

Environmental and Social Due Diligence Report

Project Number: 47083-004
September 2021

INDIA: Accelerating Infrastructure Investment Facility in India – Tranche 3

Ashoka Ankleshwar Manubar Expressway Private Limited (Part 13 of 24)

Prepared by India Infrastructure Finance Company Limited for the India Infrastructure Finance Company Limited and the Asian Development Bank.

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ABL/NHAI/Expressway/VME-Pkg-IV/2020-2021/Site/058

Date: 13.07.2020

To,
Regional Office,
Gujarat Pollution Control Board,
C-1/119/3, GIDC Phase, Narmada Nagar,
Bharuch-392015.

Sub.: Construction of Eight Lane of Vadodara Kim Expressway from Km 279.00 to Km 292.00 (Ankleshwar to Manubar Section of Vadodara Mumbai Expressway) in the State of Gujarat under NHDP Phase -VI on HAM mode (Phase IA-Package IV)-Reg. Compliance reports of consent order No AWH-36322, Dated 14.05.2019.

Respected Sir,

With respected to the consent order No **AWH-36322, Dated 14.05.2019**, under section-25 of Water (Prevention and Control of pollution) Act-1974, under section-21 of the Air (Prevention and Control of pollution) Act-1981 and Authorisation under rule 6(2) of the Hazardous and other Waste (Management and Trans Boundary Movement) Rules, 2016 Framed under Environmental Protection Act, 1986. The clause wise compliance reports and analysis are attached here with.

Thanking you,

For, Ashoka Buildcon Limited,



Prem Shankar Rai
(Authorized Signatory)

Enclosures:

1. Annexure 1. Compliance Reports of Consent conditions
2. Annexure 2. Ambient Air monitoring reports
3. Annexure 3. Ambient Noise Monitoring Reports
4. Annexure 4. Stack Monitoring reports
5. Annexure 5. Water Analysis Reports

Post Received
Guj. Pollution Control Board
BHARUCH

ANNEXURE-1

A. COMPLIANCE REPORT OF CONSENT NO: AWH-36322

CONDITIONS

REMARKS

3 CONDITIONS UNDER WATER ACT 1974:

- 3.1 Source of water: **Tankers**
- 3.2 The total Quantity of water consumption shall not exceed **89KL/day** (Breakup as below)
a) **Domestic : 10 KL/day** – *In this quarter on an avg, we are consumed 7 KL / day*
b) **Industrial : 79KL/day** – *In this quarter on an avg, we are consumed 60 KL / day*
- 3.3 The total quantity of waste water generation shall not exceed **7 KL/day** (Break up as below)
a) **Domestic : 7 KL/day** – *In this quarter on an avg, we are consumed 3KL / day*
b) **Industrial : 0 KL/day** – *In this quarter on an avg, we are consumed 3KL / day*
- 3.4 There shall be no generation of the industrial effluent from the manufacturing process and other ancillary industrial operations.
- 3.5 Sewage shall be disposed off through septic tank / soak pit system.
- 3.6 The unit shall affix of water meter as per section 4(1) of the water (Prevention and control of pollution) Cess Act-1977 for the purpose of measuring and recording the quantity of water consumed at such places as many be required, within 15 days and it shall be presumed that the quantity indicated by the meter has been consumed by the industry until the contrary is proved.

Complied

Complied

Complied

Complied

Complied

Complied

4 CONDITIONS UNDER AIR ACT:

- 4.1 The following shall be used as a fuel in Boiler:

Sr. No	Fuel	Quantity
1	Diesel	616 Lit/Hour

Complied

- 4.2 The flue gas emission through stack attached to DG sets (320 KVA) shall conform to following standards.

Stack No	Stack attached to	Stack height in Meter	APCM	Parameter	Permissible Limit
1	DG sets (320KVA) 2 Nos.	3	-----	Particulate Matter SO2 NOx	<150 mg/NM3 <100 ppm <50 ppm

Complied and reports are enclosed

- 4.3 There shall be no process gas emission from the manufacturing process and other ancillary industrial operations.

