

Zuari Cement Limited

Solapur Grinding Unit, Vil Auj (Aherwadi)
Po. Shingadgaon, Tal - South Solapur
Dist - Solapur, Maharashtra - 413228
Tel : +91 217 2500 750
zclsgu@zcltd.com
www.zuaricements.com

Ref no:- ZCL/SGU/EHS/06/2021
24th May'2021

To,
The Sub Regional Officer
Sub Regional Office (SRO)
Maharashtra Pollution Control Board
Solapur.

Subject: - Compliance Under Environmental Clearance

1)MPCB consent No. Format 1.0/BO/CAC-Cell/EIC No.PN-27744-15/CAC-6484 dated 17.05.2016
(M/s. Zuari Cement Ltd, Solapur- Maharashtra)

1) 1st application towards CTO renewal for next five year vide no. vide no. MPCB-CONSENT-0000096669

Dear Sir/Madam,

Please find the attached Compliance report of Environmental Clearance (This compliance report is submitted for the period- from Oct2020 to Mar2021) of M/s Zuari Cement Limited-MH.

Compliance Under Environmental Clearance we have submitting in your good office every six month Since 2014.

Kindly acknowledge the receipt and obliged.

Thanking You,

Yours faithfully
For Zuari cement Ltd.



Deepak Kakkar
Plant Head-SGU
Encl: As above.
Copy to MPCB -RO office- Pune
MPCB-AAO--Mumbai

Received
Ehs
25-05-2021
Jr. Clerk
Sub. Regional Office
M. P. C. Board,
Solapur.



Zuari Cement
HEIDELBERGCEMENT Group

Zuari Cement Limited
Solapur Grinding Unit, Vil Au (Aherwadi)
Po. Shingadgaon, Tal - South Solapur
Dist - Solapur, Maharashtra - 413228
Tel : +91 217 2500 750
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www.zuaricements.com

Dear Sir,

Already we have submitted detailed compliance report of consent conditions and Environment Clearance Conditions in your good office (MPCB- Solapur) on regular basis.

- 1) We are having full-fledged dust control system at raw material unloading points as well as at various locations to control fugitive dust emissions during manufacturing activities.
 - 2) All conveyor belt 17, 18 near (Gat number 56 area 4 H) and bag filters also covered by GI sheet to control fugitive dust emissions during manufacturing activities.
 - 3) We have provided maximum number of bag filter at all location to control fugitive dust emissions during manufacturing activities.
 - 4) All wagon tippler area fully covered by GI sheet to control fugitive dust emissions during manufacturing activities.
 - 5) We have completed tree plantation beside our boundary wall and surrounding premises to maintain greenery and control environment.
 - 6) We have installed three ambient air quality monitoring stations (AAQMS) in our factory premises as per the guidelines of pollution control board consent dated 17.05.2016
 - 7) Constructed Concrete Road inside the factory premises as per the guidelines in the CTO.
 - 8) Apart from the above we are sprinkling the water on the access roads on regular intervals.
 - 9) We have taken all measures by providing AAQMS, bag filter to control the fugitive dust emission.
 - 10) Since inception of the factory, we have done mass tree plantation i.e. more than 21,000 nos. till date to maintain green environment and continuing every year.
 - 11) We have obtained in principle approval from CGWA, Nagpur for ground water extraction. Enclosed copy for your ready reference.
 - 12) As per the consent we have provided septic tank soak pits. Enclosed Effluent sampling monthly analysis report for your ready reference.
 - 13) We have engaged approved third party for Ambient air monitoring, stack emission monitoring, ambient noise level monitoring, effluent sample analysis monitoring etc...and report attached for your ready reference.
- Hope you will find the above compliance comprehensively in order along with evidences.

Kindly acknowledge the receipt and obliged.

Thanking You,

Yours faithfully

For Zuari cement Ltd.

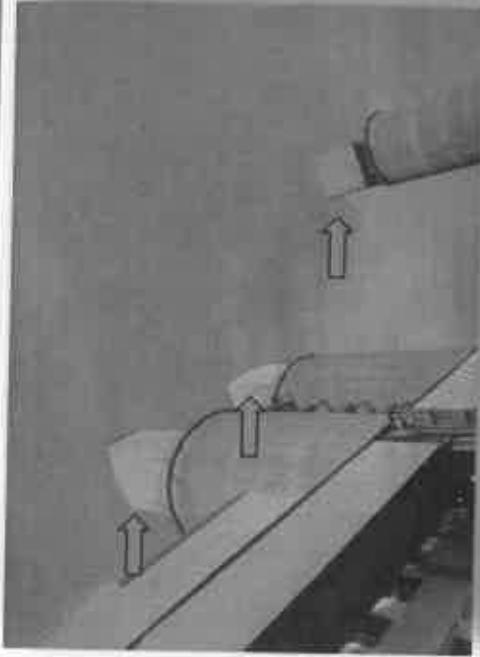
Encl: As above.

Authorized Signature



All bag filters of SGU plant have been covered by GI sheet for maintain dust free weather .

safe work healthy life



Health & Safety

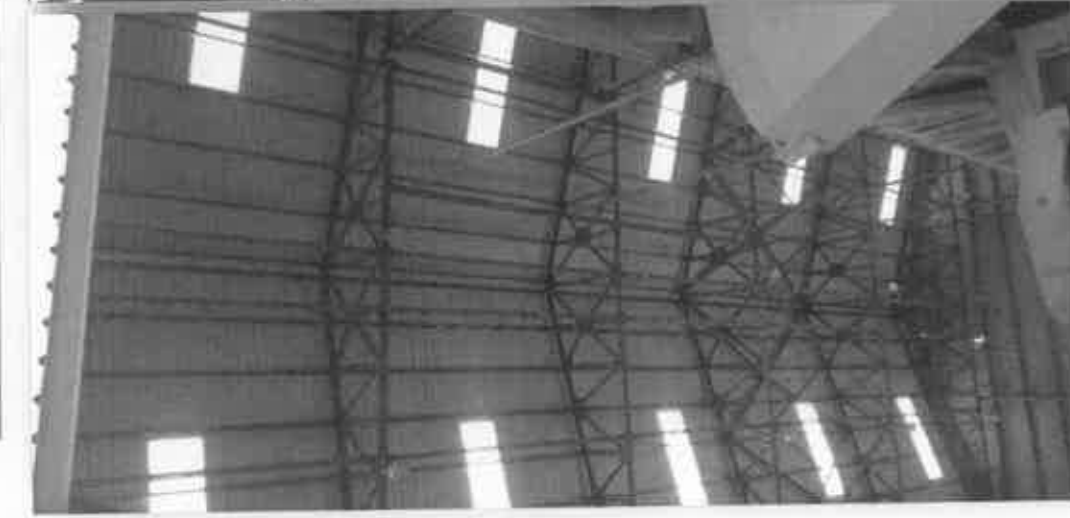
1

HCIL ZCL

HEIDELBERGCEMENT

Transparent GI sheet provided at Store , bag go down,
wagon tippler area etc for saving electrical energy.

safe work healthy life



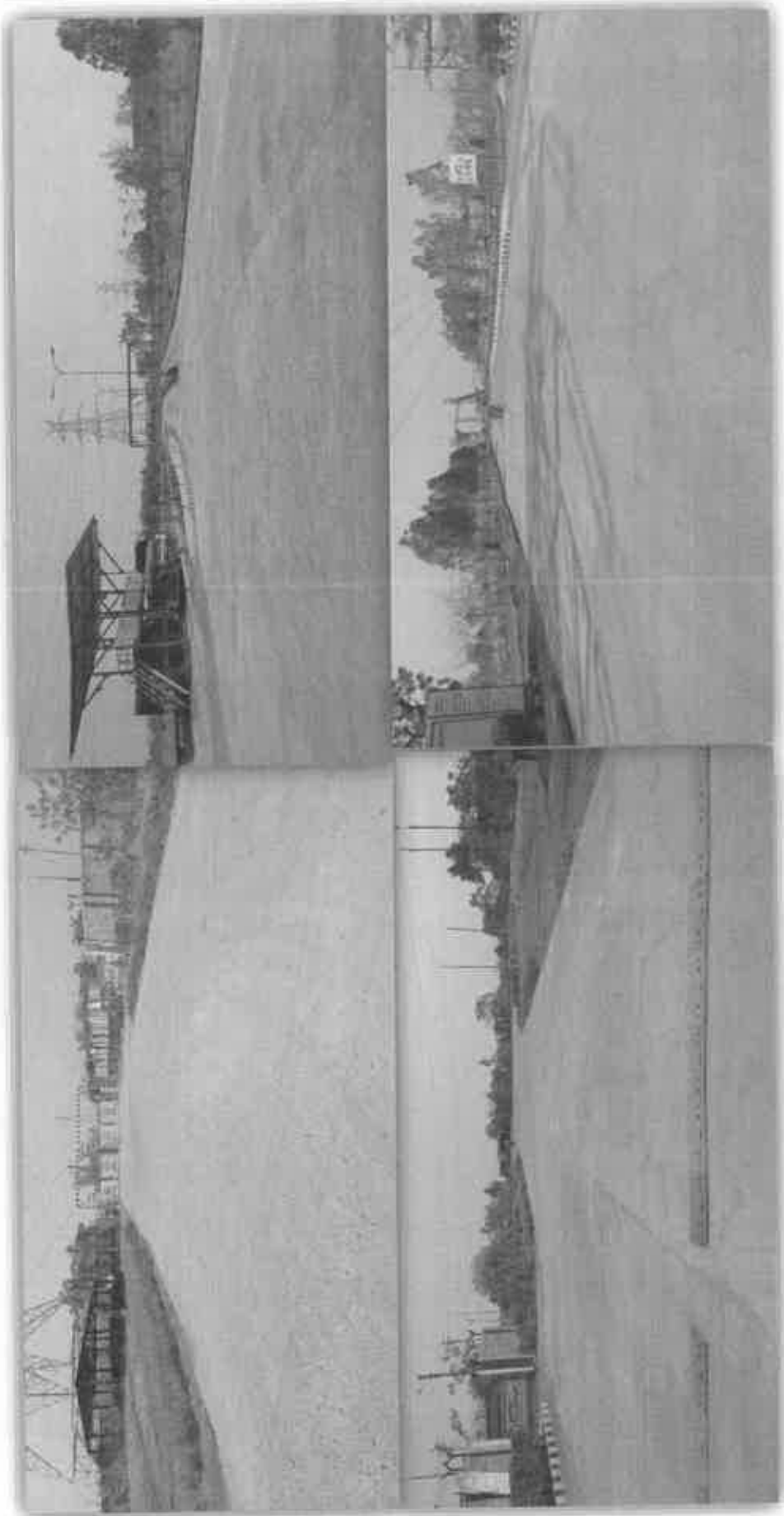
safe work healthy life

SGU-AAQMS Installation near Cement mill & Wagon tippler



safe work healthy life

SGU- Concrete Road from main gate to packing plant



Clinker Unloading system – Dust Free

safe work healthy life

back filter provided around at wagon tippler to control dust emission



Deck plate completed



GI Sheets , dust collector provided around all wagon tippler area to control dust emission



Hood guard , deck plate, GI Sheet, back filter provided around all conveyor belt to control dust emission



Under ground Tunnel provided to control dust emission

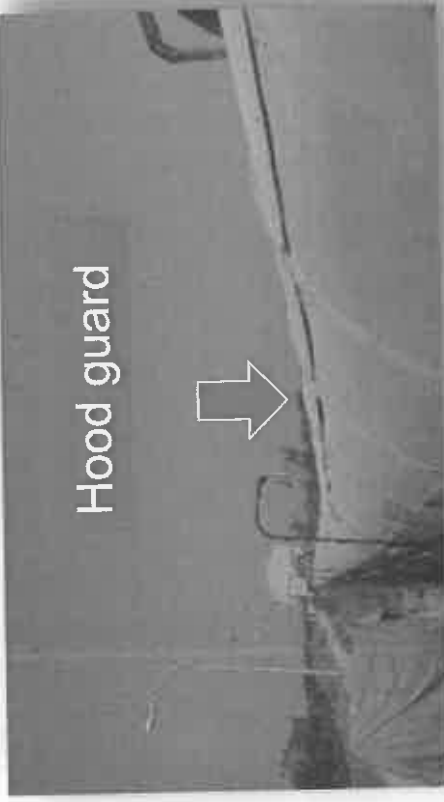
Health & Safety

5

Reducing cement spillage in the plant and ship unloading area

safe work healthy life

Hood guard , deck plate, GI Sheet provided around all conveyor belt to control dust emission



All conveyor belt covered with GI sheet



Reducing cement spillage in the plant and ship unloading area

safe work healthy life



Deck plate provided



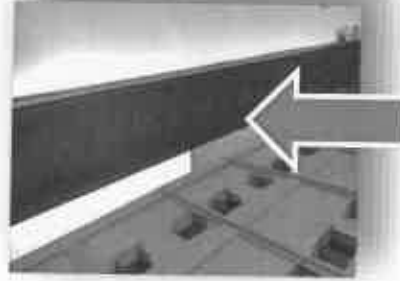
GI Sheet provided around all wagon tippler area to control dust emission



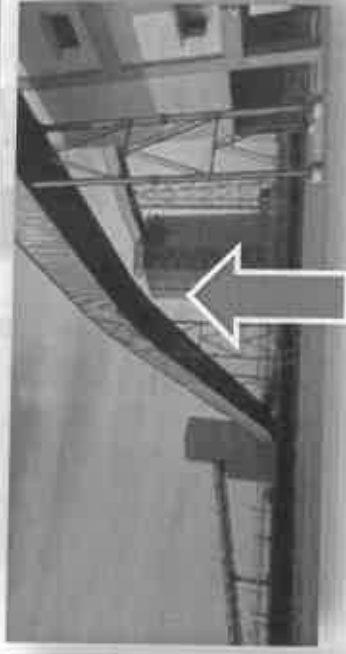
Hood guard , deck plate, GI Sheet provided around all conveyor belt to control dust emission



Closed conveyor belt in tunnel



Deck plate provided to all conveyors belt below to control dust emission



Closed conveyor belt



Affordable and Clean Energy

safe work

h

7 AFFORDABLE AND
CLEAN ENERGY



Solar Street light installation at Local Villages Auj (A) & Shingadgaon, Solapur

Health & Safety

8

HCIL  ZCL

HEIDELBERGCEMENT

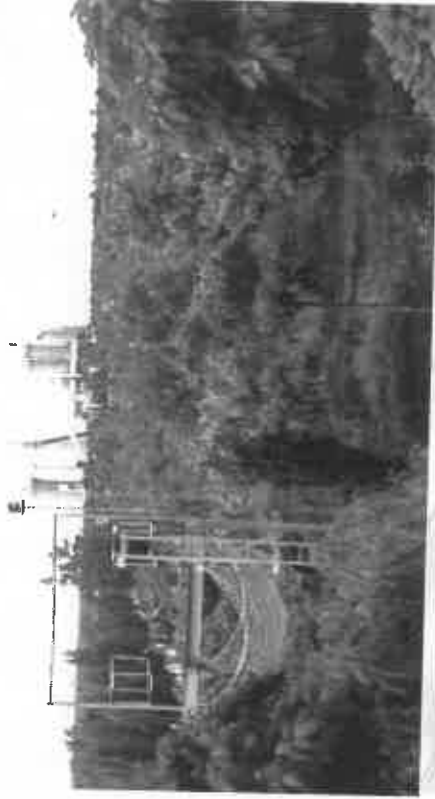
Climate Action

safe work

h

13

CLIMATE
ACTION



Sustainability Development with Green Belt Development at OUR Solapur Plant

Health & Safety
9

HCIL  ZCL

HEIDELBERGCEMENT

Life on Land

safe work

hea

3

GOOD HEALTH
AND WELL BEING



Tree Saplings Plantation and Nearby Villages and Government Schools

Life on Land

safe work

hi

15

LIFE
ON LAND



Solapur Team

Friends of Earth-Tree Saplings mass plantation at Solapur

Health & Safety
11

HCIL ZCL

HEIDELBERGCEMENT

Life on Land

safe work

15



Solapur



Solapur



Increase in Green Cover

Health & Safety

12

HCIL ZCL

HEIDELBERGCEMENT



Mahabal Enviro Engineers Pvt. Ltd.

Engineers, Consultants, Environmental Monitoring Laboratory & Contractors
Plot Nos. 13,14,17,18, Grampanchayat Bokhara, 8 km from Nagpur City,
Opp. Patel Petrol Pump, Chhindwara Road, Koradi, Dist.Nagpur-441111
Phone : 91-712-2612162, 91-712-2612212 Email: mahabal.nagpur@gmail.com

Test Report

Report No.: ME-NG04683-210327-SA-ZC-PUNE			Date: 27.03.2021
Name and Address of Customer	ZUARI CEMENT LTD. Auj (Aherwadi) Solapur		Order Reference
			PO. No. 4470510069 PO Date: 28.12.2020
Sample Description/Type	Drinking water	Sample Collected by	Laboratory
Sampling Location	Dining Hall (Cooler)	Sample Quantity/Packing	2 L X 1 No. PVC Can 500mLX 1No. PVC Can 500mLX 1No.Sterilised Glass Bottle
Date of Sampling	13.03.2021	Date of Receipt of Sample	15.03.2021
Sampling Procedure	IS:3025(Part I):1987 RA 2003; IS 1622:1981 RA 1996 Ed 2.4 (2003); APHA 23 rd Ed. 2017, 1060-B, 1-40; 9060 A, 9-36		
Date of Start of Analysis	15.03.2021	Date of Completion of Analysis	27.03.2021

Sr. No.	Parameter	Unit	Result	Acceptable Limit for Drinking Water (IS 10500:2012)	Method Reference
Discipline: Chemical Testing; Product Group: Water (Drinking Water)					
1	Colour	Hazen	<1	5 Max.	APHA 23 rd Ed. 2017, 2120-B, 2-6
2	Odour	-	Agreeable	Agreeable	IS 3025 (Part 5):1984, Reaffirmed 2006
3	Taste	-	Agreeable	Agreeable	IS 3025 (Part 7 & 8):1984, Reaffirmed 2006
4	Turbidity	NTU	0.1	1 Max.	APHA 23 rd Ed. 2017, 2130-B, 2-13
5	pH	-	8.0	6.5 to 8.5	APHA 23 rd Ed. 2017, 4500-H ⁺ -B, 4-95
6	Total Dissolved Solids	mg/L	238	500 Max.	IS 3025 (Part 16):1984 RA 2006, Ed.2.1 (1999-12)
7	Alkalinity Total (as CaCO ₃)	mg/L	94	200 Max.	IS 3025 (Part 23):1986 Reaffirmed 2009 Amds 1
8	Total Hardness (as CaCO ₃)	mg/L	152	200 Max.	APHA 23 rd Ed. 2017, 2340-C, 2-48
9	Chloride (as Cl)	mg/L	50.3	250 Max.	APHA 23 rd Ed. 2017, 4500-Cl-B, 4-75
10	Sulphate (as SO ₄)	mg/L	42.0	200 Max.	APHA 23 rd Ed. 2017, 4500- SO ₄ -E, 4-199
11	Nitrate (as NO ₃)	mg/L	1.34	45 Max.	APHA 23 rd Ed. 2017, 4500-NO ₃ , E 4-131
12	Calcium (as Ca)	mg/L	38.5	75 Max.	APHA 23 rd Ed. 2017, 3500-Ca-B, 3-69

Page 1 of 2

QF/SALE/02/Issue No 03 Dt 05.12.2019,Amd 00 Dt 00

Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra
(600 m from Hotel Rukhmini Palace Turn Opp Toyota Show Room. Next to Ashida Electrical - near J B Sawant Bus Stop)
Phone: 2582 0658/ 3139/ 1663/ 3154 Fax: 91-22-25823543 thane@mahabal.com

ULR- TC748721000004451F



Report No.04683 Cont...

Sr. No.	Parameter	Unit	Result	Acceptable Limit for Drinking Water (IS 10500:2012)	Method Reference
13	Fluoride (as F)	mg/L	0.209	1 Max.	APHA 23 rd Ed. 2017, 4500-F, D, 4-90
Residues in water (Trace metal Element)					
14	Chromium Hexa (as Cr ⁶⁺)	mg/L	N.D.	-	APHA 23 rd Ed. 2017, 3500- Cr-B, 3-71
15	Mercury (as Hg)	mg/L	N.D.	0.001 Max.	APHA 23 rd Ed. 2017, 3112-B, 3-25
Discipline: Biological Testing; Product Group: Water (Drinking Water)					
26	Total Coliforms	P-A/ 100 mL	Absent	Not Detectable	APHA 23 rd Ed. 2017, 9221-D, 9-75
27	E-Coli	P-A/ 100 mL	Absent	Not Detectable	APHA 23 rd Ed. 2017, 9221-D,E &G,9-75-9-80
Remark: N.D.: Not Detected;					

-END-

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi

TECHNICAL MANAGER
(Chemical Testing)

Pranali Kurve

TECHNICAL MANAGER
(Biological Testing)

Note:

1. The result listed refers only to the tested sample(s) and applicable parameter(s).
2. This report is not to be reproduced except in full, without written approval of the laboratory.

ULR- TC748721000004451F



Mahabal Enviro Engineers Pvt. Ltd.

Engineers, Consultants, Environmental Monitoring Laboratory & Contractors
Plot Nos. 13,14,17,18, Grampanchayat Bokhara, 8 km from Nagpur City,
Opp. Patel Petrol Pump, Chhindwara Road, Koradi, Dist.Nagpur-441111
Phone : 91-712-2612162, 91-712-2612212 Email: mahabal.nagpur@gmail.com

Test Report

Report No.: ME-NG04683-210327-SA-ZC-PUNE			Date: 27.03.2021
Name and Address of Customer	ZUARI CEMENT LTD. Auj (Aherwadi) Solapur		Order Reference
			PO. No. 4470510069 PO Date: 28.12.2020
Sample Description/Type	Drinking water	Sample Collected by	Laboratory
Sampling Location	Dining Hall (Cooler)	Sample Quantity/Packing	500mLX 1No. PVC Can
Date of Sampling	13.03.2021	Date of Receipt of Sample	15.03.2021
Sampling Procedure	IS:3025(Part I):1987 RA 2003; APHA 23 rd Ed. 2017, 1060-B, 1-40;		
Date of Start of Analysis	15.03.2021	Date of Completion of Analysis	27.03.2021

Sr. No.	Parameter	Unit	Result	Acceptable Limit for Drinking Water (IS 10500:2012)	Method Reference
Discipline: Chemical Testing; Product Group: Water (Drinking Water)					
1	Cyanide (as CN)	mg/L	N.D.	0.05 Max.	APHA 23 rd Ed. 2017, 4500-CN, C & E, 4-44 & 4-46
2	Anionic detergents as MBAS	mg/L	N.D.	0.2 Max.	APHA 23 rd Ed. 2017, 5540-C, 5-55
3	Phenolic compounds (as C ₆ H ₅ OH)	mg/L	N.D.	0.001 Max.	APHA 23 rd Ed. 2017, 5530- B & C, 5-49, 5-50
Residues in water (Trace metal Element)					
4	Iron (as Fe)	mg/L	0.373	1.0 Max.	IS 3025(Part 2)2004, RA 2019
5	Manganese (as Mn)	mg/L	<0.04	0.1 Max.	IS 3025(Part 2)2004, RA 2019
6	Cadmium (as Cd)	mg/L	N.D.	0.003 Max.	IS 3025(Part 2)2004, RA 2019
7	Copper (as Cu)	mg/L	N.D.	0.05 Max.	IS 3025(Part 2)2004, RA 2019
8	Lead (as Pb)	mg/L	N.D.	0.01 Max.	IS 3025(Part 2)2004, RA 2019
9	Zinc (as Zn)	mg/L	0.052	5 Max.	IS 3025(Part 2)2004, RA 2019
10	Arsenic (as As)	mg/L	N.D.	0.01 Max.	IS 3025(Part 2)2004, RA 2019
Remark: N.D.: Not Detected;					

---END---

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Hajish Mendhi

TECHNICAL MANAGER



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Page 1 of 1

QF/SALE/02/Issue No 03 Dt 05.12.2019, Amd 00 Dt 00

Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra
(600 m from Hotel Rukhmini Palace Turn Opp Toyota Show Room. Next to Ashida Electrical - near J B Sawant Bus Stop)
Phone: 2582 0658/ 3139/ 1663/ 3154 Fax: 91-22-25823543 thane@mahabal.com



Mahabal Enviro Engineers Pvt. Ltd.

Engineers, Consultants, Environmental Monitoring Laboratory & Contractors
Plot Nos. 13,14,17,18, Grampanchayat Bokhara, 8 km from Nagpur City,
Opp. Patel Petrol Pump, Chhindwara Road, Koradi, Dist.Nagpur-441111
Phone : 91-712-2612162, 91-712-2612212 Email: mahabal.nagpur@gmail.com

Test Report

Report No.: ME-NG04685-210327-SA-ZC-PUNE			Date: 27.03.2021
Name and Address of Customer	ZUARI CEMENT LTD. Auj (Aherwadi) Solapur		Order Reference
			PO. No. 4470510069 PO Date: 28.12.2020
Sample Description/Type	Ground water	Sample Collected by	Laboratory
Sampling Location	Tap Water	Sample Quantity/Packing	2 L X 1 No. PVC Can 500mLX 1No. PVC Can 500mLX 1No.Sterilised Glass Bottle
Date of Sampling	13.03.2021	Date of Receipt of Sample	15.03.2021
Sampling Procedure	IS:3025(Part I):1987 RA 2003; IS 1622:1981 RA 1996 Ed 2.4 (2003); APHA 23 rd Ed. 2017, 1060-B, 1-40; 9060 A, 9-36		
Date of Start of Analysis	15.03.2021	Date of Completion of Analysis	27.03.2021

Sr. No.	Parameter	Unit	Result	Method Reference
Discipline: Chemical Testing; Product Group: Water (Ground Water)				
1	Colour	Hazen	<1	APHA 23 rd Ed. 2017, 2120-B, 2-6
2	Odour	-	Agreeable	IS 3025 (Part 5):1984, Reaffirmed 2006
3	Taste	-	NA	IS 3025 (Part 7 & 8):1984, Reaffirmed 2006
4	Turbidity	NTU	0.1	APHA 23 rd Ed. 2017, 2130-B, 2-13
5	pH	-	8.1	APHA 23 rd Ed. 2017, 4500-H ⁺ -B, 4-95
6	Total Dissolved Solids	mg/L	335	IS 3025 (Part 16):1984 RA 2006, Ed.2.1 (1999-12)
7	Alkalinity Total (as CaCO ₃)	mg/L	176	IS 3025 (Part 23):1986 Reaffirmed 2009 Amds 1
8	Total Hardness (as CaCO ₃)	mg/L	242	APHA 23 rd Ed. 2017, 2340-C, 2-48
9	Chloride (as Cl)	mg/L	36.2	APHA 23 rd Ed. 2017, 4500-Cl-B, 4-75
10	Sulphate (as SO ₄)	mg/L	64.8	APHA 23 rd Ed. 2017, 4500- SO ₄ -E, 4-199
11	Nitrate (as NO ₃)	mg/L	4.01	APHA 23 rd Ed. 2017, 4500-NO ₃ , E 4-131
12	Calcium (as Ca)	mg/L	51.3	APHA 23 rd Ed. 2017, 3500-Ca-B, 3-69
13	Fluoride (as F)	mg/L	0.337	APHA 23 rd Ed. 2017, 4500-F, D, 4-90



Report No.04685 Cont...

Sr. No.	Parameter	Unit	Result	Method Reference
Residues in water (Trace metal Element)				
14	Iron (as Fe)	mg/L	0.192	APHA 23 rd Ed. 2017, 3111-B, 3-20
15	Manganese (as Mn)	mg/L	<0.04	APHA 23 rd Ed. 2017, 3111-B, 3-20
16	Cadmium (as Cd)	mg/L	N.D.	APHA 23 rd Ed. 2017, 3111-B, 3-20
17	Chromium Hexa (as Cr ⁶⁺)	mg/L	N.D.	APHA 23 rd Ed. 2017, 3500- Cr-B, 3-71
18	Copper (as Cu)	mg/L	N.D.	APHA 23 rd Ed. 2017, 3111-B, 3-20
19	Lead (as Pb)	mg/L	N.D.	APHA 23 rd Ed. 2017, 3111-B, 3-20
20	Zinc (as Zn)	mg/L	0.014	APHA 23 rd Ed. 2017, 3111-B, 3-20
21	Arsenic (as As)	mg/L	N.D.	IS 3025 (Part 37): 1988, RA 2009
22	Mercury (as Hg)	mg/L	N.D.	APHA 23 rd Ed. 2017, 3112-B, 3-25
Discipline: Biological Testing; Product Group: Water (Ground Water)				
26	Total Coliforms	MPN/100 mL	3.6	APHA 23 rd Ed. 2017, 9221-B & C, 9-69, 9-72
27	E-Coli	MPN/100 mL	Absent	APHA 23 rd Ed. 2017, 9221-B, C & G, 9-69, 9-72 & 9-80
Remark: N.D.: Not Detected;				

END

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi

TECHNICAL MANAGER
(Chemical Testing)

Pranali Kurve

TECHNICAL MANAGER
(Biological Testing)

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ULR- TC748721000004453F



Mahabal Enviro Engineers Pvt. Ltd.

