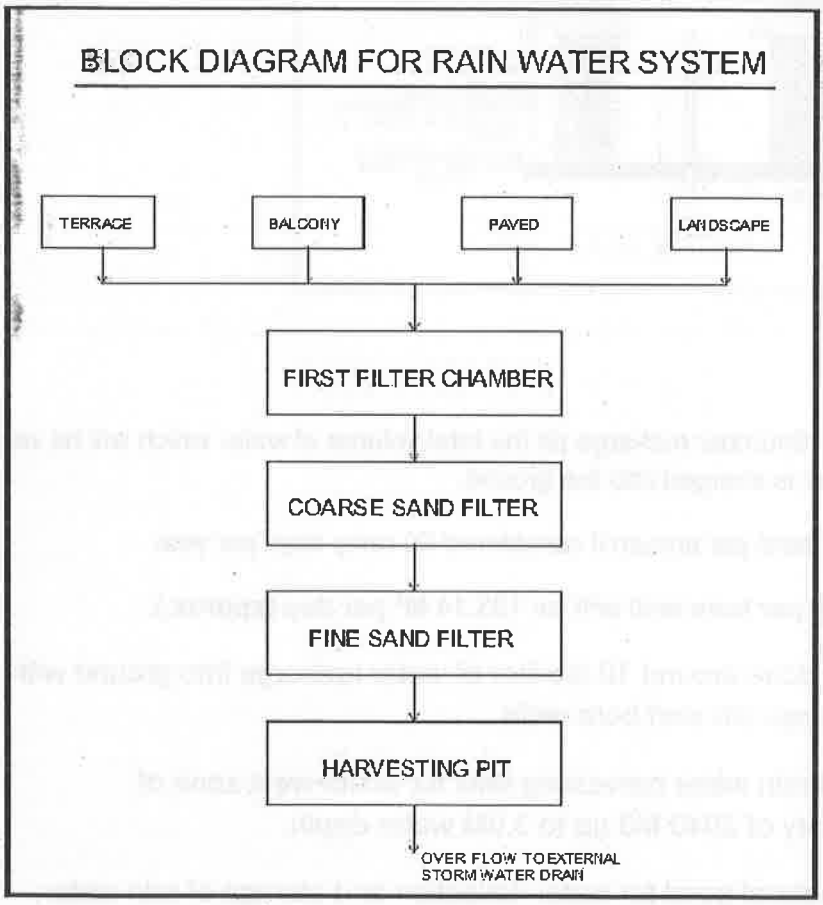
- Proper utilization of available runoff to facilitate withdrawal
- Improves sustainability to nearby groundwater structure
- Reduces surface runoff, preventing choking and over-flooding of storm drains
- Flooding and water stagnation on roads and open areas is avoided.
- Reduction in groundwater pollution
- Groundwater storage is well augmented, and it can supplement the domestic requirement during summer

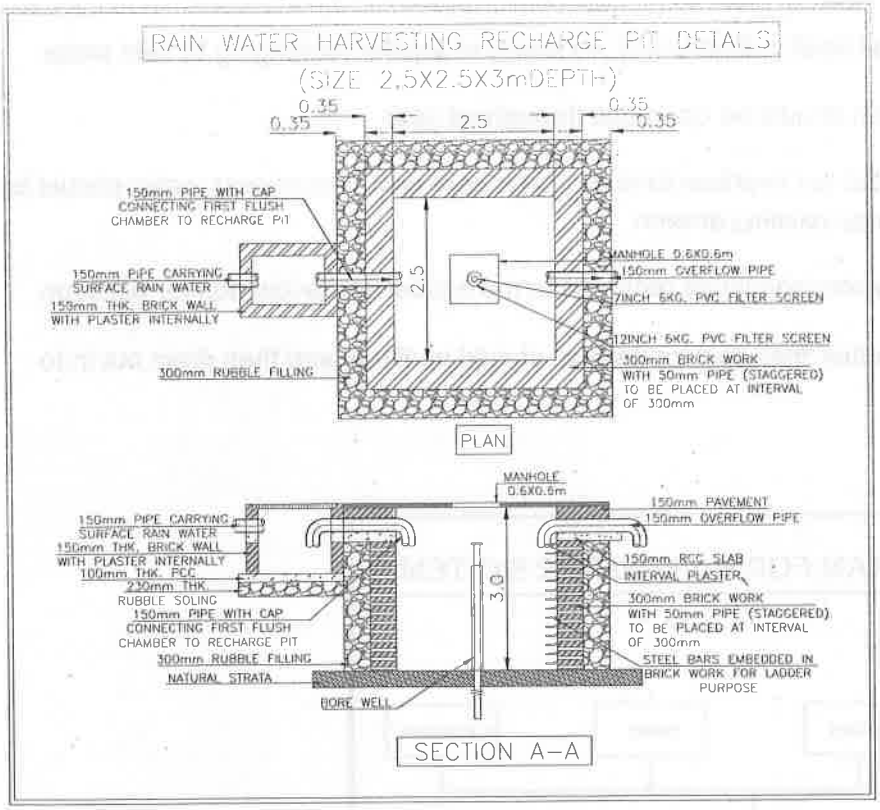
Schematic of Drawing of Recharge Pit with Bore Well:-



Recommended rain water harvesting and recharging strategic.

- Percolation test should be carried out on proposed recharge bore well.
- Uncertain rainfall itself indicates that necessity of aquifer recharging by rain water.
- Recharge system should be operative throughout year.
- Rain water should not overflow form recharge bore well. The excess water should be drain out in nearby existing stream.
- The clean rain water should be recharge to the aquifer and avoid aquifer pollution.
- The rain water other than roof top terrace should be filters and then drain out in to nearby stream.





We are considered having this 10number recharge pit the total volume of water which will be we are assuring of so much of water is charged into the ground.

= 61887.0 / 10 = 6188.7 M^3 per bore per annum if considered 60 rainy days per year.

An average recharge capacity per bore well will be 103.14 M^3 per day (approx.).

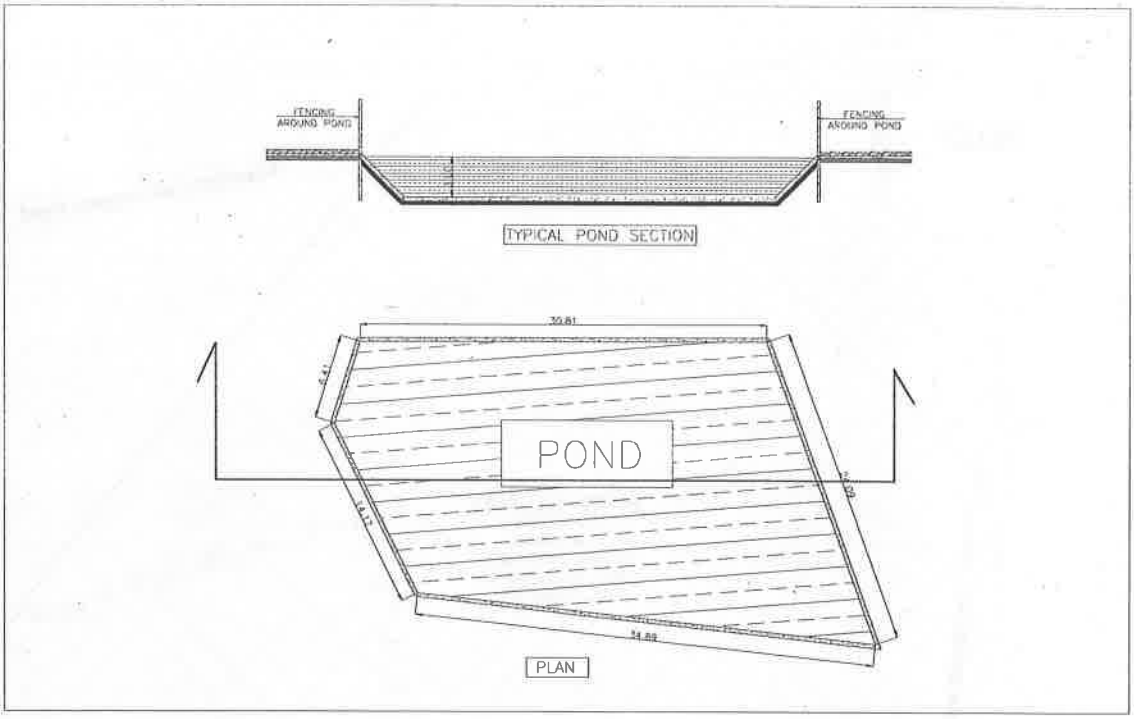
According to above we have done around 10 lac liter of water recharge into ground with providing 10 number of recharge pits and bore wells.

However, we do recommend rain water harvesting tank for south-west zone of rectangular shape and capacity of 2040 M3 up to 3.0M water depth.

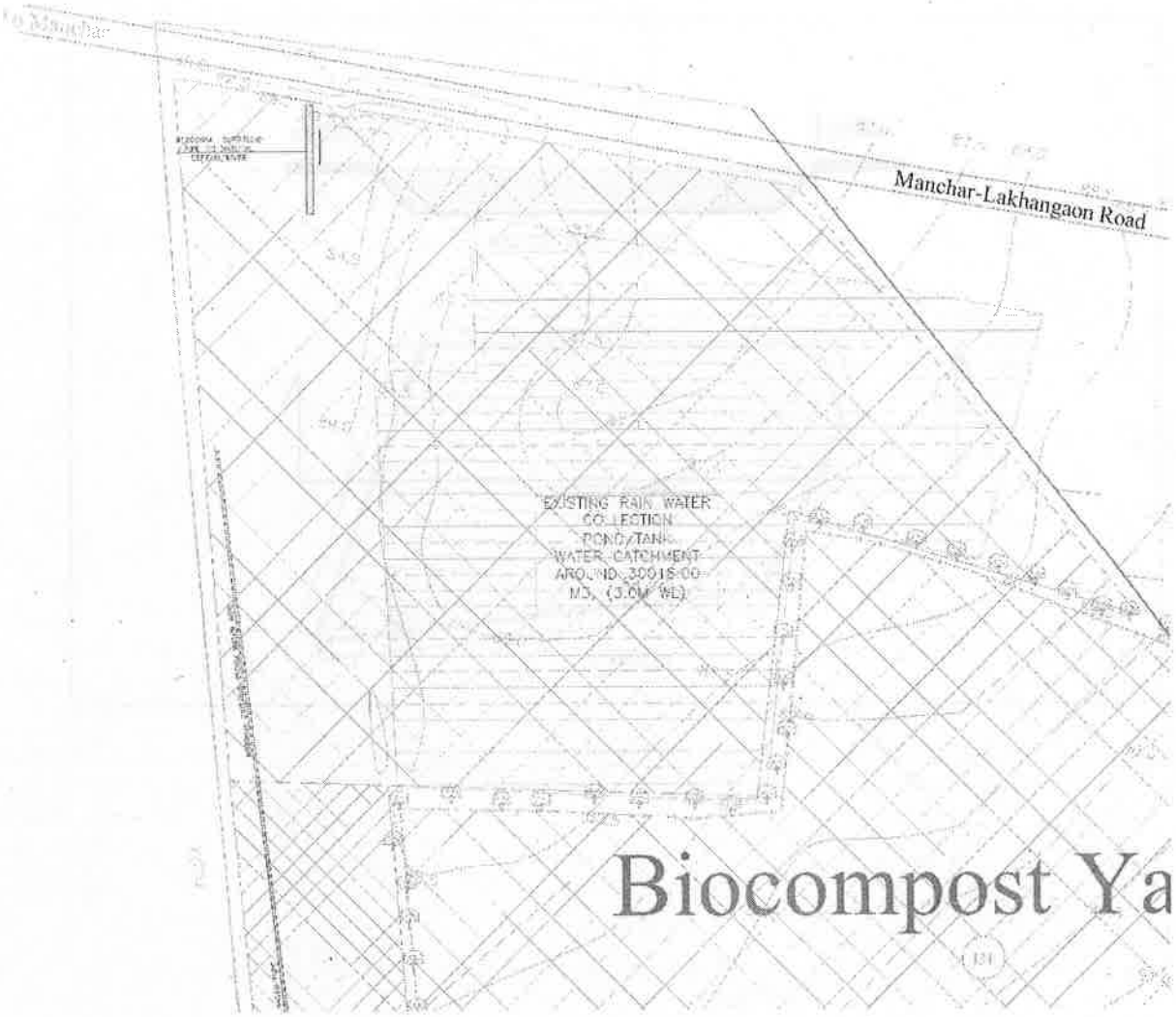
Also, we are using existing natural pond for water collection and storage of rain water, capacity around 30018.00 M3 with water depth of 3.0M.