Complied

- 4.4 Ambient Air quality within the premises of the unit shall conform to the following standards:-

Complied

PARAMETER	PERMISSIBLE LIMIT
Particular Matter (size less than 10um)	100 microgram per cubic meter
Particular Matter (size less than 2.5um)	060 microgram per cubic meter
Oxides of Sulphur	080 microgram per cubic meter
Oxides of Nitrogen	080 microgram per cubic meter

Complied and reports are enclosed

**** 24 hourly mentioned values, shall be complied with 98% of the time in a year 2% of the time, they may exceed the limits but not on two consecutive days of monitoring.**

- 4.5 The industry shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standards in respect of noise to less than 75dB(A) during day time and 70 dB(A) during night time. Day time is reckoned in between 6 AM and 10 PM and night time reckoned between 10 PM and 6 AM.

Complied and reports are enclosed

- 4.6 The applicant shall provide proper ventilation and exhaust facilities so as to maintain healthy working atmosphere within the factory premises.

Complied

5 **AUTHORIZATION AS PER HAZARDOUS AND OTHER WASTE (MANAGEMENT AND TRANSBOUNDARY) RULES, 2016 FORM-12 [SEE RULE 6 (2)]**

5.1 Number of Authorization: **AWH-34209**

5.2 **ASHOKA BUILDCON LIMITED (66112)** is here by granted an authorization to operate facility for following hazardous waste on the premises situated at **PLOT NO: 184, 185, 186, 190, 191, 193, 194, 203, 202/1, 202/3\0026, 201/2, DAHEGAM-392012, TAL & DIST: BHARUCH.**

Sr. No	Waste	Schedule & category	Quantity	Facility
1	Used or spent oil	I-5.1	0.100 MT/year	Collection, Storage & Reuse

There is no Hazardous waste generated in this quarter

5.3 The authorization shall be force for a period up to 31/12/2023.

5.4 The authorization is subject to the condition stated below and such other conditions as may be specified in the rules from time to time under the Environmental (Protection) Act-1986.

Complied

5.5 The authorization is granted to operate a facility for collection storage within factory premises transportation and ultimate disposal of hazardous wastes as per condition no 5.2 to the industry having valid CCA of this Board.

Complied

6 **TERMS AND CONDITIONS OF AUTHORIZATION:**

6.1 Industry shall have to display on-line data outside the main factory gate with regard to quantity and nature of hazardous chemicals being handled in the plant, including wastewater and air emission and solid hazardous waste generated within the factory premises.

Complied

7 **GENERAL CONDITIONS:**

7.1 Adequate plantation shall be carried out all along the periphery of the industrial premises in such a way that the density of plantation is at least 1000 trees per Acre of land a green belt of 10/20/30 meters width is developed.

Complied we have planted trees around the plant

7.2 In case of change of ownership/management the name and address of the new owner/partners/proprietor should immediately be intimated to the board.

There is no change

7.3 The applicant should however, not without the prior consent of the Board bring into use any new or altered outlet for the discharge of effluent or gaseous emission or sewage waste from the proposed Industrial plant.

There is no change

7.4 The concentration of Noise in Ambient air with in the premises of industrial unit shall not exceed following levels:

Between 6 am to 10 pm: 75dB (A)

Between 10 pm to 6 am: 70 dB (A)

Complied

COMET

CONSULTANCY SERVICES

Ref No. : 112/06/2020-2021

Registered Office:

201/2/3/4, 2nd Floor, Sterling
Apartments, Opp. Alfred High School,
Jawahar Road, Rajkot - 360 001.
Tel.: +91 281 2225676, 2226399
E-mail: rjt@cometconserve.com
Website: www.cometconserve.com

Date : 02/07/2020

Appendure - 2

Report of Ambient Air Monitoring :

Name of Industry : M/s. Ashoka Buildcon Limited.
ADDRESS : Plot No. 184, 185, 186, 190, 191, 193, 194, 203, 202/1, 201/2,
DAHEGAM - 392 012, Dist. BHARUCH