Engineers, Consultants, Environmental Monitoring Laboratory & Contractors
Plot Nos. 13,14,17,18, Grampanchayat Bokhara, 8 km from Nagpur City,
Opp. Patel Petrol Pump, Chhindwara Road, Koradi, Dist.Nagpur-441111
Phone : 91-712-2612162, 91-712-2612212 **Email**: mahabal.nagpur@gmail.com

Test Report

Report No.: ME-NG04685-210327-SA-ZC-PUNE			Date: 27.03.2021
Name and Address of Customer	ZUARI CEMENT LTD. Auj (Aherwadi) Solapur		Order Reference
			PO. No. 4470510069 PO Date: 28.12.2020
Sample Description/Type	Ground water	Sample Collected by	Laboratory
Sampling Location	Tap Water	Sample Quantity/Packing	500mLX 1No. PVC Can
Date of Sampling	13.03.2021	Date of Receipt of Sample	15.03.2021
Sampling Procedure	IS:3025(Part I):1987 RA 2003; APHA 23 rd Ed. 2017, 1060-B, 1-40;		
Date of Start of Analysis	15.03.2021	Date of Completion of Analysis	27.03.2021

Sr. No.	Parameter	Unit	Result	Acceptable Limit for Drinking Water (IS 10500:2012)	Method Reference
Discipline: Chemical Testing; Product Group: Water (Ground Water)					
1	Cyanide (as CN)	mg/L	N.D.	0.05 Max.	APHA 23 rd Ed. 2017, 4500-CN, C & E, 4-44 & 4-46
2	Anionic detergents as MBAS	mg/L	N.D.	0.2 Max.	APHA 23 rd Ed. 2017, 5540-C, 5-55
3	Phenolic compounds (as C ₆ H ₅ OH)	mg/L	N.D.	0.001 Max.	APHA 23 rd Ed. 2017, 5530- B & C, 5-49, 5-50
Remark: N.D.: Not Detected;					

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Hanish Mendhi

TECHNICAL MANAGER



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Zuari Cement
HEIDELBERGCEMENT Group

Zuari Cement Limited

Solapur Grinding Unit, Vil Auji (Aherwadi)
Po. Shingadgaon, Tal - South Solapur
Dist - Solapur, Maharashtra - 413228
Tel : +91 217 2500 750
zclsgu@zcltd.com
www.zuaricements.com

21.05.2021

To,
The Chief Accounts Officer
Cess Branch
Maharashtra Pollution Control Board,
Mumbai
Ref No. ZCL/SGU/EHS/05/2021

Sub: Monthly water consumption report

Reference: Zuari Cement Ltd.- Consent to Operate: Format No.1.0/ BO/CAC-Cell/EIC
No.PN-27744- 15/CAC 6484 dated 17/05/2016

Our existing CTO Format 1.0/CAC/UAN No.0000096669/CR-2102000494 dt.
08.02.2021

Dear Sir,

Please find the enclosed water consumption report of M/s Zuari Cement Limited,
MH for the month of Jan, Feb, March, April 2021.

Kindly acknowledge receipt.

Thanking You.

Yours sincerely,
For **Zuari Cement Limited**

Authorized signature

Encl: as above

- Cc: 1. Regional Officer, MPCB, Pune-1
2. Sub Regional Officer, MPCB, Solapur
3. Water Cess office Mumbai

Registered Office :
Krishna Nagar - 516 311
Yerraguntla, Dist. - Kadapa
Andhra Pradesh, India
Tel : +91-85 63-27 51 02 / 07 / 08 / 95
Fax : +91-85 63-27 51 64.

Corporate Identity Number (CIN) :
U26942AP2000PLC050415



Form I
(See rule 4)

Return regarding water consumed during the month of Jan'2021

Name and address of the consumer	Purpose of which water consumed	Reading at the beginning of the 1st day of the Calendar Month	Reading at the end of last day of Calendar month under rebate	Quantity of water Consumed in Kilo-liters	If the meter was out of order Monthly average for water consumption Quantity of	Remarks
M/s Zuari Cement Limited, Solapur Grinding Unit, Auj(A) & Shingadgaon, South Solapur, Dist.: Solapur, Maharashtra - 413228	Industrial cooling spraying in cement mill From 1) Municipal water supply 2) well/tuibewell 3) canal 4) River 5) any other source			645		
	Domestic purpose From 1) Municipal water supply 2) well/tuibewell 3) canal 4) River 5) any other source			215		
	Processing whereby water get polluted and the pollutants are easily biodegradable From 1) Municipal water supply 2) well/tuibewell 3) canal 4) Riv			N.A.		
	Processing whereby water get polluted and the pollutants are easily biodegradable and are toxic. From 1) Municipal water supply 2) well/tuibewell 3) canal			N.A.		
	Agricultural Gardening (Lawn/Trees/Plants)			412		
	Total Consumption (KL)			1272		

(*) for claiming rebate under col. 7 the assessee shall indicate in this column the analytical and other report annexed to this return in support of this claim.



Signature of Consumer:

Name

: Authorized signature

Address

: Zuari Cement Limited
Solapur Grinding Unit
Auj(A) & Shingadgaon, South Solapur,
Dist- Solapur (Maharashtra)-413228

Form I
(See rule 4)

Return regarding water consumed during the month of Feb'21

Name and address of the consumer	Purpose of which water consumed	Reading at the beginning of the 1st day of the Calendar Month	Reading at the end of last day of Calendar month under rebate	Quantity of water Consumed in Kilo-liters	If the meter was out of order Monthly average for water consumption Quantity of	Remarks
M/s Zuari Cement Limited, Solapur Grinding Unit, Auj(A) & Shingadgaon, South Solapur, Dist.: Solapur, Maharashtra - 413228	Industrial cooling spraying in cement mill From 1) Municipal water supply 2) well/tuibewell 3) canal 4) River 5) any other source			877		
	Domestic purpose From 1) Municipal water supply 2) well/tuibewell 3) canal 4) River 5) any other source			235		
	Processing whereby water get polluted and the pollutants are easily biodegradable From 1) Municipal water supply 2) well/tuibewell 3) canal 4) Riv			N.A.		
	Processing whereby water get polluted and the pollutants are easily biodegradable and are toxic. From 1) Municipal water supply 2) well/tuibewell 3) canal			N.A.		
	Agricultural Gardening (Lawn/Trees/Plants)			591		
	Total Consumption (KL)			1703		

(*) for claiming rebate under col. 7 the assessee shall indicate in this column the analytical and other report annexed to this return in support of this claim.



Signature of Consumer:

Name

: Authorized signature

Address

: Zuari Cement Limited
Solapur Grinding Unit
Auj(A) & Shingadgaon, South Solapur,
Dist- Solapur (Maharashtra)-413228

Form I
(See rule 4)

Return regarding water consumed during the month of March'21

Name and address of the consumer	Purpose of which water consumed	Reading at the beginning of the 1st day of the Calendar Month	Reading at the end of last day of Calendar month under rebate	Quantity of water Consumed in Kilo-liters	If the meter was out of order Monthly average for water consumption Quantity of	Remarks
M/s Zuari Cement Limited, Solapur Grinding Unit, Auj(A) & Shingadgaon, South Solapur, Dist.: Solapur, Maharashtra - 413228	Industrial cooling spraying in cement mill From 1) Municipal water supply 2) well/tuibewell 3) canal 4) River 5) any other source			841		
	Domestic purpose From 1) Municipal water supply 2) well/tuibewell 3) canal 4) River 5) any other source			222		
	Processing whereby water get polluted and the pollutants are easily biodegradable From 1) Municipal water supply 2) well/tuibewell 3) canal 4) Riv			N.A.		
	Processing whereby water get polluted and the pollutants are easily biodegradable and are toxic. From 1) Municipal water supply 2) well/tuibewell 3) canal			N.A.		
	Agricultural Gardening (Lawn/Trees/Plants)			580		
	Total Consumption (KL)			1643		

(*) for claiming rebate under col. 7 the assessee shall indicate in this column the analytical and other report annexed to this return in support of this claim.

Signature of Consumer:

Name

: Authorized signature

Address

: Zuari Cement Limited
Solapur Grinding Unit
Auj(A) & Shingadgaon, South Solapur,
Dist- Solapur (Maharashtra)-413228

Real Time Data Acquisition And Monitoring

Site Name: Zuari Cement

Report: Custom Report

From Date: 2020/12/01 00:00:00 To Date : 2020/12/31 23:00:00

Description	CAAQMS_1- PM10_U	CAAQMS_1- PM2.5_U	CAAQMS_1- SO2_U	CAAQMS_1- NO_U	CAAQMS_1- NO2_U	CAAQMS_1- NOx_U
Prescribed Standards						
Maximum Data	73.09	44.37	23.42	17.79	3.1	20.03
Minimum Data	29.08	19.27	22.41	8.41	2.09	10.13
Geometric Mean	47.0	32.59	22.71	12.73	2.63	14.69
Median	45.69	31.67	22.6	12.48	2.64	14.42
Standard Deviation	11.32	7.86	0.27	2.39	0.26	2.52
Maximum Value At Time	2020-12-29	2020-12-04	2020-12-21	2020-12-01	2020-12-22	2020-12-01
Minimum Value At Time	2020-12-09	2020-12-10	2020-12-08	2020-12-22	2020-12-01	2020-12-22
Valid Data Points	31	31	31	31	31	31
Total Data Points	31	31	31	31	31	31
Data Availability %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

SI No	Time	CAAQMS_1- PM10_U	CAAQMS_1- PM2.5_U	CAAQMS_1- SO2_U	CAAQMS_1- NO_U	CAAQMS_1- NO2_U	CAAQMS_1- NOx_U
1	2020-12-01	41.58	37.21	22.51	17.79	2.09	20.03
2	2020-12-02	39.55	39.52	22.67	16.77	2.18	18.95
3	2020-12-03	45.69	44.09	22.80	14.69	2.41	16.75
4	2020-12-04	47.79	44.37	22.73	13.99	2.48	16.01
5	2020-12-05	45.71	34.39	22.77	14.33	2.45	16.37
6	2020-12-06	39.77	25.62	22.85	12.47	2.64	14.40
7	2020-12-07	30.39	22.45	22.67	9.97	2.93	11.78
8	2020-12-08	34.27	23.53	22.41	13.82	2.51	15.83
9	2020-12-09	29.08	19.71	22.43	14.60	2.43	16.67
10	2020-12-10	34.17	19.27	22.50	16.45	2.21	18.61
11	2020-12-11	36.39	23.22	22.56	14.98	2.39	17.06
12	2020-12-12	36.43	24.82	22.53	13.96	2.48	15.97

Sl No	Time	CAAQMS_1-PM10_U	CAAQMS_1-PM2.5_U	CAAQMS_1-SO2_U	CAAQMS_1-NO_U	CAAQMS_1-NO2_U	CAAQMS_1-NOx_U
13	2020-12-13	49.11	32.93	22.59	13.63	2.52	15.63
14	2020-12-14	38.10	24.72	22.56	15.32	2.33	17.41
15	2020-12-15	43.41	25.60	22.60	14.23	2.48	16.28
16	2020-12-16	41.57	28.30	22.53	12.48	2.65	14.42
17	2020-12-17	57.43	31.67	22.53	12.40	2.67	14.34
18	2020-12-18	51.82	36.11	22.63	12.35	2.65	14.27
19	2020-12-19	52.80	39.64	22.82	11.74	2.74	13.65
20	2020-12-20	42.60	31.05	23.19	11.73	2.74	13.63
21	2020-12-21	33.25	23.61	23.42	9.34	3.00	11.11
22	2020-12-22	46.17	30.21	23.35	8.41	3.10	10.13
23	2020-12-23	54.97	31.20	23.19	9.37	2.99	11.13
24	2020-12-24	45.52	31.53	23.01	8.63	3.06	10.34
25	2020-12-25	52.37	36.56	22.84	10.15	2.91	11.97
26	2020-12-26	61.60	41.17	22.64	11.05	2.82	12.92
27	2020-12-27	63.21	39.86	22.53	10.63	2.86	12.47
28	2020-12-28	61.45	40.80	22.51	11.30	2.79	13.18
29	2020-12-29	73.09	43.31	22.52	11.72	2.75	13.62
30	2020-12-30	60.66	40.33	22.60	12.67	2.63	14.62
31	2020-12-31	67.17	43.43	22.54	13.78	2.51	15.79

Report Details: ZURCE | 2021-02-01 14:20:48 | Custom Report

Data Report

FromTime : 01 Dec 2020 00:00:00 ToTime : 31 Dec 2020 00:00:00 Interval : hour

Time	Zuari Cements Ltd--AAQMS-2--PM10--µg/m3	Zuari Cements Ltd--AAQMS-2--SO2--µg/m3	Zuari Cements Ltd--AAQMS-2--NOx--µg/m3
01 Dec 2020 00:00	35.85	19.23	19.34
01 Dec 2020 12:00	32.91	43.65	18.74
02 Dec 2020 00:00	35.32	39.75	18.83
02 Dec 2020 12:00	30.82	31.45	18.89
03 Dec 2020 00:00	46.3	50.32	18.77
03 Dec 2020 12:00	35.22	32.32	18.81
04 Dec 2020 00:00	43.36	51.63	18.9
04 Dec 2020 12:00	35.32	56.32	18.97
05 Dec 2020 00:00	42.86	42.07	19.06
05 Dec 2020 12:00	22.23	14.81	18.72
06 Dec 2020 00:00	29.29	27.45	18.65
06 Dec 2020 12:00	18.89	10.33	18.67
07 Dec 2020 00:00	31.58	26.18	18.88
07 Dec 2020 12:00	18.54	7.89	18.48
08 Dec 2020 00:00	27.82	23.26	18.8
08 Dec 2020 12:00	22.83	10.13	18.52
09 Dec 2020 00:00	22.73	17.06	18.81
09 Dec 2020 12:00	22.3	12.4	18.46
10 Dec 2020 00:00	19.05	11.52	18.62
10 Dec 2020 12:00	20.62	10.14	18.79
11 Dec 2020 00:00	25	15.98	18.92
11 Dec 2020 12:00	23.58	14.79	18.97
12 Dec 2020 00:00	23.46	16.95	19.02
12 Dec 2020 12:00	27.51	18.93	18.95
13 Dec 2020 00:00	35.16	31.65	19.14
13 Dec 2020 12:00	33.67	27.92	19.07
14 Dec 2020 00:00	28.64	23.08	19.11

14 Dec 2020 12:00	26.25	18.41	19.5	4.21
15 Dec 2020 00:00	23.88	17.53	19.41	4.18
15 Dec 2020 12:00	22.82	16.31	19.12	3.75
16 Dec 2020 00:00	29.72	23.68	19.58	4.25
16 Dec 2020 12:00	29.84	23.06	19.42	4.18
17 Dec 2020 00:00	31.98	23.67	20	3.88
17 Dec 2020 12:00	22.03	22.78	19.28	3.45
18 Dec 2020 00:00	42.11	37.99	19.98	3.7
19 Dec 2020 00:00	44.12	45.5	20.02	3.4
19 Dec 2020 12:00	36.94	37.43	19.42	3.77
20 Dec 2020 00:00	38.62	36.7	19.81	4.12
21 Dec 2020 00:00	25.79	21.52	19.72	4.3
21 Dec 2020 12:00	21.88	13.07	19.87	4.2
22 Dec 2020 00:00	32.85	29.85	19.57	4.21
22 Dec 2020 12:00	28.64	21.35	19.73	4.18
23 Dec 2020 00:00	25.81	21.64	19.65	4.18
23 Dec 2020 12:00	31.3	24.88	19.52	4.19
24 Dec 2020 00:00	32.58	31.55	19.67	4.21
24 Dec 2020 12:00	29.84	23.06	19.66	4.18
25 Dec 2020 00:00	39.46	36.04	19.66	4.19
25 Dec 2020 12:00	36.67	30.12	19.74	4.18
26 Dec 2020 00:00	42.79	37.37	19.82	4.2
26 Dec 2020 12:00	40.24	37.91	19.81	4.2
27 Dec 2020 00:00	43.22	43.14	20.3	4.2
27 Dec 2020 12:00	36.92	32.75	20.14	4.18
28 Dec 2020 00:00	40.23	36.27	20.31	4.19
28 Dec 2020 12:00	42.93	40.11	19.99	4.18
29 Dec 2020 00:00	46.91	43.53	20.04	4.18
29 Dec 2020 12:00	39.47	36.64	19.91	4.18
30 Dec 2020 00:00	45.54	39.83	19.96	4.19
30 Dec 2020 12:00	38.34	27.72	20.08	4.2

Real Time Data Acquisition And Monitoring

Site Name: Zuari Cement

Report: Custom Report

From Date: 2020/12/01 00:00:00 To Date : 2020/12/31 23:00:00

Description	CAAQMS_3- PM10_U	CAAQMS_3- PM2.5_U	CAAQMS_3- SO2_U	CAAQMS_3- NOx_U	CAAQMS_3- NO2_U	CAAQMS_3- NO_U
Prescribed Standards	-	-	-	-	-	-
Maximum Data	94.02	62.08	33.2	26.22	22.03	4.59
Minimum Data	25.2	18.82	30.14	10.84	9.46	1.19
Geometric Mean	56.31	40.81	31.59	17.11	14.67	2.51
Median	55.7	40.03	31.47	17.03	14.41	2.41
Standard Deviation	16.11	11.98	0.83	3.0	2.52	0.77
Maximum Value At Time	2020-12-26	2020-12-26	2020-12-31	2020-12-22	2020-12-22	2020-12-22
Minimum Value At Time	2020-12-10	2020-12-24	2020-12-06	2020-12-19	2020-12-19	2020-12-20
Valid Data Points	31	31	31	31	31	31
Total Data Points	31	31	31	31	31	31
Data Availability %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

SI No	Time	CAAQMS_3- PM10_U	CAAQMS_3- PM2.5_U	CAAQMS_3- SO2_U	CAAQMS_3- NOx_U	CAAQMS_3- NO2_U	CAAQMS_3- NO_U
1	2020-12-01	47.31	40.03	31.34	14.14	11.96	2.53
2	2020-12-02	52.89	48.09	30.94	14.58	12.39	2.77
3	2020-12-03	50.92	60.83	30.69	17.03	14.98	2.07
4	2020-12-04	76.34	46.36	30.61	16.78	14.27	2.55
5	2020-12-05	72.57	43.12	30.44	17.10	14.41	2.75
6	2020-12-06	68.54	39.73	30.14	18.95	15.81	3.08
7	2020-12-07	49.04	34.35	30.37	13.38	11.38	2.09
8	2020-12-08	41.45	30.43	30.79	15.84	13.53	2.19
9	2020-12-09	31.72	23.15	30.87	15.72	14.30	1.42
10	2020-12-10	25.20	22.48	30.88	16.95	14.13	2.98
11	2020-12-11	41.82	29.84	30.97	15.73	13.08	2.68
12	2020-12-12	56.24	35.53	31.04	16.87	14.19	2.72

SI No	Time	CAAQMS_3-PM10_U	CAAQMS_3-PM2.5_U	CAAQMS_3-SO2_U	CAAQMS_3-NOx_U	CAAQMS_3-NO2_U	CAAQMS_3-NO_U
13	2020-12-13	60.17	49.79	31.40	19.31	16.39	2.92
14	2020-12-14	47.87	29.12	32.02	18.17	14.65	3.50
15	2020-12-15	59.26	36.09	32.11	20.07	16.19	3.91
16	2020-12-16	41.74	42.01	32.16	16.56	13.66	2.94
17	2020-12-17	50.23	46.21	32.42	17.54	14.86	2.64
18	2020-12-18	43.52	51.90	32.39	15.59	13.32	2.32
19	2020-12-19	55.70	58.71	32.22	10.84	9.46	1.35
20	2020-12-20	43.80	47.38	32.04	12.03	10.82	1.19
21	2020-12-21	39.89	38.41	31.51	14.23	12.21	2.02
22	2020-12-22	57.40	53.05	31.25	26.22	22.03	4.59
23	2020-12-23	63.23	36.71	31.20	23.06	19.56	4.01
24	2020-12-24	62.19	18.82	31.47	17.15	14.96	2.23
25	2020-12-25	84.51	21.23	31.92	17.88	15.71	2.22
26	2020-12-26	94.02	62.08	32.19	19.65	17.59	2.03
27	2020-12-27	79.30	54.65	32.33	19.13	17.11	2.04
28	2020-12-28	78.71	26.38	32.60	18.52	16.55	2.01
29	2020-12-29	66.40	51.93	32.85	18.98	17.08	1.95
30	2020-12-30	65.73	49.89	32.88	17.48	15.05	2.41
31	2020-12-31	37.94	36.89	33.20	14.81	13.25	1.58

Report Details: ZURCE | 2021-02-01 14:23:20 | Custom Report

Forbes Marshall

Zuari Cement Ltd

Survey No: 139,140,141,
Auj(Aherwadi),
Solapur,Maharashtra-413228

Station Report

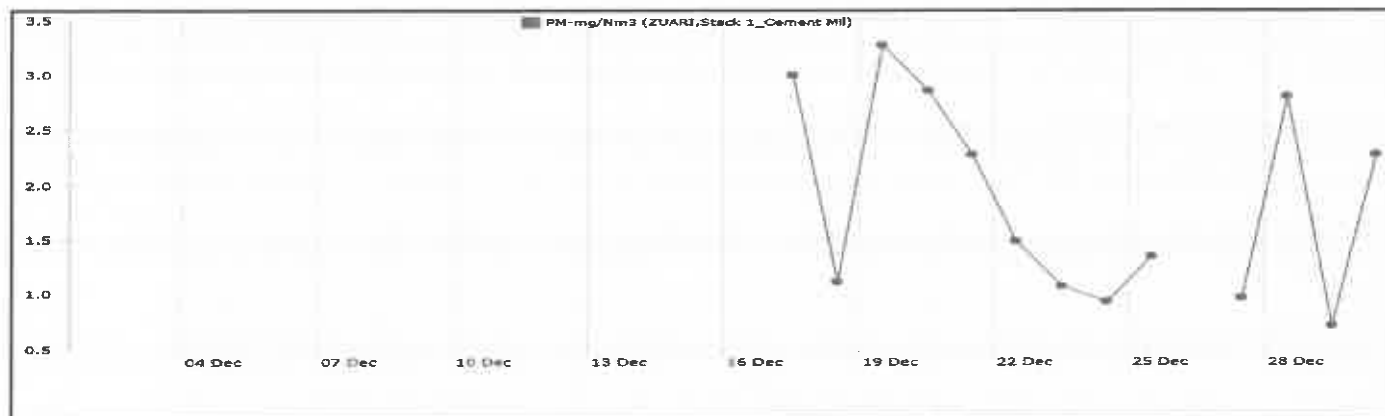
Station: Stack 1_Cement Mil

From : 01-12-2020 12:31:00

To : 31-12-2020 14:31:00

Interval : Daily

Function : Average



Flag legends:

< - Average with less data, C - Calibration mode, M - Maintenance mode, S - Data under scrutiny,
B - Bad data, H - High permissible limit crossed, L - Low permissible limit crossed, P - Processed Data, V - Corrected Data, D - Delayed Data, R-
Analyzer drift

Calender	PM Avg					
Units	mg/Nm3					
Range	0 - 30					
17-12-2020 12:31:00	3.00 <					
18-12-2020 12:31:00	1.11 <					
19-12-2020 12:31:00	3.27 < D					
20-12-2020 12:31:00	2.86 < D					
21-12-2020 12:31:00	2.27 < D					

Calender	PM Avg					
Units	mg/Nm3					
Range	0 - 30					
22-12-2020 12:31:00	1.48 < D					
23-12-2020 12:31:00	1.07 < D					
24-12-2020 12:31:00	0.93 < D					
25-12-2020 12:31:00	1.34 < D					
27-12-2020 12:31:00	0.96 <					
28-12-2020 12:31:00	2.80 <					
29-12-2020 12:31:00	0.71 < D					
30-12-2020 12:31:00	2.27 < D					

Report Summary

Average	1.85					
Maximum	3.27					
Minimum	0.71					
Std.Deviation	0.92					
Geom.Mean	1.64					
Median	1.48					
Mode	2.86					
Total Active Duration						

Real Time Data Acquisition And Monitoring

Site Name: Zueli Cement

Report: Custom Report

From Date: 2021/05/01 00:00:00 To Date: 2021/05/28 23:59:59

Summary Statistics									
Maximum Data	67.33	54.75	24.35	23.75	4.31	25.13	1.4	1.4	1.4
Minimum Data	32.80	10.87	73.08	8.08	2.4	10.71	1.4	1.4	1.4
Maximum Alarm	62.58	17.87	25.9	10.72	8.85	10.81	1.4	1.4	1.4
Minimum	42.99	17.87	23.82	12.84	5.72	10.81	1.4	1.4	1.4
Standard Deviation	8.28	8.41	5.2	4.47	0.83	4.73	1.4	1.4	1.4
Maximum Value At Time	2021-05-01	2021-05-01	2021-05-01	2021-05-01	2021-05-01	2021-05-01	2021-05-01	2021-05-01	2021-05-01
Minimum Value At Time	2021-05-01	2021-05-01	2021-05-01	2021-05-01	2021-05-01	2021-05-01	2021-05-01	2021-05-01	2021-05-01
Valid Data Points	28	28	28	28	28	28	28	28	28
Total Data Points	28	28	28	28	28	28	28	28	28
Data Availability %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Time	Parameter 1	Parameter 2	Parameter 3	Parameter 4	Parameter 5	Parameter 6	Parameter 7	Parameter 8	Parameter 9	Parameter 10
1	66.88	54.75	24.35	23.75	4.31	25.13	1.4	1.4	1.4	1.4
2	66.88	54.75	24.35	23.75	4.31	25.13	1.4	1.4	1.4	1.4
3	66.88	54.75	24.35	23.75	4.31	25.13	1.4	1.4	1.4	1.4
4	66.88	54.75	24.35	23.75	4.31	25.13	1.4	1.4	1.4	1.4
5	66.88	54.75	24.35	23.75	4.31	25.13	1.4	1.4	1.4	1.4
6	66.88	54.75	24.35	23.75	4.31	25.13	1.4	1.4	1.4	1.4
7	66.88	54.75	24.35	23.75	4.31	25.13	1.4	1.4	1.4	1.4
8	66.88	54.75	24.35	23.75	4.31	25.13	1.4	1.4	1.4	1.4
9	66.88	54.75	24.35	23.75	4.31	25.13	1.4	1.4	1.4	1.4
10	66.88	54.75	24.35	23.75	4.31	25.13	1.4	1.4	1.4	1.4
11	66.88	54.75	24.35	23.75	4.31	25.13	1.4	1.4	1.4	1.4
12	66.88	54.75	24.35	23.75	4.31	25.13	1.4	1.4	1.4	1.4
13	66.88	54.75	24.35	23.75	4.31	25.13	1.4	1.4	1.4	1.4
14	66.88	54.75	24.35	23.75	4.31	25.13	1.4	1.4	1.4	1.4
15	66.88	54.75	24.35	23.75	4.31	25.13	1.4	1.4	1.4	1.4
16	66.88	54.75	24.35	23.75	4.31	25.13	1.4	1.4	1.4	1.4
17	66.88	54.75	24.35	23.75	4.31	25.13	1.4	1.4	1.4	1.4
18	66.88	54.75	24.35	23.75	4.31	25.13	1.4	1.4	1.4	1.4
19	66.88	54.75	24.35	23.75	4.31	25.13	1.4	1.4	1.4	1.4
20	66.88	54.75	24.35	23.75	4.31	25.13	1.4	1.4	1.4	1.4
21	66.88	54.75	24.35	23.75	4.31	25.13	1.4	1.4	1.4	1.4
22	66.88	54.75	24.35	23.75	4.31	25.13	1.4	1.4	1.4	1.4
23	66.88	54.75	24.35	23.75	4.31	25.13	1.4	1.4	1.4	1.4
24	66.88	54.75	24.35	23.75	4.31	25.13	1.4	1.4	1.4	1.4
25	66.88	54.75	24.35	23.75	4.31	25.13	1.4	1.4	1.4	1.4
26	66.88	54.75	24.35	23.75	4.31	25.13	1.4	1.4	1.4	1.4
27	66.88	54.75	24.35	23.75	4.31	25.13	1.4	1.4	1.4	1.4
28	66.88	54.75	24.35	23.75	4.31	25.13	1.4	1.4	1.4	1.4

Report: Zueli Cement (2021-05-01 00:00:00) Custom Report

Data Report

FromTime : 01 Feb 2021 00:00:00 ToTime : 28 Feb 2021 00:00:00 Interval : hour

Time	Zuari Cements Ltd-- AAQMS-2--PM10-- µg/m3	Zuari Cements Ltd-- AAQMS-2--PM2.5-- µg/m3	Zuari Cements Ltd--AAQMS- 2--SO2--µg/m3	Zuari Cements Ltd--AAQMS-2--NOx- -mµg/m3
01 Feb 2021 00:00	35.99	30.23	22.22	4.21
01 Feb 2021 12:00	29.94	24.29	21.91	4.21
02 Feb 2021 00:00	33.92	0	22.51	4.21
02 Feb 2021 12:00	23.08	0	21.35	4.2
03 Feb 2021 00:00	89.12	0	21.24	4.18
03 Feb 2021 12:00	84.05	54.2	20.73	5.86
04 Feb 2021 00:00	25.55	19.1	20.96	4.2
04 Feb 2021 12:00	23.03	17.04	20.91	4.21
05 Feb 2021 00:00	30.94	25.37	20.75	4.21
05 Feb 2021 12:00	26.21	17.65	20.33	4.19
06 Feb 2021 00:00	33.3	25.98	20.83	4.21
06 Feb 2021 12:00	26.8	17.57	20.46	4.21
07 Feb 2021 00:00	31.85	26.74	20.72	4.2
07 Feb 2021 12:00	29.57	25.69	20.91	4.21
08 Feb 2021 00:00	29.85	28.08	21.1	4.21
08 Feb 2021 12:00	23.55	19.1	21.07	4.19
09 Feb 2021 00:00	28.55	26.59	21.66	4.18
09 Feb 2021 12:00	24.66	19.93	21.02	4.2
10 Feb 2021 00:00	29.53	27.45	21.56	4.21
10 Feb 2021 12:00	27.14	21.46	21.08	4.2
11 Feb 2021 00:00	34.43	28.72	21.82	4.2
11 Feb 2021 12:00	25.88	19.95	20.24	4.19
12 Feb 2021 00:00	28.45	25.51	20.74	4.23
12 Feb 2021 12:00	25.16	22.33	21.27	4.19
13 Feb 2021 00:00	28.23	23.44	21.36	4.22
13 Feb 2021 12:00	24.08	18.06	20.58	4.19