Conclusions: -

1) Proposed Storage Tank

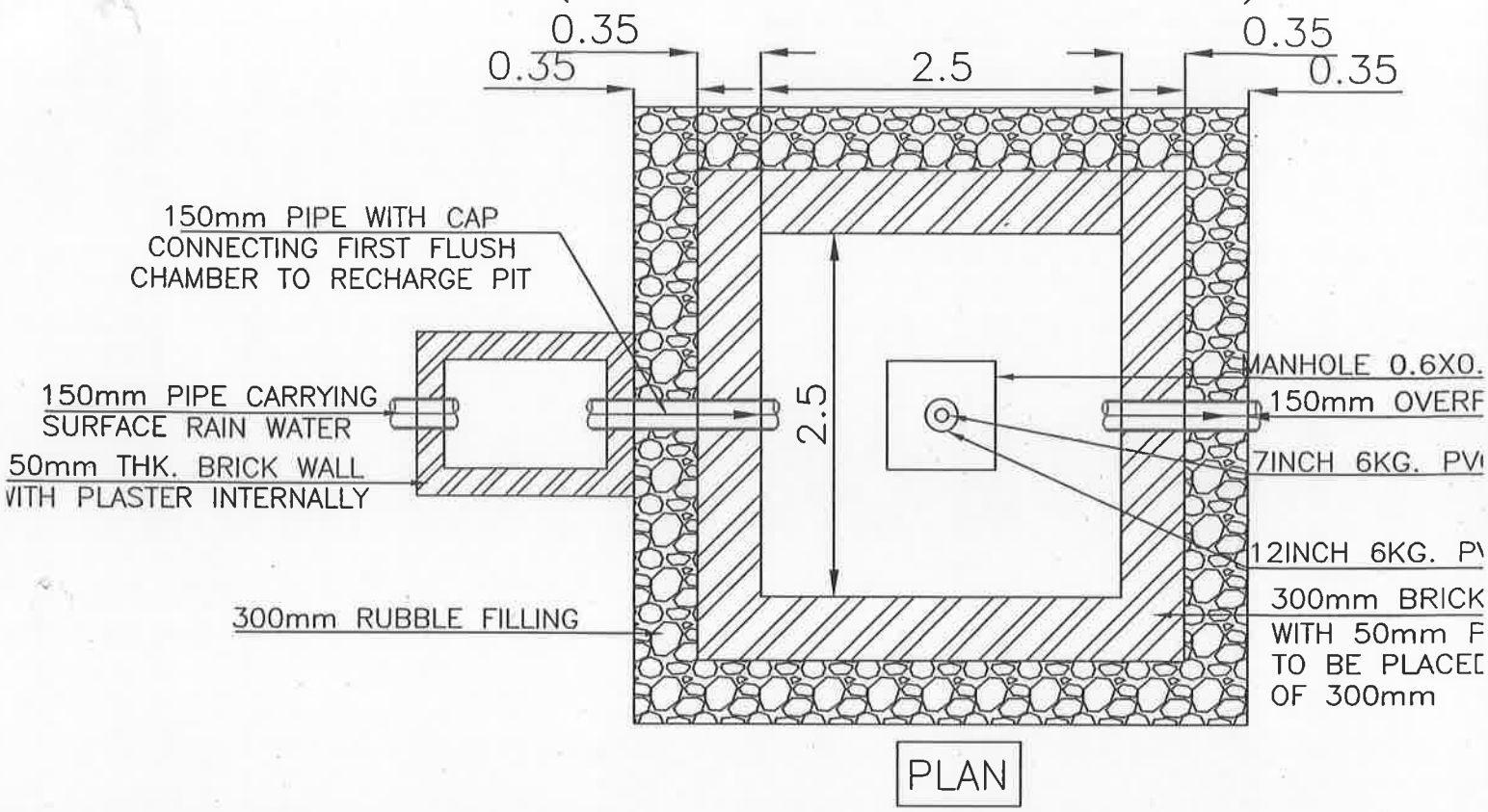


2) Existing Rain water storage Tank/ Pond

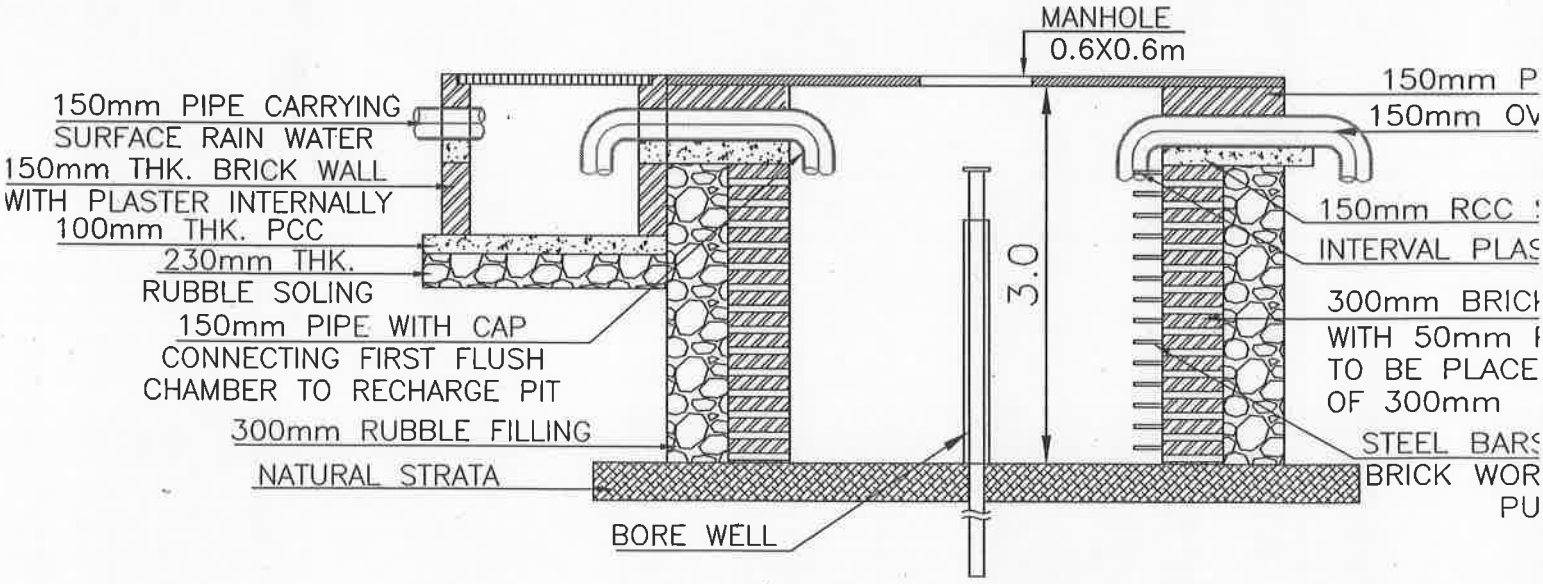


RAIN WATER HARVESTING RECHARGE PIT DE

(SIZE 2.5X2.5X3mDEPTH)



PLAN



SECTION A–A

Ann. VI

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TEST 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-412406		**Report No**	TC724719000002274P
		Report Date	23/12/2019
		Inward No	12-121
		Inward Date	16/12/2019
Sample Detail	Dyaneshwar Ragunath Dhoble-East Well Water	**Analysis Start date**	17/12/2019
Sample Collected By	Party	**Analysis End date**	19/12/2019
Sample Volume	3000 ml	**Sample Condition**	Fit For Analysis

Sr. No.	Parameter	Unit	Result	Desirable limits as per IS:10500, 2012	Method
A)	**PHYSICAL ANALYSIS**				
1.	Colour	Hazan	BDL	5.00 Max	IS3025(Part-4)
2.	Odour	--	Unobjectionable	Unobjectionable	IS3025(Part-5)
3.	Turbidity	NTU	0.20	1.0 NTU	IS3025(Part-10)
4.	Conductivity	µMHOs/cm	1381	Not Specified	IS 3025 (Part 14):2013
B)	**CHEMICAL ANALYSIS**				
5.	pH	---	7.22	6.5 to 8.5	IS 3025 (Part 11) RA 2012 Electrometric Method
6.	Total Dissolved Solids	mg/lit	898	500 Max	IS 3025 (Part 16) RA 2012
7.	Total Hardness as CaCO3	mg/lit	589	200 Max	IS3025(Part-21) RA 2014 EDTA Titremetric method
8.	Calcium as Ca	mg/lit	120	75.0 Max	IS3025(Part-40) RA 2009 EDTA Method
9.	Magnesium as Mg	mg/lit	69.5	30.0 Max	APHA 23rd Edition 2017 3500- mg B Calculation method
10.	Chlorides as Cl	mg/lit	141	250 Max	IS3025(Part-40) RA 2009 Argentometric Method
11.	*Sulphate as SO4-2	mg/lit150	5.33	200 Max	APHA-23 rdEdition 2017-SO42- -E
12.	Total Alkalinity	mg/lit	308	200 Max	IS3025(Part-23)RA 2009
13.	*Nitrate	mg/lit	3.70	45.0 Max.	APHA 23rd Edition 2017 (4500 – NO_3^- B), pg no. 4-127.
14.	*Iron as Fe	mg/lit	BDL	0.3 Max	IS3025(Part-53)
C)	***BACTERIOLOGICAL ANALYSIS**				
15.	Coliform	MPN Index/100ml.	Present	Absent	IS1622:1981 Reaff.2014
16.	Fecal Coliform	MPN Index/100ml	Present	Absent	IS1622:1981 Reaff.2014
17.	E- Coli	Per 100 ml	Present	Absent	IS1622:1981 Reaff.2014

REMARK,OPINION & INTERPRITATION-

- **As per Specified above analysis water sample is not potable.**
- **Sample will be preserve for seven days after analysis.**
- **Above analysis results are related to its testing.**
- **The contents of this test report shall not be reproduced in part or without written approval of lab incharge.**
- **The parameter marked with an * are not accredited by NABL.**
- **BDL- Below Detectable Limit**

Aishwarya

Verified by
(Analyst)

Reela

Authorized Signatory

...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 | **Email :** akankshalab2007@gmail.com

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TEST 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-412406		**Report No**	TC724719000002277P
		Report Date	23/12/2019
		Inward No	12-124
		Inward Date	16/12/2019
Sample Detail	Sandip Popat Dhoble North Grampanchayat	**Analysis Start date**	17/12/2019
Sample Collected By	Party	**Analysis End date**	19/12/2019
Sample Volume	3000 ml	**Sample Condition**	Fit For Analysis

Sr. No.	Parameter	Unit	Result	Desirable limits as per IS:10500, 2012	Method
A)	**PHYSICAL ANALYSIS**				
1.	Colour	Hazan	BDL	5.00 Max	IS3025(Part-4)
2.	Odour	--	Unobjectionable	Unobjectionable	IS3025(Part-5)
3.	Turbidity	NTU	0.40	1.0 NTU	IS3025(Part-10)
4.	Conductivity	µMHOs/cm	1818	Not Specified	IS 3025 (Part 14):2013
B)	**CHEMICAL ANALYSIS**				
5.	pH	---	7.59	6.5 to 8.5	IS 3025 (Part 11) RA 2012 Electrometric Method
6.	Total Dissolved Solids	mg/lit	1182	500 Max	IS 3025 (Part 16) RA 2012
7.	Total Hardness as CaCO3	mg/lit	820	200 Max	IS3025(Part-21) RA 2014 EDTA Titremetric method
8.	Calcium as Ca	mg/lit	170	75.0 Max	IS3025(Part-40) RA 2009 EDTA Method
9.	Magnesium as Mg	mg/lit	95.0	30.0 Max	APHA 23rd Edition 2017 3500- mg B Calculation method
10.	Chlorides as Cl	mg/lit	141	250 Max	IS3025(Part-40) RA 2009 Argentometric Method
11.	*Sulphate as SO4-2	mg/lit150	6.72	200 Max	APHA-23 rdEdition 2017-SO42- -E
12.	Total Alkalinity	mg/lit	362	200 Max	IS3025(Part-23)RA 2009
13.	*Nitrate	mg/lit	380	45.0 Max.	APHA 23rd Edition 2017 (4500 – NO_3^- B), pg no. 4-127.
14.	*Iron as Fe	mg/lit	BDL	0.3 Max	IS3025(Part-53)
C)	***BACTERIOLOGICAL ANALYSIS**				
15.	Coliform	MPN Index/100ml.	Present	Absent	IS1622:1981 Reaff.2014
16.	Fecal Coliform	MPN Index/100ml	Present	Absent	IS1622:1981 Reaff.2014
17.	E- Coli	Per 100 ml	Present	Absent	IS1622:1981 Reaff.2014

REMARK,OPINION & INTERPRITATION-

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- **BDL- Below Detectable Limit**

Verified by
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TEST 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-412406		**Report No**	TC724719000002275P
		Report Date	23/12/2019
		Inward No	12-122
		Inward Date	16/12/2019
Sample Detail	Rama Nivruti Dhoble-West Grampanchayat	**Analysis Start date**	17/12/2019
Sample Collected By	Party	**Analysis End date**	19/12/2019
Sample Volume	3000 ml	**Sample Condition**	Fit For Analysis