Sr. No	PARTICULAR	SAMPLE NO.1	GPCB LIMIT In ug/m3
01	Date & Time of Sampling	26/06/2020 10 : 35	
02	Location of Sampling	Near the Q.C. Lab. Area (RMC Plant)	
03	Duration of Sampling In Hrs	24	
04	Avg. Flow Rate of R. D. S. during Sampling M3/min	1.20	
05	Avg. Concentration of P.M., (PM10) ug/m3	94.27	100
06	Avg. Concentration of P.M., (PM2.5) ug/m3	46.72	60
07	Concentration of SOx, ug/m3	13.14	80
08	Concentration of NOx, ug/m3	21.98	80
09	Concentration of CO, ug/m3	118	5000
10	Concentration of HCL, ug/m3	ND	200

RSPM(PM10) IS : 5182 (Part-IV & 23) 2006, (PM2.5) as per manufacturing method, Sox : IS : 5182 (Part-II), Nox IS : 5182 (Part-VI).

ND = Not Detecable

Comet Consultancy Services

Analyst

Ahmedabad Office & Lab.	18, Block - B, Amrapali Complex, Bopal-Ambli Cross Road, Ahmedabad - 380 015. Email: nhj@cometconserve.com
Ankleshwar Office	A-43, Ramvatika, Hasot Road, Ankleshwar - 393 001. Phone (02646) 245263 Email: ccs.ankleshwar@gmail.com



Registered Office:
201/2/3/4, 2nd Floor, Sterling
Apartments, Opp. Alfred High School,
Jawahar Road, Rajkot - 360 001.
Tel.: +91 281 2225676, 2226399
E-mail: rjt@cometconserve.com
Website: www.cometconserve.com

Ref No. : 109/06/2020-2021

Date : 01/07/2020.

Report of Noise Level Measurement

Name of Industry : M/s Ashoka Buildcon Limited.
Plot No. 184, 185, 186, 190, 191, 193, 194, 203, 202/1, 201/2,
DAHEGAM - 392 012, Dist. BHARUCH

Date of Sampling : On 26th of June, 2020.

Sr No	LOCATION	NOISE LEVEL (in dB (A)) (Day Time)	NOISE LEVEL (in dB (A)) (Night Time)
01	Near Lab. (Q.C.)	62-65	55-56
02	Nr Workshop Area	67-69	56-57
03	RMC Plant	72-74	64-65
04	Nr. DG Set Area (RMC Plant)	74-76	65-66
05	Nr. DG set (Behind Main Office)	68-70	61-62
06	Near Residance Camp	56-58	43-45
07	Near Main Office	53-55	44-46
08	Nr. Canteen	62-64	45-46
09	Nr. Main Gate No. 1	56-59	46-48
10	Nr. Main Gate No. 4	56-62	45-47

GPCB Limits

Ambient from 6:00 am to 10:00 pm 75 dB (A)
Ambient from 10:00 pm to 6:00 am 70 dB (A)

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Analyst

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Ankleshwar Office	A-43, Ramvatika, Hasot Road, Ankleshwar - 393 001. Phone (02646) 245263 Email: ccs.ankleshwar@gmail.com



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Apartments, Opp. Alfred High School,
Jawahar Road, Rajkot - 360 001.
Tel.: +91 281 2225676, 2226399
E-mail: rjt@cometconserve.com
Website: www.cometconserve.com

Ref No. : 111/06/2020-2021

Date : 02/07/2020

Analysis Report of Stack Emission Measurement

Name of Industry

M/s. Ashoka Buildcon Limited,
Plot No. 184, 185, 186, 190, 191, 193, 194, 203, 202/1, 201/2,
DAHEGAM - 392 012, Dist. BHARUCH

Sr No	Parameters	Sample No.1	Sample No.2	GPCB Limit
01.	Date of Sampling	26/06/2020.	26/06/2020.	
02.	Stack/Duct attached to	D. G. Set No.1	D. G. Set No. 2 (RMC Plant)	
03.	Stack Height, Meter	---	---	
04.	Stack Diameter, mm	---	---	
05.	Type of Fuel used,	Diesal	Diesal	
06.	Stack Temperature, Centigrade	179	349	
07.	Avg. Velocity of Fuel Gases, m/sec.	13.5121	16.7081	
08.	Isokinetic flow rate for P. M. Sampling, L.P.M.,	18	16	
09.	Gaseous Sampling flow rate, L.P.M.	02	02	
10.	Avg. Concentration of P.M., mg/Nm ³ .	86	97	150
11.	Concentration of SO ₂ , ppm,	31.64	33.42	100
12.	Concentration of NO _x , ppm,	42.67	44.69	50
13.	Concentration of CO, ppm,	874	674	---