14 Feb 2021 00:00	28.86	25.69	21.02	4.2
14 Feb 2021 12:00	24.77	17.88	21.37	4.21
15 Feb 2021 00:00	30.72	24.64	22	4.21
15 Feb 2021 12:00	25.24	20.96	21.32	4.19
16 Feb 2021 00:00	30.27	28.18	21.89	4.19
16 Feb 2021 12:00	29.06	21.77	21.47	4.19
17 Feb 2021 00:00	37.53	31.04	22.09	4.2
17 Feb 2021 12:00	31.25	26.08	21.92	4.19
18 Feb 2021 00:00	24.18	23.18	22.4	4.2
18 Feb 2021 12:00	23.7	18.53	22.14	4.21
19 Feb 2021 00:00	25.73	21.67	22.55	4.2
19 Feb 2021 12:00	18.31	15.26	22.57	4.2
20 Feb 2021 00:00	15.98	13.18	22.79	4.2
20 Feb 2021 12:00	18.83	16.16	22.39	4.19
21 Feb 2021 00:00	20.76	19.37	22.56	4.21
21 Feb 2021 12:00	16.1	11.97	21.77	4.2
22 Feb 2021 00:00	21.07	18.3	22.31	4.21
22 Feb 2021 12:00	19.83	15.05	21.65	4.21
23 Feb 2021 00:00	30.01	27.55	22.71	4.2
23 Feb 2021 12:00	23.4	19.11	22.05	4.19
24 Feb 2021 00:00	31.02	28.29	22.45	4.22
24 Feb 2021 12:00	26.3	20.48	22.06	4.2
25 Feb 2021 00:00	32.45	28.4	22.65	4.21
25 Feb 2021 12:00	27.64	24.5	22.41	4.17
26 Feb 2021 00:00	38.06	30.71	22.55	4.22
26 Feb 2021 12:00	31.45	24.72	22.13	4.2
27 Feb 2021 00:00	32.15	27.24	22.17	4.21
27 Feb 2021 12:00	26.96	15.27	21.82	4.18

Real Time Data Acquisition And Monitoring

Site Name: Zuari Cement

Report: Custom Report

From Date: 2021/02/01 00:00:00 To Date : 2021/02/28 23:42:40

Description	CAAQMS_3- PM10_U	CAAQMS_3- PM2.5_U	CAAQMS_3- SO2_U	CAAQMS_3- NOx_U	CAAQMS_3- NO2_U	CAAQMS_3- NO_U
Prescribed Standards	-	-	-	-	-	-
Maximum Data	54.35	28.34	36.15	18.8	16.97	2.71
Minimum Data	10.37	8.65	15.88	8.03	6.89	1.06
Geometric Mean	28.28	14.29	18.73	13.74	12.18	1.6
Median	28.4	13.0	16.96	13.98	12.6	1.58
Standard Deviation	7.79	4.33	5.51	2.99	2.74	0.44
Maximum Value At Time	2021-02-07	2021-02-03	2021-02-01	2021-02-14	2021-02-14	2021-02-25
Minimum Value At Time	2021-02-06	2021-02-18	2021-02-10	2021-02-20	2021-02-20	2021-02-01
Valid Data Points	28	28	28	28	28	28
Total Data Points	28	28	28	28	28	28
Data Availability %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

SI No	Time	CAAQMS_3- PM10_U	CAAQMS_3- PM2.5_U	CAAQMS_3- SO2_U	CAAQMS_3- NOx_U	CAAQMS_3- NO2_U	CAAQMS_3- NO_U
1	2021-02-01	31.59	12.42	36.15	9.46	8.40	1.06
2	2021-02-02	24.15	9.56	35.65	10.41	9.33	1.09
3	2021-02-03	15.99	28.34	30.16	15.91	13.84	2.05
4	2021-02-04	30.48	11.73	19.31	16.36	14.58	1.78
5	2021-02-05	24.19	13.47	16.25	17.08	15.39	1.67
6	2021-02-06	10.37	13.27	16.28	15.45	13.99	1.44
7	2021-02-07	54.35	14.05	16.31	9.47	8.41	1.07
8	2021-02-08	26.00	13.42	16.13	10.27	9.21	1.06
9	2021-02-09	26.50	11.78	15.90	15.88	14.49	1.39
10	2021-02-10	28.61	11.24	15.88	16.95	15.31	1.65
11	2021-02-11	27.13	11.48	16.07	14.38	13.16	1.22
12	2021-02-12	28.74	12.73	16.38	12.56	11.10	1.44

Sl No	Time	CAAQMS_3-PM10_U	CAAQMS_3-PM2.5_U	CAAQMS_3-SO2_U	CAAQMS_3-NOx_U	CAAQMS_3-NO2_U	CAAQMS_3-NO_U
13	2021-02-13	25.98	11.35	16.36	12.97	11.69	1.27
14	2021-02-14	32.24	11.14	16.43	18.80	16.97	1.85
15	2021-02-15	29.92	11.00	16.48	11.88	10.55	1.33
16	2021-02-16	31.96	10.31	16.55	15.61	13.93	1.67
17	2021-02-17	36.60	11.22	16.71	17.42	15.25	2.15
18	2021-02-18	29.30	8.65	16.80	12.95	10.62	2.36
19	2021-02-19	25.76	16.13	17.13	8.38	7.13	1.24
20	2021-02-20	19.54	16.03	17.17	8.03	6.89	1.14
21	2021-02-21	22.07	16.70	17.39	10.63	9.01	1.60
22	2021-02-22	22.69	16.99	17.78	13.53	11.88	1.66
23	2021-02-23	30.33	19.90	17.84	13.59	12.05	1.66
24	2021-02-24	35.19	21.56	17.63	14.82	13.27	1.57
25	2021-02-25	34.84	19.54	17.49	17.34	14.64	2.71
26	2021-02-26	35.44	19.03	17.50	15.54	14.14	1.81
27	2021-02-27	28.19	15.38	17.46	13.28	11.94	1.32
28	2021-02-28	23.71	11.75	17.32	15.70	13.81	2.47

Report Details: ZURCE | 2021-03-24 13:48:11 | Custom Report

Forbes Marshall

Zuari Cement Ltd

Survey No: 139,140,141,
Auj(Aherwadi),
Solapur,Maharashtra-413228

Station Report

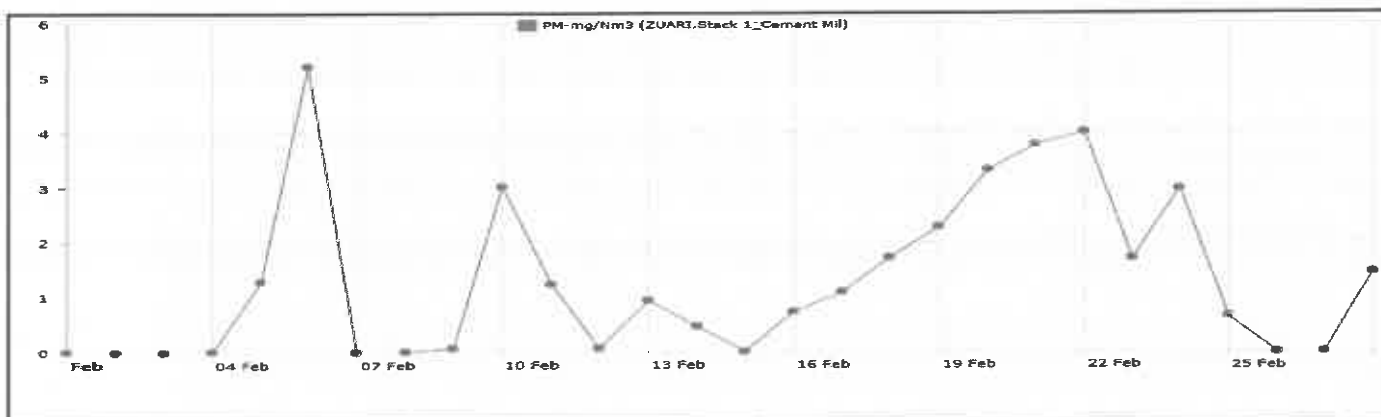
Station: Stack 1_Cement Mil

From : 01-02-2021 00:00:00

To : 28-02-2021 23:59:59

Interval : Daily

Function : Average



Flag legends:

< - Average with less data, C - Calibration mode, M - Maintenance mode, S - Data under scrutiny,
B - Bad data, H - High permissible limit crossed, L - Low permissible limit crossed, P - Processed Data, V - Corrected Data, D - Delayed Data, R-
Analyzer drift

Calender	PM Avg					
Units	mg/Nm3					
Range	0 - 30					
01-02-2021 00:00:00	0.00 <					
02-02-2021 00:00:00	0.00 <					
03-02-2021 00:00:00	0.00 <					
04-02-2021 00:00:00	0.00 <					
05-02-2021 00:00:00	1.29 <					

Calender	PM Avg					
Units	mg/Nm3					
Range	0 - 30					
06-02-2021 00:00:00	5.21 <					
07-02-2021 00:00:00	0.00 <					
08-02-2021 00:00:00	0.00 <					
09-02-2021 00:00:00	0.06 <					
10-02-2021 00:00:00	3.02 <					
11-02-2021 00:00:00	1.23 < H					
12-02-2021 00:00:00	0.06 < H					
13-02-2021 00:00:00	0.94 <					
14-02-2021 00:00:00	0.46 <					
15-02-2021 00:00:00	0.00 <					
16-02-2021 00:00:00	0.72 <					
17-02-2021 00:00:00	1.09 <					
18-02-2021 00:00:00	1.72 < B					
19-02-2021 00:00:00	2.27 <					
20-02-2021 00:00:00	3.31 <					
21-02-2021 00:00:00	3.77 <					
22-02-2021 00:00:00	4.00 <					
23-02-2021 00:00:00	1.69 <					
24-02-2021 00:00:00	2.96 < H					
25-02-2021 00:00:00	0.65 <					
26-02-2021 00:00:00	0.00 <					
27-02-2021 00:00:00	0.00 <					

Calender	PM Avg					
Units	mg/Nm3					
Range	0 - 30					
28-02-2021 00:00:00	1.44 <					

Report Summary

Average	1.28					
Maximum	5.21					
Minimum	0.00					
Std.Deviation	1.49					
Geom.Mean	0.87					
Median	0.83					
Mode	0.00					
Total Active Duration						

Real Time Data Acquisition And Monitoring

Site Name: Zuari Cement

Report: Custom Report

From Date: 2021/01/01 00:00:00 To Date : 2021/01/31 23:35:48

Description	CAAQMS_1- PM10_U	CAAQMS_1- PM2.5_U	CAAQMS_1- SO2_U	CAAQMS_1- NO_U	CAAQMS_1- NO2_U	CAAQMS_1- NOx_U
Prescribed Standards	-	-	-	-	-	-
Maximum Data	83.98	45.69	23.51	21.1	2.53	23.51
Minimum Data	17.77	12.93	22.51	13.69	1.7	15.7
Geometric Mean	47.78	30.59	23.09	17.06	2.16	19.25
Median	46.37	32.28	23.22	17.0	2.15	19.18
Standard Deviation	16.05	8.22	0.3	1.97	0.22	2.08
Maximum Value At Time	2021-01-25	2021-01-03	2021-01-31	2021-01-22	2021-01-04	2021-01-22
Minimum Value At Time	2021-01-07	2021-01-07	2021-01-01	2021-01-05	2021-01-22	2021-01-05
Valid Data Points	31	31	31	31	31	31
Total Data Points	31	31	31	31	31	31
Data Availability %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

SI No	Time	CAAQMS_1- PM10_U	CAAQMS_1- PM2.5_U	CAAQMS_1- SO2_U	CAAQMS_1- NO_U	CAAQMS_1- NO2_U	CAAQMS_1- NOx_U
1	2021-01-01	59.12	42.15	22.51	14.47	2.43	16.52
2	2021-01-02	64.39	42.80	22.62	14.88	2.39	16.95
3	2021-01-03	58.89	45.69	22.72	14.71	2.43	16.79
4	2021-01-04	46.37	32.87	22.68	13.73	2.53	15.75
5	2021-01-05	33.91	21.74	22.59	13.69	2.53	15.70
6	2021-01-06	27.82	17.93	22.67	15.00	2.37	17.07
7	2021-01-07	17.77	12.93	22.58	16.98	2.17	19.17
8	2021-01-08	31.30	25.30	22.69	17.60	2.09	19.82
9	2021-01-09	29.01	19.58	22.88	17.86	2.07	20.10
10	2021-01-10	25.24	17.94	22.94	18.21	2.05	20.48
11	2021-01-11	32.30	22.08	23.21	16.74	2.20	18.93
12	2021-01-12	36.58	24.06	23.27	16.40	2.23	18.57

SI No	Time	CAAQMS_1-PM10_U	CAAQMS_1-PM2.5_U	CAAQMS_1-SO2_U	CAAQMS_1-NO_U	CAAQMS_1-NO2_U	CAAQMS_1-NOx_U
13	2021-01-13	33.92	23.22	23.30	16.76	2.17	18.93
14	2021-01-14	37.29	25.70	23.34	15.13	2.36	17.22
15	2021-01-15	40.54	30.63	23.27	15.37	2.34	17.47
16	2021-01-16	47.18	35.08	23.22	15.77	2.31	17.91
17	2021-01-17	44.15	29.85	23.15	17.80	2.07	20.03
18	2021-01-18	37.61	26.66	23.14	17.92	2.05	20.16
19	2021-01-19	46.16	29.70	23.13	16.40	2.23	18.56
20	2021-01-20	49.70	32.28	23.21	17.00	2.15	19.18
21	2021-01-21	67.07	42.20	23.25	18.58	1.99	20.86
22	2021-01-22	57.26	36.37	23.24	21.10	1.70	23.51
23	2021-01-23	61.01	36.09	23.30	21.02	1.70	23.42
24	2021-01-24	70.01	37.54	23.29	19.35	1.90	21.67
25	2021-01-25	83.98	36.82	23.27	17.98	2.05	20.22
26	2021-01-26	76.14	37.18	23.40	17.72	2.08	19.95
27	2021-01-27	59.63	33.67	23.40	17.16	2.15	19.37
28	2021-01-28	62.12	36.77	23.37	19.27	1.93	21.60
29	2021-01-29	54.92	34.87	23.30	20.13	1.83	22.50
30	2021-01-30	50.83	32.63	23.35	18.61	1.98	20.89
31	2021-01-31	38.94	25.99	23.51	15.46	2.33	17.56

Report Details: ZURCE | 2021-02-01 10:40:49 | Custom Report

Data Report

FromTime : 01 Jan 2021 00:00:00 ToTime : 31 Jan 2021 00:00:00 Interval : hour

Time	Zuari Cements Ltd-Zuari Cements Ltd--		Zuari Cements Ltd--		Zuari Cements Ltd--AAQMS-2--NOx--	
	-AAQMS-2--PM10- -µg/m3	AAQMS-2--PM2.5-- µg/m3	AAQMS-2--SO2--µg/m3		mµg/m3	
01 Jan 2021 00:00		45.5	36.91	20.26		4.2
01 Jan 2021 12:00		42.22	32.18	20.01		4.18
02 Jan 2021 00:00		44.55	38.52	20.16		4.18
02 Jan 2021 12:00		39.11	30.23	20.12		4.18
03 Jan 2021 00:00		47.15	38.97	20.26		4.17
03 Jan 2021 12:00		40.6	30.25	20.03		4.16
04 Jan 2021 00:00		39.94	31.88	20.12		4.21
04 Jan 2021 12:00		28.76	19.42	20.13		4.07
05 Jan 2021 00:00		25.11	11.35	20.26		4
05 Jan 2021 12:00		24.86	9.24	20.05		3.56
06 Jan 2021 00:00		23.59	12.74	20.55		4.03
06 Jan 2021 12:00		14.87	2.63	19.97		3.95
07 Jan 2021 00:00		18.77	7.76	19.97		4.16
07 Jan 2021 12:00		12.78	1.96	20.24		3.64
08 Jan 2021 00:00		18.94	7.28	20.76		3.81
09 Jan 2021 00:00		28.52	11.42	20.69		3.14
09 Jan 2021 12:00		20.92	7.96	20.57		4.19
10 Jan 2021 00:00		21.86	11.27	20.93		4.18
10 Jan 2021 12:00		18.58	4.89	20.63		4.2
11 Jan 2021 00:00		28.13	15.36	21.17		4.19
11 Jan 2021 12:00		23.13	9.17	20.71		4.18
12 Jan 2021 00:00		32.96	20.84	21.09		4.2
12 Jan 2021 12:00		23.57	10.44	20.77		4.18
13 Jan 2021 00:00		31.52	19.41	21.14		4.18
13 Jan 2021 12:00		22.79	9.98	20.87		4.18
14 Jan 2021 00:00		30.11	19.41	20.97		4.2
14 Jan 2021 12:00		28.83	14.79	20.66		4.19

15 Jan 2021 00:00	30.47	20.42	21.11	4.17
15 Jan 2021 12:00	32.23	21.98	20.92	4.15
16 Jan 2021 00:00	36.59	26.73	21.35	4.13
16 Jan 2021 12:00	34.42	23.6	20.81	4.08
17 Jan 2021 00:00	41.59	31.62	21.13	4.03
17 Jan 2021 12:00	40.18	25.86	20.8	3.84
18 Jan 2021 00:00	28.43	14.95	21.69	3.85
18 Jan 2021 12:00	27.89	16.23	21.31	4.11
19 Jan 2021 00:00	31.38	20.5	21.82	3.25
19 Jan 2021 12:00	34.25	18.94	21.39	3.35
20 Jan 2021 00:00	38.89	27.08	21.47	3.17
20 Jan 2021 12:00	31.9	18.87	21.53	3.45
21 Jan 2021 00:00	42.29	32.29	21.95	3.53
21 Jan 2021 12:00	42.73	29.28	21.81	4.2
22 Jan 2021 00:00	41.48	31.64	22.32	4.2
22 Jan 2021 12:00	37.22	25.81	22.24	4.19
23 Jan 2021 00:00	38.07	28.33	22.89	4.18
23 Jan 2021 12:00	38.7	26.59	22.3	4.19
24 Jan 2021 00:00	43.87	32.9	22.77	4.17
24 Jan 2021 12:00	38.35	24.06	22.47	4.21
25 Jan 2021 00:00	45.35	34.27	23.13	4.19
25 Jan 2021 12:00	37.25	24.01	23.17	4.2
26 Jan 2021 00:00	39.08	30.24	23.5	4.21
26 Jan 2021 12:00	40.62	26.75	23.29	4.18
27 Jan 2021 00:00	39.18	29.97	23.78	4.17
27 Jan 2021 12:00	32.64	21.36	23.52	4.07
28 Jan 2021 00:00	39.21	29.9	24	3.81
28 Jan 2021 12:00	32.94	25.25	23.66	3.98
29 Jan 2021 00:00	36.75	30.95	23.98	4.17
29 Jan 2021 12:00	34.16	25.1	23.7	4.19
30 Jan 2021 00:00	42.94	28.96	22.85	4.21
30 Jan 2021 12:00	290.21	19.63	20.67	4.22

Real Time Data Acquisition And Monitoring

Site Name: Zuari Cement

Report: Custom Report

From Date: 2021/01/01 00:00:00 To Date : 2021/01/31 23:35:48

Description	CAAQMS_3- PM10_U	CAAQMS_3- PM2.5_U	CAAQMS_3- SO2_U	CAAQMS_3- NOx_U	CAAQMS_3- NO2_U	CAAQMS_3- NO_U
Prescribed Standards	-	-	-	-	-	-
Maximum Data	39.97	20.19	36.09	29.25	27.37	3.99
Minimum Data	10.45	9.15	33.54	8.47	6.74	1.13
Geometric Mean	26.81	14.34	35.06	15.47	13.51	2.05
Median	29.24	14.69	35.15	15.58	13.09	1.95
Standard Deviation	7.35	2.96	0.76	4.15	3.96	0.7
Maximum Value At Time	2021-01-03	2021-01-03	2021-01-31	2021-01-21	2021-01-21	2021-01-02
Minimum Value At Time	2021-01-07	2021-01-10	2021-01-03	2021-01-07	2021-01-07	2021-01-31
Valid Data Points	31	31	31	31	31	31
Total Data Points	31	31	31	31	31	31
Data Availability %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

SI No	Time	CAAQMS_3- PM10_U	CAAQMS_3- PM2.5_U	CAAQMS_3- SO2_U	CAAQMS_3- NOx_U	CAAQMS_3- NO2_U	CAAQMS_3- NO_U
1	2021-01-01	33.43	19.78	33.59	14.41	12.59	1.85
2	2021-01-02	35.46	18.29	33.68	17.38	14.79	3.99
3	2021-01-03	39.97	20.19	33.54	17.57	14.88	2.72
4	2021-01-04	28.97	14.69	33.74	15.58	13.12	2.46
5	2021-01-05	20.03	12.25	33.93	17.81	14.57	3.62
6	2021-01-06	16.65	10.81	34.11	14.35	11.61	2.68
7	2021-01-07	10.45	10.81	34.65	8.47	6.74	1.73
8	2021-01-08	20.31	16.38	34.95	10.47	9.10	1.36
9	2021-01-09	15.01	13.12	35.09	12.76	10.63	2.12
10	2021-01-10	12.38	9.15	35.14	13.04	11.05	1.94
11	2021-01-11	16.89	11.17	34.96	14.97	13.02	1.96
12	2021-01-12	20.68	11.54	34.78	13.08	11.56	1.52

SI No	Time	CAAQMS_3-PM10_U	CAAQMS_3-PM2.5_U	CAAQMS_3-SO2_U	CAAQMS_3-NOx_U	CAAQMS_3-NO2_U	CAAQMS_3-NO_U
13	2021-01-13	22.20	10.79	34.76	15.74	12.75	3.02
14	2021-01-14	22.96	11.94	34.75	10.69	9.44	1.22
15	2021-01-15	26.96	16.54	34.91	11.22	9.81	1.41
16	2021-01-16	32.05	15.29	35.15	13.72	11.97	1.72
17	2021-01-17	32.16	17.48	35.40	14.43	13.09	1.34
18	2021-01-18	23.61	11.33	35.32	11.22	9.94	1.28
19	2021-01-19	26.65	12.48	35.46	15.97	13.52	2.45
20	2021-01-20	30.59	16.70	35.40	15.93	13.88	2.08
21	2021-01-21	35.64	16.85	35.41	29.25	27.37	1.90
22	2021-01-22	29.76	17.20	35.53	16.06	14.78	1.28
23	2021-01-23	30.61	18.61	35.57	15.65	14.38	1.26
24	2021-01-24	33.14	14.93	35.83	22.28	20.42	2.66
25	2021-01-25	33.83	15.03	35.78	23.10	20.44	2.69
26	2021-01-26	30.14	11.65	35.80	18.01	16.01	1.99
27	2021-01-27	28.55	15.45	35.89	19.49	17.56	1.95
28	2021-01-28	32.01	13.93	35.84	15.84	13.63	2.26
29	2021-01-29	31.02	13.12	35.94	13.83	11.97	1.85
30	2021-01-30	29.24	15.26	35.92	16.56	14.48	2.06
31	2021-01-31	29.74	11.86	36.09	10.77	9.65	1.13

Report Details: ZURCE | 2021-02-01 10:41:57 | Custom Report

Forbes Marshall

Zuari Cement Ltd

Survey No: 139,140,141,
Auj(Aherwadi),
Solapur,Maharashtra-413228

Station Report

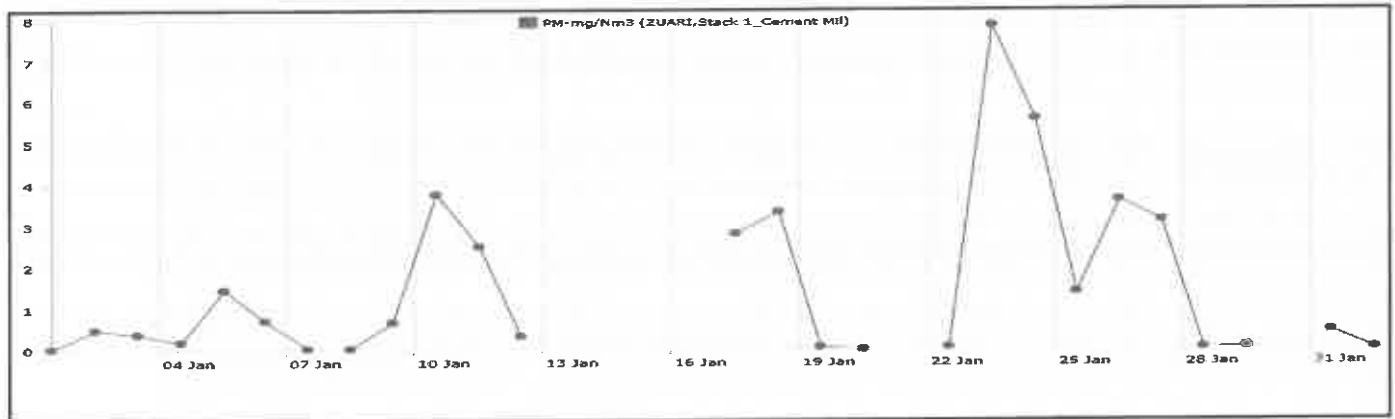
Station: Stack 1_Cement Mil

From : 01-01-2021 12:15:00

To : 01-02-2021 14:15:00

Interval : Daily

Function : Average



Flag legends: < - Average with less data, C - Calibration mode, M - Maintenance mode, S - Data under scrutiny, B - Bad data, H - High permissible limit crossed, L - Low permissible limit crossed, P - Processed Data, V - Corrected Data, D - Delayed Data, R - Analyzer drift

Calender	PM Avg					
Units	mg/Nm3					
Range	0 - 30					
01-01-2021 12:15:00	0.00 <					
02-01-2021 12:15:00	0.46 <					
03-01-2021 12:15:00	0.36 <					
04-01-2021 12:15:00	0.15 <					
05-01-2021 12:15:00	1.43 <					

Calender	PM Avg					
Units	mg/Nm3					
Range	0 - 30					
06-01-2021 12:15:00	0.69 <					
07-01-2021 12:15:00	0.00 <					
08-01-2021 12:15:00	0.00 <					
09-01-2021 12:15:00	0.64 <					
10-01-2021 12:15:00	3.76 <					
11-01-2021 12:15:00	2.49 <					
12-01-2021 12:15:00	0.30 <					
17-01-2021 12:15:00	2.80 <					
18-01-2021 12:15:00	3.32 <					
19-01-2021 12:15:00	0.03 <					
20-01-2021 12:15:00	0.00 <					
22-01-2021 12:15:00	0.03 <					
23-01-2021 12:15:00	7.85 <					
24-01-2021 12:15:00	5.58 <					
25-01-2021 12:15:00	1.36 <					
26-01-2021 12:15:00	3.61 <					
27-01-2021 12:15:00	3.09 <					
28-01-2021 12:15:00	0.00 <					
29-01-2021 12:15:00	0.03 <					
31-01-2021 12:15:00	0.42 <					
01-02-2021 12:15:00	0.00 <					

Report Summary

Average	1.48					
Maximum	7.85					
Minimum	0.00					
Std.Deviation	2.03					
Geom.Mean	0.57					
Median	0.44					
Mode	0.00					
Total Active Duration						

Real Time Data Acquisition And Monitoring

Site Name: Zuari Cement

Report: Custom Report

From Date: 2021/01/01 00:00:00 To Date : 2021/01/31 23:35:48

Description	CAAQMS_1- PM10_U	CAAQMS_1- PM2.5_U	CAAQMS_1- SO2_U	CAAQMS_1- NO_U	CAAQMS_1- NO2_U	CAAQMS_1- NOx_U
Prescribed Standards						
Maximum Data	83.98	45.69	23.51	21.1	2.53	23.51
Minimum Data	17.77	12.93	22.51	13.69	1.7	15.7
Geometric Mean	47.78	30.59	23.09	17.06	2.16	19.25
Median	46.37	32.28	23.22	17.0	2.15	19.18
Standard Deviation	16.05	8.22	0.3	1.97	0.22	2.08
Maximum Value At Time	2021-01-25	2021-01-03	2021-01-31	2021-01-22	2021-01-04	2021-01-22
Minimum Value At Time	2021-01-07	2021-01-07	2021-01-01	2021-01-05	2021-01-22	2021-01-05
Valid Data Points	31	31	31	31	31	31
Total Data Points	31	31	31	31	31	31
Data Availability %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

SI No	Time	CAAQMS_1- PM10_U	CAAQMS_1- PM2.5_U	CAAQMS_1- SO2_U	CAAQMS_1- NO_U	CAAQMS_1- NO2_U	CAAQMS_1- NOx_U
1	2021-01-01	59.12	42.15	22.51	14.47	2.43	16.52
2	2021-01-02	64.39	42.80	22.62	14.88	2.39	16.95
3	2021-01-03	58.89	45.69	22.72	14.71	2.43	16.79
4	2021-01-04	46.37	32.87	22.68	13.73	2.53	15.75
5	2021-01-05	33.91	21.74	22.59	13.69	2.53	15.70
6	2021-01-06	27.82	17.93	22.67	15.00	2.37	17.07
7	2021-01-07	17.77	12.93	22.58	16.98	2.17	19.17
8	2021-01-08	31.30	25.30	22.69	17.60	2.09	19.82
9	2021-01-09	29.01	19.58	22.88	17.86	2.07	20.10
10	2021-01-10	25.24	17.94	22.94	18.21	2.05	20.48
11	2021-01-11	32.30	22.08	23.21	16.74	2.20	18.93
12	2021-01-12	36.58	24.06	23.27	16.40	2.23	18.57

SI No	Time	CAAQMS_1-PM10_U	CAAQMS_1-PM2.5_U	CAAQMS_1-SO2_U	CAAQMS_1-NO_U	CAAQMS_1-NO2_U	CAAQMS_1-NOx_U
13	2021-01-13	33.92	23.22	23.30	16.76	2.17	18.93
14	2021-01-14	37.29	25.70	23.34	15.13	2.36	17.22
15	2021-01-15	40.54	30.63	23.27	15.37	2.34	17.47
16	2021-01-16	47.18	35.08	23.22	15.77	2.31	17.91
17	2021-01-17	44.15	29.85	23.15	17.80	2.07	20.03
18	2021-01-18	37.61	26.66	23.14	17.92	2.05	20.16
19	2021-01-19	46.16	29.70	23.13	16.40	2.23	18.56
20	2021-01-20	49.70	32.28	23.21	17.00	2.15	19.18
21	2021-01-21	67.07	42.20	23.25	18.58	1.99	20.86
22	2021-01-22	57.26	36.37	23.24	21.10	1.70	23.51
23	2021-01-23	61.01	36.09	23.30	21.02	1.70	23.42
24	2021-01-24	70.01	37.54	23.29	19.35	1.90	21.67
25	2021-01-25	83.98	36.82	23.27	17.98	2.05	20.22
26	2021-01-26	76.14	37.18	23.40	17.72	2.08	19.95
27	2021-01-27	59.63	33.67	23.40	17.16	2.15	19.37
28	2021-01-28	62.12	36.77	23.37	19.27	1.93	21.60
29	2021-01-29	54.92	34.87	23.30	20.13	1.83	22.50
30	2021-01-30	50.83	32.63	23.35	18.61	1.98	20.89
31	2021-01-31	38.94	25.99	23.51	15.46	2.33	17.56