Sr. No.	Parameter	Unit	Result	Desirable limits as per IS:10500, 2012	Method
A)	**PHYSICAL ANALYSIS**				
1.	Colour	Hazan	BDL	5.00 Max	IS3025(Part-4)
2.	Odour	--	Unobjectionable	Unobjectionable	IS3025(Part-5)
3.	Turbidity	NTU	0.20	1.0 NTU	IS3025(Part-10)
4.	Conductivity	µMHOs/cm	1072	Not Specified	IS 3025 (Part 14):2013
B)	**CHEMICAL ANALYSIS**				
5.	pH	---	7.89	6.5 to 8.5	IS 3025 (Part 11) RA 2012 Electrometric Method
6.	Total Dissolved Solids	mg/lit	697	500 Max	IS 3025 (Part 16) RA 2012
7.	Total Hardness as CaCO3	mg/lit	376	200 Max	IS3025(Part-21) RA 2014 EDTA Titremetric method
8.	Calcium as Ca	mg/lit	81.1	75.0 Max	IS3025(Part-40) RA 2009 EDTA Method
9.	Magnesium as Mg	mg/lit	41.7	30.0 Max	APHA 23rd Edition 2017 3500- mg B Calculation method
10.	Chlorides as Cl	mg/lit	111	250 Max	IS3025(Part-40) RA 2009 Argentometric Method
11.	*Sulphate as SO4-2	mg/lit150	5.86	200 Max	APHA-23 rdEdition 2017-SO42- -E
12.	Total Alkalinity	mg/lit	319	200 Max	IS3025(Part-23)RA 2009
13.	*Nitrate	mg/lit	3.50	45.0 Max.	APHA 23rd Edition 2017 (4500 – NO_3^- B), pg no. 4-127.
14.	*Iron as Fe	mg/lit	BDL	0.3 Max	IS3025(Part-53)
C)	***BACTERIOLOGICAL ANALYSIS**				
15.	Coliform	MPN Index/100ml.	Present	Absent	IS1622:1981 Reaff.2014
16.	Fecal Coliform	MPN Index/100ml	Present	Absent	IS1622:1981 Reaff.2014
17.	E- Coli	Per 100 ml	Present	Absent	IS1622:1981 Reaff.2014

REMARK,OPINION & INTERPRITATION-

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Aishwarya.

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(Analyst)

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TEST 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-412406		**Report No**	TC724719000002276P
		Report Date	23/12/2019
		Inward No	12-123
		Inward Date	16/12/2019
Sample Detail	Maruti Vaidhy Vaidwadi Phata South Well Water	**Analysis Start date**	17/12/2019
Sample Collected By	Party	**Analysis End date**	19/12/2019
Sample Volume	3000 ml	**Sample Condition**	Fit For Analysis

Sr. No.	Parameter	Unit	Result	Desirable limits as per IS:10500, 2012	Method
A)	**PHYSICAL ANALYSIS**				
1.	Colour	Hazan	BDL	5.00 Max	IS3025(Part-4)
2.	Odour	--	Unobjectionable	Unobjectionable	IS3025(Part-5)
3.	Turbidity	NTU	0.20	1.0 NTU	IS3025(Part-10)
4.	Conductivity	µMHOs/cm	1072	Not Specified	IS 3025 (Part 14):2013
B)	**CHEMICAL ANALYSIS**				
5.	pH	---	7.74	6.5 to 8.5	IS 3025 (Part 11) RA 2012 Electrometric Method
6.	Total Dissolved Solids	mg/lit	850	500 Max	IS 3025 (Part 16) RA 2012
7.	Total Hardness as CaCO3	mg/lit	425	200 Max	IS3025(Part-21) RA 2014 EDTA Titremetric method
8.	Calcium as Ca	mg/lit	88.8	75.0 Max	IS3025(Part-40) RA 2009 EDTA Method
9.	Magnesium as Mg	mg/lit	48.6	30.0 Max	APHA 23rd Edition 2017 3500- mg B Calculation method
10.	Chlorides as Cl	mg/lit	121	250 Max	IS3025(Part-40) RA 2009 Argentometric Method
11.	*Sulphate as SO4-2	mg/lit150	6.57	200 Max	APHA-23 rdEdition 2017-SO42- -E
12.	Total Alkalinity	mg/lit	425	200 Max	IS3025(Part-23)RA 2009
13.	*Nitrate	mg/lit	3.86	45.0 Max.	APHA 23rd Edition 2017 (4500 – NO_3^- B), pg no. 4-127.
14.	*Iron as Fe	mg/lit	BDL	0.3 Max	IS3025(Part-53)
C)	***BACTERIOLOGICAL ANALYSIS**				
15.	Coliform	MPN Index/100ml.	Present	Absent	IS1622:1981 Reaff.2014
16.	Fecal Coliform	MPN Index/100ml	Present	Absent	IS1622:1981 Reaff.2014
17.	E- Coli	Per 100 ml	Present	Absent	IS1622:1981 Reaff.2014

REMARK,OPINION & INTERPRITATION-

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TEST 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-412406		**Report No**	TC724720000000221P
		Report Date	27/01/2020
		Inward No	01-199
		Inward Date	22/01/2020
Sample Detail	Well Water- Popat Pingle south west	**Analysis Start date**	22/01/2020
Sample Collected By	Party	**Analysis End date**	25/01/2020
Sample Volume	2250 ml	**Sample Condition**	Fit For Analysis

Sr. No.	Parameter	Unit	Result	Desirable limits as per IS:10500, 2012	Method
A)	**PHYSICAL ANALYSIS**				
1.	Colour	Hazen	BDL	≤5.00	IS3025(Part-4)
2.	Odour	--	Unobjectionable	Unobjectionable	IS3025(Part-5)
3.	Turbidity	NTU	0.20	≤1.0	IS3025(Part-10)
4.	Conductivity	µMHOs/cm	2496	Not Specified	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	1622	≤500	IS 3025 (Part 16) RA 2012
7.	Total Hardness as CaCO3	mg/lit	549	≤200	IS3025(Part-21) RA 2014 EDTA Titrimetric method
8.	Calcium as Ca	mg/lit	114	≤75.0	IS3025(Part-40) RA 2009 EDTA Method
9.	Magnesium as Mg	mg/lit	63.5	≤30.0	APHA 23rd Edition 2017 3500-mg B Calculation method
10.	Chlorides as Cl	mg/lit	198	≤250	IS3025(Part-32) RA 2009 Argentometric Method
11.	*Sulphate as SO4-2	mg/lit	6.32	≤200	APHA-23rd Edition 2017-SO_4^{2-} -E
12.	Total Alkalinity	mg/lit	462	≤200	IS3025(Part-23)RA 2009
13.	*Nitrate	mg/lit	11.0	≤45.0	APHA 23rd Edition 2017 (4500 – NO_3^- B)
14.	*Iron as Fe	mg/lit	BDL	0.3 Max	IS3025(Part-53)
C)	***BACTERIOLOGICAL ANALYSIS**				
15.	Coliform	MPN Index/100ml	Absent	Absent	IS1622:1981 Reaff.2014
16.	Fecal Coliform	MPN Index/100ml	Absent	Absent	IS1622:1981 Reaff.2014
17.	E- Coli	Per 100 ml	Absent	Absent	IS1622:1981 Reaff.2014

REMARK,OPINION & INTERPRITATION-

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TEST 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-412406		**Report No**	TC724720000000222P
		Report Date	27/01/2020
		Inward No	01-200
		Inward Date	22/01/2020
Sample Detail	Well Water-Mahadev dhoble north east	**Analysis Start date**	22/01/2020
Sample Collected By	Party	**Analysis End date**	25/01/2020
Sample Volume	2250 ml	**Sample Condition**	Fit For Analysis

Sr. No.	Parameter	Unit	Result	Desirable limits as per IS:10500, 2012	Method
A)	**PHYSICAL ANALYSIS**				
1.	Colour	Hazen	BDL	≤5.00	IS3025(Part-4)
2.	Odour	--	Unobjectionable	Unobjectionable	IS3025(Part-5)
3.	Turbidity	NTU	0.30	≤1.0	IS3025(Part-10)
4.	Conductivity	µMHOs/cm	1860	Not Specified	IS 3025 (Part 14):2013
B)	**CHEMICAL ANALYSIS**				
5.	pH @ 25°C	---	7.66	6.5 to 8.5	IS 3025 (Part 11) RA 2012 Electrometric Method
6.	Total Dissolved Solids	mg/lit	1209	≤500	IS 3025 (Part 16) RA 2012
7.	Total Hardness as CaCO3	mg/lit	539	≤200	IS3025(Part-21) RA 2014 EDTA Titrimetric method
8.	Calcium as Ca	mg/lit	110	≤75.0	IS3025(Part-40) RA 2009 EDTA Method
9.	Magnesium as Mg	mg/lit	63.5	≤30.0	APHA 23rd Edition 2017 3500-mg B Calculation method
10.	Chlorides as Cl	mg/lit	157	≤250	IS3025(Part-32) RA 2009 Argentometric Method
11.	*Sulphate as SO4-2	mg/lit	7.24	≤200	APHA-23rd Edition 2017-SO_4^{2-}-E
12.	Total Alkalinity	mg/lit	294	≤200	IS3025(Part-23)RA 2009
13.	*Nitrate	mg/lit	8.70	≤45.0	APHA 23rd Edition 2017 (4500 – NO_3^- B)
14.	*Iron as Fe	mg/lit	BDL	≤0.3	IS3025(Part-53)
C)	***BACTERIOLOGICAL ANALYSIS**				
15.	Coliform	MPN Index/100ml.	Absent	Absent	IS1622:1981 Reaff.2014
16.	Fecal Coliform	MPN Index/100ml	Absent	Absent	IS1622:1981 Reaff.2014
17.	E- Coli	Per 100 ml	Absent	Absent	IS1622:1981 Reaff.2014

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TEST 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-412406		**Report No**	TC724720000000223P
		Report Date	27/01/2020
		Inward No	01-201
		Inward Date	22/01/2020
Sample Detail	Well Water -Goraksh Jadhav south east	**Analysis Start date**	22/01/2020
Sample Collected By	Party	**Analysis End date**	25/01/2020
Sample Volume	2250 ml	**Sample Condition**	Fit For Analysis

Sr. No.	Parameter	Unit	Result	Desirable limits as per IS:10500, 2012	Method
A)	**PHYSICAL ANALYSIS**				
1.	Colour	Hazen	BDL	≤5.00	IS3025(Part-4)
2.	Odour	--	Unobjectionable	Unobjectionable	IS3025(Part-5)
3.	Turbidity	NTU	0.20	≤1.0	IS3025(Part-10)
4.	Conductivity	µMHOs/cm	1990	Not Specified	IS 3025 (Part 14):2013
B)	**CHEMICAL ANALYSIS**				
5.	pH @ 25°C	---	8.09	6.5 to 8.5	IS 3025 (Part 11) RA 2012 Electrometric Method
6.	Total Dissolved Solids	mg/lit	879	≤500	IS 3025 (Part 16) RA 2012
7.	Total Hardness as CaCO3	mg/lit	608	≤200	IS3025(Part-21) RA 2014 EDTA Titrimetric method
8.	Calcium as Ca	mg/lit	125	≤75.0	IS3025(Part-40) RA 2009 EDTA Method
9.	Magnesium as Mg	mg/lit	70.6	≤30.0	APHA 23rd Edition 2017 3500-mg B Calculation method
10.	Chlorides as Cl	mg/lit	152	≤250	IS3025(Part-32) RA 2009 Argentometric Method
11.	*Sulphate as SO4-2	mg/lit	7.41	≤200	APHA-23 rdEdition 2017-SO42- - E
12.	Total Alkalinity	mg/lit	242	≤200	IS3025(Part-23)RA 2009
13.	*Nitrate	mg/lit	9.44	≤45.0	APHA 23rd Edition 2017 (4500 – NO_3 B), pg no. 4-127.
14.	*Iron as Fe	mg/lit	BDL	≤0.3	IS3025(Part-53)
C)	***BACTERIOLOGICAL ANALYSIS**				
15.	Coliform	MPN Index/100ml.	Absent	Absent	IS1622:1981 Reaff.2014
16.	Fecal Coliform	MPN Index/100ml	Absent	Absent	IS1622:1981 Reaff.2014
17.	E- Coli	Per 100 ml	Absent	Absent	IS1622:1981 Reaff.2014

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TEST 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-412406

Report No	TC724720000000224P	**Sample Detail**	Borewell water -Natha Chakkar North west
Report Date	27/01/2020	**Sample Collected By**	Party
Inward No	01-202	**Sample Volume**	2250 ml
Inward Date	22/01/2020		
Analysis Start date	22/01/2020		
Analysis End date	25/01/2020		
Sample Condition	Fit For Analysis		