Report Details: ZURCE | 2021-02-01 10:40:49 | Custom Report

Data Report

FromTime : 01 Jan 2021 00:00:00 ToTime : 31 Jan 2021 00:00:00 Interval : hour

Time	Zuari Cements Ltd-- -AAQMS-2--PM10- µg/m3	Zuari Cements Ltd-- AAQMS-2--PM2.5-- µg/m3	Zuari Cements Ltd-- AAQMS-2--SO2- µg/m3	Zuari Cements Ltd--AAQMS-2--NOx-- mpg/m3
01 Jan 2021 00:00	45.5	36.91	20.26	4.2
01 Jan 2021 12:00	42.22	32.18	20.01	4.18
02 Jan 2021 00:00	44.55	38.52	20.16	4.18
02 Jan 2021 12:00	39.11	30.23	20.12	4.18
03 Jan 2021 00:00	47.15	38.97	20.26	4.17
03 Jan 2021 12:00	40.6	30.25	20.03	4.16
04 Jan 2021 00:00	39.94	31.88	20.12	4.21
04 Jan 2021 12:00	28.76	19.42	20.13	4.07
05 Jan 2021 00:00	25.11	11.35	20.26	4
05 Jan 2021 12:00	24.86	9.24	20.05	3.56
06 Jan 2021 00:00	23.59	12.74	20.55	4.03
06 Jan 2021 12:00	14.87	2.63	19.97	3.95
07 Jan 2021 00:00	18.77	7.76	19.97	4.16
07 Jan 2021 12:00	12.78	1.96	20.24	3.64
08 Jan 2021 00:00	18.94	7.28	20.76	3.81
09 Jan 2021 00:00	28.52	11.42	20.69	3.14
09 Jan 2021 12:00	20.92	7.96	20.57	4.19
10 Jan 2021 00:00	21.86	11.27	20.93	4.18
10 Jan 2021 12:00	18.58	4.89	20.63	4.2
11 Jan 2021 00:00	28.13	15.36	21.17	4.19
11 Jan 2021 12:00	23.13	9.17	20.71	4.18
12 Jan 2021 00:00	32.96	20.84	21.09	4.2
12 Jan 2021 12:00	23.57	10.44	20.77	4.18
13 Jan 2021 00:00	31.52	19.41	21.14	4.18
13 Jan 2021 12:00	22.79	9.98	20.87	4.18
14 Jan 2021 00:00	30.11	19.41	20.97	4.2
14 Jan 2021 12:00	28.83	14.79	20.66	4.19

15 Jan 2021 00:00	30.47	20.42	21.11	4.17
15 Jan 2021 12:00	32.23	21.98	20.92	4.15
16 Jan 2021 00:00	36.59	26.73	21.35	4.13
16 Jan 2021 12:00	34.42	23.6	20.81	4.08
17 Jan 2021 00:00	41.59	31.62	21.13	4.03
17 Jan 2021 12:00	40.18	25.86	20.8	3.84
18 Jan 2021 00:00	28.43	14.95	21.69	3.85
18 Jan 2021 12:00	27.89	16.23	21.31	4.11
19 Jan 2021 00:00	31.38	20.5	21.82	3.25
19 Jan 2021 12:00	34.25	18.94	21.39	3.35
20 Jan 2021 00:00	38.89	27.08	21.47	3.17
20 Jan 2021 12:00	31.9	18.87	21.53	3.45
21 Jan 2021 00:00	42.29	32.29	21.95	3.53
21 Jan 2021 12:00	42.73	29.28	21.81	4.2
22 Jan 2021 00:00	41.48	31.64	22.32	4.2
22 Jan 2021 12:00	37.22	25.81	22.24	4.19
23 Jan 2021 00:00	38.07	28.33	22.89	4.18
23 Jan 2021 12:00	38.7	26.59	22.3	4.19
24 Jan 2021 00:00	43.87	32.9	22.77	4.17
24 Jan 2021 12:00	38.35	24.06	22.47	4.21
25 Jan 2021 00:00	45.35	34.27	23.13	4.19
25 Jan 2021 12:00	37.25	24.01	23.17	4.2
26 Jan 2021 00:00	39.08	30.24	23.5	4.21
26 Jan 2021 12:00	40.62	26.75	23.29	4.18
27 Jan 2021 00:00	39.18	29.97	23.78	4.17
27 Jan 2021 12:00	32.64	21.36	23.52	4.07
28 Jan 2021 00:00	39.21	29.9	24	3.81
28 Jan 2021 12:00	32.94	25.25	23.66	3.98
29 Jan 2021 00:00	36.75	30.95	23.98	4.17
29 Jan 2021 12:00	34.16	25.1	23.7	4.19
30 Jan 2021 00:00	42.94	28.96	22.85	4.21
30 Jan 2021 12:00	290.21	19.63	20.67	4.22

Real Time Data Acquisition And Monitoring

Site Name: Zuari Cement

Report: Custom Report

From Date: 2021/01/01 00:00:00 To Date : 2021/01/31 23:35:48

Description	CAAQMS_3- PM10_U	CAAQMS_3- PM2.5_U	CAAQMS_3- SO2_U	CAAQMS_3- NOx_U	CAAQMS_3- NO2_U	CAAQMS_3- NO_U
Prescribed Standards	-	-	-	-	-	-
Maximum Data	39.97	20.19	36.09	29.25	27.37	3.99
Minimum Data	10.45	9.15	33.54	8.47	6.74	1.13
Geometric Mean	26.81	14.34	35.06	15.47	13.51	2.05
Median	29.24	14.69	35.15	15.58	13.09	1.95
Standard Deviation	7.35	2.96	0.76	4.15	3.96	0.7
Maximum Value At Time	2021-01-03	2021-01-03	2021-01-31	2021-01-21	2021-01-21	2021-01-02
Minimum Value At Time	2021-01-07	2021-01-10	2021-01-03	2021-01-07	2021-01-07	2021-01-31
Valid Data Points	31	31	31	31	31	31
Total Data Points	31	31	31	31	31	31
Data Availability %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

SI No	Time	CAAQMS_3- PM10_U	CAAQMS_3- PM2.5_U	CAAQMS_3- SO2_U	CAAQMS_3- NOx_U	CAAQMS_3- NO2_U	CAAQMS_3- NO_U
1	2021-01-01	33.43	19.78	33.59	14.41	12.59	1.85
2	2021-01-02	35.46	18.29	33.68	17.38	14.79	3.99
3	2021-01-03	39.97	20.19	33.54	17.57	14.88	2.72
4	2021-01-04	28.97	14.69	33.74	15.58	13.12	2.46
5	2021-01-05	20.03	12.25	33.93	17.81	14.57	3.62
6	2021-01-06	16.65	10.81	34.11	14.35	11.61	2.68
7	2021-01-07	10.45	10.81	34.65	8.47	6.74	1.73
8	2021-01-08	20.31	16.38	34.95	10.47	9.10	1.36
9	2021-01-09	15.01	13.12	35.09	12.76	10.63	2.12
10	2021-01-10	12.38	9.15	35.14	13.04	11.05	1.94
11	2021-01-11	16.89	11.17	34.96	14.97	13.02	1.96
12	2021-01-12	20.68	11.54	34.78	13.08	11.56	1.52

SI No	Time	CAAQMS_3-PM10_U	CAAQMS_3-PM2.5_U	CAAQMS_3-SO2_U	CAAQMS_3-NOx_U	CAAQMS_3-NO2_U	CAAQMS_3-NO_U
13	2021-01-13	22.20	10.79	34.76	15.74	12.75	3.02
14	2021-01-14	22.96	11.94	34.75	10.69	9.44	1.22
15	2021-01-15	26.96	16.54	34.91	11.22	9.81	1.41
16	2021-01-16	32.05	15.29	35.15	13.72	11.97	1.72
17	2021-01-17	32.16	17.48	35.40	14.43	13.09	1.34
18	2021-01-18	23.61	11.33	35.32	11.22	9.94	1.28
19	2021-01-19	26.65	12.48	35.46	15.97	13.52	2.45
20	2021-01-20	30.59	16.70	35.40	15.93	13.88	2.08
21	2021-01-21	35.64	16.85	35.41	29.25	27.37	1.90
22	2021-01-22	29.76	17.20	35.53	16.06	14.78	1.28
23	2021-01-23	30.61	18.61	35.57	15.65	14.38	1.26
24	2021-01-24	33.14	14.93	35.83	22.28	20.42	2.66
25	2021-01-25	33.83	15.03	35.78	23.10	20.44	2.69
26	2021-01-26	30.14	11.65	35.80	18.01	16.01	1.99
27	2021-01-27	28.55	15.45	35.89	19.49	17.56	1.95
28	2021-01-28	32.01	13.93	35.84	15.84	13.63	2.26
29	2021-01-29	31.02	13.12	35.94	13.83	11.97	1.85
30	2021-01-30	29.24	15.26	35.92	16.56	14.48	2.06
31	2021-01-31	29.74	11.86	36.09	10.77	9.65	1.13

Report Details: ZURCE | 2021-02-01 10:41:57 | Custom Report

Forbes Marshall

Zuari Cement Ltd

Survey No: 139,140,141,
Auj(Aherwadi),
Solapur,Maharashtra-413228

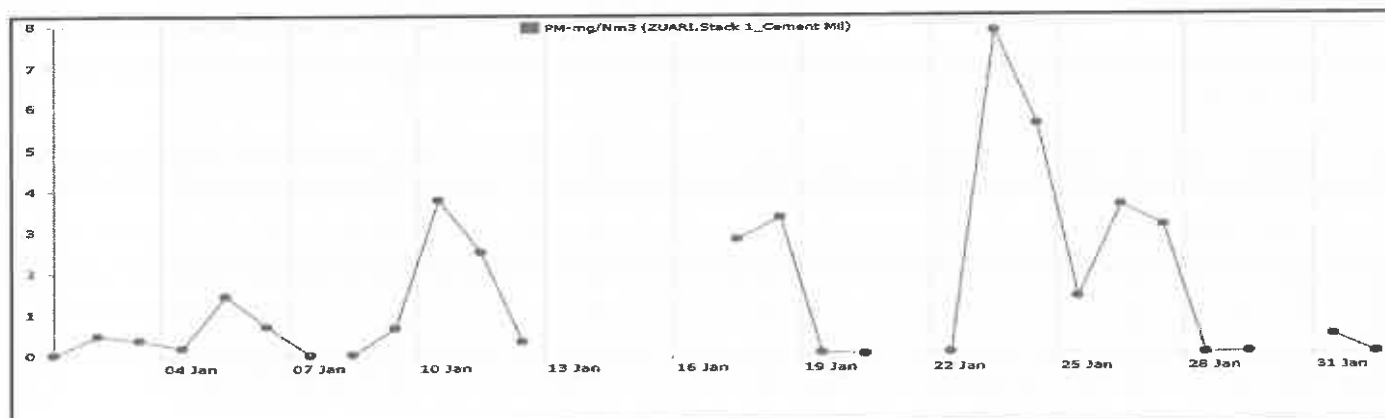
Station Report Station: Stack 1_Cement Mil

From : 01-01-2021 12:15:00

To : 01-02-2021 14:15:00

Interval : Daily

Function : Average



Flag legends:

< - Average with less data, C - Calibration mode, M - Maintenance mode, S - Data under scrutiny,
B - Bad data, H - High permissible limit crossed, L - Low permissible limit crossed, P - Processed Data, V - Corrected Data, D - Delayed Data,R-
Analyzer drift

Calender	PM Avg					
Units	mg/Nm3					
Range	0 - 30					
01-01-2021 12:15:00	0.00 <					
02-01-2021 12:15:00	0.46 <					
03-01-2021 12:15:00	0.36 <					
04-01-2021 12:15:00	0.15 <					
05-01-2021 12:15:00	1.43 <					

Calender	PM Avg					
Units	mg/Nm3					
Range	0 - 30					
06-01-2021 12:15:00	0.69 <					
07-01-2021 12:15:00	0.00 <					
08-01-2021 12:15:00	0.00 <					
09-01-2021 12:15:00	0.64 <					
10-01-2021 12:15:00	3.76 <					
11-01-2021 12:15:00	2.49 <					
12-01-2021 12:15:00	0.30 <					
17-01-2021 12:15:00	2.80 <					
18-01-2021 12:15:00	3.32 <					
19-01-2021 12:15:00	0.03 <					
20-01-2021 12:15:00	0.00 <					
22-01-2021 12:15:00	0.03 <					
23-01-2021 12:15:00	7.85 <					
24-01-2021 12:15:00	5.58 <					
25-01-2021 12:15:00	1.36 <					
26-01-2021 12:15:00	3.61 <					
27-01-2021 12:15:00	3.09 <					
28-01-2021 12:15:00	0.00 <					
29-01-2021 12:15:00	0.03 <					
31-01-2021 12:15:00	0.42 <					
01-02-2021 12:15:00	0.00 <					

Report Summary

Average	1.48					
Maximum	7.85					
Minimum	0.00					
Std.Deviation	2.03					
Geom.Mean	0.57					
Median	0.44					
Mode	0.00					
Total Active Duration						

Real Time Data Acquisition And Monitoring

Site Name: Zwart Dam

Report: Custom Report

From Date: 2021/03/01 00:00:00 To Date: 2021/03/21 12:00:00

Summary Statistics		1st Quarter (Jan-Mar)		2nd Quarter (Apr-Jun)		3rd Quarter (Jul-Sep)		4th Quarter (Oct-Dec)		Annual Totals		Average		Standard Deviation		Minimum Value At Time		Total Data Points		Data Availability %	
Maximum Data	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4	87.4
Minimum Data	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Geometric Mean	53.55	53.55	53.55	53.55	53.55	53.55	53.55	53.55	53.55	53.55	53.55	53.55	53.55	53.55	53.55	53.55	53.55	53.55	53.55	53.55	53.55
Median	57.35	57.35	57.35	57.35	57.35	57.35	57.35	57.35	57.35	57.35	57.35	57.35	57.35	57.35	57.35	57.35	57.35	57.35	57.35	57.35	57.35
Standard Deviation	18.43	18.43	18.43	18.43	18.43	18.43	18.43	18.43	18.43	18.43	18.43	18.43	18.43	18.43	18.43	18.43	18.43	18.43	18.43	18.43	18.43
Maximum Value At Time	2021-03-07	2021-03-07	2021-03-07	2021-03-07	2021-03-07	2021-03-07	2021-03-07	2021-03-07	2021-03-07	2021-03-07	2021-03-07	2021-03-07	2021-03-07	2021-03-07	2021-03-07	2021-03-07	2021-03-07	2021-03-07	2021-03-07	2021-03-07	2021-03-07
Minimum Value At Time	2021-03-09	2021-03-09	2021-03-09	2021-03-09	2021-03-09	2021-03-09	2021-03-09	2021-03-09	2021-03-09	2021-03-09	2021-03-09	2021-03-09	2021-03-09	2021-03-09	2021-03-09	2021-03-09	2021-03-09	2021-03-09	2021-03-09	2021-03-09	2021-03-09
Yield Data Points	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
Total Data Points	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
Data Availability %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Hourly Data		1st Quarter (Jan-Mar)		2nd Quarter (Apr-Jun)		3rd Quarter (Jul-Sep)		4th Quarter (Oct-Dec)		Annual Totals		Average		Standard Deviation		Minimum Value At Time		Total Data Points		Data Availability %	
1	2021-03-01	40.80	40.80	40.80	40.80	40.80	40.80	40.80	40.80	40.80	40.80	40.80	40.80	40.80	40.80	40.80	40.80	40.80	40.80	40.80	40.80
2	2021-03-02	57.20	57.20	57.20	57.20	57.20	57.20	57.20	57.20	57.20	57.20	57.20	57.20	57.20	57.20	57.20	57.20	57.20	57.20	57.20	57.20
3	2021-03-03	50.20	50.20	50.20	50.20	50.20	50.20	50.20	50.20	50.20	50.20	50.20	50.20	50.20	50.20	50.20	50.20	50.20	50.20	50.20	50.20
4	2021-03-04	37.60	37.60	37.60	37.60	37.60	37.60	37.60	37.60	37.60	37.60	37.60	37.60	37.60	37.60	37.60	37.60	37.60	37.60	37.60	37.60
5	2021-03-05	45.80	45.80	45.80	45.80	45.80	45.80	45.80	45.80	45.80	45.80	45.80	45.80	45.80	45.80	45.80	45.80	45.80	45.80	45.80	45.80
6	2021-03-06	50.27	50.27	50.27	50.27	50.27	50.27	50.27	50.27	50.27	50.27	50.27	50.27	50.27	50.27	50.27	50.27	50.27	50.27	50.27	50.27
7	2021-03-07	47.40	47.40	47.40	47.40	47.40	47.40	47.40	47.40	47.40	47.40	47.40	47.40	47.40	47.40	47.40	47.40	47.40	47.40	47.40	47.40
8	2021-03-08	38.74	38.74	38.74	38.74	38.74	38.74	38.74	38.74	38.74	38.74	38.74	38.74	38.74	38.74	38.74	38.74	38.74	38.74	38.74	38.74
9	2021-03-09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	2021-03-10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	2021-03-11	11.70	11.70	11.70	11.70	11.70	11.70	11.70	11.70	11.70	11.70	11.70	11.70	11.70	11.70	11.70	11.70	11.70	11.70	11.70	11.70
12	2021-03-12	33.24	33.24	33.24	33.24	33.24	33.24	33.24	33.24	33.24	33.24	33.24	33.24	33.24	33.24	33.24	33.24	33.24	33.24	33.24	33.24
13	2021-03-13	53.80	53.80	53.80	53.80	53.80	53.80	53.80	53.80	53.80	53.80	53.80	53.80	53.80	53.80	53.80	53.80	53.80	53.80	53.80	53.80
14	2021-03-14	50.20	50.20	50.20	50.20	50.20	50.20	50.20	50.20	50.20	50.20	50.20	50.20	50.20	50.20	50.20	50.20	50.20	50.20	50.20	50.20
15	2021-03-15	50.40	50.40	50.40	50.40	50.40	50.40	50.40	50.40	50.40	50.40	50.40	50.40	50.40	50.40	50.40	50.40	50.40	50.40	50.40	50.40
16	2021-03-16	44.14	44.14	44.14	44.14	44.14	44.14	44.14	44.14	44.14	44.14	44.14	44.14	44.14	44.14	44.14	44.14	44.14	44.14	44.14	44.14
17	2021-03-17	51.70	51.70	51.70	51.70	51.70	51.70	51.70	51.70	51.70	51.70	51.70	51.70	51.70	51.70	51.70	51.70	51.70	51.70	51.70	51.70
18	2021-03-18	52.80	52.80	52.80	52.80	52.80	52.80	52.80	52.80	52.80	52.80	52.80	52.80	52.80	52.80	52.80	52.80	52.80	52.80	52.80	52.80
19	2021-03-19	44.80	44.80	44.80	44.80	44.80	44.80	44.80	44.80	44.80	44.80	44.80	44.80	44.80	44.80	44.80	44.80	44.80	44.80	44.80	44.80
20	2021-03-20	16.50	16.50	16.50	16.50	16.50	16.50	16.50	16.50	16.50	16.50	16.50	16.50	16.50	16.50	16.50	16.50	16.50	16.50	16.50	16.50
21	2021-03-21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Report Details: 21/03/21 | 2021-03-21 12:00:00 | Custom Report

Data Report

FromTime : 01 Mar 2021 00:00:00 ToTime : 21 Mar 2021 00:00:00 Interval : hour

Time	Zuari Cements Ltd--AAQMS-2--PM10--µg/m3	Zuari Cements Ltd--AAQMS-2--PM2.5--µg/m3	Zuari Cements Ltd--AAQMS-2--SO2--µg/m3	Zuari Cements Ltd--AAQMS-2--NOx--µg/m3
01 Mar 2021 00:00	27.95	18.58	22.51	4.2
01 Mar 2021 12:00	24.82	18.15	22.54	4.2
02 Mar 2021 00:00	27.4	22.1	23.5	4.18
02 Mar 2021 12:00	26.34	10.67	23.08	4.2
03 Mar 2021 00:00	26.4	20.2	23.45	4.2
03 Mar 2021 12:00	23.56	14.94	22.93	4.19
04 Mar 2021 00:00	33.13	26.45	23.46	4.22
04 Mar 2021 12:00	24.13	18.36	23.15	4.2
05 Mar 2021 00:00	32.12	26.56	23.78	4.21
05 Mar 2021 12:00	23.34	16.03	23.28	4.22
06 Mar 2021 00:00	31.1	23.62	23.64	4.22
06 Mar 2021 12:00	28.62	18.15	23.04	4.15
07 Mar 2021 00:00	37.66	55.21	23.46	4.15
07 Mar 2021 12:00	86.35	20.47	23.84	4.15
08 Mar 2021 00:00	47	29.71	24.18	4.19
08 Mar 2021 12:00	33.68	23.06	23.88	4.24
09 Mar 2021 00:00	68.61	25.38	24.13	4.21
09 Mar 2021 12:00	41.01	24.23	23.61	3.83
10 Mar 2021 00:00	31.05	26.24	24.26	4.2
10 Mar 2021 12:00	26.45	21.95	23.96	4.2
11 Mar 2021 00:00	27.75	23.77	24.03	4.21
11 Mar 2021 12:00	18.83	11.84	23.92	4.21
12 Mar 2021 00:00	18.28	8.07	24.16	4.18
12 Mar 2021 12:00	19.36	11.97	23.82	4.22
13 Mar 2021 00:00	21.49	17.52	23.93	4.22
13 Mar 2021 12:00	16.94	11.34	23.53	4.2

14 Mar 2021 00:00	25.3	20.78	23.93	4.22
14 Mar 2021 12:00	19.91	13.03	23.61	4.21
15 Mar 2021 00:00	22.99	19.06	24.05	4.21
15 Mar 2021 12:00	19.73	13.82	24.16	4.22
16 Mar 2021 00:00	30.96	25.89	25.01	4.2
16 Mar 2021 12:00	22.09	20.3	24.54	4.21
17 Mar 2021 00:00	32.5	29.77	25.02	4.21
17 Mar 2021 12:00	32.67	33.35	24.88	4.2
18 Mar 2021 00:00	38.97	40.51	25.26	4.2
18 Mar 2021 12:00	35.85	30.28	24.92	4.19
19 Mar 2021 00:00	40.14	33.55	25.2	4.21
19 Mar 2021 12:00	81.23	46.32	23.84	4.34
20 Mar 2021 00:00	35.78	31.31	20.22	4.3
20 Mar 2021 12:00	31.56	20.96	19.51	4.29

Real Time Data Acquisition And Monitoring

Site Name: Zuari Cement

Report: Custom Report

From Date: 2021/03/01 00:00:00 To Date : 2021/03/21 12:10:44

Description	CAAQMS_3- PM10_U	CAAQMS_3- PM2.5_U	CAAQMS_3- SO2_U	CAAQMS_3- NOx_U	CAAQMS_3- NO2_U	CAAQMS_3- NO_U
Prescribed Standards	•	•	•	•	•	•
Maximum Data	53.36	12.74	20.47	22.43	19.96	3.04
Minimum Data	0.0	6.38	16.79	8.12	6.19	1.21
Geometric Mean	26.7	9.1	17.47	14.14	12.18	1.97
Median	26.46	9.14	17.15	14.9	12.68	2.0
Standard Deviation	10.15	1.79	0.84	2.97	2.81	0.38
Maximum Value At Time	2021-03-07	2021-03-01	2021-03-19	2021-03-19	2021-03-19	2021-03-14
Minimum Value At Time	2021-03-21	2021-03-12	2021-03-07	2021-03-21	2021-03-21	2021-03-04
Valid Data Points	21	21	21	21	21	21
Total Data Points	21	21	21	21	21	21
Data Availability %	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

SI No	Time	CAAQMS_3- PM10_U	CAAQMS_3- PM2.5_U	CAAQMS_3- SO2_U	CAAQMS_3- NOx_U	CAAQMS_3- NO2_U	CAAQMS_3- NO_U
1	2021-03-01	24.63	12.74	17.08	14.90	12.86	2.02
2	2021-03-02	23.98	10.06	17.15	11.84	10.18	1.66
3	2021-03-03	26.34	10.26	17.10	11.86	10.14	1.69
4	2021-03-04	25.97	10.53	17.02	10.43	9.21	1.21
5	2021-03-05	26.46	10.11	16.89	15.35	13.31	2.00
6	2021-03-06	29.94	11.09	17.24	16.91	14.89	2.04
7	2021-03-07	53.36	11.05	16.79	16.66	14.55	2.12
8	2021-03-08	32.63	10.55	16.98	15.48	14.07	1.41
9	2021-03-09	30.26	10.73	16.99	12.86	11.11	2.16
10	2021-03-10	30.99	9.14	18.03	16.13	14.41	1.73
11	2021-03-11	23.45	6.98	17.45	15.06	13.23	1.85
12	2021-03-12	18.89	6.38	16.97	12.62	10.79	1.88

SI No	Time	CAAQMS_3-PM10_U	CAAQMS_3-PM2.5_U	CAAQMS_3-SO2_U	CAAQMS_3-NOx_U	CAAQMS_3-NO2_U	CAAQMS_3-NO_U
13	2021-03-13	20.48	6.73	16.93	11.37	9.22	2.13
14	2021-03-14	27.73	7.23	17.17	15.81	12.68	3.04
15	2021-03-15	20.68	7.08	17.12	12.01	10.32	1.68
16	2021-03-16	26.87	7.73	17.27	15.12	12.71	2.31
17	2021-03-17	34.99	8.77	17.56	15.76	13.70	2.06
18	2021-03-18	35.40	9.65	17.61	13.22	11.24	1.96
19	2021-03-19	34.82	9.00	20.47	22.43	19.96	2.47
20	2021-03-20	12.93	8.35	18.59	13.07	10.98	2.08
21	2021-03-21	0.00	6.84	18.41	8.12	6.19	1.92

Report Details: ZURCE | 2021-03-27 12:13:15 | Custom Report

Forbes Marshall

Zuari Cement Ltd

Survey No: 139,140,141,
Auj(Aherwadi),
Solapur,Maharashtra-413228

Station Report

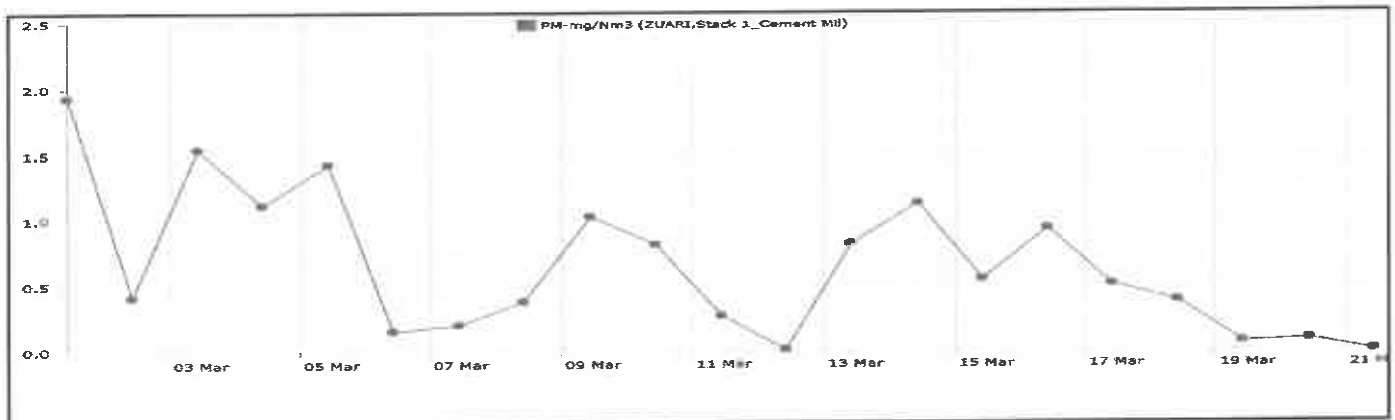
Station: Stack 1_Cement Mil

From : 01-03-2021 10:09:00

To : 21-03-2021 12:09:00

Interval : Daily

Function : Average



Flag legends:

< - Average with less data, C - Calibration mode, M - Maintenance mode, S - Data under scrutiny,
B - Bad data, H - High permissible limit crossed, L - Low permissible limit crossed, P - Processed Data, V - Corrected Data, D - Delayed Data, R-
Analyzer drift

Calender	PM Avg					
Units	mg/Nm3					
Range	0 - 30					
01-03-2021 10:09:00	1.93 < D					
02-03-2021 10:09:00	0.41 <					
03-03-2021 10:09:00	1.54 <					
04-03-2021 10:09:00	1.11 < H					
05-03-2021 10:09:00	1.42 < H					

Calender	PM Avg					
Units	mg/Nm3					
Range	0 - 30					
06-03-2021 10:09:00	0.15 < H					
07-03-2021 10:09:00	0.20 < HD					
08-03-2021 10:09:00	0.38 < DH					
09-03-2021 10:09:00	1.02 <					
10-03-2021 10:09:00	0.81 <					
11-03-2021 10:09:00	0.27 <					
12-03-2021 10:09:00	0.01 <					
13-03-2021 10:09:00	0.82 <					
14-03-2021 10:09:00	1.12 < D					
15-03-2021 10:09:00	0.54 < H					
16-03-2021 10:09:00	0.93 < HB					
17-03-2021 10:09:00	0.50 < H					
18-03-2021 10:09:00	0.38 < H					
19-03-2021 10:09:00	0.06 <					e
20-03-2021 10:09:00	0.08 <					
21-03-2021 10:09:00	0.00 <					

Report Summary

Average	0.65					
Maximum	1.93					
Minimum	0.00					
Std.Deviation	0.55					
Geom.Mean	0.42					
Median	0.50					
Mode	0.00					
Total Active Duration						

Online Pollution Monitoring Portal

Site Name: Zuari Cement

From Date: 2020/11/01 To Date: 2020/11/30

Report Name: Custom Report

Report Created by ZURCE on 2021-05-17 15:30:08

Sl No.	Time	CAAQMS_1- PM10_U	CAAQMS_1- PM2.5_U	CAAQMS_1-SO2_U	CAAQMS_1- NO_U	CAAQMS_1- NO2_U	CAAQMS_1- NOx_U
1	2020-11-01	55.83	54.82	21.22	17.09	2.15	19.29
2	2020-11-02	50.99	51.85	21.27	14.88	2.39	16.95
3	2020-11-03	46.39	47.61	21.34	14.33	2.46	16.38
4	2020-11-04	45.16	45.29	21.33	13.84	2.52	15.86
5	2020-11-05	37.8	36.02	21.31	12.52	2.64	14.46
6	2020-11-06	39.55	37.07	21.27	12.73	2.62	14.68
7	2020-11-07	53.05	51.35	21.02	14.43	2.43	16.47
8	2020-11-08	47.81	44.09	21.11	14.4	2.45	16.45
9	2020-11-09	50.3	44.33	21.29	11.39	2.77	13.27
10	2020-11-10	48.82	46.02	22.68	10.31	2.94	12.18
11	2020-11-11	61.21	58.11	22.62	8.1	3.14	9.8
12	2020-11-12	42.23	32.31	22.33	10.81	2.83	12.65
13	2020-11-13	21.69	16.58	21.98	15.84	2.29	17.96
14	2020-11-14	22.92	19.39	21.95	18.15	2.03	20.4
15	2020-11-15	24.07	20.79	22.14	18.59	1.97	20.86
16	2020-11-16	24.01	21.17	22.08	18.98	1.96	21.3

17	2020-11-17	23.77	22.36	22.18	20.74	1.73	23.12
18	2020-11-18	31.86	23.41	22.23	21.81	1.63	24.26
19	2020-11-19	23	18.24	22.35	21.36	1.69	23.8
20	2020-11-20	34.04	20.4	22.49	18.97	1.94	21.27
21	2020-11-21	28.12	20.91	22.61	19.2	1.93	21.51
22	2020-11-22	36.43	28.55	22.59	20.44	1.78	22.81
23	2020-11-23	41.95	40.99	22.54	20.06	1.83	22.42
24	2020-11-24	39.4	42.56	22.68	17.58	2.1	19.81
25	2020-11-25	39.16	57.26	22.88	14.49	2.43	16.54
26	2020-11-26	32.31	54.38	22.71	15.37	2.34	17.47
27	2020-11-27	34.14	36.48	22.58	14.7	2.42	16.77
28	2020-11-28	25.46	28.99	22.61	10.76	2.85	12.61
29	2020-11-29	22.57	25.83	22.45	13.03	2.6	15.01
30	2020-11-30	31.14	28.13	22.33	16.54	2.21	18.7
31	Prescribed Standards	0 - 100	0 - 60	0 - 80	0 - 80	0 - 80	0 - 80
32	Maximum Value	61.21	58.11	22.88	21.81	3.14	24.26
33	Maximum Value At Time	2020-11-11	2020-11-20	2020-11-25	2020-11-18	2020-11-11	2020-11-18
34	Minimum Value	21.69	16.58	21.02	8.1	1.63	9.8
35	Minimum Value At Time	2020-11-13	2020-11-13	2020-11-07	2020-11-11	2020-11-18	2020-11-11
36	Geometric Mean	37.17	36.43	22.07	15.71	2.3	17.84

37	Median	37.11	36.25	22.28	15.12	2.37	17.21
38	Standard Deviation	11.31	14.44	0.6	3.63	0.4	3.83
39	Valid Data Points	30	30	30	30	30	30
40	Total Data Points	30	30	30	30	30	30
41	Data Availability %	100	100	100	100	100	100

Data Report

FromTime : 01 Nov 2020 00:00:00 ToTime : 30 Nov 2020 00:00:00 Interval : hour

Time	Zuari Cements Ltd-- AAQMS-2--PM10--	Zuari Cements Ltd--AAQMS-2-- PM2.5--µg/m3	Zuari Cements Ltd-- AAQMS-2--SO2--µg/m3	Zuari Cements Ltd--AAQMS-2-- NOx--µg/m3
01 Nov 2020 00:00	52.12	56.32	17.3	4.18
01 Nov 2020 12:00	47.63	50.41	16.96	4.17
02 Nov 2020 00:00	54.95	58.02	17.39	4.17
02 Nov 2020 12:00	39.97	42.19	16.99	4.16
03 Nov 2020 00:00	45.62	49.51	17.19	4.17
03 Nov 2020 12:00	39.87	40.79	17.08	4.16
04 Nov 2020 00:00	46.28	56.89	17.38	4.17
04 Nov 2020 12:00	35.07	34.64	17.31	4.13
05 Nov 2020 00:00	40.26	41.95	17.65	4.19
05 Nov 2020 12:00	31.44	27.39	17.47	4.18
06 Nov 2020 00:00	36.18	35.85	17.53	4.19
06 Nov 2020 12:00	36.59	33.59	17.47	4.19
07 Nov 2020 00:00	49.96	58.89	17.55	4.17
07 Nov 2020 12:00	44.02	48.24	17.38	4.18
08 Nov 2020 00:00	42.96	55.59	17.51	4.18
08 Nov 2020 12:00	39.75	39.71	17.76	4.2
09 Nov 2020 00:00	49.32	57.49	17.99	4.18
09 Nov 2020 12:00	32.09	32.11	17.89	4.19
10 Nov 2020 00:00	54.77	52.2	17.83	4.16
10 Nov 2020 12:00	39.74	43.87	17.83	4.17
11 Nov 2020 00:00	55.07	50.87	17.83	4.19
11 Nov 2020 12:00	31.99	32.8	17.96	4.19
12 Nov 2020 00:00	42.82	37.43	18.09	4.19
12 Nov 2020 12:00	23.59	14.12	17.87	4.19
13 Nov 2020 00:00	19.44	9.53	18.04	4.2
13 Nov 2020 12:00	17.11	5.84	17.62	4.21
14 Nov 2020 00:00	23.3	12.94	18.36	4.19

14 Nov 2020 12:00	19.96	7.81	17.76	4.18
15 Nov 2020 00:00	26.8	16.69	18.3	4.21
15 Nov 2020 12:00	19.11	7.86	17.85	4.2
16 Nov 2020 00:00	24.63	18.33	18.09	4.17
16 Nov 2020 12:00	18.13	10.93	17.73	4.19
17 Nov 2020 00:00	22.47	20.52	18.35	4.21
17 Nov 2020 12:00	22.17	8.6	17.75	4.18
18 Nov 2020 00:00	26.38	20.09	18.41	4.2
18 Nov 2020 12:00	19.62	8.51	17.93	4.18
19 Nov 2020 00:00	20.34	12.97	18.38	4.18
19 Nov 2020 12:00	19.86	5.98	17.71	4.19
20 Nov 2020 00:00	23.2	16.79	18.27	4.2
20 Nov 2020 12:00	17.56	3.32	17.14	4.19
21 Nov 2020 00:00	19.87	13.29	17.69	4.18
21 Nov 2020 12:00	22.19	8.25	17.52	4.18
22 Nov 2020 00:00	27.38	25.35	17.87	4.2
22 Nov 2020 12:00	23.87	16.79	17.57	4.2
23 Nov 2020 00:00	39.71	51.31	17.9	4.23
23 Nov 2020 12:00	31.2	35.18	17.67	4.2
24 Nov 2020 00:00	34.8	41.02	18.22	4.21
24 Nov 2020 12:00	29.83	30.13	17.91	4.21
25 Nov 2020 00:00	36.22	51.57	18.04	4.19
25 Nov 2020 12:00	23.28	19.5	18.21	4.2
26 Nov 2020 00:00	46.21	42.25	18.39	4.19
26 Nov 2020 12:00	39.14	15.14	18.29	4.19
27 Nov 2020 00:00	38.27	44.17	18.61	4.18
27 Nov 2020 12:00	47.56	25.78	18.2	4.19
28 Nov 2020 00:00	49.2	26.61	18.54	4.21
28 Nov 2020 12:00	26.12	23.49	18.54	4.21
29 Nov 2020 00:00	25.17	29.86	18.91	4.21
29 Nov 2020 12:00	19.02	12.05	18.2	4.2

Online Pollution Monitoring Portal

Site Name: Zuari Cement

From Date: 2020/11/01 To Date: 2020/11/30

Report Name: Custom Report

Report Created by ZURCE on 2021-05-17 15:33:27

Sl No.	Time	CAAQMS_3-PM10_U	CAAQMS_3-PM2.5_U	CAAQMS_3-SO2_U	CAAQMS_3-NOx_U	CAAQMS_3-NO2_U	CAAQMS_3-NO_U
1	2020-11-01	77.02	50.73	26.08	6.33	5.14	1.19
2	2020-11-02	68.55	56.58	25.93	8.1	6.79	1.31
3	2020-11-03	74.03	33.08	25.62	16.16	14.71	1.45
4	2020-11-04	65.14	38.4	25.48	11.16	9.61	1.54
5	2020-11-05	51.88	31.09	25.62	9.59	8.2	1.4
6	2020-11-06	51.69	31.93	25.69	10.59	9.1	1.48
7	2020-11-07	70.17	50.05	26.47	9.58	8.11	1.46
8	2020-11-08	65.2	45.33	26.67	11.51	9.55	1.98
9	2020-11-09	59.11	39.46	26.3	15.55	12.83	2.72
10	2020-11-10	57.57	47.74	26.3	17.23	14.64	2.57
11	2020-11-11	62.71	54.2	26.11	15.31	13.75	1.58
12	2020-11-12	70.54	28.69	26.74	17.23	14.45	3.23
13	2020-11-13	24.2	15.78	27.59	10.36	8.29	2.05
14	2020-11-14	30.84	15.71	28.32	11.95	9.58	2.38
15	2020-11-15	34.7	17.79	28.46	10.62	8.5	2.13
16	2020-11-16	31.87	17.78	28.79	10.55	8.72	1.89
17	2020-11-17	34.23	22.8	29.15	9.58	8.01	1.56
18	2020-11-18	37.14	17.55	29.46	13.21	9.98	3.33
19	2020-11-19	33.72	15.3	29.58	14.08	10.41	3.7
20	2020-11-20	36.38	17.73	29.55	14.54	11.86	2.72
21	2020-11-21	58.6	21.49	29.42	19.03	15.06	4
22	2020-11-22	48.28	27.07	29.56	16.92	14.09	2.86
23	2020-11-23	49.42	38.81	29.95	15.2	13.19	2.01
24	2020-11-24	39.68	35.59	29.92	13.65	11.75	1.98

25	2020-11-25	54.34	35.61	29.38	11.29	10.01	1.26
26	2020-11-26	34.58	28.24	29.68	9.68	8.37	1.31
27	2020-11-27	42.28	31.34	30.18	9.84	8.51	1.33
28	2020-11-28	35.55	27.48	30.4	9.44	7.98	1.45
29	2020-11-29	40.05	39.81	30.9	13.42	10.69	2.76
30	2020-11-30	43.94	36.56	31.24	13.68	10.8	2.92
31	Prescribed	0 - 100	0 - 60	0 - 80	0 - 80	0 - 80	0 - 80
32	Maximum	77.02	56.58	31.24	19.03	15.06	4
33	Maximum	2020-11-01	2020-11-01	2020-11-30	2020-11-21	2020-11-21	2020-11-21
34	Minimum	24.2	15.3	25.48	6.33	5.14	1.19
35	Minimum	2020-11-13	2020-11-19	2020-11-04	2020-11-01	2020-11-01	2020-11-01
36	Geometric	49.45	33.32	28.15	12.51	10.42	2.12
37	Median	48.85	31.64	28.62	11.73	9.8	1.98
38	Standard	15.02	14.42	1.87	3.12	2.64	0.79
39	Valid Data	30	30	30	30	30	30
40	Total Data	30	30	30	30	30	30
41	Data	100	100	100	100	100	100



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Stack Emission Monitoring Report

Report No.: ME-NG13526-201024-SA-ZC-PUNE			Date: 24.10.2020
Name and Address of Customer	ZUARI CEMENT LTD.		Order Reference
	Auj (Aherwadi) Solapur		PO. No. 4470361390 PO Date: 22.08.2019
Sample Description/Type	Stack Emission Monitoring	Sample Collected by	Laboratory
Sampling Location	Cement Mill	Sample Quantity/Packing	Thimble:1 X 1 No.
Date of Sampling	13.10.2020	Date of Receipt of Sample	15.10.2020
Sampling Procedure	As per Method reference		
Date of Start of Analysis	15.10.2020	Date of Completion of Analysis	19.10.2020

Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Stack Emission)			
Stack attached to		Cement Mill	
Material of construction		Cement Mill	
Stack height above ground level (Meter)		40	
Stack Diameter (Meter)		2	
Stack shape at top		Round	
Type of fuel		NA	
Fuel Consumption		NA	
Parameter	Unit	Result	Method Reference
Flue gas Temperature	°C	56	IS 11255 (Part 3):2008
Flue gas Velocity	m/s	5.69	IS 11255 (Part 3):2008
Total gas quantity	Nm ³ /h	58,259	IS 11255 (Part 3):2008
Particulate Matter (PM)	mg/Nm ³	28	IS 11255 (Part 1):1985 RA 2003
Remarks:			

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Haresh Mendhi
TECHNICAL MANAGER



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ULR- TC748720000012958F



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Stack Emission Monitoring Report

Report No.: ME-NG11741-200930-SA-ZC-PUNE		Date: 30.09.2020	
Name and Address of Customer	ZUARI CEMENT LTD. Auj (Aherwadi) Solapur	Order Reference	
		PO. No. 4470361390 PO Date: 22.08.2019	
Sample Description/Type	Stack Emission Monitoring	Sample Collected by	Laboratory
Sampling Location	Cement Mill	Sample Quantity/Packing	Thimble:1 X 1 No.
Date of Sampling	17.09.2020	Date of Receipt of Sample	18.09.2020
Sampling Procedure	As per method reference		
Date of Start of Analysis	19.09.2020	Date of Completion of Analysis	19.09.2020

Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Stack Emission)			
Stack attached to		Cement Mill	
Material of construction		Cement Mill	
Stack height above ground level (Meter)		40	
Stack Diameter (Meter)		2	
Stack shape at top		Round	
Type of fuel		NA	
Fuel Consumption		NA	
Parameter	Unit	Result	Method Reference
Flue gas Temperature	°C	59	IS 11255 (Part 3):2008
Flue gas Velocity	m/s	5.44	IS 11255 (Part 3):2008
Total gas quantity	Nm ³ /h	55,196	IS 11255 (Part 3):2008
Particulate Matter (PM)	mg/Nm ³	24	IS 11255 (Part 1):1985 RA 2003
Remarks:			

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Stack Emission Monitoring Report

Report No.: ME-NG08678-200814-SA-ZC-PUNE			Date: 14.08.2020
Name and Address of Customer	ZUARI CEMENT LTD. Auj (Aherwadi) Solapur		Order Reference
			PO. No. 4470361390 PO Date: 22.08.2019
Sample Description/Type	Stack Emission Monitoring	Sample Collected by	Laboratory
Sampling Location	Cement Mill	Sample Quantity/Packing	Thimble: 1 X 1 No.
Date of Sampling	05.08.2020	Date of Receipt of Sample	08.08.2020
Sampling Procedure	As per method reference		
Date of Start of Analysis	08.08.2020	Date of Completion of Analysis	11.08.2020

Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Stack Emission)

Stack attached to	Cement Mill
Material of construction	Cement Mill
Stack height above ground level (Meter)	40
Stack Diameter (Meter)	2
Stack shape at top	Round
Type of fuel	NA
Fuel Consumption	NA

Parameter	Unit	Result	Method Reference
Flue gas Temperature	°C	57	IS 11255 (Part 3):2008
Flue gas Velocity	m/s	5.26	IS 11255 (Part 3):2008
Total gas quantity	Nm ³ /h	53,693	IS 11255 (Part 3):2008
Particulate Matter (PM)	mg/Nm ³	25	IS 11255 (Part 1):1985 RA 2003

Remarks:

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Kishor Yeole

BRANCH MANAGER



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Stack Emission Monitoring Report

Report No.: ME-NG08252-200814-SA-ZC-PUNE			Date: 14.08.2020
Name and Address of Customer	ZUARI CEMENT LTD. Auj (Aherwadi) Solapur		Order Reference
			PO. No. 4470361390 PO Date: 22.08.2019
Sample Description/Type	Stack Emission Monitoring	Sample Collected by	Laboratory
Sampling Location	Cement Mill	Sample Quantity/Packing	Thimble:1 X 1 No.
Date of Sampling	29.07.2020	Date of Receipt of Sample	01.08.2020
Sampling Procedure	As per method reference		
Date of Start of Analysis	07.08.2020	Date of Completion of Analysis	07.08.2020

Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Stack Emission)			
Stack attached to		Cement Mill	
Material of construction		Cement Mill	
Stack height above ground level (Meter)		40	
Stack Diameter (Meter)		2	
Stack shape at top		Round	
Type of fuel		NA	
Fuel Consumption		NA	
Parameter	Unit	Result	Method Reference
Flue gas Temperature	°C	60	IS 11255 (Part 3):2008
Flue gas Velocity	m/s	5.18	IS 11255 (Part 3):2008
Total gas quantity	Nm³/h	51,458	IS 11255 (Part 3):2008
Particulate Matter (PM)	mg/Nm³	23	IS 11255 (Part 1):1985 RA 2003
Remarks:			

END

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Stack Emission Monitoring Report

Report No.: ME-NG06314-200630-SA-ZC-PUNE		Date: 30.06.2020	
Name and Address of Customer	ZUARI CEMENT LTD. Auj (Aherwadi) Solapur		Order Reference
			PO. No. 4470361390 PO Date: 22.08.2019
Sample Description/Type	Stack Emission Monitoring	Sample Collected by	Laboratory
Sampling Location	Cement Mill	Sample Quantity/Packing	Thimble: 1 X 1 No.
Date of Sampling	18.06.2020	Date of Receipt of Sample	20.06.2020
Sampling Procedure	As per method reference		
Date of Start of Analysis	20.06.2020	Date of Completion of Analysis	22.06.2020

Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Stack Emission)			
Stack attached to		Cement Mill	
Material of construction		Cement	
Stack height above ground level (Meter)		40	
Stack Diameter (Meter)		2	
Stack shape at top		Round	
Type of fuel		NA	
Fuel Consumption		NA	
Parameter	Unit	Result	Method Reference
Flue gas Temperature	°C	68	IS 11255 (Part 3):2008
Flue gas Velocity	m/s	5.73	IS 11255 (Part 3):2008
Total gas quantity	Nm ³ /h	55,587	IS 11255 (Part 3):2008
Particulate Matter (PM)	mg/Nm ³	13	IS 11255 (Part 1):1985 RA 2003
Remarks:			

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Stack Emission Monitoring Report

Report No.: ME-NG15676-201125-SA-ZC-PUNE		Date: 25.11.2020	
Name and Address of Customer	ZUARI CEMENT LTD.		Order Reference
	Auj (Aherwadi) Solapur		PO. No. 4470361390 PO Date: 22.08.2019
Sample Description/Type	Stack Emission Monitoring	Sample Collected by	Laboratory
Sampling Location	Cement Mill	Sample Quantity/Packing	Thimble: 1 X 1 No.
Date of Sampling	19.11.2020	Date of Receipt of Sample	21.11.2020
Sampling Procedure	As per Method reference		
Date of Start of Analysis	21.11.2020	Date of Completion of Analysis	25.11.2020

Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Stack Emission)			
Stack attached to		Cement Mill	
Material of construction		Cement Mill	
Stack height above ground level (Meter)		40	
Stack Diameter (Meter)		2	
Stack shape at top		Round	
Type of fuel		NA	
Fuel Consumption		NA	
Parameter	Unit	Result	Method Reference
Flue gas Temperature	°C	57	IS 11255 (Part 3):2008
Flue gas Velocity	m/s	5.26	IS 11255 (Part 3):2008
Total gas quantity	Nm³/h	53,693	IS 11255 (Part 3):2008
Particulate Matter (PM)	mg/Nm³	29	IS 11255 (Part 1):1985 RA 2003
Remarks:			

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Stack Emission Monitoring Report

Report No.: ME-NG16750-201217-SA-ZC-PUNE		Date: 17.12.2020	
Name and Address of Customer	ZUARI CEMENT LTD. Auj (Aherwadi) Solapur	Order Reference	
		PO. No. 4470361390 PO Date: 22.08.2019	
Sample Description/Type	Stack Emission Monitoring	Sample Collected by	Laboratory
Sampling Location	Cement Mill	Sample Quantity/Packing	Thimble: 1 X 1 No.
Date of Sampling	07.12.2020	Date of Receipt of Sample	09.12.2020
Sampling Procedure	As per Method reference		
Date of Start of Analysis	09.12.2020	Date of Completion of Analysis	12.12.2020

Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Stack Emission)			
Stack attached to		Cement Mill	
Material of construction		Cement Mill	
Stack height above ground level (Meter)		40	
Stack Diameter (Meter)		2	
Stack shape at top		Round	
Type of fuel		NA	
Fuel Consumption		NA	
Parameter	Unit	Result	Method Reference
Flue gas Temperature	°C	59	IS 11255 (Part 3):2008
Flue gas Velocity	m/s	5.44	IS 11255 (Part 3):2008
Total gas quantity	Nm ³ /h	54270	IS 11255 (Part 3):2008
Particulate Matter (PM)	mg/Nm ³	18	IS 11255 (Part 1):1985 RA 2003
Remarks:			

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Stack Emission Monitoring Report

Report No.: ME-NG02040-210211-SA-ZC-PUNE			Date: 11.02.2021
Name and Address of Customer	ZUARI CEMENT LTD. Auj (Aherwadi) Solapur		Order Reference
			PO. No. 4470510069 PO Date: 28.12.2020
Sample Description/Type	Stack Emission Monitoring	Sample Collected by	Laboratory
Sampling Location	Cement Mill	Sample Quantity/Packing	Thimble:1 X 1 No.
Date of Sampling	02.02.2021	Date of Receipt of Sample	04.02.2021
Sampling Procedure	As per Method reference		
Date of Start of Analysis	04.02.2021	Date of Completion of Analysis	06.02.2021

ULR- TC748721000001942F

Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Stack Emission)			
Stack attached to		Cement Mill	
Material of construction		Cement Mill	
Stack height above ground level (Meter)		40	
Stack Diameter (Meter)		2	
Stack shape at top		Round	
Type of fuel		NA	
Fuel Consumption		NA	
Parameter	Unit	Result	Method Reference
Flue gas Temperature	°C	58	IS 11255 (Part 3):2008
Flue gas Velocity	m/s	6.39	IS 11255 (Part 3):2008
Total gas quantity	Nm ³ /h	65,031	IS 11255 (Part 3):2008
Particulate Matter (PM)	mg/Nm ³	25	IS 11255 (Part 1):1985 RA 2003
Remarks:			

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

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Test Report

Report No.: ME-NG04681-210322-SA-ZC-PUNE		Date: 22.03.2021	
Name and Address of Customer	ZUARI CEMENT LTD.		Order Reference
	Auj (Aherwadi) Solapur		PO. No. 4470510069 PO Date: 28.12.2020
Sample Description/Type	Stack Emission Monitoring	Sample Collected by	Laboratory
Sampling Location	Cement Mill	Sample Quantity/Packing	Thimble:1 X 1 No.
Date of Sampling	13.03.2021	Date of Receipt of Sample	15.03.2021
Sampling Procedure	As per method reference		
Date of Start of Analysis	15.03.2021	Date of Completion of Analysis	20.03.2021

Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Stack Emission)

Stack attached to	Cement Mill
Material of construction	Cement Mill
Stack height above ground level (Meter)	40
Stack Diameter (Meter)	2
Stack shape at top	Round
Type of fuel	NA
Fuel Consumption	NA

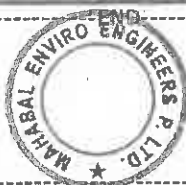
Parameter	Unit	Result	Method Reference
Flue gas Temperature	°C	54	IS 11255 (Part 3):2008
Flue gas Velocity	m/s	5.70	IS 11255 (Part 3):2008
Total gas quantity	Nm³/h	58838	IS 11255 (Part 3):2008
Particulate Matter (PM)	mg/Nm³	23	IS 11255 (Part 1):1985 RA 2003

Remarks:

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi

TECHNICAL MANAGER



Note:

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QF/SALE/04/Issue No 03 Dt 05.12.2019,Amd 00 Dt 00

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 (Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace. Next to Ashida Electrical. Near J B Sawant Bus Stop)
Phone: 2582 0658/3139/1663/3154 Fax:+91-22-25823543 thane@mahabal.com



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor

Plot Nos. 13,14,17,18, Grampanchayat Bokhara, 8 km from Nagpur City,

Opp. Patel Petrol Pump, Chhindwara Road, Koradi, Dist. Nagpur-441111

Phone : 91-712-2612162, 2612212 Email: mahabal.nagpur@gmail.com

Test Report

Report No.: ME-NG06461-210419-SA-ZC-PUNE			Date: 19.04.2021
Name and Address of Customer	ZUARI CEMENT LTD. Auj (Aherwadi) Solapur		Order Reference
			PO. No. 4470510069 PO Date: 28.12.2020
Sample Description/Type	Stack Emission Monitoring	Sample Collected by	Laboratory
Sampling Location	Cement Mill	Sample Quantity/Packing	Thimble: 1 X 1 No.
Date of Sampling	12.04.2021	Date of Receipt of Sample	14.04.2021
Sampling Procedure	As per method reference		
Date of Start of Analysis	14.04.2021	Date of Completion of Analysis	17.04.2021

Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Stack Emission)			
Stack attached to		Cement Mill	
Material of construction		Cement Mill	
Stack height above ground level (Meter)		40	
Stack Diameter (Meter)		2	
Stack shape at top		Round	
Type of fuel		NA	
Fuel Consumption		NA	
Parameter	Unit	Result	Method Reference
Flue gas Temperature	°C	55	IS 11255 (Part 3):2008
Flue gas Velocity	m/s	4.57	IS 11255 (Part 3):2008
Total gas quantity	Nm ³ /h	46692	IS 11255 (Part 3):2008
Particulate Matter (PM)	mg/Nm ³	14	IS 11255 (Part 1):1985 RA 2003
Remarks:			

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi

TECHNICAL MANAGER



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Opp. Patel Petrol Pump, Chhindwara Road, Koradi, Dist.Nagpur-441111
Phone : 91-712-2612162, 2612212 Email: mahabal.nagpur@gmail.com

Stack Emission Monitoring Report

Report No.: ME-NG15676-201125-SA-ZC-PUNE		Date: 25.11.2020	
Name and Address of Customer	ZUARI CEMENT LTD. Auj (Aherwadi) Solapur	Order Reference	
		PO. No. 4470361390 PO Date: 22.08.2019	
Sample Description/Type	Stack Emission Monitoring	Sample Collected by	Laboratory
Sampling Location	Cement Mill	Sample Quantity/Packing	Thimble:1 X 1 No.
Date of Sampling	19.11.2020	Date of Receipt of Sample	21.11.2020
Sampling Procedure	As per Method reference		
Date of Start of Analysis	21.11.2020	Date of Completion of Analysis	25.11.2020

Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Stack Emission)			
Stack attached to		Cement Mill	
Material of construction		Cement Mill	
Stack height above ground level (Meter)		40	
Stack Diameter (Meter)		2	
Stack shape at top		Round	
Type of fuel		NA	
Fuel Consumption		NA	
Parameter	Unit	Result	Method Reference
Flue gas Temperature	°C	57	IS 11255 (Part 3):2008
Flue gas Velocity	m/s	5.26	IS 11255 (Part 3):2008
Total gas quantity	Nm ³ /h	53,693	IS 11255 (Part 3):2008
Particulate Matter (PM)	mg/Nm ³	29	IS 11255 (Part 1):1985 RA 2003
Remarks:			

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi
TECHNICAL MANAGER



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ULR- TC748720000015058F



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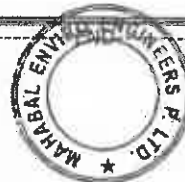
Stack Emission Monitoring Report

Report No.: ME-NG16750-201217-SA-ZC-PUNE		Date: 17.12.2020	
Name and Address of Customer	ZUARI CEMENT LTD. Auj (Aherwadi) Solapur	Order Reference	
		PO. No. 4470361390 PO Date: 22.08.2019	
Sample Description/Type	Stack Emission Monitoring	Sample Collected by	Laboratory
Sampling Location	Cement Mill	Sample Quantity/Packing	Thimble:1 X 1 No.
Date of Sampling	07.12.2020	Date of Receipt of Sample	09.12.2020
Sampling Procedure	As per Method reference		
Date of Start of Analysis	09.12.2020	Date of Completion of Analysis	12.12.2020

Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Stack Emission)			
Stack attached to		Cement Mill	
Material of construction		Cement Mill	
Stack height above ground level (Meter)		40	
Stack Diameter (Meter)		2	
Stack shape at top		Round	
Type of fuel		NA	
Fuel Consumption		NA	
Parameter	Unit	Result	Method Reference
Flue gas Temperature	°C	59	IS 11255 (Part 3):2008
Flue gas Velocity	m/s	5.44	IS 11255 (Part 3):2008
Total gas quantity	Nm ³ /h	54270	IS 11255 (Part 3):2008
Particulate Matter (PM)	mg/Nm ³	18	IS 11255 (Part 1):1985 RA 2003
Remarks:			

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

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Stack Emission Monitoring Report

Report No.: ME-NG02040-210211-SA-ZC-PUNE			Date: 11.02.2021
Name and Address of Customer	ZUARI CEMENT LTD. Auj (Aherwadi) Solapur		Order Reference
			PO. No. 4470510069 PO Date: 28.12.2020
Sample Description/Type	Stack Emission Monitoring	Sample Collected by	Laboratory
Sampling Location	Cement Mill	Sample Quantity/Packing	Thimble: 1 X 1 No.
Date of Sampling	02.02.2021	Date of Receipt of Sample	04.02.2021
Sampling Procedure	As per Method reference		
Date of Start of Analysis	04.02.2021	Date of Completion of Analysis	06.02.2021

Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Stack Emission)			
Stack attached to			Cement Mill
Material of construction			Cement Mill
Stack height above ground level (Meter)			40
Stack Diameter (Meter)			2
Stack shape at top			Round
Type of fuel			NA
Fuel Consumption			NA
Parameter	Unit	Result	Method Reference
Flue gas Temperature	°C	58	IS 11255 (Part 3):2008
Flue gas Velocity	m/s	6.39	IS 11255 (Part 3):2008
Total gas quantity	Nm³/h	65,031	IS 11255 (Part 3):2008
Particulate Matter (PM)	mg/Nm³	25	IS 11255 (Part 1):1985 RA 2003
Remarks:			

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

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ULR- TC748721000001942F



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Opp. Patel Petrol Pump, Chhindwara Road, Koradi, Dist. Nagpur-441111

Phone : 91-712-2612162, 2612212 Email: mahabal.nagpur@gmail.com

Test Report

Report No.: ME-NG04681-210322-SA-ZC-PUNE			Date: 22.03.2021
Name and Address of Customer	ZUARI CEMENT LTD. Auj (Aherwadi) Solapur		Order Reference
			PO. No. 4470510069 PO Date: 28.12.2020
Sample Description/Type	Stack Emission Monitoring	Sample Collected by	Laboratory
Sampling Location	Cement Mill	Sample Quantity/Packing	Thimble:1 X 1 No.
Date of Sampling	13.03.2021	Date of Receipt of Sample	15.03.2021
Sampling Procedure	As per method reference		
Date of Start of Analysis	15.03.2021	Date of Completion of Analysis	20.03.2021

Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Stack Emission)			
Stack attached to		Cement Mill	
Material of construction		Cement Mill	
Stack height above ground level (Meter)		40	
Stack Diameter (Meter)		2	
Stack shape at top		Round	
Type of fuel		NA	
Fuel Consumption		NA	
Parameter	Unit	Result	Method Reference
Flue gas Temperature	°C	54	IS 11255 (Part 3):2008
Flue gas Velocity	m/s	5.70	IS 11255 (Part 3):2008
Total gas quantity	Nm ³ /h	58838	IS 11255 (Part 3):2008
Particulate Matter (PM)	mg/Nm ³	23	IS 11255 (Part 1):1985 RA 2003
Remarks:			

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

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Test Report

Report No.: ME-NG06461-210419-SA-ZC-PUNE			Date: 19.04.2021
Name and Address of Customer	ZUARI CEMENT LTD. Auj (Aherwadi) Solapur		Order Reference
			PO. No. 4470510069 PO Date: 28.12.2020
Sample Description/Type	Stack Emission Monitoring	Sample Collected by	Laboratory
Sampling Location	Cement Mill	Sample Quantity/Packing	Thimble:1 X 1 No.
Date of Sampling	12.04.2021	Date of Receipt of Sample	14.04.2021
Sampling Procedure	As per method reference		
Date of Start of Analysis	14.04.2021	Date of Completion of Analysis	17.04.2021

Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Stack Emission)			
Stack attached to		Cement Mill	
Material of construction		Cement Mill	
Stack height above ground level (Meter)		40	
Stack Diameter (Meter)		2	
Stack shape at top		Round	
Type of fuel		NA	
Fuel Consumption		NA	
Parameter	Unit	Result	Method Reference
Flue gas Temperature	°C	55	IS 11255 (Part 3):2008
Flue gas Velocity	m/s	4.57	IS 11255 (Part 3):2008
Total gas quantity	Nm³/h	46692	IS 11255 (Part 3):2008
Particulate Matter (PM)	mg/Nm³	14	IS 11255 (Part 1):1985 RA 2003
Remarks:			

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi

Harish Mendhi

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ULR- TC748721000006056F

Calibration Report

Project : Zuari cement Ltd , Auj Solapur

Calibration Date : 04.02.2021

CAQMS Local Station 3:

Thermo Scientific Dust Analyzer	Dust Concentration (Foil Value)		Amplification Factor	
			Before	After
PM 10 Analyzer (5014i) S/N- CM18441066	Zero Foil	0 µg		
	Span Foil	1100 µg	6883	7058.4
			Before	After
PM 2.5 Analyzer(5014i) S/N- CM18441061	Zero Foil	0 µg		
	Span Foil	1100 µg	6943	6968.1

Calibration Done By Nikhil Shriwas

M/s ThermoFisher

Nshriwas
04/02/2021

www.thermofisher.cn

Registered Office :

Thermo Fisher Scientific India Pvt. Ltd.