Sr. No.	Parameter	Unit	Result	Desirable limits as per IS:10500, 2012	Method
A)	**PHYSICAL ANALYSIS**				
1.	Colour	Hazen	BDL	≤5.00	IS3025(Part-4)
2.	Odour	--	Unobjectionable	Unobjectionable	IS3025(Part-5)
3.	Turbidity	NTU	0.50	≤1.0	IS3025(Part-10)
4.	Conductivity	µMHOs/cm	3136	Not Specified	IS 3025 (Part 14):2013
B)	**CHEMICAL ANALYSIS**				
5.	pH @ 25°C	---	7.17	6.5 to 8.5	IS 3025 (Part 11) RA 2012 Electrometric Method
6.	Total Dissolved Solids	mg/lit	1141	≤500	IS 3025 (Part 16) RA 2012
7.	Total Hardness as CaCO3	mg/lit	784	≤200	IS3025(Part-21) RA 2014 EDTA Titrimetric method
8.	Calcium as Ca	mg/lit	161	≤75.0	IS3025(Part-40) RA 2009 EDTA Method
9.	Magnesium as Mg	mg/lit	91.7	≤30.0	APHA 23rd Edition 2017 3500- mg B Calculation method
10.	Chlorides as Cl	mg/lit	355	≤250	IS3025(Part-32) RA 2009 Argentometric Method
11.	*Sulphate as SO4-2	mg/lit	7.11	≤200	APHA-23 rdEdition 2017-SO42- -E
12.	Total Alkalinity	mg/lit	326	≤200	IS3025(Part-23)RA 2009
13.	*Nitrate	mg/lit	8.79	≤45.0	APHA 23rd Edition 2017 (4500 – NO_3^- B), pg no. 4-127.
14.	*Iron as Fe	mg/lit	BDL	≤0.3	IS3025(Part-53)
C)	***BACTERIOLOGICAL ANALYSIS**				
15.	Coliform	MPN Index/100ml	Absent	Absent	IS1622:1981 Reaff.2014
16.	Fecal Coliform	MPN Index/100ml	Absent	Absent	IS1622:1981 Reaff.2014
17.	E- Coli	Per 100 ml	Absent	Absent	IS1622:1981 Reaff.2014

REMARK,OPINION & INTERPRITATION-

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Aishwarya.
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(Analyst)

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TEST 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-412406		**Report No**	TC724720000000494P
		Report Date	27/02/2020
		Inward No	02-209
		Inward Date	20/02/2020
Sample Detail	Bala saheb shingate-bore well water	**Analysis Start date**	22/02/2020
Sample Collected By	Party	**Analysis End date**	25/02/2020
Sample Volume	2250 ml	**Sample Condition**	Fit For Analysis

Sr. No.	Parameter	Unit	Result	Desirable limits as per IS:10500, 2012	Method
A)	**PHYSICAL ANALYSIS**				
1.	Colour	Hazen	BDL	≤5.00	IS3025(Part-4)
2.	Odour	--	Unobjectionable	Unobjectionable	IS3025(Part-5)
3.	Turbidity	NTU	0.7	≤1.0	IS3025(Part-10)
4.	Conductivity	µMHOs/cm	1234	Not Specified	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	844	≤500	IS 3025 (Part 16) RA 2012 Gravimetric method
7.	Total Hardness as CaCO3	mg/lit	519	≤200	IS3025(Part-21) RA 2014 EDTA Titrimetric method
8.	Calcium as Ca	mg/lit	82.3	≤75.0	IS3025(Part-40) RA 2009 EDTA Method
9.	Magnesium as Mg	mg/lit	75.3	≤30.0	APHA 23rd Edition 2017 3500-Mg B Calculation method
10.	Chlorides as Cl	mg/lit	80.0	≤250	IS3025(Part-32) RA 2009 Argentometric Method
11.	*Sulphate as SO4-2	mg/lit	25.1	≤200	APHA-23rd Edition 2017-E-SO_4^2
12.	Total Alkalinity	mg/lit	293	≤200	IS3025(Part-23)RA 2009
13.	*Nitrate	mg/lit	4.30	≤45.0	APHA 23rd Edition 20174500-B-NO_3
14.	*Iron as Fe	mg/lit	BDL	≤0.3	IS3025(Part-53)
C)	***BACTERIOLOGICAL ANALYSIS**				
15.	Coliform	MPN Index/100ml	Present	Absent	IS1622:1981 Reaff.2014
16.	Fecal Coliform	MPN Index/100ml	Present	Absent	IS1622:1981 Reaff.2014
17.	E- Coli	Per 100 ml	Present	Absent	IS1622:1981 Reaff.2014

REMARK,OPINION & INTERPRITATION-

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TEST 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-412406		**Report No**	TC724720000000493P
		Report Date	27/02/2020
		Inward No	02-208
		Inward Date	20/02/2020
Sample Detail	Bharat shete-East bore well water	**Analysis Start date**	22/02/2020
Sample Collected By	Party	**Analysis End date**	25/02/2020
Sample Volume	2250 ml	**Sample Condition**	Fit For Analysis

Sr. No.	Parameter	Unit	Result	Desirable limits as per IS:10500, 2012	Method
A)	**PHYSICAL ANALYSIS**				
1.	Colour	Hazen	BDL	≤5.00	IS3025(Part-4)
2.	Odour	--	Unobjectionable	Unobjectionable	IS3025(Part-5)
3.	Turbidity	NTU	0.6	≤1.0	IS3025(Part-10)
4.	Conductivity	µMHOs/cm	1049	Not Specified	IS 3025 (Part 14):2013
B)	**CHEMICAL ANALYSIS**				
5.	pH @ 25°C	---	7.64	6.5 to 8.5	IS 3025 (Part 11) RA 2012 Electrometric Method
6.	Total Dissolved Solids	mg/lit	673	≤500	IS 3025 (Part 16) RA 2012 Gravimetric method
7.	Total Hardness as CaCO3	mg/lit	392	≤200	IS3025(Part-21) RA 2014 EDTA Titrimetric method
8.	Calcium as Ca	mg/lit	78.4	≤75.0	IS3025(Part-40) RA 2009 EDTA Method
9.	Magnesium as Mg	mg/lit	47.0	≤30.0	APHA 23rd Edition 2017 3500-Mg B Calculation method
10.	Chlorides as Cl	mg/lit	60.0	≤250	IS3025(Part-32) RA 2009 Argentometric Method
11.	*Sulphate as SO4-2	mg/lit	4.64	≤200	APHA-23rd Edition 2017-E-SO_4^2
12.	Total Alkalinity	mg/lit	217	≤200	IS3025(Part-23)RA 2009
13.	*Nitrate	mg/lit	4.29	≤45.0	APHA 23rd Edition 20174500-B-NO_3
14.	*Iron as Fe	mg/lit	BDL	≤0.3	IS3025(Part-53)
C)	***BACTERIOLOGICAL ANALYSIS**				
15.	Coliform	MPN Index/100ml	Present	Absent	IS1622:1981 Reaff.2014
16.	Fecal Coliform	MPN Index/100ml	Present	Absent	IS1622:1981 Reaff.2014
17.	E- Coli	Per 100 ml	Present	Absent	IS1622:1981 Reaff.2014

REMARK,OPINION & INTERPRITATION-

- **As per Specified above analysis water sample is not potable.**
- **Sample will be preserve for seven days after analysis.**
- **Above analysis results are related to its testing.**
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- **The parameter marked with an * are not accredited by NABL.**
- **BDL- Below Detectable Limit**

Verified by
(Analyst)

Authorized Signatory

...End of test report...

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- ISO 9001:2015, OHSAS 18001:2007 Certified Organization

TEST 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-412406		Report No	TC724720000000490P
		Report Date	27/02/2020
		Inward No	02-205
		Inward Date	20/02/2020
Sample Detail	Sunil Changan- West Well Water	Analysis Start date	22/02/2020
Sample Collected By	Party	Analysis End date	25/02/2020
Sample Volume	2250 ml	Sample Condition	Fit For Analysis

Sr. No.	Parameter	Unit	Result	Desirable limits as per IS:10500, 2012	Method
A)	PHYSICAL ANALYSIS				
1.	Colour	Hazen	BDL	≤5.00	IS3025(Part-4)
2.	Odour	--	Unobjectionable	Unobjectionable	IS3025(Part-5)
3.	Turbidity	NTU	0.8	≤1.0	IS3025(Part-10)
4.	Conductivity	µMHOs/cm	1703	Not Specified	IS 3025 (Part 14):2013
B)	CHEMICAL ANALYSIS				
5.	pH @ 25°C	---	8.60	6.5 to 8.5	IS 3025 (Part 11) RA 2012 Electrometric Method
6.	Total Dissolved Solids	mg/lit	934	≤500	IS 3025 (Part 16) RA 2012 Gravimetric method
7.	Total Hardness as CaCO3	mg/lit	333	≤200	IS3025(Part-21) RA 2014 EDTA Titrimetric method
8.	Calcium as Ca	mg/lit	62.7	≤75.0	IS3025(Part-40) RA 2009 EDTA Method
9.	Magnesium as Mg	mg/lit	42.3	≤30.0	APHA 23rd Edition 2017 3500-Mg B Calculation method
10.	Chlorides as Cl	mg/lit	135	≤250	IS3025(Part-32) RA 2009 Argentometric Method
11.	*Sulphate as SO4-2	mg/lit	4.94	≤200	APHA-23rd Edition 2017-E-SO_4^2
12.	Total Alkalinity	mg/lit	553	≤200	IS3025(Part-23)RA 2009
13.	*Nitrate	mg/lit	3.72	≤45.0	APHA 23rd Edition 20174500-B-NO_3
14.	*Iron as Fe	mg/lit	BDL	≤0.3	IS3025(Part-53)
C)	*BACTERIOLOGICAL ANALYSIS				
15.	Coliform	MPN Index/100ml	Present	Absent	IS1622:1981 Reaff.2014
16.	Fecal Coliform	MPN Index/100ml	Present	Absent	IS1622:1981 Reaff.2014
17.	E- Coli	Per 100 ml	Present	Absent	IS1622:1981 Reaff.2014

REMARK,OPINION & INTERPRITATION-

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- **Sample will be preserve for seven days after analysis.**
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Verified by
(Analyst)

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TEST 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-412406		Report No	TC724720000000491P
		Report Date	27/02/2020
		Inward No	02-206
		Inward Date	20/02/2020
Sample Detail	Ashok Jadhav-South well water	Analysis Start date	22/02/2020
Sample Collected By	Party	Analysis End date	25/02/2020
Sample Volume	2250 ml	Sample Condition	Fit For Analysis

Sr. No.	Parameter	Unit	Result	Desirable limits as per IS:10500, 2012	Method
A)	**PHYSICAL ANALYSIS**				
1.	Colour	Hazen	BDL	≤5.00	IS3025(Part-4)
2.	Odour	--	Unobjectionable	Unobjectionable	IS3025(Part-5)
3.	Turbidity	NTU	0.4	≤1.0	IS3025(Part-10)
4.	Conductivity	µMHOs/cm	816	Not Specified	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	605	≤500	IS 3025 (Part 16) RA 2012 Gravimetric method
7.	Total Hardness as CaCO3	mg/lit	317	≤200	IS3025(Part-21) RA 2014 EDTA Titrimetric method
8.	Calcium as Ca	mg/lit	65.8	≤75.0	IS3025(Part-40) RA 2009 EDTA Method
9.	Magnesium as Mg	mg/lit	36.7	≤30.0	APHA 23rd Edition 2017 3500-Mg B Calculation method
10.	Chlorides as Cl	mg/lit	50.0	≤250	IS3025(Part-32) RA 2009 Argentometric Method
11.	*Sulphate as SO4-2	mg/lit	4.57	≤200	APHA-23rd Edition 2017-E-SO_4^2
12.	Total Alkalinity	mg/lit	286	≤200	IS3025(Part-23)RA 2009
13.	*Nitrate	mg/lit	3.70	≤45.0	APHA 23rd Edition 20174500-B-NO_3
14.	*Iron as Fe	mg/lit	BDL	≤0.3	IS3025(Part-53)
C)	***BACTERIOLOGICAL ANALYSIS**				
15.	Coliform	MPN Index/100ml	Present	Absent	IS1622:1981 Reaff.2014
16.	Fecal Coliform	MPN Index/100ml	Present	Absent	IS1622:1981 Reaff.2014
17.	E- Coli	Per 100 ml	Present	Absent	IS1622:1981 Reaff.2014

REMARK,OPINION & INTERPRITATION-

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Verified by
(Analyst)

Authorized Signatory

...End of test report...