403, 404, Delphi 'B' Wing,
Hiranandani Business Park,

Powai, Mumbai - 400 076,
India.

+91-22-6716 2200 tel

+91-22-6716 2244 fax

1800222230 toll free number

U73100MH2000PTC128872 CIN number

Calibration Report

Project : Zuari cement Ltd , Auj Solapur

Calibration Date : 03-02-2021

CAQMS Local Station 1:

Thermo Scientific Dust Analyzer	Dust Concentration (Foil Value)		Amplification Factor	
PM 10 Analyzer (FH 62) S/N- CM-0004			Before	After
	Zero Foil	0 µg		
	Span Foil	1219 µg	7113	7120
PM 2.5 Analyzer (FH 62) S/N- E-3589			Before	After
	Zero Foil	0 µg		
	Span Foil	1219 µg	6933	6668

Calibration Done By **Nikhil Shriwas**

M/s ThermoFisher

Nshriwas
03/02/2021

www.thermofisher.com

Registered Office :

Thermo Fisher Scientific India Pvt. Ltd.

403, 404, Delphi 'B' Wing,
Hiranandani Business Park,

Powai, Mumbai - 400 076,
India

+91-22-6716 2200 tel
+91-22-6716 2244 fax
1800222230 toll free number
U73100MH2000PTC126872 CIN number

CALIBRATION CERTIFICATE



Certificate No: NKSS/AAQMS/ZCL/2020/162/Z

Date of Issue: 10.02.2021

Customer: M/s Zuari Cements Ltd., Solapur, Maharashtra.

Instrument Details:

Instrument: SO2 Analyser

Station Name: AAQMS-2

Make: Horiba, Japan.

Date of Calibration: 07.02.2021

Model: APSA-370

Due Date: 07.08.2021

Serial No: XGGNLBSG

Calibration Gas Details

Calibration Diluter: APMC-370

SO2 Gas: 50 ppm SO2, Balance N2.

Serial No: 903772

Calibration Equipment Details:

Ratio: 1: 545

Details	SO2 Gas Cylinder
Serial Number	JJ11162
Expiry Date	19.08.2021

Calibration Details:

Parameter	Zero Calibration		Span Calibration		% of Deviation
	Standard Gas Concentration	Measured Value	Standard Gas Concentration	Measured Value	
SO2	0.0ppm	0.0ppm	0.750 ppm	0.761	1.46

Acceptable Tolerance: $\pm 2\%$

Result: The Calibration of above instrument is performed and it meets the acceptance Criteria.

P. P. Kishore
Calibrated by:
Prabhu Kishore
Sr. Service Engineer



I. Sravan Kumar
Reviewed by:
I. Sravan Kumar
Sr. Service Engineer

NK SQUARE SOLUTIONS

Regd. Office : 83/3, Saraswati Nagar Colony, Lothukunta, Secundrebad, Telangana State - 500 015
Corp. Office : 501 Yashoda Pride, Above South Indian Bank, HIG 541 & 542, 6th Phase, KPHB Colony, Hyderabad - 500 072
Ph: +91 40 48514821 E-mail: info@nksquare.com, Website : nksquare.com



CALIBRATION CERTIFICATE

Certificate No: NKSS/AAQMS/ZCL/2020/163/Z

Date of Issue: 10.02.2021

Customer: M/s Zuari Cements Ltd., Solapur, Maharashtra.

Instrument Details:

Instrument: NOx Analyzer

Station Name: AAQMS-2

Make: Horiba, Japan.

Date of Calibration: 07.02.2021

Model: APNA-370

Due Date: 07.08.2021

Serial No: R06HBD3M

Calibration Gas Details:

Calibration Diluter: APMC-370

NO Gas: 49 ppm NO, Balance N₂.

Serial No: 903772

Calibration Equipment Details:

Ratio: 1: 545

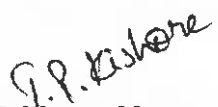
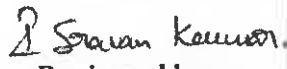
Details	NO Gas Cylinder
Serial Number	JJ11032
Expiry Date	10.08.2021

Calibration Details:

	Zero Calibration		Span Calibration		
Parameter	Standard Gas Concentration	Measured Value	Standard Gas Concentration	Measured Value	% of Deviation
NO	0.0 ppm	0.0 ppm	0.740	0.732	-1.08

Accepted Tolerance: $\pm 2\%$

Result: The Calibration of above instrument is performed and it meets the acceptance Criteria.

 Calibrated by: Prabhu Kishore Sr. Service Engineer		 Reviewed by: I. Sravan Kumar Sr. Service Engineer
---	---	--

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Regd. Office : 83/3, Saraswati Nagar Colony, Lothukunta, Secundrabad, Telangana State - 500 015

Corp. Office : 501 Yashoda Pride, Above South Indian Bank, HIG 541 & 542, 6th Phase, KPHB Colony, Hyderabad - 500 072

Ph: +91 40 48514821 E-mail: info@nksquare.com, Website : nksquare.com



CALIBRATION CERTIFICATE

Certificate No: NKSS/AAQMS/ZCL/2020/161/Z **Date of Issue:** 10.02.2021

Customer: M/s Zuari Cements Ltd., Solapur, Maharashtra.

Instrument Details:

Instrument: PM -2.5 Analyzer

Station Name: AAQMS-2

Make: Metone, U.S.A

Date of Calibration: 07.02.2021

Model: BAM-1020

Due Date: 07.08.2021

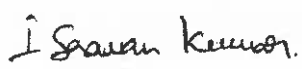
Serial No: P18025

Calibration Details:

Parameter	Span Calibration		
	Standard Value	Measured Value	% of Deviation
Film Value	836 µg/m ³	850 µg/m ³	167

Accepted Tolerance: $\pm 2\%$

Result: The Calibration of above instrument is performed and it meets the acceptance Criteria.

 Calibrated by: Prabhu Kishore Sr. Service Engineer		 Reviewed by: I Sravan Kumar Sr. Service Engineer
--	---	--

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Corp. Office : 501 Yashoda Pride, Above South Indian Bank, HIG 541 & 542, 6th Phase, KPHB Colony, Hyderabad - 500 072
Ph: +91 40 48514821 E-mail: info@nksquare.com, Website : nksquare.com



CALIBRATION CERTIFICATE

Certificate No: NKSS/AAQMS/ZCL/2020/160/Z

Date of Issue: 10.02.2021

Customer: M/s Zuari Cements Ltd., Solapur, Maharashtra.

Instrument Details:

Instrument: PM -10 Analyzer

Station Name: AAQMS-2

Make: Metone, U.S.A

Date of Calibration: 07.02.2021

Model: BAM-1020

Due Date: 07.08.2021

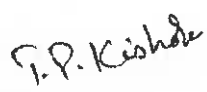
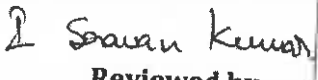
Serial No: P17650

Calibration Details:

Parameter	Span Calibration		
	Standard Value	Measured Value	% of Deviation
Film Value	857 µg/m3	848 µg/m3	-1.05

Accepted Tolerance: $\pm 2\%$

Result: The Calibration of above instrument is performed and it meets the acceptance Criteria.

 Calibrated by: Prabhu Kishore Sr. Service Engineer		 Reviewed by: I. Sravan Kumar Sr. Service Engineer
--	---	--

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Ph: +91 40 48514821 E-mail: info@nksquare.com, Website : nksquare.com

CALIBRATION CERTIFICATE**CLIENT : ZUARI CEMENT, (Heidelberg Cement group)****TEST CERTIFICATE NO : MP/DCEM/PN/20-21/120****WO : -****DATE : 20-10-2020****DETAILS OF THE Forbes Marshall Codel Opacity Monitor.****Model: DCEM2100; Sno:14142****Monitor range:0-100 % Opacity****Testing method: Detector outputs adjusted to standard level and Zero Calibration carried out.****Test Data:**

Opacity%	Measured%
0%	0.04%
100%	100.03%

Zero condition : Fail safe shutter Valve OPEN.**100% Condition: Fail safe shutter Valve CLOSE.****REMARKS:THE ABOVE CALIBRATION RESULTS ARE WELL WITHIN THE
(+/-0.2 % of the opacity measured) SPECIFIED ACCURACY LIMITS OF METER..****CALIBRATION DUE DATE_: 19th Oct 2021****FOR FORBES MARSHALL PVT.LTD.****Forbes Marshall PVT.LTD.****Factory Address: B-35, Phase II, Shree Industrial Area, Sawardari, Chakan, Tal. Khed,
Dist. Pune 410501 Maharashtra, India. Tel : +91 20135 393400****Regd. Office: A-34/35, MIDC H Block, Pimpri, Pune 411 018. Tel: +91 20 27442020 / 39851100, Fax: +91 20 27442040****CIN No.: U28996PN1985PTC037806**

Calibration Report

Project : Zuarl cement Ltd , Auj Solapur

Calibration Date : 04.02.2021

CAQMS Local Station 3:

Thermo Scientific Dust Analyzer	Dust Concentration (Foil Value)		Amplification Factor	
			Before	After
PM 10 Analyzer (5014i) S/N- CM18441066	Zero Foil	0 µg		
	Span Foil	1100 µg	6883	7058.4
PM 2.5 Analyzer(5014i) S/N- CM18441061	Zero Foil	0 µg		
	Span Foil	1100 µg	6943	6968.1

Calibration Done By Nikhil Shriwas

M/s ThermoFisher

Nshriwas
04/02/2021

www.thermofisher.com

Registered Office :

Thermo Fisher Scientific India Pvt. Ltd.

403, 404, Delphi 'B' Wing,
Hiranandani Business Park,

Powai, Mumbai - 400 076,
India.

+91-22-6716 2200 tel

+91-22-6716 2244 fax

1800222230 toll free number

U73100MH2000PTC128872 CIN number

Calibration Report

Project : Zuari cement Ltd , Auj Solapur

Calibration Date : 03-02-2021

CAQMS Local Station 1:

Thermo Scientific Dust Analyzer	Dust Concentration (Foil Value)		Amplification Factor	
PM 10 Analyzer (FH 62) S/N- CM-0004			Before	After
	Zero Foil	0 µg		
	Span Foil	1219 µg	7113	7120
PM 2.5 Analyzer (FH 62) S/N- E-3589			Before	After
	Zero Foil	0 µg		
	Span Foil	1219 µg	6933	6668

Calibration Done By Nikhil Shriwas

M/s ThermoFisher

Nshriwas
03/02/2021

www.thermofisher.com

Registered Office :

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403, 404, Delphi 'B' Wing,
Hiranandani Business Park,

Powai, Mumbai - 400 076,
India.

+91-22-6716 2200 tel
+91-22-6716 2244 fax
1800222230 toll free number
U73100MH2000PTC126872 CIN number



CALIBRATION CERTIFICATE

Certificate No: NKSS/AAQMS/ZCL/2020/162/Z

Date of Issue: 10.02.2021

Customer: M/s Zuari Cements Ltd., Solapur, Maharashtra.

Instrument Details:

Instrument: SO2 Analyser

Station Name: AAQMS-2

Make: Horiba, Japan.

Date of Calibration: 07.02.2021

Model: APSA-370

Due Date: 07.08.2021

Serial No: XGGNLBSG

Calibration Diluter: APMC-370

Calibration Gas Details

SO2 Gas: 50 ppm SO2, Balance N2.

Serial No: 903772

Calibration Equipment Details:

Ratio: 1: 545

Details	SO2 Gas Cylinder
Serial Number	JJ11162
Expiry Date	19.08.2021

Calibration Details:

Parameter	Zero Calibration		Span Calibration		% of Deviation
	Standard Gas Concentration	Measured Value	Standard Gas Concentration	Measured Value	
SO2	0.0ppm	0.0ppm	0.750 ppm	0.761	1.46

Acceptable Tolerance: $\pm 2\%$

Result: The Calibration of above instrument is performed and it meets the acceptance Criteria.

T.P. Kishore
Calibrated by:
Prabhu Kishore
Sr. Service Engineer



I. Sravan Kumar
Reviewed by:
I. Sravan Kumar
Sr. Service Engineer

NK SQUARE SOLUTIONS

Regd. Office : 83/3, Saraswati Nagar Colony, Lothukunta, Secundrabad, Telangana State - 500 015
Corp. Office : 501 Yashoda Pride, Above South Indian Bank, HIG 541 & 542, 6th Phase, KPHB Colony, Hyderabad - 500 072
Ph: +91 40 48514821 E-mail: info@nksquare.com, Website : nksquare.com



CALIBRATION CERTIFICATE

Certificate No: NKSS/AAQMS/ZCL/2020/163/Z

Date of Issue: 10.02.2021

Customer: M/s Zuari Cements Ltd., Solapur, Maharashtra.

Instrument Details:

Instrument: NOx Analyzer

Station Name: AAQMS-2

Make: Horiba, Japan.

Date of Calibration: 07.02.2021

Model: APNA-370

Due Date: 07.08.2021

Serial No: R06HBD3M

Calibration Gas Details:

Calibration Diluter: APMC-370

NO Gas: 49 ppm NO, Balance N₂.

Serial No: 903772

Calibration Equipment Details:

Ratio: 1: 545

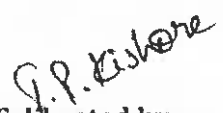
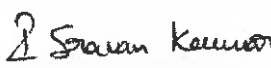
Details	NO Gas Cylinder
Serial Number	JJ11032
Expiry Date	10.08.2021

Calibration Details:

	Zero Calibration		Span Calibration		
Parameter	Standard Gas Concentration	Measured Value	Standard Gas Concentration	Measured Value	% of Deviation
NO	0.0 ppm	0.0 ppm	0.740	0.732	-1.08

Accepted Tolerance: $\pm 2\%$

Result: The Calibration of above instrument is performed and it meets the acceptance Criteria.

 Calibrated by: Prabhu Kishore Sr. Service Engineer		 Reviewed by: I. Sravan Kumar Sr. Service Engineer
--	---	---

NK SQUARE SOLUTIONS

Regd. Office : 83/3, Saraswati Nagar Colony, Lothukunta, Secundrebad, Telangana State - 500 015

Corp. Office : 501 Yashoda Pride, Above South Indian Bank, HIG 541 & 542, 6th Phase, KPHB Colony, Hyderabad - 500 072

Ph: +91 40 48514821 E-mail: info@nksquare.com, Website : nksquare.com



CALIBRATION CERTIFICATE

Certificate No: NKSS/AAQMS/ZCL/2020/161/Z **Date of Issue:** 10.02.2021

Customer: M/s Zuari Cements Ltd., Solapur, Maharashtra.

Instrument Details:

Instrument: PM -2.5 Analyzer

Station Name: AAQMS-2

Make: Metone, U.S.A

Date of Calibration: 07.02.2021

Model: BAM-1020

Due Date: 07.08.2021

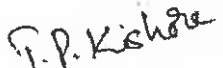
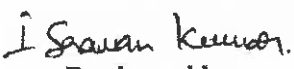
Serial No: P18025

Calibration Details:

Parameter	Span Calibration		
	Standard Value	Measured Value	% of Deviation
Film Value	836 µg/m ³	850 µg/m ³	167

Accepted Tolerance: $\pm 2\%$

Result: The Calibration of above instrument is performed and it meets the acceptance Criteria.

 Calibrated by: Prabhu Kishore Sr. Service Engineer		 Reviewed by: I Sravan Kumar Sr. Service Engineer
--	---	--

NK SQUARE SOLUTIONS

Regd. Office : 83/3, Saraswati Nagar Colony, Lothukunta, Secundrebad, Telangana State - 500 015

Corp. Office : 501 Yashoda Pride, Above South Indian Bank, HIG 541 & 542, 6th Phase, KPHB Colony, Hyderabad - 500 072

Ph: +91 40 48514821 E-mail: info@nksquare.com, Website : nksquare.com



CALIBRATION CERTIFICATE

Certificate No: NKSS/AAQMS/ZCL/2020/160/Z

Date of Issue: 10.02.2021

Customer: M/s Zuari Cements Ltd., Solapur, Maharashtra.

Instrument Details:

Instrument: PM -10 Analyzer

Station Name: AAQMS-2

Make: Metone, U.S.A

Date of Calibration: 07.02.2021

Model: BAM-1020

Due Date: 07.08.2021

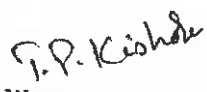
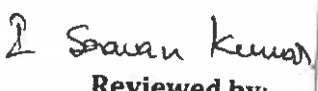
Serial No: P17650

Calibration Details:

Parameter	Span Calibration		
	Standard Value	Measured Value	% of Deviation
Film Value	857 µg/m ³	848 µg/m ³	-1.05

Accepted Tolerance: $\pm 2\%$

Result: The Calibration of above instrument is performed and it meets the acceptance Criteria.

 Calibrated by: Prabhu Kishore Sr. Service Engineer		 Reviewed by: I. Sravan Kumar Sr. Service Engineer
--	---	--

NK SQUARE SOLUTIONS

Regd. Office : 83/3, Saraswati Nagar Colony, Lothukunta, Secundrebad, Telangana State - 500 015
Corp. Office : 501 Yashoda Pride, Above South Indian Bank, HIG 541 & 542, 6th Phase, KPHB Colony, Hyderabad - 500 072
Ph: +91 40 48514821 E-mail: info@nksquare.com, Website : nksquare.com

CALIBRATION CERTIFICATE**CLIENT : ZUARI CEMENT, (Heidelberg Cement group)****TEST CERTIFICATE NO : MP/DCEM/PN/20-21/120****WO : -****DATE : 20-10-2020****DETAILS OF THE Forbes Marshall Codel Opacity Monitor.****Model: DCEM2100; Sno:14142****Monitor range:0-100 % Opacity****Testing method: Detector outputs adjusted to standard level and Zero Calibration carried out.****Test Data:**

Opacity%	Measured%
0%	0.04%
100%	100.03%

Zero condition : Fail safe shutter Valve OPEN.**100% Condition: Fail safe shutter Valve CLOSE.****REMARKS:THE ABOVE CALIBRATION RESULTS ARE WELL WITHIN THE
(+/-0.2 % of the opacity measured) SPECIFIED ACCURACY LIMITS OF METER..****CALIBRATION DUE DATE_: 19th Oct 2021****FOR FORBES MARSHALL PVT.LTD.****Forbes Marshall MANOJ PATEL****Factory Address: B-85, Phase 1, Shree Industrial Area, Sawardari, Chakan, Tal. Khed,
Dist. Pune 410501 Maharashtra, India. Tel : +91 20135 393400****Regd. Office: A-34/35, MIDC H Block, Pimpri, Pune 411 018. Tel: +91 20 27442020 / 39851100, Fax: +91 20 27442040****CIN No.: U28996PN1985PTC037806**

MAHARASHTRA POLLUTION CONTROL BOARD

Phone : 2025611/558
Fax : 25611029



REGIONAL LABORATORY
Jog Centre, 3rd Floor
Wakode Road, Pune-
Mumbai Road, Shivaji
Nagar.

REPORT NO:
MPCB/RLPH/AAQ/20/0370

Date : 06/01/21

ANALYSIS REPORT - AAQM

Industry Name	1	Zuari Cement	Industry Code	1	-
Consent No	1	-	Type Of Industry	1	-
Dt. of Sample Collection	1	07/12/2020			
Sample Id	1	SROSO/AAQ/20/00601			
Sample Location	1	Ind/Res/Ru	Location Details	1	Near adm Building Zuari
Collected By	1	Preshant M. Shosale			
Dt. of Submission	1	16/12/2020	Dt. of Receipt	1	-
Sampling Instrument No	1	-	Dt. of Calibration	1	-
Weather Condition	1	Clear	Temperature	1	-
Wind Direction	1	-	Wind Speed	1	-

Parameter	Sampling Time	Result	Average
NOx	12/07/2020 10:00 to 12/07/2020 14:00	28	
	12/07/2020 14:00 to 12/07/2020 18:00	29	33.5
RSPM	12/07/2020 10:00 to 12/07/2020 18:00	83	83
SO2	12/07/2020 10:00 to 12/07/2020 14:00	5	
	12/07/2020 14:00 to 12/07/2020 18:00	6	5.5

1. All results are in microgram/m³
2. BDL : "Below Detectable Limit".
3. UoM : "Unit of Measurement".
4. NA : "Not Analyzed".

Reviewed By

Shri S.V. Shosale
Scientific Officer
I/C REGIONAL LABORATORY
Regional Laboratory - Pune

**Electronic Report does not require Signature

MAHARASHTRA POLLUTION CONTROL BOARD

Phone : 2628801/4988
Fax : 26611626



REGIONAL LABORATORY
3rd Floor, 3rd Floor
Mukade Ward, Pune
Mumbai Road, Shivajinagar

REPORT NO:
MPCL/RLPL/AAQ/20/0070

Date: 08/01/21

ANALYSIS REPORT - AAQM

Industry Name	-	Industry Code	-
Consent No.	-	Type Of Industry	-
Dt. of Sample Collection	07/12/2020		
Sample ID	SN/007/AAQ/20/00002		
Sample Location	Out/Rec/In	Location Details	SEAR ROAD GATE
Collected By	Prashant N. Bhosale		
Dt. of Submission	16/12/2020	Dt. of Receipt	-
Sampling Instrument No.	-	DL of Calibration	-
Weather Condition	Clear	Temperature	-
Wind Direction	-	Wind Speed	-

Parameter	Sampling Time	Result	Average
SO ₂	12/07/2020 11:00 to 12/07/2020 15:00	31	
	12/07/2020 15:00 to 12/07/2020 19:00	38	34.5
NO ₂	12/07/2020 11:00 to 12/07/2020 15:00	93	93
	12/07/2020 15:00 to 12/07/2020 19:00	4	
	12/07/2020 15:00 to 12/07/2020 19:00	6	5

1. All results are in microgram/m³
2. BDL : "Below Detectable Limit".
3. Unit : "Unit of Measurement".
4. NA : "Not Analyzed".

Reviewed By

Shri S. V. Bhosale
Scientific Officer
I/C REGIONAL LABORATORY
Regional Laboratory - Pune

**Electronic Report does not require Signature

MAHARASHTRA POLLUTION CONTROL BOARD

Phone : 2025811698
Fax : 25811029



REGIONAL LABORATORY

Jog Centre, 3rd Floor
Wakade Wadi, Pune-
Mumbai Road, Shivaji
Nagar.

REPORT NO:
MPCB/RLPN/AAQ/20/0370

Date : 06/01/21

ANALYSIS REPORT - AAQM

Industry Name	:		Industry Code	:	
Consent No	:		Type Of Industry	:	
Dt. of Sample Collection	:	07/12/2020			
Sample Id	:	SROSO/AAQ/20/00802			
Sample Location	:	Ind/Resl/Ru	Location Details	:	NEAR MAIN GATE
Collected By	:	Prashant M. Bhosale			
Dt. of Submission	:	16/12/2020	Dt. of Receipt	:	-
Sampling Instrument No	:	-	Dt. of Calibration	:	-
Whether Condition	:	Clear	Temperature	:	-
Wind Direction	:	-	Wind Speed	:	-

M/s. Zuari Cement Ltd., Vill. Aji (Aherwadi), Po. Shingadgaon,

Tal- South sampur, Dist- Solapur - AAQM.

Parameter	Sampling Time	Result	Average
NOx	12/07/2020 11:00 to 12/07/2020 15:00	31	
	12/07/2020 15:00 to 12/07/2020 19:00	38	34.5
RSPM	12/07/2020 11:00 to 12/07/2020 19:00	95	95
SO2	12/07/2020 11:00 to 12/07/2020 15:00	4	
	12/07/2020 15:00 to 12/07/2020 19:00	6	5

1. All results are in microgram/m³
2. BDL : "Below Detectable Limit"
3. UoM : "Unit of Measurement".
4. NA : "Not Analysed".

Reviewed By

Shri.S.V.Bhosale
Scientific Officer
I/C REGIONAL LABORATORY
Regional Laboratory - Pune

**Electronic Report does not require Signature

MAHARASHTRA POLLUTION CONTROL BOARD

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REGIONAL LABORATORY

Jog Centre, 3rd Floor
Wakade Wadi, Pune-
Mumbai Road, Shivaji
Nagar.

REPORT NO:
MPCB/RLPN/AAQ/20/0373

Date : 16/03/21

ANALYSIS REPORT - AAQM

Industry Name	:	-	Industry Code	:	-
Consent No	:	-	Type Of Industry	:	-
Dt. of Sample Collection	:	27/01/2021			
Sample Id	:	SROSO/AAQ/20/00804			
Sample Location	:	Ind/Resi/Ru	Location Details	:	Near Main Gate
Collected By	:	Prashant M. Bhosale			
Dt. of Submission	:	10/03/2021	Dt. of Receipt	:	-
Sampling Instrument No	:	-	Dt. of Calibration	:	-
Whether Condition	:	Clear	Temperature	:	34
Wind Direction	:	-	Wind Speed	:	-

Parameter	Sampling Time	Result	Average
NOx	01/27/2021 09:00 to 01/27/2021 13:00	28	31.5
	01/27/2021 13:00 to 01/27/2021 17:00	35	
RSPM	01/27/2021 09:00 to 01/27/2021 17:00	77	77
SO2	01/27/2021 09:00 to 01/27/2021 13:00	4	4.5
	01/27/2021 13:00 to 01/27/2021 17:00	5	

1. All results are in microgram/m³
2. BDL : "Below Detectable Limit".

M/s. Zuari Cement Lch, VII Aug (Aherwadi) po. Shingadgaon,
Tal- South Solapur, Dist- Solapur - AAQM

3. UoM : "Unit of Measurement"
4. NA : "Not Analysed".

**Electronic Report does not require Signature

Reviewed By
Shri.S.V.Bhosale
Scientific Officer
I/C REGIONAL LABORATORY
Regional Laboratory - Pune

MAHARASHTRA POLLUTION CONTROL BOARD

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Fax : 25811029



REGIONAL LABORATORY

Jog Centre, 3rd Floor
Wakade Wadi, Pune-
Mumbai Road, Shivaji
Nagar.