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TEST 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-412406		**Report No**	TC724720000000492P
		Report Date	27/02/2020
		Inward No	02-207
		Inward Date	20/02/2020
Sample Detail	Mahadu Chakkar-North bore well water	**Analysis Start date**	22/02/2020
Sample Collected By	Party	**Analysis End date**	25/02/2020
Sample Volume	2250 ml	**Sample Condition**	Fit For Analysis

Sr. No.	Parameter	Unit	Result	Desirable limits as per IS:10500, 2012	Method
A)	**PHYSICAL ANALYSIS**				
1.	Colour	Hazen	BDL	≤5.00	IS3025(Part-4)
2.	Odour	--	Unobjectionable	Unobjectionable	IS3025(Part-5)
3.	Turbidity	NTU	0.8	≤1.0	IS3025(Part-10)
4.	Conductivity	µMHOs/cm	1760	Not Specified	IS 3025 (Part 14):2013
B)	**CHEMICAL ANALYSIS**				
5.	pH @ 25°C	---	7.16	6.5 to 8.5	IS 3025 (Part 11) RA 2012 Electrometric Method
6.	Total Dissolved Solids	mg/lit	917	≤500	IS 3025 (Part 16) RA 2012 Gravimetric method
7.	Total Hardness as CaCO3	mg/lit	510	≤200	IS3025(Part-21) RA 2014 EDTA Titrimetric method
8.	Calcium as Ca	mg/lit	106	≤75.0	IS3025(Part-40) RA 2009 EDTA Method
9.	Magnesium as Mg	mg/lit	58.8	≤30.0	APHA 23rd Edition 2017 3500-Mg B Calculation method
10.	Chlorides as Cl	mg/lit	265	≤250	IS3025(Part-32) RA 2009 Argentometric Method
11.	*Sulphate as SO4-2	mg/lit	4.82	≤200	APHA-23rd Edition 2017-E-SO_4^2
12.	Total Alkalinity	mg/lit	358	≤200	IS3025(Part-23)RA 2009
13.	*Nitrate	mg/lit	3.83	≤45.0	APHA 23rd Edition 20174500-B-NO_3
14.	*Iron as Fe	mg/lit	BDL	≤0.3	IS3025(Part-53)
C)	***BACTERIOLOGICAL ANALYSIS**				
15.	Coliform	MPN Index/100ml	Present	Absent	IS1622:1981 Reaff.2014
16.	Fecal Coliform	MPN Index/100ml	Present	Absent	IS1622:1981 Reaff.2014
17.	E- Coli	Per 100 ml	Present	Absent	IS1622:1981 Reaff.2014

REMARK,OPINION & INTERPRITATION-

- **As per Specified above analysis water sample is not potable.**
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- **Above analysis results are related to its testing.**
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Verified by
(Analyst)

Authorized Signatory

...End of test report...

Ann-VII

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AMBIENT & WORK ZONE NOISE LEVEL MONITORING REPORT.			
Inward No : AL/TR/AM/52-978/19-20		Report No. Al/6-492/09/19-20	
Name of Client	**M/s. Bhima Sahankar Sahakari Sakhar Karkhana Ltd.** Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon, Dist. – Pune-412 406		
Sample type	**Noise**		
Sample Collected By	Akanksha Analytical and Research Lab		
Date of Sampling	14/12/2019	Date of Report	23/12/2019

Sr. No.	Test Location	Reading	Unit	Limits in day time
1	Near Guest House	65.2	dB(A)	≤ 75 As per MPCB Standard
2	Near Sugar House	80.2	dB(A)	≤ 90 As per Factory Act. 1948
3	Near Boiling House	82.9	dB(A)	
4	Near Mill Section	83.5	dB(A)	
5	Near Boiler Section	78.1	dB(A)	

REMARK / OBSERVATIONS:

- All above results are within limits prescribed in the MPCB Consent & Factories Act, 1948 Standards

For **AKANKSHA ANALYTICAL & RESEARCH LAB**

Authorized Signatory

Aishwarya
Chemist

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

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AMBIENT & WORK ZONE NOISE LEVEL MONITORING REPORT			Page 1 of 1
NAME OF COMPANY:- **M/s. Bhima Sahankar Sahakari Sakhar Karkhana Ltd.** Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon,Dist. – Pune-412 406		**Report No**	AL/TR/53-779/19-20
		Report Date	29/01/2020
		Inward No	AL/6-565/09/19-20
		Inward Date	21/01/2020
Sample Location	Company Premises	**Sampling Time**	01:00 Pm To 01:50 Pm
Sample Collected By	AARL	**Time duration**	50 Min

SR. NO	LOCATIONS	UNIT	RESULT DAY TIME	LIMITS	METHOD
1.	Near New Boiler Area	dB(A)	71.3	≤ 75 dB(A)	IS 4758-1968 (PART 10) RA 2002
2.	College /Colony Area	dB(A)	48.2		
3.	Mill Section Near Fibriser	dB(A)	87.2	≤ 90 dB(A)	IS 9989-1981 (RA 2001)
4.	Centry – Fugal Section	dB(A)	85.6		
5.	Sugar house	dB(A)	82.8		

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 Sahankar Sahakari Sakhar Karkhana Ltd.** Dattatraynagar, Pargaon, Village-Awasari Bk., Tal. - Ambegaon,Dist. – Pune-412 406		**Report No**	AL/TR/54-306/19-20
		Report Date	27/02/2020
		Inward No	AL/6-606/09/19-20
		Inward Date	20/02/2020
Sample Location	Company Premises	**Sampling Time**	03:05 PM To 03:35 PM
Sample Collected By	AARL	**Time duration**	30 Min

SR. NO	LOCATIONS	UNIT	RESULT DAY TIME	LIMITS	METHOD
A.	**Outside of Shop**				
1.	Near Khandoba Mandir	dB(A)	64.2	≤ 75 dB(A)	IS 4758-1968 (PART 10) RA 2002
2.	Near College	dB(A)	65.7		
B.	**Inside of Shop**				
3.	Sugar Godaun	dB(A)	67.2	≤ 90 dB(A)	IS 9989-1981 (RA 2001)
4.	Pan Section	dB(A)	70.3		
5.	New Boiler Section	dB(A)	82.2		
6.	Near mill House	dB(A)	72.4		

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...

Ann-VIII-1

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/ ९६९/२०१९ - 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 सहकारी साखर कारखाना परिसरात व सभोवताली १९.५३ हे.क्षेत्रात ६५०२ वृक्ष लागवड केलेल्या सोबत दर्शविलेल्या यादीतील फळझाडे इ.आंबा,नारळ,चिक्कू,जांभुळ,सीताफळ,आवळा,फणस इ.वृक्षामधील सरासरी अंतर ९- ते १० मी असून इतर प्रजातीतील ३ ते ४ मी. आहे.

तसेच शोभेच्या झाडातील अंतर २ ते ३ मी. आहे.लागवड केलेल्या वृक्षातील अंतर योग्य आहे.

(योगेश एस.महाजन)
वनपरिक्षेत्र अधिकारी
मंचर.

वनपरिक्षेत्र अधिकारी मंचर, ता.आंबेगाव, जि.पुणे.

जाक्र/ताकृअ/ विस्तार/३९१/२०१९
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 लावुन 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 असलेचे प्रमाणितर करणेत येत आहे.

तालुका कृषि अधिकारी
आंबेगाव (घोडेगाव) जि.पुणे

भीमाशंकर सहकारी साखर कारखाना लि., दत्तात्रयनगर

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

झाडांची नावे व अंतर तपशिल

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 (पुर्वीची)	२०१८-१९	२०१९-२०	आज अखेर एकूण			
१	नारळ	१७०	०	०	१७०	5 X 5	२५	०.४३
२	आंबा	१९	१०५	५५	१७९	10 X 10	१००	१.७९
३	चिक्कु	५८	०	०	५८	9 X 9	८१	०.४७
४	आवळा	३	५	०	८	6 X 6	३६	०.०३
५	फणस	७	०	०	७	8 X 8	६४	०.०४
६	कागदी लिंबू	२२	०	०	२२	5 X 5	२५	०.०६
७	सिताफळ	१३९	०	०	१३९	4 X 4	१६	०.२२
८	पेरु	२९	०	०	२९	6 X 6	३६	०.१०
९	जांभुळ	२८	०	२५	५३	6 X 6	३६	०.१९
१०	चिंच	७	४०	६५०	६९७	8 X 8	६४	४.४६
११	डाळींब	५	०	०	५	4 X 4	१६	०.०१
१२	कौठ	६	०	०	६	6 X 6	३६	०.०२
१३	बोर	११	०	०	११	4 X 4	१६	०.०२
१४	गुलमोहर	२३	५०	०	७३	8 X 8	६४	०.४७
१५	रेनट्री	१६	११०	०	१२६	8 X 8	६४	०.८१
१६	बॉटल पाम	२४१	२२	५०	३१३	5 X 5	२५	०.७८
१७	फिलोशिया पाम	१४	३	०	१७	5 X 5	२५	०.०४
१८	सप्तपर्णी	५२	४८	०	१००	8 X 8	६४	०.६४
१९	पित्त मोहर	१७	५६	०	७३	8 X 8	६४	०.४७
२०	वड	१२०	६	०	१२६	10 X 10	१००	१.२६
२१	अर्जुन	२९	२०	०	४९	8 X 8	६४	०.३१
२२	सिल्वर ओक	६	०	०	६	5 X 5	२५	०.०२
२३	काशिद	३५	३५	१०५	१७५	8 X 8	६४	१.१२
२४	सिसम	१२५	२०	०	१४५	8 X 8	६४	०.९३
२५	पिंपळ	१७	०	०	१७	8 X 8	६४	०.११
२६	फायकस	०	५०	०	५०	4 X 4	१६	०.०८
२७	बांबू	१२	०	०	१२	4 X 4	१६	०.०२
२८	करंज	३३	०	९०	१२३	8 X 8	६४	०.७९
२९	बॉटल ब्रश	१९	०	०	१९	4 X 4	१६	०.०३
३०	कडूलिंब	२००	०	९५	२९५	6 X 6	३६	१.०६
३१	बदाम	३०	०	०	३०	6 X 6	३६	०.११
३२	सुरु	३१	०	०	३१	6 X 6	३६	०.११
३३	अशोक	९९	०	०	९९	4 X 4	१६	०.१६
३४	स्पॅथोडिया	६	०	०	६	8 X 8	६४	०.०४
३५	कांचन (आपटा)	३९	०	१००	१३९	8 X 8	६४	०.८९
३६	सोनचाफा	५	०	०	५	4 X 4	१६	०.०१
३७	पांढरा चाफा	२१	०	०	२१	4 X 4	१६	०.०३
३८	उंबर	११	०	०	११	8 X 8	६४	०.०७
३९	निलगिरी	३४	०	०	३४	3 X 3	९	०.०३
४०	रामफळ	१४	०	०	१४	5 X 5	२५	०.०४
४१	सुबाभळ	२१३	०	०	२१३	4 X 4	१६	०.३४
४२	शेवगा	१४	०	०	१४	3 X 3	९	०.०१
४३	अंजीर	२	०	०	२			
४४	पांगारा	३	०	०	३			
४५	चंदनी	७	०	०	७	4 X 4	१६	०.०१
४६	भेंडी	४	०	०	४	3 X 3	९	०.००
४७	बाभुळ	६४	०	०	६४	6 X 6	३६	०.२३
४८	भोकर	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 (पुर्वीची)	२०१८-१९	२०१९-२०	आज अखेर एकूण			
४९	पपई	८	०	०	८	3 X 3	९	०.०१
५०	बेल	३	०	०	३	6 X 6	३६	०.०१
५१	शेवरी	१२	०	०	१२	4 X 4	१६	०.०२
५२	देवदार	२७	०	०	२७	8 X 8	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	2 X 2	४	०.०१
५८	सायर	५	०	०	५			
५९	करवंद	२	०	०	२			
६०	हिरडा	०	०	२५	२५	5 X 5	२५	०.०६
	एकूण	**२१६३**	**५७०**	**११९५**	**३९२८**			**१९.१४**
	वुशेस							
६१	जास्वंद	२८	०	०	२८	2 X 2	४	०.०१
६२	तगर पांढरा	७१	०	०	७१	2 X 2	४	०.०३
६३	बोगन वेल	४०२	०	०	४०२	2 X 2	४	०.१६
६४	मोरपंखी	१३	०	०	१३	2 X 2	४	०.०१
६५	रातराणी	३	०	०	३			
६६	प्राजक्ता	२	०	०	२			
६७	ख्रिसमस	२	०	०	२			
	एकूण	५२१	०	०	५२१			०.२१
	फुलझाडे/ शोभेची झाडे							
६८	गुलाब	८८	०	०	८८	2 X 1.5	३	०.०३
६९	लिली	४३	०	०	४३	2 X 1.5	३	०.०१
७०	क्रोटॉन	५०	०	०	५०	2 X 1.5	३	०.०२
७१	गोल्डन डोरांटा	५३८	०	०	५३८	1.5 X 1.5	०	०.००
७२	लॅन्टीना व्हेरीगेटेड	८५	०	०	८५	1.5 X 1.5	२.२५	०.०२
७३	क्रिपरवडेलिया	१००	०	०	१००			
७४	हिमेलिया	६३	०	०	६३	1.5 X 1.5	२.२५	०.०१
७५	मोगरा	१२	०	०	१२	1 X 1	१	०.००
७६	आबोली	३	०	०	३			
७७	कॅलेंडरा	२१२	०	०	२१२	1 X 1	१	०.०२
७८	ॲकॅलीफा	२३०	०	०	२३०	1 X 1	१	०.०२
७९	डबल तगर	५८	०	०	५८	1 X 1	१	०.०१
८०	ॲलॅमेंडा	४१	०	०	४१	1 X 1	१	०.००
८१	साबंर कांडी	३०	०	०	३०	1 X 1	१	०.००
८२	रेबीन ग्रास	७५	०	०	७५	1 X 1	१	०.०१
८३	मंकी ग्रास	२५	०	०	२५			
८४	केना	५०	०	०	५०			
८५	एक्यालिफा	३५०	०	०	३५०	1 X 1	१	०.०४
	एकूण	२०५३	०	०	२०५३			०.१९
	एकूण एकंदर	४७३७	५७०	११९५	६५०२			१९.५३