REPORT NO:
MPCB/RLPN/AAQ/20/0373

Date : 16/03/21

ANALYSIS REPORT - AAQM

Industry Name	:		Industry Code	:	-
Consent No	:		Type Of Industry	:	-
Dt. of Sample Collection :		27/01/2021			
Sample Id	:	SROSO/AAQ/20/00805			
Sample Location	:	Ind/Resi/Ru	Location Details	:	Near Mili Building
Collected By	:	Prashant M. Bhosale			
Dt. of Submission	:	10/03/2021	Dt. of Receipt	:	-
Sampling Instrument No	:	-	Dt. of Calibration	:	-
Whether Condition	:	Clear	Temperature	:	34
Wind Direction	:	-	Wind Speed	:	-

M/s. Zuari Cement Ltd., H/P. Auj (Aherwadi), Po - Shingadgaon,
Tal - South Solapur, Dist - Solapur - AAQM

Parameter	Sampling Time	Result	Average
NOx	01/27/2021 10:00 to 01/27/2021 14:00	25	
	01/27/2021 14:00 to 01/27/2021 18:00	31	28
RSPM	01/27/2021 10:00 to 01/27/2021 18:00	96	96
SO2	01/27/2021 10:00 to 01/27/2021 14:00	4	
	01/27/2021 14:00 to 01/27/2021 18:00	3	3.5

1. All results are in microgram/m3
2. BDL : "Below Detectable Limit".
3. UoM : "Unit of Measurement".
4. NA : "Not Analysed".

Reviewed By

Shri.S.V.Bhosale

Scientific Officer
I/C REGIONAL LABORATORY
Regional Laboratory - Pune

**Electronic Report does not require Signature

MAHARASHTRA POLLUTION CONTROL BOARD

Phone : 2025811698
Fax : 25811020



REGIONAL LABORATORY
Jog Centre, 3rd Floor
Wakade Wadi, Pune-
Mumbai Road, Shivajinagar.

REPORT NO:
MPCB/RLPN/AAQ/20/0370

Date : 06/01/21

ANALYSIS REPORT - AAQM

Industry Name	: Zuari Cement	Industry Code	:
Consent No	:	Type Of Industry	:
Dt. of Sample Collection	: 07/12/2020		
Sample Id	: SROSO/AAQ/20/00801		
Sample Location	: Ind/Resl/Ru	Location Details	: Near adm Building Zuari
Collected By	: Prashant M. Bhosale		
Dt. of Submission	: 16/12/2020	Dt. of Receipt	: -
Sampling Instrument No	: -	Dt. of Calibration	: -
Whether Condition	: Clear	Temperature	: -
Wind Direction	: -	Wind Speed	: -

Mr. Zuari Cement Ltd, Vil Raj (Aherwadi) Pa. Shengadgaon,
Tal. South Solapur, Dist. - Solapur - AAQM.

Parameter	Sampling Time	Result	Average
NOx	12/07/2020 10:00 to 12/07/2020 14:00	38	
	12/07/2020 14:00 to 12/07/2020 18:00	29	33.5
RSPM	12/07/2020 10:00 to 12/07/2020 18:00	83	83
SO2	12/07/2020 10:00 to 12/07/2020 14:00	5	
	12/07/2020 14:00 to 12/07/2020 18:00	6	5.5

1. All results are in microgram/m3
2. BDL : "Below Detectable Limit"
3. UoM : "Unit of Measurement".
4. NA : "Not Analysed"

Reviewed By

Shri.S.V.Bhosale

Scientific Officer
I/C REGIONAL LABORATORY
Regional Laboratory - Pune

**Electronic Report does not require Signature

12	MPCB- CONSENT- 0000082384	Zuari Cement Ltd., At Ahuj, Shingadgaon, South Solapur, Solapur	APPROVED Review of BG Forfeiture	—	Committee noted that, PP has applied for renewal of consent to operate. Committee also noted that, the case was discussed and approved in the earlier CAC with BG forfeiture towards exceeding JVS results of AAQM. Thereafter PP has made representation for waive off the forfeiture of BG and submitted that industry has taken all adequate measures for control emission from the sources as well as fugitive dust emission. In view of above it was decided waive the BG forfeiture condition. Industry shall submit the separate application for extension of validity for consent through MPCB Portal.
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Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor

Plot Nos. 13,14,17,18, Grampanchayat Bokhara, 8 km from Nagpur City,
Opp. Patel Petrol Pump, Chhindwara Road, Koradi, Dist. Nagpur-441111

Phone : 91-712-2612162,2612212 Email: mahabal.nagpur@gmail.com

Effluent Sample Analysis Report

Report No.: ME-NG13527-201024-SA-ZC-PUNE		Date: 24.10.2020	
Name and Address of Customer	ZUARI CEMENT LTD. Auj (Aherwadi) Solapur	Order Reference	
		PO. No. 4470361390 PO Date: 22.08.2019	
Sample Description/Type	Domestic Effluent	Sample Collected by	Laboratory
Sampling Location	Septic Tank Outlet	Sample Quantity/Packing	2 L X 1 No. PVC Can 100mL X 1 No. PVC Can 1 L X 1 No. Glass Bottle
Date of Sampling	13.10.2020	Date of Receipt of Sample	15.10.2020
Sampling Procedure	IS:3025(Part I):1987 RA 2003; APHA 23 rd Ed. 2017, 1060-B, 1-40		
Date of Start of Analysis	15.10.2020	Date of Completion of Analysis	24.10.2020

Sr. No.	Parameter	Unit	Result	Method Reference
Discipline: Chemical Testing; Product Group: Pollution & Environment (Waste Water)				
1	pH	-	7.8	APHA 23 rd Ed. 2017, 4500-H ⁺ -B, 4-95
2	Total Suspended Solids	mg/L	13	APHA 23 rd Ed. 2017, 2540-D, 2-70
3	Biochemical Oxygen Demand (3 days 27°C)	mg/L	8.7	IS 3025 (Part 44): 1993, Reaffirmed 2009
4	Chemical Oxygen Demand	mg/L	28	APHA 23 rd Ed. 2017, 5220-B, 5-18
5	Oil and Grease	mg/L	N.D.	IS 3025 (Part 39): 1991, Reaffirmed 2009, Amds.1
Remarks: N.D. Not Detected				

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi

TECHNICAL MANAGER



Note:

- The result listed refers only to the tested sample(s) and applicable parameter(s).
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TC-7487

Page 1 of 1

QF/SALE/02/Issue No 03 Dt 05.12.2019,Amd 00 Dt 00



Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra
 (Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace. Next to Ashida Electrical. Near J B Sawant Bus Stop)
Phone: 2582 0658/3139/1663/3154 Fax: +91-22-25823543 thane@mahabal.com



Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor

Plot Nos. 13,14,17,18, Grampanchayat Bokhara, 8 km from Nagpur City,
Opp. Patel Petrol Pump, Chhindwara Road, Koradi, Dist.Nagpur-441111

Phone : 91-712-2612162, 2612212 Email: mahabal.nagpur@gmail.com

Ambient Noise Level Monitoring Report

Report No.: ME-NG13528-201024-SA-ZC-PUNE		Date: 24.10.2020
Name and Address of Customer	ZUARI CEMENT LTD. Auj (Aherwadi) Solapur	Order Reference
		PO. No. 4470361390 PO Date: 22.08.2019
Sample Description/Type	Noise Level Monitoring	Sample Collected by
		NA
Date of Sampling	12.10.2020	
Sampling Procedure	IS 9876:1981 & manufacturer Manual	

Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Ambient Noise)			
Location		Time	Result
			Sound Level LeqdB (A)
Near Mill Area			
Day		13:20	60.4
Night		22:40	52.2
Near Gypsum Yard			
Day		13:20	64.8
Night		22:50	57.3
Near Wagan Tipler			
Day		13:40	63.1
Night		22:55	58.7
Noise Level Standard			
Area Code	Area Type	Limit in dB(A) weighted scale	
		Day	Night
A	Industries	75	70

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi

TECHNICAL MANAGER



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QF/SALE/05/Issue No.03, Dt.05.12.2019, Amd.00, Dt.00



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(Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace. Next to Ashida Electrical. Near J B Sawant Bus Stop)
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Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor

Plot Nos. 13,14,17,18, Grampanchayat Bokhara, 8 km from Nagpur City,
Opp. Patel Petrol Pump, Chhindwara Road, Koradi, Dist. Nagpur-441111

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Ambient Noise Level Monitoring Report

Report No.: ME-NG15675-201130-SA-ZC-PUNE		Date: 30.11.2020
Name and Address of Customer	ZUARI CEMENT LTD. Auj (Aherwadi) Solapur	Order Reference
		PO. No. 4470361390 PO Date: 22.08.2019
Sample Description/Type	Noise Level Monitoring	Sample Collected by
		NA
Date of Sampling	18.11.2020	
Sampling Procedure	IS 9876:1981 & manufacturer Manual	

Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Ambient Noise)		
Location	Time	Result
		Sound Level L _{eq} dB (A)
Near Mill Area		
Day	13:10	61.4
Night	22:30	54.3
Near Gypsum Yard		
Day	13:35	65.2
Night	22:55	57.6
Near Wagan Tipler		
Day	13:20	60.2
Night	22:45	57.6
Noise Level Standard		
Area Code	Area Type	Limit in dB(A) weighted scale
		DayNight
A	Industries	7570

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi
TECHNICAL MANAGER

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Ambient Noise Level Monitoring Report

Report No.: ME-NG16748-201217-SA-ZC-PUNE			Date: 17.12.2020
Name and Address of Customer	ZUARI CEMENT LTD. Auj (Aherwadi) Solapur		Order Reference
			PO. No. 4470361390 PO Date: 22.08.2019
Sample Description/Type	Noise Level Monitoring	Sample Collected by	NA
Date of Sampling	07.12.2020		
Sampling Procedure	IS 9876:1981 & manufacturer Manual		

Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Ambient Noise)				
Location		Time	Result	
			Sound Level L _{eq} dB (A) Fast Response	Sound Level L _{eq} dB (A) Slow Response
Near Mill Area				
Day		12:00	60.0	58.5
Night		22:35	57.4	56.2
Near Gypsum Yard				
Day		12:40	65.4	64.1
Night		23:00	54.2	53.0
Near Wagon Tippler				
Day		12:20	63.2	61.8
Night		22:40	55.6	54.2
Noise Level Standard				
Area Code	Area Type	Limit in dB(A) weighted scale		
		Day	Night	
A	Industries	75	70	

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi

TECHNICAL MANAGER



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Continuation Sheet

Report No.00247 Cont...

Sr. No.	Parameter	Unit	Result	Method Reference
Residues in water (Trace metal Element)				
14	Iron (as Fe)	mg/L	0.201	APHA 23 rd Ed. 2017, 3111-B, 3-20
15	Manganese (as Mn)	mg/L	<0.04	APHA 23 rd Ed. 2017, 3111-B, 3-20
16	Cadmium (as Cd)	mg/L	N.D.	APHA 23 rd Ed. 2017, 3111-B, 3-20
17	Chromium Hexa (as Cr ⁶⁺)	mg/L	N.D.	APHA 23 rd Ed. 2017, 3500- Cr-B, 3-71
18	Copper (as Cu)	mg/L	<0.04	APHA 23 rd Ed. 2017, 3111-B, 3-20
19	Lead (as Pb)	mg/L	N.D.	APHA 23 rd Ed. 2017, 3111-B, 3-20
20	Zinc (as Zn)	mg/L	0.038	APHA 23 rd Ed. 2017, 3111-B, 3-20
21	Arsenic (as As)	mg/L	N.D.	IS 3025 (Part 37): 1988, RA 2009
22	Mercury (as Hg)	mg/L	N.D.	APHA 23 rd Ed. 2017, 3112-B, 3-25
Discipline: Biological Testing; Product Group: Water (Ground Water)				
26	Total Colliforms	MPN/100 mL	3.6	APHA 23 rd Ed. 2017, 9221-B & C, 9-69, 9-72
27	E-Coli	MPN/100 mL	Absent	APHA 23 rd Ed. 2017, 9221-B, C & G, 9-69, 9-72 & 9-80
Remark: N.D.: Not Detected;				

---END---

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.



Harish Mendhi

TECHNICAL MANAGER
(Chemical Testing)





Pranali Kurve

TECHNICAL MANAGER
(Biological Testing)



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Water Sample Analysis Report

Report No.: ME-NG00247-210123-SA-ZC-PUNE			Date: 23.01.2021
Name and Address of Customer	ZUARI CEMENT LTD. Auj (Aherwadi) Solapur		Order Reference
			PO. No. 4470510069 PO Date: 28.12.2020
Sample Description/Type	Ground water	Sample Collected by	Laboratory
Sampling Location	Tap Water	Sample Quantity/Packing	2 L X 1 No. PVC Can 500mLX 1No. PVC Can 500mLX 1No.Sterilised Glass Bottle
Date of Sampling	05.01.2021	Date of Receipt of Sample	06.01.2021
Sampling Procedure	IS:3025(Part I):1987 RA 2003; IS 1622:1981 RA 1996 Ed 2,4 (2003); APHA 23 rd Ed. 2017, 1060-B, 1-40; 9060 A, 9-36		
Date of Start of Analysis	06.01.2021	Date of Completion of Analysis	23.01.2021

Sr. No.	Parameter	Unit	Result	Method Reference
Discipline: Chemical Testing; Product Group: Water (Ground Water)				
1	Colour	Hazen	<1	APHA 23 rd Ed. 2017, 2120-B, 2-6
2	Odour	-	Agreeable	IS 3025 (Part 5):1984, Reaffirmed 2006
3	Taste	-	Agreeable	IS 3025 (Part 7 & 8):1984, Reaffirmed 2006
4	Turbidity	NTU	0.9	APHA 23 rd Ed. 2017, 2130-B, 2-13
5	pH	-	8.1	APHA 23 rd Ed. 2017, 4500-H ⁺ -B, 4-95
6	Total Dissolved Solids	mg/L	270	IS 3025 (Part 16):1984 RA 2006, Ed.2.1 (1999-12)
7	Alkalinity Total (as CaCO ₃)	mg/L	140	IS 3025 (Part 23):1986 Reaffirmed 2009 Amds 1
8	Total Hardness (as CaCO ₃)	mg/L	152	APHA 23 rd Ed. 2017, 2340-C, 2-48
9	Chloride (as Cl)	mg/L	30.0	APHA 23 rd Ed. 2017, 4500-Cl-B, 4-75
10	Sulphate (as SO ₄)	mg/L	14.5	APHA 23 rd Ed. 2017, 4500- SO ₄ -E, 4-199
11	Nitrate (as NO ₃)	mg/L	4.54	APHA 23 rd Ed. 2017, 4500-NO ₃ , E 4-131
12	Calcium (as Ca)	mg/L	32.1	APHA 23 rd Ed. 2017, 3500-Ca-B, 3-69
13	Fluoride (as F)	mg/L	0.480	APHA 23 rd Ed. 2017, 4500-F, D, 4-90

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Water Sample Analysis Report

Report No.: ME-NG00246-210123-SA-ZC-PUNE			Date: 23.01.2021
Name and Address of Customer	ZUARI CEMENT LTD. Auj (Aherwadi) Solapur		Order Reference
			PO. No. 4470510069 PO Date: 28.12.2020
Sample Description/Type	Drinking water	Sample Collected by	Laboratory
Sampling Location	Dining Hall (Cooler)	Sample Quantity/Packing	500mLX 1No. PVC Can
Date of Sampling	05.01.2021	Date of Receipt of Sample	06.01.2021
Sampling Procedure	IS:3025(Part I):1987 RA 2003; APHA 23 rd Ed. 2017, 1060-B, 1-40;		
Date of Start of Analysis	06.01.2021	Date of Completion of Analysis	23.01.2021

Sr. No.	Parameter	Unit	Result	Acceptable Limit for Drinking Water (IS 10500:2012)	Method Reference
Discipline: Chemical Testing; Product Group: Water (Drinking Water)					
1	Cyanide (as CN)	mg/L	N.D.	0.05 Max.	APHA 23 rd Ed. 2017, 4500-CN, C & E, 4-44 & 4-46
2	Anionic detergents as MBAS	mg/L	N.D.	0.2 Max.	APHA 23 rd Ed. 2017, 5540-C, 5-55
3	Phenolic compounds (as C ₆ H ₅ OH)	mg/L	N.D.	0.001 Max.	APHA 23 rd Ed. 2017, 5530- B & C, 5-49, 5-50
Remark: N.D.: Not Detected;					

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi

TECHNICAL MANAGER



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Continuation Sheet

Report No.00246 Cont...

Sr. No.	Parameter	Unit	Result	Acceptable Limit for Drinking Water (IS 10500:2012)	Method Reference
13	Fluoride (as F)	mg/L	0.480	1 Max.	APHA 23 rd Ed. 2017, 4500-F, D, 4-90
Residues in water (Trace metal Element)					
14	Iron (as Fe)	mg/L	<0.08	1.0 Max.	APHA 23 rd Ed. 2017, 3111-B, 3-20
15	Manganese (as Mn)	mg/L	N.D.	0.1 Max.	APHA 23 rd Ed. 2017, 3111-B, 3-20
16	Cadmium (as Cd)	mg/L	N.D.	0.003 Max.	APHA 23 rd Ed. 2017, 3111-B, 3-20
17	Chromium Hexa (as Cr ⁶⁺)	mg/L	N.D.	-	APHA 23 rd Ed. 2017, 3500- Cr-B, 3-71
18	Copper (as Cu)	mg/L	N.D.	0.05 Max.	APHA 23 rd Ed. 2017, 3111-B, 3-20
19	Lead (as Pb)	mg/L	N.D.	0.01 Max.	APHA 23 rd Ed. 2017, 3111-B, 3-20
20	Zinc (as Zn)	mg/L	0.029	5 Max.	APHA 23 rd Ed. 2017, 3111-B, 3-20
21	Arsenic (as As)	mg/L	N.D.	0.01 Max.	IS 3025 (Part 37): 1988, RA 2009
22	Mercury (as Hg)	mg/L	N.D.	0.001 Max.	APHA 23 rd Ed. 2017, 3112-B, 3-25
Discipline: Biological Testing; Product Group: Water (Drinking Water)					
26	Total Coliforms	P-A/ 100 mL	Absent	Not Detectable	APHA 23 rd Ed. 2017, 9221-D, 9-75
27	E-Coli	P-A/ 100 mL	Absent	Not Detectable	APHA 23 rd Ed. 2017, 9221-D,E & G, 9-75-9-80
Remark: N.D.: Not Detected;					

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END
FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi
TECHNICAL MANAGER
(Chemical Testing)



Pranali Kurve

Pranali Kurve
TECHNICAL MANAGER
(Biological Testing)



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Water Sample Analysis Report

Report No.: ME-NG00246-210123-SA-ZC-PUNE			Date: 23.01.2021
Name and Address of Customer	ZUARI CEMENT LTD. Auj (Aherwadi) Solapur		Order Reference
			PO. No. 4470510069 PO Date: 28.12.2020
Sample Description/Type	Drinking water	Sample Collected by	Laboratory
Sampling Location	Dining Hall (Cooler)	Sample Quantity/Packing	2 L X 1 No. PVC Can 500mLX 1No. PVC Can 500mLX 1No. Sterilised Glass Bottle
Date of Sampling	05.01.2021	Date of Receipt of Sample	06.01.2021
Sampling Procedure	IS:3025(Part I):1987 RA 2003; IS 1622:1981 RA 1996 Ed 2.4 (2003); APHA 23 rd Ed. 2017, 1060-B, 1-40; 9060 A, 9-36		
Date of Start of Analysis	06.01.2021	Date of Completion of Analysis	23.01.2021

Sr. No.	Parameter	Unit	Result	Acceptable Limit for Drinking Water (IS 10500:2012)	Method Reference
Discipline: Chemical Testing; Product Group: Water (Drinking Water)					
1	Colour	Hazen	<1	5 Max.	APHA 23 rd Ed. 2017, 2120-B, 2-6
2	Odour	-	Agreeable	Agreeable	IS 3025 (Part 5):1984, Reaffirmed 2006
3	Taste	-	Agreeable	Agreeable	IS 3025 (Part 7 & 8):1984, Reaffirmed 2006
4	Turbidity	NTU	0.2	1 Max.	APHA 23 rd Ed. 2017, 2130-B, 2-13
5	pH	-	7.9	6.5 to 8.5	APHA 23 rd Ed. 2017, 4500-H ⁺ -B, 4-95
6	Total Dissolved Solids	mg/L	241	500 Max.	IS 3025 (Part 16):1984 RA 2006, Ed.2.1 (1999-12)
7	Alkalinity Total (as CaCO ₃)	mg/L	136	200 Max.	IS 3025 (Part 23):1986 Reaffirmed 2009 Amds 1
8	Total Hardness (as CaCO ₃)	mg/L	148	200 Max.	APHA 23 rd Ed. 2017, 2340-C, 2-48
9	Chloride (as Cl)	mg/L	28.0	250 Max.	APHA 23 rd Ed. 2017, 4500-Cl-B, 4-75
10	Sulphate (as SO ₄)	mg/L	14.5	200 Max.	APHA 23 rd Ed. 2017, 4500- SO ₄ -E, 4-199
11	Nitrate (as NO ₃)	mg/L	4.19	45 Max.	APHA 23 rd Ed. 2017, 4500-NO ₃ , E 4-131
12	Calcium (as Ca)	mg/L	30.5	75 Max.	APHA 23 rd Ed. 2017, 3500-Ca-B, 3-69

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Ambient Noise Level Monitoring Report

Report No.: ME-NG00222-210120-SA-ZC-PUNE		Date: 20.01.2021
Name and Address of Customer	ZUARI CEMENT LTD. Auj (Aherwadi) Solapur	Order Reference
		PO. No. 4470510069 PO Date: 28.12.2020
Sample Description/Type	Noise Level Monitoring	Sample Collected by
		NA
Date of Sampling	04.01.2021	
Sampling Procedure	IS 9876:1981 & manufacturer Manual	

Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Ambient Noise)			
Location		Time	Result
			Sound Level LeqdB (A)
Near Mill Area			
Day		11:30	64.6
Night		22:30	60.0
Near Gypsum Yard			
Day		12:50	61.0
Night		22:50	58.2
Near Wagon Tippler			
Day		12:40	62.2
Night		22:40	56.6
Noise Level Standard			
Area Code	Area Type	Limit in dB(A) weighted scale	
		Day	Night
A	Industries	75	70

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi

TECHNICAL MANAGER

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Effluent Sample Analysis Report

Report No.: ME-NG02042-210213-SA-ZC-PUNE			Date: 13.02.2021
Name and Address of Customer	ZUARI CEMENT LTD. Auj (Aherwadi) Solapur		Order Reference
			PO. No. 4470510069 PO Date: 28.12.2020
Sample Description/Type	Domestic Effluent	Sample Collected by	Laboratory
Sampling Location	Septic Tank Outlet	Sample Quantity/Packing	2 L X 1 No. PVC Can 100mL X 1 No. PVC Can 1 L X 1 No. Glass Bottle
Date of Sampling	02.02.2021	Date of Receipt of Sample	04.02.2021
Sampling Procedure	IS:3025(Part I):1987 RA 2003; APHA 23 rd Ed. 2017, 1060-B, 1-40		
Date of Start of Analysis	04.02.2021	Date of Completion of Analysis	10.02.2021

Sr. No.	Parameter	Unit	Result	Method Reference
Discipline: Chemical Testing; Product Group: Pollution & Environment (Waste Water)				
1	pH	-	7.4	APHA 23 rd Ed. 2017, 4500-H ⁺ -B, 4-95
2	Total Suspended Solids	mg/L	12	APHA 23 rd Ed. 2017, 2540-D, 2-70
3	Biochemical Oxygen Demand (3 days 27°C)	mg/L	8.4	IS 3025 (Part 44): 1993, Reaffirmed 2009
4	Chemical Oxygen Demand	mg/L	28	APHA 23 rd Ed. 2017, 5220-B, 5-18
5	Oil and Grease	mg/L	N.D.	IS 3025 (Part 39): 1991, Reaffirmed 2009, Amds.1
Remarks: N.D. Not Detected				

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

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Ambient Noise Level Monitoring Report

Report No.: ME-NG02038-210213-SA-ZC-PUNE			Date: 13.02.2021
Name and Address of Customer	ZUARI CEMENT LTD. Auj (Aherwadi) Solapur		Order Reference
			PO. No. 4470510069 PO Date: 28.12.2020
Sample Description/Type	Noise Level Monitoring	Sample Collected by	NA
Date of Sampling	02.02.2021		
Sampling Procedure	IS 9876:1981 & manufacturer Manual		

Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Ambient Noise)

Discipline: Chemical Testing, Product Group: Atmospheric Pollution (Noise)			
Location	Time	Result	
		Sound Level LeqdB (A) Fast Response	Sound Level LeqdB (A) Slow Response
Near Mill Area			
Day	11:00	62.2	60.7
Night	22:10	53.4	51.2
Near Gypsum Yard			
Day	11:25	63.6	62.0
Night	22:40	59.4	58.5
Near Wagon Tippler			
Day	11:10	64.6	63.2
Night	22:20	54.2	52.9

Noise Level Standard

Area Code	Area Type	Limit in dB(A) weighted scale	
		Day	Night
A	Industries	75	70

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

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Phone : 91-712-2612162, 91-712-2612212 Email: mahabal.nagpur@gmail.com

Test Report

Report No.: ME-NG04678-210322-SA-ZC-PUNE			Date: 22.03.2021
Name and Address of Customer	ZUARI CEMENT LTD. Auj (Aherwadi) Solapur		Order Reference
			PO. No. 4470510069 PO Date: 28.12.2020
Sample Description/Type	Stack Emission Monitoring	Sample Collected by	Laboratory
Sampling Location	DG Set 200 kVA	Sample Quantity/Packing	Thimble PM: 1 X 1 No. SO ₂ : 30mL X 1 No. PVC Bottle NO _x : 25mL X 1 No. PVC Bottle
Date of Sampling	13.03.2021	Date of Receipt of Sample	15.03.2021
Sampling Procedure	As per method reference		
Date of Start of Analysis	15.03.2021	Date of Completion of Analysis	20.03.2021

Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Stack Emission)

Stack Identity		DG Set 200 kVA (Pump House)	
Stack attached to		DG Set	
Material of construction		M.S.	
Stack height above ground level (Meter)		15	
Stack Diameter at sampling point (Meter)		0.125	
Stack shape at top		Round	
Type of fuel		Diesel	
Parameter	Unit	Result	Method Reference
Flue gas Temperature	°C	72	IS 11255 (Part 3):2008
Flue gas Velocity	m/s	6.76	IS 11255 (Part 3):2008
Total gas quantity	Nm ³ /h	258	IS 11255 (Part 3):2008
Particulate Matter (PM)	mg/Nm ³	21	IS 11255 (Part 1):1985 RA 2003
Sulphur Dioxide (SO ₂)	kg/d	0.10	IS 11255 (Part 2):1985 RA 2003
Oxides of Nitrogen (NO _x)	mg/Nm ³	26.8	IS 11255 (Part 7): 2005

Remark:

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Harish Mendhi

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Phone: 2582 0658/3139/1663/3154 Fax: +91-22-25823543 thane@mahabal.com





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Engineer, Consultant, Environmental Monitoring Laboratory & Contractor

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Test Report

Report No.: ME-NG04679-210322-SA-ZC-PUNE			Date: 22.03.2021		
Name and Address of Customer	ZUARI CEMENT LTD. Auj (Aherwadi) Solapur			Order Reference	
				PO. No. 4470510069 PO Date: 28.12.2020	
Sample Description/Type	Stack Emission Monitoring	Sample Collected by		Laboratory	
Sampling Location	DG Set 500 kVA	Sample Quantity/Packing		Thimble PM: 1 X 1 No. SO ₂ : 30mL X 1 No. PVC Bottle NO _x : 25mL X 1 No. PVC Bottle	
Date of Sampling	13.03.2021	Date of Receipt of Sample		15.03.2021	
Sampling Procedure	As per method reference				
Date of Start of Analysis	15.03.2021	Date of Completion of Analysis		20.03.2021	
Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Stack Emission)					
Stack Identity			DG Set 500 kVA (CCR Building)		
Stack attached to			DG Set		
Material of construction			M.S.		
Stack height above ground level (Meter)			15		
Stack Diameter at sampling point (Meter)			0.125		
Stack shape at top			Round		
Type of fuel			Diesel		
Parameter	Unit	Result	Method Reference		
Flue gas Temperature	°C	80	IS 11255 (Part 3):2008		
Flue gas Velocity	m/s	7.06	IS 11255 (Part 3):2008		
Total gas quantity	Nm ³ /h	263	IS 11255 (Part 3):2008		
Particulate Matter (PM)	mg/Nm ³	11	IS 11255 (Part 1):1985 RA 2003		
Sulphur Dioxide (SO ₂)	kg/d	0.32	IS 11255 (Part 2):1985 RA 2003		
Oxides of Nitrogen (NO _x)	mg/Nm ³	55.5	IS 11255 (Part 7): 2005		
Remark:					

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Test Report

Report No.: ME-NG04684-210325-SA-ZC-PUNE		Date: 25.03.2021
Name and Address of Customer:	ZUARI CEMENT LTD. Auj (Aherwadi) Solapur	Order Reference
		PO. No. 4470510069 PO Date: 28.12.2020
Sample Description/Type	Noise Level Monitoring	
Date of Sampling	13.03.2021	
Sampling Procedure	IS 9876:1981 & manufacturer Manual	

Discipline: Chemical Testing; Product Group: Atmospheric Pollution
(Source Noise Excluding Vibrations)

Location	Unit	Result			Limit as per EPA Rule 1986
		Inside	Outside	Insertion loss	
DG Set 1 200 KVA	dB(A)	96.8	71.6	25.2	1 Insertion loss of Min. 25dB(A) at a distance of 0.5 m 2 Shall be 75 dB(A) at 1 mt. from the enclosure surface
DG Set 2 500 KVA	dB(A)	95.6	70.2	25.4	

Remark:

- 1) Outside Noise Level measurements are taken 1 meter away from the enclosure.
- 2) The inside Noise Level measurements are taken 0.5 meter away from the acoustic enclosure
- 3) The above measurements are the average value of 10 no. of readings.

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Test Report

Report No.: ME-NG04603-210325-SA-ZC-PUNE			Date: 25.03.2021
Name and Address of Customer:	ZUARI CEMENT LTD. Auj (Aherwadi) Solapur		Order Reference
			PO. No. 4470510069 PO Date: 28.12.2020
Sample Description/Type	Noise Level Monitoring	Sample Collected by	NA
Date of Sampling	12.03.2021		
Sampling Procedure	IS 9876:1981 & manufacturer Manual		

Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Ambient Noise)				
Location		Time	Result	
			Sound Level LeqdB (A) Fast Response	Sound Level LeqdB (A) Slow Response
Near Mill Area				
Day		11:00	64.8	61.6
Night		22:10	58.2	50.4
Near Gypsum Yard				
Day		11:10	68.4	61.4
Night		22:20	60.2	57.6
Near Wagon Tippler				
Day		11:20	64.8	60.6
Night		22:30	57.2	55.8
Noise Level Standard				
Area Code	Area Type	Limit in dB(A) weighted scale		
		Day	Night	
A	Industries	75	70	

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Effluent Sample Analysis Report

Report No.: ME-NG13527-201024-SA-ZC-PUNE			Date: 24.10.2020
Name and Address of Customer	ZUARI CEMENT LTD. Auj (Aherwadi) Solapur		Order Reference
			PO. No. 4470361390 PO Date: 22.08.2019
Sample Description/Type	Domestic Effluent	Sample Collected by	Laboratory
Sampling Location	Septic Tank Outlet	Sample Quantity/Packing	2 L X 1 No. PVC Can 100mL X 1 No. PVC Can 1 L X 1 No. Glass Bottle
Date of Sampling	13.10.2020	Date of Receipt of Sample	15.10.2020
Sampling Procedure	IS:3025(Part I):1987 RA 2003; APHA 23 rd Ed. 2017, 1060-B, 1-40		
Date of Start of Analysis	15.10.2020	Date of Completion of Analysis	24.10.2020

Sr. No.	Parameter	Unit	Result	Method Reference
Discipline: Chemical Testing; Product Group: Pollution & Environment (Waste Water)				
1	pH	-	7.8	APHA 23 rd Ed. 2017, 4500-H ⁺ -B, 4-95
2	Total Suspended Solids	mg/L	13	APHA 23 rd Ed. 2017, 2540-D, 2-70
3	Biochemical Oxygen Demand (3 days 27°C)	mg/L	8.7	IS 3025 (Part 44): 1993, Reaffirmed 2009
4	Chemical Oxygen Demand	mg/L	28	APHA 23 rd Ed. 2017, 5220-B, 5-18
5	Oil and Grease	mg/L	N.D.	IS 3025 (Part 39): 1991, Reaffirmed 2009, Amds.1
Remarks: N.D. Not Detected				

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Ambient Noise Level Monitoring Report

Report No.: ME-NG13528-201024-SA-ZC-PUNE			Date: 24.10.2020
Name and Address of Customer	ZUARI CEMENT LTD. Auj (Aherwadi) Solapur		Order Reference
			PO. No. 4470361390 PO Date: 22.08.2019
Sample Description/Type	Noise Level Monitoring	Sample Collected by	NA
Date of Sampling	12.10.2020		
Sampling Procedure	IS 9876:1981 & manufacturer Manual		

Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Ambient Noise)

Location		Time	Result	
			Sound Level LeqdB (A)	
Near Mill Area				
Day		13:20	60.4	
Night		22:40	52.2	
Near Gypsum Yard				
Day		13:20	64.8	
Night		22:50	57.3	
Near Wagan Tipler				
Day		13:40	63.1	
Night		22:55	58.7	
Noise Level Standard				
Area Code	Area Type	Limit in dB(A) weighted scale		
		Day	Night	
A	Industries	75	70	

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

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Ambient Noise Level Monitoring Report

Report No.: ME-NG15675-201130-SA-ZC-PUNE			Date: 30.11.2020
Name and Address of Customer	ZUARI CEMENT LTD. Auj (Aherwadi) Solapur		Order Reference
			PO. No. 4470361390 PO Date: 22.08.2019
Sample Description/Type	Noise Level Monitoring	Sample Collected by	NA
Date of Sampling	18.11.2020		
Sampling Procedure	IS 9876:1981 & manufacturer Manual		

Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Ambient Noise)			
Location		Time	Result
			Sound Level LeqdB (A)
Near Mill Area			
Day		13:10	61.4
Night		22:30	54.3
Near Gypsum Yard			
Day		13:35	65.2
Night		22:55	57.6
Near Wagan Tipler			
Day		13:20	60.2
Night		22:45	57.6
Noise Level Standard			
Area Code	Area Type	Limit in dB(A) weighted scale	
		Day	Night
A	Industries	75	70

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Ambient Noise Level Monitoring Report

Report No.: ME-NG16748-201217-SA-ZC-PUNE		Date: 17.12.2020
Name and Address of Customer	ZUARI CEMENT LTD. Auj (Aherwadi) Solapur	Order Reference
		PO. No. 4470361390 PO Date: 22.08.2019
Sample Description/Type	Noise Level Monitoring	Sample Collected by
		NA
Date of Sampling	07.12.2020	
Sampling Procedure	IS 9876:1981 & manufacturer Manual	

Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Ambient Noise)				
Location		Time	Result	
			Sound Level LeqdB (A) Fast Response	Sound Level LeqdB (A) Slow Response
Near Mill Area				
Day		12:00	60.0	58.5
Night		22:35	57.4	56.2
Near Gypsum Yard				
Day		12:40	65.4	64.1
Night		23:00	54.2	53.0
Near Wagon Tippler				
Day		12:20	63.2	61.8
Night		22:40	55.6	54.2
Noise Level Standard				
Area Code	Area Type	Limit in dB(A) weighted scale		
		Day	Night	
A	Industries	75	70	

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi
TECHNICAL MANAGER



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Continuation Sheet

Report No.00247 Cont...

Sr. No.	Parameter	Unit	Result	Method Reference
Residues in water (Trace metal Element)				
14	Iron (as Fe)	mg/L	0.201	APHA 23 rd Ed. 2017, 3111-B, 3-20
15	Manganese (as Mn)	mg/L	<0.04	APHA 23 rd Ed. 2017, 3111-B, 3-20
16	Cadmium (as Cd)	mg/L	N.D.	APHA 23 rd Ed. 2017, 3111-B, 3-20
17	Chromium Hexa (as Cr ⁶⁺)	mg/L	N.D.	APHA 23 rd Ed. 2017, 3500- Cr-B, 3-71
18	Copper (as Cu)	mg/L	<0.04	APHA 23 rd Ed. 2017, 3111-B, 3-20
19	Lead (as Pb)	mg/L	N.D.	APHA 23 rd Ed. 2017, 3111-B, 3-20
20	Zinc (as Zn)	mg/L	0.038	APHA 23 rd Ed. 2017, 3111-B, 3-20
21	Arsenic (as As)	mg/L	N.D.	IS 3025 (Part 37): 1988, RA 2009
22	Mercury (as Hg)	mg/L	N.D.	APHA 23 rd Ed. 2017, 3112-B, 3-25
Discipline: Biological Testing; Product Group: Water (Ground Water)				
26	Total Colliforms	MPN/100 mL	3.6	APHA 23 rd Ed. 2017, 9221-B & C, 9-69, 9-72
27	E-Coli	MPN/100 mL	Absent	APHA 23 rd Ed. 2017, 9221-B, C & G, 9-69, 9-72 & 9-80
Remark: N.D.: Not Detected;				

END

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi

TECHNICAL MANAGER
(Chemical Testing)



Pranali Kurve

TECHNICAL MANAGER
(Biological Testing)



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Water Sample Analysis Report

Report No.: ME-NG00247-210123-SA-ZC-PUNE			Date: 23.01.2021
Name and Address of Customer	ZUARI CEMENT LTD. Auj (Aherwadi) Solapur		Order Reference
			PO. No. 4470510069 PO Date: 28.12.2020
Sample Description/Type	Ground water	Sample Collected by	Laboratory
Sampling Location	Tap Water	Sample Quantity/Packing	2 L X 1 No. PVC Can 500mLX 1No. PVC Can 500mLX 1No. Sterilised Glass Bottle
Date of Sampling	05.01.2021	Date of Receipt of Sample	06.01.2021
Sampling Procedure	IS:3025(Part I):1987 RA 2003; IS 1622:1981 RA 1996 Ed 2.4 (2003); APHA 23 rd Ed. 2017, 1060-B, 1-40; 9060 A, 9-36		
Date of Start of Analysis	06.01.2021	Date of Completion of Analysis	23.01.2021

Sr. No.	Parameter	Unit	Result	Method Reference
Discipline: Chemical Testing; Product Group: Water (Ground Water)				
1	Colour	Hazen	<1	APHA 23 rd Ed. 2017, 2120-B, 2-6
2	Odour	-	Agreeable	IS 3025 (Part 5):1984, Reaffirmed 2006
3	Taste	-	Agreeable	IS 3025 (Part 7 & 8):1984, Reaffirmed 2006
4	Turbidity	NTU	0.9	APHA 23 rd Ed. 2017, 2130-B, 2-13
5	pH	-	8.1	APHA 23 rd Ed. 2017, 4500-H ⁺ -B, 4-95
6	Total Dissolved Solids	mg/L	270	IS 3025 (Part 16):1984 RA 2006, Ed.2.1 (1999-12)
7	Alkalinity Total (as CaCO ₃)	mg/L	140	IS 3025 (Part 23):1986 Reaffirmed 2009 Amds 1
8	Total Hardness (as CaCO ₃)	mg/L	152	APHA 23 rd Ed. 2017, 2340-C, 2-48
9	Chloride (as Cl)	mg/L	30.0	APHA 23 rd Ed. 2017, 4500-Cl-B, 4-75
10	Sulphate (as SO ₄)	mg/L	14.5	APHA 23 rd Ed. 2017, 4500- SO ₄ -E, 4-199
11	Nitrate (as NO ₃)	mg/L	4.54	APHA 23 rd Ed. 2017, 4500-NO ₃ , E 4-131
12	Calcium (as Ca)	mg/L	32.1	APHA 23 rd Ed. 2017, 3500-Ca-B, 3-69
13	Fluoride (as F)	mg/L	0.480	APHA 23 rd Ed. 2017, 4500-F, D, 4-90

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Water Sample Analysis Report

Report No.: ME-NG00246-210123-SA-ZC-PUNE			Date: 23.01.2021
Name and Address of Customer	ZUARI CEMENT LTD. Auj (Aherwadi) Solapur		Order Reference
			PO. No. 4470510069 PO Date: 28.12.2020
Sample Description/Type	Drinking water	Sample Collected by	Laboratory
Sampling Location	Dining Hall (Cooler)	Sample Quantity/Packing	500mLX 1No. PVC Can
Date of Sampling	05.01.2021	Date of Receipt of Sample	06.01.2021
Sampling Procedure	IS:3025(Part I):1987 RA 2003; APHA 23 rd Ed. 2017, 1060-B, 1-40;		
Date of Start of Analysis	06.01.2021	Date of Completion of Analysis	23.01.2021

Sr. No.	Parameter	Unit	Result	Acceptable Limit for Drinking Water (IS 10500:2012)	Method Reference
Discipline: Chemical Testing; Product Group: Water (Drinking Water)					
1	Cyanide (as CN)	mg/L	N.D.	0.05 Max.	APHA 23 rd Ed. 2017, 4500-CN, C & E, 4-44 & 4-46
2	Anionic detergents as MBAS	mg/L	N.D.	0.2 Max.	APHA 23 rd Ed. 2017, 5540-C, 5-55
3	Phenolic compounds (as C ₆ H ₅ OH)	mg/L	N.D.	0.001 Max.	APHA 23 rd Ed. 2017, 5530- B & C, 5-49, 5-50
Remark: N.D.: Not Detected;					

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi

TECHNICAL MANAGER



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Mahabal Enviro Engineers Pvt. Ltd.

Engineer, Consultant, Environmental Monitoring Laboratory & Contractor
Continuation Sheet

Report No.00246 Cont...

Sr. No.	Parameter	Unit	Result	Acceptable Limit for Drinking Water (IS 10500:2012)	Method Reference
13	Fluoride (as F)	mg/L	0.480	1 Max.	APHA 23 rd Ed. 2017, 4500-F, D, 4-90
Residues in water (Trace metal Element)					
14	Iron (as Fe)	mg/L	<0.08	1.0 Max.	APHA 23 rd Ed. 2017, 3111-B, 3-20
15	Manganese (as Mn)	mg/L	N.D.	0.1 Max.	APHA 23 rd Ed. 2017, 3111-B, 3-20
16	Cadmium (as Cd)	mg/L	N.D.	0.003 Max.	APHA 23 rd Ed. 2017, 3111-B, 3-20
17	Chromium Hexa (as Cr ⁶⁺)	mg/L	N.D.	-	APHA 23 rd Ed. 2017, 3500- Cr-B, 3-71
18	Copper (as Cu)	mg/L	N.D.	0.05 Max.	APHA 23 rd Ed. 2017, 3111-B, 3-20
19	Lead (as Pb)	mg/L	N.D.	0.01 Max.	APHA 23 rd Ed. 2017, 3111-B, 3-20
20	Zinc (as Zn)	mg/L	0.029	5 Max.	APHA 23 rd Ed. 2017, 3111-B, 3-20
21	Arsenic (as As)	mg/L	N.D.	0.01 Max.	IS 3025 (Part 37): 1988, RA 2009
22	Mercury (as Hg)	mg/L	N.D.	0.001 Max.	APHA 23 rd Ed. 2017, 3112-B, 3-25
Discipline: Biological Testing; Product Group: Water (Drinking Water)					
26	Total Colliforms	P-A/ 100 mL	Absent	Not Detectable	APHA 23 rd Ed. 2017, 9221-D, 9-75
27	E-Coli	P-A/ 100 mL	Absent	Not Detectable	APHA 23 rd Ed. 2017, 9221-D,E &G,9-75-9-80
Remark: N.D.: Not Detected;					

END

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi
TECHNICAL MANAGER
(Chemical Testing)



Pranali Kurve
TECHNICAL MANAGER
(Biological Testing)



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Water Sample Analysis Report

Report No.: ME-NG00246-210123-SA-ZC-PUNE			Date: 23.01.2021
Name and Address of Customer	ZUARI CEMENT LTD. Auj (Aherwadi) Solapur		Order Reference
			PO. No. 4470510069 PO Date: 28.12.2020
Sample Description/Type	Drinking water	Sample Collected by	Laboratory
Sampling Location	Dining Hall (Cooler)	Sample Quantity/Packing	2 L X 1 No. PVC Can 500mLX 1No. PVC Can 500mLX 1No. Sterilised Glass Bottle
Date of Sampling	05.01.2021	Date of Receipt of Sample	06.01.2021
Sampling Procedure	IS:3025(Part I):1987 RA 2003; IS 1622:1981 RA 1996 Ed 2.4 (2003); APHA 23 rd Ed. 2017, 1060-B, 1-40; 9060 A, 9-36		
Date of Start of Analysis	06.01.2021	Date of Completion of Analysis	23.01.2021

Sr. No.	Parameter	Unit	Result	Acceptable Limit for Drinking Water (IS 10500:2012)	Method Reference
Discipline: Chemical Testing; Product Group: Water (Drinking Water)					
1	Colour	Hazen	<1	5 Max.	APHA 23 rd Ed. 2017, 2120-B, 2-6
2	Odour	-	Agreeable	Agreeable	IS 3025 (Part 5):1984, Reaffirmed 2006
3	Taste	-	Agreeable	Agreeable	IS 3025 (Part 7 & 8):1984, Reaffirmed 2006
4	Turbidity	NTU	0.2	1 Max.	APHA 23 rd Ed. 2017, 2130-B, 2-13
5	pH	-	7.9	6.5 to 8.5	APHA 23 rd Ed. 2017, 4500-H ⁺ -B, 4-95
6	Total Dissolved Solids	mg/L	241	500 Max.	IS 3025 (Part 16):1984 RA 2006, Ed.2.1 (1999-12)
7	Alkalinity Total (as CaCO ₃)	mg/L	136	200 Max.	IS 3025 (Part 23):1986 Reaffirmed 2009 Amds 1
8	Total Hardness (as CaCO ₃)	mg/L	148	200 Max.	APHA 23 rd Ed. 2017, 2340-C, 2-48
9	Chloride (as Cl)	mg/L	28.0	250 Max.	APHA 23 rd Ed. 2017, 4500-Cl-B, 4-75
10	Sulphate (as SO ₄)	mg/L	14.5	200 Max.	APHA 23 rd Ed. 2017, 4500- SO ₄ -E, 4-199
11	Nitrate (as NO ₃)	mg/L	4.19	45 Max.	APHA 23 rd Ed. 2017, 4500-NO ₃ , E 4-131
12	Calcium (as Ca)	mg/L	30.5	75 Max.	APHA 23 rd Ed. 2017, 3500-Ca-B, 3-69

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Ambient Noise Level Monitoring Report

Report No.: ME-NG00222-210120-SA-ZC-PUNE		Date: 20.01.2021
Name and Address of Customer	ZUARI CEMENT LTD. Auj (Aherwadi) Solapur	Order Reference
		PO. No. 4470510069 PO Date: 28.12.2020
Sample Description/Type	Noise Level Monitoring	Sample Collected by
		NA
Date of Sampling	04.01.2021	
Sampling Procedure	IS 9876:1981 & manufacturer Manual	

Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Ambient Noise)			
Location		Time	Result
			Sound Level L _{eq} dB (A)
Near Mill Area			
Day		11:30	64.6
Night		22:30	60.0
Near Gypsum Yard			
Day		12:50	61.0
Night		22:50	58.2
Near Wagon Tippler			
Day		12:40	62.2
Night		22:40	56.6
Noise Level Standard			
Area Code	Area Type	Limit in dB(A) weighted scale	
		Day	Night
A	Industries	75	70

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi
TECHNICAL MANAGER

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Effluent Sample Analysis Report

Report No.: ME-NG02042-210213-SA-ZC-PUNE			Date: 13.02.2021
Name and Address of Customer	ZUARI CEMENT LTD. Auj (Aherwadi) Solapur		Order Reference
			PO. No. 4470510069 PO Date: 28.12.2020
Sample Description/Type	Domestic Effluent	Sample Collected by	Laboratory
Sampling Location	Septic Tank Outlet	Sample Quantity/Packing	2 L X 1 No. PVC Can 100mL X 1 No. PVC Can 1 L X 1 No. Glass Bottle
Date of Sampling	02.02.2021	Date of Receipt of Sample	04.02.2021
Sampling Procedure	IS:3025(Part I):1987 RA 2003; APHA 23 rd Ed. 2017, 1060-B, 1-40		
Date of Start of Analysis	04.02.2021	Date of Completion of Analysis	10.02.2021

Sr. No.	Parameter	Unit	Result	Method Reference
Discipline: Chemical Testing; Product Group: Pollution & Environment (Waste Water)				
1	pH	-	7.4	APHA 23 rd Ed. 2017, 4500-H ⁺ -B, 4-95
2	Total Suspended Solids	mg/L	12	APHA 23 rd Ed. 2017, 2540-D, 2-70
3	Biochemical Oxygen Demand (3 days 27°C)	mg/L	8.4	IS 3025 (Part 44): 1993, Reaffirmed 2009
4	Chemical Oxygen Demand	mg/L	28	APHA 23 rd Ed. 2017, 5220-B, 5-18
5	Oil and Grease	mg/L	N.D.	IS 3025 (Part 39): 1991, Reaffirmed 2009, Amds.1
Remarks: N.D. Not Detected				

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Ambient Noise Level Monitoring Report

Report No.: ME-NG02038-210213-SA-ZC-PUNE			Date: 13.02.2021
Name and Address of Customer	ZUARI CEMENT LTD. Auj (Aherwadi) Solapur		Order Reference
			PO. No. 4470510069 PO Date: 28.12.2020
Sample Description/Type	Noise Level Monitoring	Sample Collected by	NA
Date of Sampling	02.02.2021		
Sampling Procedure	IS 9876:1981 & manufacturer Manual		

Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Ambient Noise)				
Location		Time	Result	
			Sound Level LeqdB (A) Fast Response	Sound Level LeqdB (A) Slow Response
Near Mill Area				
Day		11:00	62.2	60.7
Night		22:10	53.4	51.2
Near Gypsum Yard				
Day		11:25	63.6	62.0
Night		22:40	59.4	58.5
Near Wagon Tippler				
Day		11:10	64.6	63.2
Night		22:20	54.2	52.9
Noise Level Standard				
Area Code	Area Type	Limit in dB(A) weighted scale		
		Day	Night	
A	Industries	75	70	

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Test Report

Report No.: ME-NG04678-210322-SA-ZC-PUNE			Date: 22.03.2021		
Name and Address of Customer	ZUARI CEMENT LTD. Auj (Aherwadi) Solapur			Order Reference	
				PO. No. 4470510069 PO Date: 28.12.2020	
Sample Description/Type	Stack Emission Monitoring	Sample Collected by		Laboratory	
Sampling Location	DG Set 200 kVA	Sample Quantity/Packing		Thimble PM: 1 X 1 No. SO ₂ : 30mL X 1 No. PVC Bottle NOx: 25mL X 1 No. PVC Bottle	
Date of Sampling	13.03.2021	Date of Receipt of Sample		15.03.2021	
Sampling Procedure	As per method reference				
Date of Start of Analysis	15.03.2021	Date of Completion of Analysis		20.03.2021	
Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Stack Emission)					
Stack Identity			DG Set 200 kVA (Pump House)		
Stack attached to			DG Set		
Material of construction			M.S.		
Stack height above ground level (Meter)			15		
Stack Diameter at sampling point (Meter)			0.125		
Stack shape at top			Round		
Type of fuel			Diesel		
Parameter	Unit	Result	Method Reference		
Flue gas Temperature	°C	72	IS 11255 (Part 3):2008		
Flue gas Velocity	m/s	6.76	IS 11255 (Part 3):2008		
Total gas quantity	Nm ³ /h	258	IS 11255 (Part 3):2008		
Particulate Matter (PM)	mg/Nm ³	21	IS 11255 (Part 1):1985 RA 2003		
Sulphur Dioxide (SO ₂)	kg/d	0.10	IS 11255 (Part 2):1985 RA 2003		
Oxides of Nitrogen (NOx)	mg/Nm ³	26.8	IS 11255 (Part 7): 2005		
Remark:					

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Test Report

Report No.: ME-NG04679-210322-SA-ZC-PUNE			Date: 22.03.2021		
Name and Address of Customer:	ZUARI CEMENT LTD. Auj (Aherwadi) Solapur			Order Reference	
				PO. No. 4470510069 PO Date: 28.12.2020	
Sample Description/Type	Stack Emission Monitoring	Sample Collected by		Laboratory	
Sampling Location	DG Set 500 kVA	Sample Quantity/Packing		Thimble PM: 1 X 1 No. SO ₂ : 30mL X 1 No. PVC Bottle NO _x : 25mL X 1 No. PVC Bottle	
Date of Sampling	13.03.2021	Date of Receipt of Sample		15.03.2021	
Sampling Procedure	As per method reference				
Date of Start of Analysis	15.03.2021	Date of Completion of Analysis		20.03.2021	
Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Stack Emission)					
Stack Identity			DG Set 500 kVA (CCR Building)		
Stack attached to			DG Set		
Material of construction			M.S.		
Stack height above ground level (Meter)			15		
Stack Diameter at sampling point (Meter)			0.125		
Stack shape at top			Round		
Type of fuel			Diesel		
Parameter	Unit	Result	Method Reference		
Flue gas Temperature	°C	80	IS 11255 (Part 3):2008		
Flue gas Velocity	m/s	7.06	IS 11255 (Part 3):2008		
Total gas quantity	Nm ³ /h	263	IS 11255 (Part 3):2008		
Particulate Matter (PM)	mg/Nm ³	11	IS 11255 (Part 1):1985 RA 2003		
Sulphur Dioxide (SO ₂)	kg/d	0.32	IS 11255 (Part 2):1985 RA 2003		
Oxides of Nitrogen (NO _x)	mg/Nm ³	55.5	IS 11255 (Part 7): 2005		
Remark:					

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Test Report

Report No.: ME-NG04684-210325-SA-ZC-PUNE		Date: 25.03.2021
Name and Address of Customer:	ZUARI CEMENT LTD. Auj (Aherwadi) Solapur	Order Reference
		PO. No. 4470510069 PO Date: 28.12.2020
Sample Description/Type	Noise Level Monitoring	
Date of Sampling	13.03.2021	
Sampling Procedure	IS 9876:1981 & manufacturer Manual	

Discipline: Chemical Testing; Product Group: Atmospheric Pollution
(Source Noise Excluding Vibrations)

Location	Unit	Result			Limit as per EPA Rule 1986
		Inside	Outside	Insertion loss	
DG Set 1 200 KVA	dB(A)	96.8	71.6	25.2	1 Insertion loss of Min. 25dB(A) at a distance of 0.5 m 2 Shall be 75 dB(A) at 1 mt. from the enclosure surface
DG Set 2 500 KVA	dB(A)	95.6	70.2	25.4	

Remark:

- 1) Outside Noise Level measurements are taken 1 meter away from the enclosure.
- 2) The inside Noise Level measurements are taken 0.5 meter away from the acoustic enclosure
- 3) The above measurements are the average value of 10 no. of readings.

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Test Report

Report No.: ME-NG04603-210325-SA-ZC-PUNE			Date: 25.03.2021
Name and Address of Customer:	ZUARI CEMENT LTD. Auj (Aherwadi) Solapur		Order Reference
			PO. No. 4470510069 PO Date: 28.12.2020
Sample Description/Type	Noise Level Monitoring	Sample Collected by	NA
Date of Sampling	12.03.2021		
Sampling Procedure	IS 9876:1981 & manufacturer Manual		

Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Ambient Noise)				
Location		Time	Result	
			Sound Level LeqdB (A) Fast Response	Sound Level LeqdB (A) Slow Response
Near Mill Area				
Day		11:00	64.8	61.6
Night		22:10	58.2	50.4
Near Gypsum Yard				
Day		11:10	68.4	61.4
Night		22:20	60.2	57.6
Near Wagon Tippler				
Day		11:20	64.8	60.6
Night		22:30	57.2	55.8
Noise Level Standard				
Area Code	Area Type	Limit in dB(A) weighted scale		
		Day	Night	
A	Industries	75	70	

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

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Test Report

Report No.: ME-NG06459-210419-SA-ZC-PUNE			Date: 19.04.2021
Name and Address of Customer	ZUARI CEMENT LTD. Auj (Aherwadi) Solapur		Order Reference
			PO. No. 4470510069 PO Date: 28.12.2020
Sample Description/Type	Noise Level Monitoring	Sample Collected by	NA
Date of Sampling	12.04.2021		
Sampling Procedure	IS 9876:1981 & manufacturer Manual		

Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Ambient Noise)

Location		Time	Result	
			Sound Level LeqdB (A) Fast Response	Sound Level LeqdB (A) Slow Response
Near Mill Area				
Day		12:10	67.5	66.0
Night		22:00	55.9	53.6
Near Gypsum Yard				
Day		12:30	65.7	63.2
Night		22:10	63.1	59.4
Near Wagon Tippler				
Day		12:45	64.2	62.7
Night		22:20	60.0	57.4
Noise Level Standard				
Area Code	Area Type	Limit in dB(A) weighted scale		
		Day	Night	
A	Industries	75	70	

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Engineer, Consultant, Environmental Monitoring Laboratory & Contractor

Plot Nos. 13,14,17,18, Grampanchayat Bokhara, 8 km from Nagpur City,
Opp. Patel Petrol Pump, Chhindwara Road, Koradi, Dist.Nagpur-441111

Phone : 91-712-2612162, 2612212 Email: mahabal.nagpur@gmail.com

Test Report

Report No.: ME-NG06459-210419-SA-ZC-PUNE			Date: 19.04.2021
Name and Address of Customer	ZUARI CEMENT LTD. Auj (Aherwadi) Solapur		Order Reference
			PO. No. 4470510069 PO Date: 28.12.2020
Sample Description/Type	Noise Level Monitoring	Sample Collected by	NA
Date of Sampling	12.04.2021		
Sampling Procedure	IS 9876:1981 & manufacturer Manual		

Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Ambient Noise)

Location	Time	Result	
		Sound Level LeqdB (A) Fast Response	Sound Level LeqdB (A) Slow Response
Near Mill Area			
Day	12:10	67.5	66.0
Night	22:00	55.9	53.6
Near Gypsum Yard			
Day	12:30	65.7	63.2
Night	22:10	63.1	59.4
Near Wagon Tippler			
Day	12:45	64.2	62.7
Night	22:20	60.0	57.4

Noise Level Standard

Area Code	Area Type	Limit in dB(A) weighted scale	
		Day	Night
A	Industries	75	70

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Harish Mendhi

TECHNICAL MANAGER



Note:

- The result listed refers only to the tested sample(s) and applicable parameter(s).
- This report is not to be reproduced except in full, without written approval of the laboratory.

TC-7487



Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra
(Turn Opp Toyota Show Room 600 m from Hotel Rukhmini Palace. Next to Ashida Electrical. Near J B Sawant Bus Stop)
Phone: 2582 0658/3139/1663/3154 Fax: +91-22-25823543 thane@mahabal.com

Mass Tree Plantation

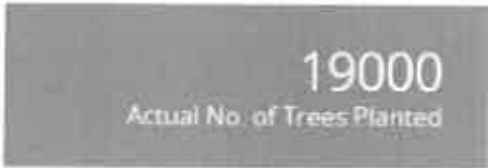
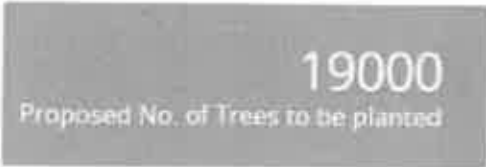
To participate MTP drive,Please click on below links:

To add details tree plantation details committed by ZUARI CEMENT LIMITED click on the links below

Proposed Plantation

Actual Plantation

Mass Tree Plantation Dashboard:





PARIVESH
परिवेश

Ministry of Environment, Forest and Climate Change
Government of India



"Pro Active and Responsive facilitation by Interactive, Virtuous and Environmental Singlewindow Hub"

p.bhushanshriram@zcltd.com

📄 E-KYC

📄 EC Condition Upload

📄 Raise Complaint

My Proposal(s)

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Approvals

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List of EC Granted Proposals for uploading condition

ID	Proposal_no	Type Of Proposal	Type of Application	Project Details	Upload EC Condition
1	00	EC	Category B	File Name : SEAC2011/CR-94/TC2 Project Name : Cement Grinding Unit (0.95MTPA)Zuari cement LTD. State Name : Maharashtra	View Condition Uploaded Report

Add EC Granted Proposal which are not available in above table

+ Add