वनक्षेत्रपाल विकास अधिकारी

मुख्य शेतकी अधिकारी

कार्यकारी संचालक

तालुका कृषि अधिकारी
आंबेगाव (घोडेगाव), जि.पुणे

Ann.IX B

AKANKSHA ANALYTICAL & RESEARCH LAB

- Recognized by Ministry of Environment Forest and Climate Change (MoEFCC), New Delhi
- Accredited by "NABL" as per ISO/IEC 17025:2005
- Authorized by "AGMARK"
- ISO 9001:2015, OHSAS 18001:2007 Certified Organization

TEST 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-412406		**Report No**	TC724719000002278P
		Report Date	23/12/2019
		Inward No	12-125
		Inward Date	16/12/2019
Sample Detail	ETP Outlet	**Analysis Start date**	17/12/2019
Sample Collected By	Party	**Analysis End date**	19/12/2019
Sample Volume	3000 ml	**Sample Condition**	Fit For Analysis

Sr. No.	Parameter	Unit	Result	Limits as per MPCB Norms	Method
1.	pH@27⁰ C	-----	7.59	5.5 to 9.0	IS 3025 (Part 11) RA 2012 Electometric method
2.	Total Suspended Solids	mg/lit.	29.0	100 Max.	IS 3025 (Part 17) RA 2012
3.	Total Dissolved Solids	mg/lit.	822	2100 Max.	IS 3025 (Part 16) RA 2012
4.	COD	mg/lit.	102	250 Max.	IS 3025 (Part 58) RA 2012 Open Reflux Method
5.	BOD @27⁰ C For 3 Days	mg/lit.	34.0	100 Max.	IS 3025 (Part 44) RA 2014 Azide Modification Method
6.	Chlorides	mg/lit.	109	600 Max.	IS 3025 (Part 40) RA 2009 Argentometric method
7.	*Sulphate	mg/lit.	2.86	1000 Max.	APHA-23rd Edition 2017 4500-SO_4^{2-} -E,
8.	Oil & Grease	mg/lit.	BDL	10 Max.	IS 3025 (Part 11) RA 2012 Electometric method

REMARK,OPINION & INTERPRITATION-

- **The above analysis water sample is within the prescribed limits.**
- **Sample will be preserve for seven days after analysis.**
- **Above analysis results are related to its testing.**
- **The contents of this test report shall not be reproduced in part or without written approval of lab incharge.**
- **The parameter marked with an * are not accredited by NABL.**
- **BDL-Below Detectable Limit.**

Verified by
(Analyst)

Authorized Signatory

...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 | **Email :** akankshalab2007@gmail.com

AKANKSHA ANALYTICAL & RESEARCH LAB

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- ISO 9001:2015, OHSAS 18001:2007 Certified Organization

TEST 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-412406		**Report No**	TC724720000000498P
		Report Date	27/02/2020
		Inward No	02-213
		Inward Date	20/02/2020
Sample Detail	ETP Final Outlet	**Analysis Start date**	22/02/2020
Sample Collected By	Party	**Analysis End date**	25/02/2020
Sample Volume	3000 ml	**Sample Condition**	Fit For Analysis

Sr. No.	Parameter	Unit	Result	Limits as per MPCB Norms	Method
1.	pH@25⁰ C	-----	7.65	5.5 to 9.0	IS 3025 (Part 11) RA 2012 Electrometric method
2.	Total Suspended Solids	mg/lit.	54.0	≤100	IS 3025 (Part 17) RA 2012 Gravimetric method
3.	Total Dissolved Solids	mg/lit.	1228	≤2100	IS 3025 (Part 16) RA 2012 Gravimetric method
4.	COD	mg/lit.	131	≤250	IS 3025 (Part 58) RA 2012 Open Reflux Method
5.	BOD @27⁰ C For 3 Days	mg/lit.	43.0	≤100	IS 3025 (Part 44) RA 2014 Azide Modification Method
6.	Chlorides	mg/lit.	60.0	≤600	IS 3025 (Part 32) RA 2009 Argentometric method
7.	*Sulphate	mg/lit.	5.35	≤1000	APHA-23rd Edition 2017 4500-E-SO_4^2
8.	Oil & Grease	mg/lit.	BDL	≤10.0	APHA 23rd Edition 2017 5520 B

REMARK,OPINION & INTERPRITATION-

- **The above analysis water sample is within the prescribed limits.**
- **Sample will be preserve for seven days after analysis.**
- **Above analysis results are related to its testing.**
- **The contents of this test report shall not be reproduced in part or without written approval of lab incharge.**
- **The parameter marked with an * are not accredited by NABL.**
- **BDL-Below Detectable Limit.**

Verified by
(Analyst)

Authorized Signatory

...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 | **Email :** akankshalab2007@gmail.com

Ann. VII

EnviroConnect Forbes Marshall Multi Station Report

From Date	01/11/2019 00:00
To Date	30/11/2019 23:59
Interval	Daily
Function	Average

Plant	BSSK	BSSK	BSSK	BSSK
Analyzer	ETP1	ETP1	ETP1	ETP1
Parameter	BOD	COD	pH	TSS
Unit	mg/l	mg/l	pH	mg/l
Limit	0.00 - 100.00	0.00 - 250.00	5.50 - 9.00	0.00 - 100.00
20/11/2019 00:00	8.13 <	12.71 <	5.54 <	0 <
21/11/2019 00:00	8.16 <	12.71 <	5.53 <	0 <
22/11/2019 00:00	8.18 <	12.72 <	5.53 <	0 <
23/11/2019 00:00	8.18 <	12.7 <	5.53 <	0 <
24/11/2019 00:00	12.88 <	22.24 <	5.83 < L	0.45 <
25/11/2019 00:00	12.56 <	21.6 <	6.52 < L	0.69 <
26/11/2019 00:00	6.91 <	10.25 <	5.76 < LH	18.66 < H
27/11/2019 00:00	8.18 <	13.1 <	5.81 < L	0.87 <
28/11/2019 00:00	0 <	0 <	0 < L	0 <
Average	8.1	13.1	5.1	2.3
Geom.Mean	8.9	14.2	5.7	1.5
Maximum	12.9	22.2	6.5	18.7
Median	8.2	12.7	5.5	0
Minimum	0	0	0	0
Mode	0	0	0	0
Std.Deviation	3.7	6.5	1.9	6.1
Total Active Duration				

EnviroConnect Forbes Marshall Multi Station Report

From Date 01/12/2019 00:00
To Date 31/12/2019 23:59
Interval Daily
Function Average

Plant	BSSK	BSSK	BSSK	BSSK
Analyzer	ETP1	ETP1	ETP1	ETP1
Parameter	BOD	COD	pH	TSS
Unit	mg/l	mg/l	pH	mg/l
Limit	0.00 - 100.00	0.00 - 250.00	5.50 - 9.00	0.00 - 100.(
03/12/2019 00:00	25.28 <	46.86 <	6.42 < HL	1.7
04/12/2019 00:00	35.19 <	66.4 <	5.25 < L	2.87
05/12/2019 00:00	35.12 <	66.25 <	7.85 <	4.17
06/12/2019 00:00	35.13	66.28	7.86	4.18
07/12/2019 00:00	35.12	66.24	7.85	4.17
08/12/2019 00:00	35.12 <	66.22 <	7.85 <	4.17
09/12/2019 00:00	35.12 <	66.24 <	7.85 <	4.16
10/12/2019 00:00	35.12 <	66.25 <	7.85 <	4.16
11/12/2019 00:00	35.12	66.25	7.85	4.16
12/12/2019 00:00	35.12	66.25	7.86	4.16
13/12/2019 00:00	35.12 <	66.21 <	7.85 <	4.14
14/12/2019 00:00	35.12	66.2	7.85	4.16
15/12/2019 00:00	35.12 <	66.2 <	7.85 <	4.15
16/12/2019 00:00	35.13 <	66.23 <	7.85 <	4.15
17/12/2019 00:00	35.12 <	66.22 <	7.85 <	4.14
18/12/2019 00:00	35.12 <	66.21 <	7.85 <	4.13
19/12/2019 00:00	35.12 <	66.2 <	7.85 <	4.12
20/12/2019 00:00	35.12 <	66.2 <	7.85 <	4.13
21/12/2019 00:00	35.12 <	66.21 <	7.85 <	4.12
22/12/2019 00:00	35.12 <	66.21 <	7.85 <	4.12
23/12/2019 00:00	35.13	66.24	7.85	4.12
24/12/2019 00:00	35.14	66.27	7.86	4.13
25/12/2019 00:00	34.64	65.23	7.41 L	24.62
26/12/2019 00:00	34.45	64.84	6.96	28.64
27/12/2019 00:00	35.82	67.67	7.34	32.86
28/12/2019 00:00	31.38	58.63	7.22	35.19
30/12/2019 00:00	29.69 <	54.94 <	7.89 <	8.12
31/12/2019 00:00	30.18	55.91	7.41	9.7
Average	34.3	64.5	7.6	8.1
Geom.Mean	34.2	64.3	7.6	5.6
Maximum	35.8	67.7	7.9	35.2
Median	35.1	66.2	7.9	4.2
Minimum	25.3	46.9	5.2	1.7
Mode	34.5	66.2	7.9	4.2
Std.Deviation	2.3	4.7	0.6	9.5
Total Active Duration				

EnviroConnect Forbes Marshall Multi Station Report

From Date 01/01/2020 00:00
To Date 31/01/2020 23:59
Interval Daily
Function Average

Plant	BSSK	BSSK	BSSK	BSSK
Analyzer	ETP1	ETP1	ETP1	ETP1
Parameter	pH	COD	TSS	BOD
Unit	pH	mg/l	mg/l	mg/l
Limit	5.50 - 9.00	0.00 - 250.00	0.00 - 100.00	0.00 - 100.(
01/01/2020 00:00	7.18	58.4	8.69	31.39
02/01/2020 00:00	7.24 <	66.53 <	22.83 <	35.33
03/01/2020 00:00	7.09 <	75.1 <	52.76 < B	39.43
04/01/2020 00:00	7.7 <	44.97 <	18.61 <	24.92
05/01/2020 00:00	7.51 <	55.77 <	16.45 <	29.96
06/01/2020 00:00	7.56	54.68	38.43 BH	29.39
07/01/2020 00:00	6.68	34.31	11.23	19.05
08/01/2020 00:00	6.22 < L	48.54 <	10.97 <	26.35
09/01/2020 00:00	6.91	47.39	14.56 BH	25.7
10/01/2020 00:00	7.06	53.3	10.68	28.87
11/01/2020 00:00	7.09	68.31	11.46	36.16
12/01/2020 00:00	7.11	80.76	10.88	42.23
13/01/2020 00:00	6.74 <	84.43 <	15.18 <	44.08
14/01/2020 00:00	6.44 <	68.91 <	11.78 <	36.35
15/01/2020 00:00	8.01 <	56.2 <	10.52 <	30.31
16/01/2020 00:00	8	48.27	11.92	26.18
17/01/2020 00:00	7.95	42.91	9.88	23.33
18/01/2020 00:00	7.86 L	53.16	25.24 BH	28.67
19/01/2020 00:00	7.66	75.31	20.48 B	39.59
20/01/2020 00:00	7.55	84.54	27.87 B	44.21
21/01/2020 00:00	7.64	61.47 B	19.88 B	32.72
22/01/2020 00:00	7.74	36.63	43.75 HB	20.16
23/01/2020 00:00	8.08	40.46	24.6 HB	22.06
24/01/2020 00:00	7.89	47.32	59.69 HB	25.52
25/01/2020 00:00	7.94	51.55	39.69	27.99
26/01/2020 00:00	7.99	59.26 B	45.63 B	30.03
27/01/2020 00:00	8.14	50.98	49.16 B	27.69
28/01/2020 00:00	7.91	46.62	40.78	25.32
29/01/2020 00:00	7.59	45.38	39.89	24.63
30/01/2020 00:00	7.91	43.05	37.95	23.43
31/01/2020 00:00	7.97	42.98	59.04 B	23.47
Average	7.5	55.7	26.5	29.8
Geom.Mean	7.5	54.2	22	29.1
Maximum	8.1	84.5	59.7	44.2
Median	7.6	53.2	20.5	28.7
Minimum	6.2	34.3	8.7	19.1
Mode	7.7	56.2	59	30
Std.Deviation	0.5	13.8	16.2	6.9

EnviroConnect Forbes Marshall Multi Station Report

From Date	01/02/2020 00:00
To Date	29/02/2020 23:59
Interval	Daily
Function	Average

Plant	BSSK	BSSK	BSSK	BSSK
Analyzer	ETP1	ETP1	ETP1	ETP1
Parameter	pH	COD	TSS	BOD
Unit	pH	mg/l	mg/l	mg/l
Limit	5.50 - 9.00	0.00 - 250.00	0.00 - 100.0(	0.00 - 100.00
01/02/2020 00:00	7.91	41.37	38.43 E	22.56
02/02/2020 00:00	8.1	40.36	36.73	22.02
03/02/2020 00:00	8.64	40.04	36.28	21.86
04/02/2020 00:00	8.03	39.86	45.5 E	21.75
05/02/2020 00:00	8.05 <	39.16 <	34.07 <	21.42 <
06/02/2020 00:00	6.65 <	38.72 <	35.91 <	21.18 <
11/02/2020 00:00	6.66 <	38.67 <	49.25 <	21.1 <
12/02/2020 00:00	7.9 <	34.08 <	42.53 <	18.76 <
14/02/2020 00:00	8.1 <	33.89 <	45.01 <	18.46 <
17/02/2020 00:00	7.55 <	33.46 <	56.56 <	18.43 <
18/02/2020 00:00	7.71 <	34.47 <	43.44 <	18.95 <
19/02/2020 00:00	7.61 <	34.5 <	50.74 <	18.98 <
20/02/2020 00:00	7.62 <	35.07 <	46.98 <	19.24 <
21/02/2020 00:00	7.48 <	34.56 <	55.06 <	18.99 <
22/02/2020 00:00	7.66 <	36.02 <	52.3 <	19.8 <
23/02/2020 00:00	7.57 <	35.4 <	59.55 <	19.41 <
24/02/2020 00:00	7.72 <	34.89 <	46.03 <	19.17 <
25/02/2020 00:00	7.76 <	34.63 <	45.14 <	19.07 <
28/02/2020 00:00	6.32 <	33.8 <	37.71 <	18.6 <
29/02/2020 00:00	7.07 <	34.75 <	19.24 <	19.1 <
Average	7.6	36.4	43.8	19.9
Geom.Mean	7.6	36.3	42.7	19.9
Maximum	8.6	41.4	59.5	22.6
Median	7.7	35	45.1	19.2
Minimum	6.3	33.5	19.2	18.4
Mode	8.1	39.2	37.7	19
Std.Deviation	0.6	2.6	9.3	1.4
Total Active Duration				

EnviroConnect Forbes Marshall Multi Station Report

From Date 01/03/2020 00:00
To Date 31/03/2020 23:59
Interval Daily
Function Average

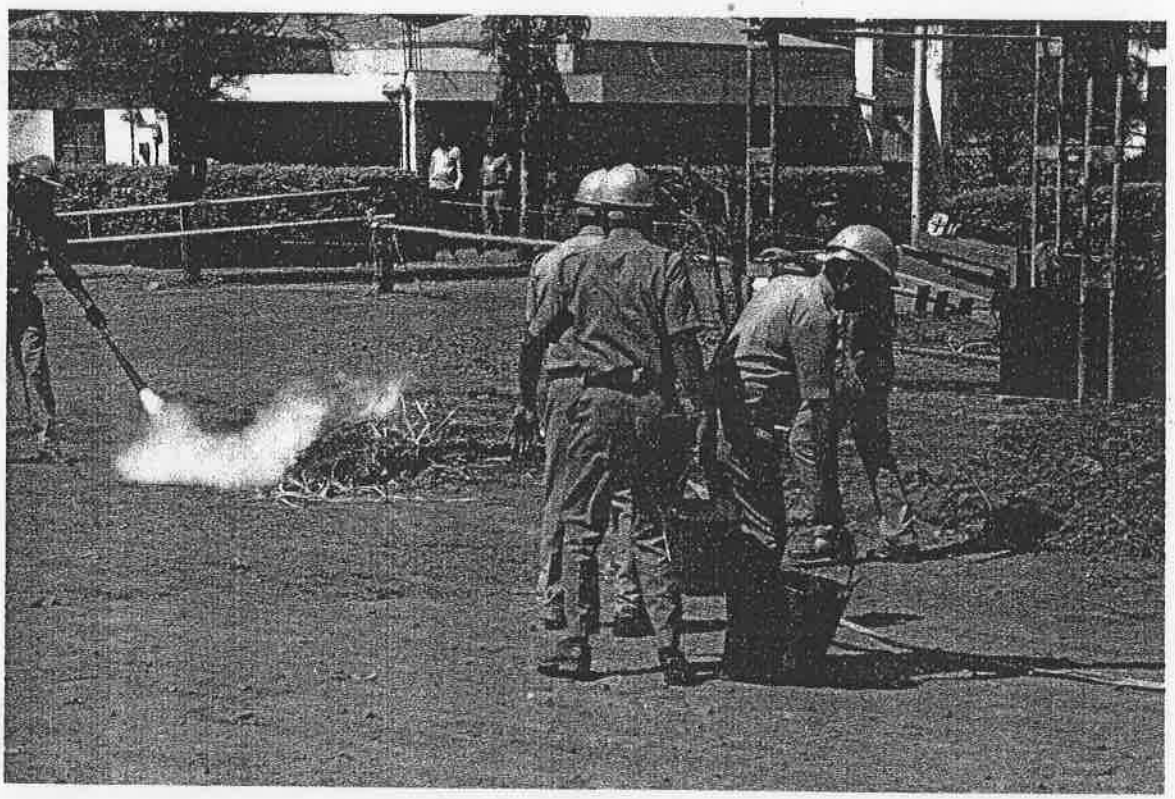
Plant	BSSK	BSSK	BSSK	BSSK
Analyzer	ETP1	ETP1	ETP1	ETP1
Parameter	pH	COD	TSS	BOD
Unit	pH	mg/l	mg/l	mg/l
Limit	5.50 - 9.00	0.00 - 250.00	0.00 - 100.00	0.00 - 100.00
01/03/2020 00:00	7.91	35.39	22.38	19.41
02/03/2020 00:00	7.64	35.86	22.67	19.68
03/03/2020 00:00	7.8 <	35.23 <	20.12 <	19.37 <
04/03/2020 00:00	8.28	35.41	21.26	19.45
05/03/2020 00:00	7.88	35.25	21.59	19.36
06/03/2020 00:00	7.88	35	21.29	19.25
07/03/2020 00:00	7.93	35.22	23.13	19.35
08/03/2020 00:00	7.9	35.44	23.46	19.47
09/03/2020 00:00	7.92	35.88	23.29	19.7
10/03/2020 00:00	7.98	37.04	23.43	20.3
11/03/2020 00:00	8.04	36.86	23.2	20.21
12/03/2020 00:00	8.11 <	36.09 <	21.7 <	19.84 <
13/03/2020 00:00	8.03 <	36.56 <	26.4 <	20.04 <
14/03/2020 00:00	8.08 <	36.7 <	26.18 <	20.12 <
15/03/2020 00:00	7.76 <	37.32 <	27.24 <	20.42 <
16/03/2020 00:00	7.83 <	38.14 <	26.74 <	20.89 <
17/03/2020 00:00	8.69 < HE	38.52 < D	27.07 < D	21.08 < D
18/03/2020 00:00	8.07	38.79	27.65	21.19
19/03/2020 00:00	8.28 H	38.44	25.62	21.03
20/03/2020 00:00	7.97 <	38.66 <	26.5 <	21.15 <
21/03/2020 00:00	8.24 <	38.99 <	28.35 <	21.3 <
22/03/2020 00:00	8.5 <	39.38 <	32.25 <	21.49 <
23/03/2020 00:00	8.5 <	39.31 <	32.19 <	21.47 <
24/03/2020 00:00	8.51 <	39.41 <	32.27 <	21.51 <
25/03/2020 00:00	8.5 <	39.33 <	32.23 <	21.49 <
26/03/2020 00:00	8.5 <	39.26 <	32.19 <	21.46 <
28/03/2020 00:00	8.51 <	39.4 <	32.25 <	21.5 <
29/03/2020 00:00	8.5	39.36	32.22	21.48
30/03/2020 00:00	8.5	39.36	32.21	21.48
31/03/2020 00:00	8.5 <	39.36 <	32.22 <	21.49 <
Average	8.2	37.5	26.6	20.5
Geom.Mean	8.2	37.5	26.3	20.5
Maximum	8.7	39.4	32.3	21.5
Median	8.1	37.7	26.4	20.7
Minimum	7.6	35	20.1	19.2
Mode	8.5	38.5	32.3	21.5
Std.Deviation	0.3	1.7	4.3	0.9
Total Active Duration				

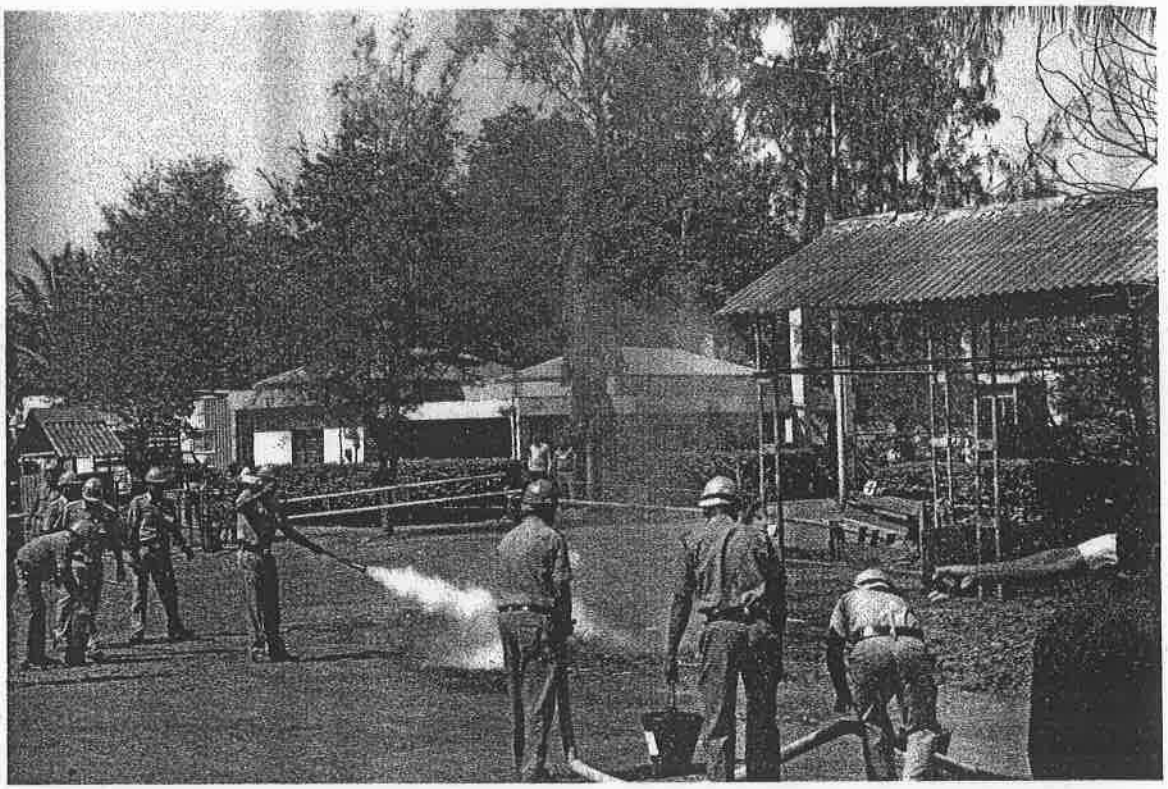
EnviroConnect Forbes Marshall Multi Station Report

From Date	01/04/2020 00:00
To Date	30/04/2020 23:59
Interval	Daily
Function	Average

Plant	BSSK	BSSK	BSSK	BSSK
Analyzer	ETP1	ETP1	ETP1	ETP1
Parameter	pH	COD	TSS	BOD
Unit	pH	mg/l	mg/l	mg/l
Limit	5.50 - 9.00	0.00 - 250.00	0.00 - 100.00	0.00 - 100.00
01/04/2020 00:00	8.5	39.4	32.25	21.51
02/04/2020 00:00	8.5	39.41	32.25	21.51
03/04/2020 00:00	8.5	39.4	32.26	21.51
04/04/2020 00:00	8.51	39.41	32.25	21.5
05/04/2020 00:00	8.5	39.4	32.25	21.5
06/04/2020 00:00	8.5	39.37	32.24	21.5
07/04/2020 00:00	8.5	39.37	32.22	21.49
08/04/2020 00:00	8.5	39.35	32.23	21.49
09/04/2020 00:00	8.5	39.37	32.24	21.5
10/04/2020 00:00	8.5	39.37	32.24	21.5
11/04/2020 00:00	8.5	39.39	32.23	21.49
12/04/2020 00:00	8.5	39.38	32.22	21.49
13/04/2020 00:00	8.5	39.37	32.21	21.47
14/04/2020 00:00	8.5	39.39	32.21	21.49
15/04/2020 00:00	8.5	39.39	32.2	21.48
16/04/2020 00:00	8.5	39.38	32.19	21.48
17/04/2020 00:00	8.5	39.35	32.18	21.47
18/04/2020 00:00	8.51	39.38	32.21	21.48
19/04/2020 00:00	8.5	39.39	32.2	21.48
20/04/2020 00:00	8.5	39.37	32.19	21.48
21/04/2020 00:00	8.5	39.35	32.21	21.48
22/04/2020 00:00	8.5	39.37	32.22	21.49
23/04/2020 00:00	8.51	39.38	32.2	21.49
24/04/2020 00:00	8.5 <	39.33 <	32.18 <	21.47 <
Average	8.5	39.4	32.2	21.5
Geom.Mean	8.5	39.4	32.2	21.5
Maximum	8.5	39.4	32.3	21.5
Median	8.5	39.4	32.2	21.5
Minimum	8.5	39.3	32.2	21.5
Mode	8.5	39.4	32.2	21.5
Std.Deviation	0	0	0	0
Total Active Duration				

Ann. V





Annexure 13

पुढारी दि १२ जुलै २०१२

Public Notice

This is to inform all concern people that, the State Environment Impact Assessment Authority, Government of Maharashtra, Mumbai has accorded 'Environmental Clearance' to **M/s. Bhimashankar Sahakari Sakhar Karkhana Limited,** at Dattatraynagar, pargaon Via Awasari Bk, Taluka- Ambegaon, District- Pune, for its bagasse based 10 MW cogeneration project. The 'Environmental Clearance' is granted under the provision of EIA notification dated 14th September 2006. The copy of the environmental clearance is available on the website http://ec.maharashtra.gov.in/ This advertisement is published in the public interest, according to the general conditions specified in the 'Environmental Clearance'.

For Bhimashankar Sahakari Sakhar Karkhana Limited
Managing Director

सकाळ दि १२ जुलै २०१२

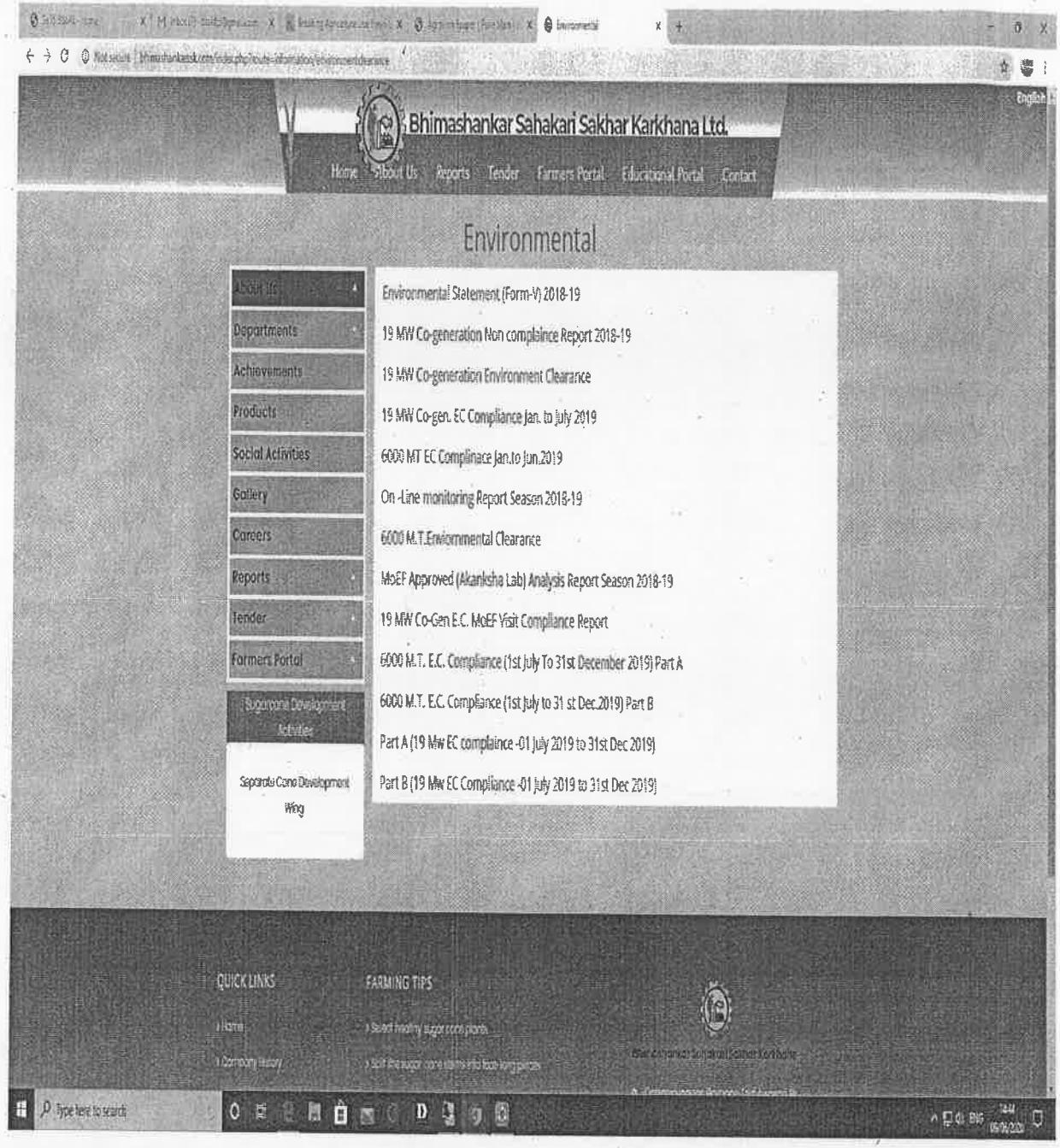
जाहीर सूचना

या जाहीर सूचनेद्वारे कळविण्यात येते की, मा. राज्य ईआयए प्राधिकरण, महाराष्ट्र शासन, मुंबई यांच्याकडून मे. भीमाशंकर सहकारी साखर कारखाना लिमिटेड, दत्तानगर, पारगाव तर्फे अवसरी बु.॥, तालुका आंबेगाव, जिल्हा पुणे यांना नियोजित १९ मे.वॅट क्षमतेच्या बगॅसवर आधारित सहवीजनिर्मिती प्रकल्प उभारण्यास पर्यावरणीय मंजुरी मिळाली आहे. सदर मंजुरीचे पत्र हे पर्यावरण विभाग, महाराष्ट्र शासनाच्या **http://ec.maharashtra.gov.in/** या संकेतस्थळी उपलब्ध आहे.

सदर जाहीर सूचना ही पर्यावरणीय मंजुरीतील सामान्य शर्तींची पूर्तता करण्यासाठी देण्यात येत आहे.

मे. भीमाशंकर सहकारी साखर कारखाना लिमिटेड
कार्यकारी संचालक

Annexure XII



FORM V

Environmental Audit Report for the financial Year ending the 31st March 2020

Part A

Company Information

* Company Name: Bhimashankar Sahakari Sakhar Karkhana Ltd.	* Application UAN number: 0000064013	* Financial Year: 2020
* Address: Dattatreyanagar,Pargaon Tarfe Awasari Bk.		
* Plot Number: -	* Taluka: Ambegaon	* Village: Pargaon Tarfe Awasari Vk.
* Capital Investment (In lakhs): 24243,00,000/-	* Scale: Red	
* City: Pargaon Tarfe Awasari Bk	* Pincode: 412406	
* Person Name: Mr. Chandrakant G. Dhage	* Designation: Managing Director	
* Telephone Number: (02133)284270	* Fax Number: (02133)284270	* Email: bsskltd@gmail.com
* Region: SRO - Pune II	* Industry Category: Red	* Industry Type: R12 Sugar (excluding Khandsari)
* Last Environmental statement submitted online: ● No ● Yes	* Consent Number: Format 1.0/BO/CAC-CELL/UAN No.0000064013/C	* Consent Issue Date: 23/07/2019
Consent Valid Upto: 31/07/2020		

Save

Product Information

* Product Name	* Consent Quantity	* Actual Quantity	* UOM
Sugar	129600	79573.399	MT/A

Add More

By-product Information

* By Product Name	* Consent Quantity	* Actual Quantity	* UOM
Bagasse	280800	178746.310	MT/A
Pressmud	43200	22242.930	MT/A
Molasses	43200	28310.400	MT/A
Co-Generation	19 MW	60195060	Mwh

Add More

Part B

1) Water Consumption in m3/day

Sr. no	Water Consumption for	Consent Quantity in m3/day	Actual Quantity in m3/day
1	Process	1000	750
2	Cooling	200	175
3	Domestic	96	55
4	All others	-	-
	Total	1296	980

1) Effluent Generation in CMD / MLD

* Particulars	* Consent Quantity	* Actual Quantity	* UOM
Trade Effluent	650	450	CMD
Domestic Effluent	55	45	CMD

Add More

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	-	0.07	CMD
Bagasse	00	00	CMD
Molasses	00	00	CMD
Pressmud	00	00	CMD

Save

Add More

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	-	692192.310	MT/A

Add More

4) Fuel Consumption

* Fuel Name	* Consent quantity	* Actual Quantity	* UOM
Bagasse	280800	178746.310	MT/A

Add More

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 or Kg/day)	Concentration of Pollutants discharged(Mg/Lit) Except	Percentage of variation from prescribed standards with reasons

SOLID WASTES

1) From Process

Non Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
Fly/Boiler Ash	-	3750	MT/A
ETP Sludge	-	10	MT/A

Add More

2) From Pollution Control Facilities

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

Add More

3) Quantity Recycled or Re-utilized within the unit

Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
NA	-	-	MT/A

Add More

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	0.250	MT/A	-

Add More

2) Solid Waste

Type of Solid Waste Generated	Qty of Solid Waste	UOM	Concentration of Solid Waste
Fly /Boiler Ash	3750	MT/A	-
ETP Sludge	10	MT/A	-

Add More

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)
Treated EEfluer	6.50	510.00	15.00	1500	2.50	0.40

Add More

Part H

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

	Quantity	Concentration	% variation	Standard	Reason
pH	7.5	7.0	00	5.5-9.0	-
Oil & Grease	0.06	0.06	00	10	-
BOD	95	100	00	100	-
COD	125	120	00	250	-
Total Dissolved Solids	850	950	00	2100	-
Suspended Solids	45	52	00	100	-
Sulphate	130	125	00	1000	-
Chloride	180	160	00	600	-

Add More

[B] Air (Stack)

Pollutants Detail	Quantity of Pollutants discharged (kL/day or Kg/day)	Concentration of Pollutants discharged(Mg/NM3)	Percentage of variation from prescribed standards with reasons		
	Quantity	Concentration	% variation	Standard	Reason
SPM	115	105	00	150	-

Save

Add More

Part D

HAZARDOUS WASTES

[As specified under Hazardous Waste (Management Handling & Transboundry Movement Rules, 2008)]

1) From Process

Hazardous Waste Type	Total During Previous Financial year	Total During Current Financial year	UOM
5.1 Used or spent oil	-	0.250	MT/A

Add More

2) From Pollution Control Facilities

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

Add More

Part E

[A] Investment made during the period of Environmental Statement

Detail of measures for Environmental Protection	Environmental Protection Measures	Capital Investment (Lacks)
On line Monitoring System for Effluent & Stack (N	On Line Reading Facility	2.50

Add More

[B] Investment Proposed for next Year

Detail of measures for Environmental Protection	Environmental Protection Measures	Capital Investment (Lacks)
Plantation Programme	Tree Plantation	0.50

Add More

Part I

Any other particulars in respect of evnironmental protection and abatement of pollution

Particulars

Adopt New technology for Air & Water pollution

Name & Designation

Mr. Chandrakant G. Dhage

NOTE: Attached file must be in pdf format and size should be upto 2MB.
Kindly attach Latest Consent copy

Choose File Existing Co...py-BSSK.pdf

Analysis report(Water & Air & Hazardous Waste) of the current year.(Analysis report from recognized laboratory by MoEF)

Choose File Akanksha La...019-20).pdf

Capcha:

Save

Enter the code above here :

2B7A6CC2

Submit Application

Web enabled by Web Werks.
Portal support Helpline number - 7045113344 / 022-24024068