Sampling PM : IS : 11255 (Part-I, 1985) SO₂ : IS : 11255 (Part - II, 1985), NO_x : IS 5182 (Part - 7, 2005).

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Analyst.

Ahmedabad Office & Lab.	18, Block - B, Amrapali Complex, Bopal-Ambli Cross Road, Ahmedabad - 380 015. Email: nhj@cometconserve.com
Ankleshwar Office	A-43, Ramvatika, Hasot Road, Ankleshwar - 393 001. Email: ccs.ankleshwar@gmail.com

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Annexure - 5

Registered Office:
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Jawahar Road, Rajkot - 360 001.
Tel.: +91 781 7775676, 2226309
E-mail: rjt@cometconserve.com
Website: www.cometconserve.com

Ref No. 26/06/2020-2021

Date : 06/07/2020

Report of Water Analysis

Name of Industry

M/s. Ashoka Buildcon Limited
Plot No. 184,185,186,190,191,193,194,203,202/1,201/2,
DAHEGAM - 392 012.. Dist. BHARUCH

Source of Sample Collection

Drinking Water (RMC Plant)

Sr No.	Parameters	Unit	* Requirement (Acceptable Limits)	* Permissible Limit	Result
01	Date of Sample	---	---	---	26/06/2020
02	Colour	Hazen Units	5.0	15	Colourless
03	Odour	---	Agreeable	Agreeable	Agreeable
04	Taste	---	Agreeable	Agreeable	Agreeable
05	pH	pH Unit	6.5 to 8.5	No Relaxation	8.34
06	Total Dissolved Solids (TDS)	mg/l.	500	2000	256
07	Suspended Solids(SS)	mg/l.	---	---	NIL
08	Total Solids (TS)	mg/l.	---	---	256
09	Chloride (as Cl)	mg/l.	250	1000	89.5
10	Sulphates (as SO ₄)	mg/l.	200	400	23.6
11	Total Hardness (as CaCO ₃)	mg/l.	200	600	130
12	Calcium (as Ca)	mg/l.	75	100	28
13	Magnesium (as Mg)	mg/l.	30	1000	14.64
14	Total Alkalinity	mg/l.	200	600	70
15	Turbidity	NTU	1.0	5.0	NIL
16	Fluoride (as F)	mg/l.	01	1.5	0.092
17	Free Residual Chlorine	mg/l.	0.2	1.0	NIL
18	Nitrate (as NO ₃)	mg/l.	45	100	NIL
19	Iron (as Fe)	mg/l.	0.3	1.0	0.039
20	Zinc (as Zn)	mg/l.	05	15	0.096

Test Method : Reference Standard Methods for the Examination of Water & Waste Water - Prepared & Published jointly
By American Public Health Asso. American Water Works Asso. & Water Env. Federation (23rd Edn)
* Desirable & Permissible Limits as per IS 10500 : 2012 Guidelines for Drinking Water Specification
(Second Revision)

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Analyst

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COMET

CONSULTANCY SERVICES

Ref No: 27/06/2020-2021.

Registered Office:

201/2/3/4, 2nd Floor, Sterling
Apartments, Opp. Alfred High School,
Jawahar Road, Rajkot - 360 001.
Tel.: +91 281 2225676, 2226399
E-mail: rjt@cometconserve.com
Website: www.cometconserve.com

Date: 06/07/2020

Report of Water Analysis

Name of Industry

M/s Ashoka Buildcon Limited,
Plot No. 184,185,186,190,191,193,194,203,202/1,201/2,
DAHEGAM - 392 012, Dist. BHARUCH

Source of Sample Collection

Drinking Water. (Canteen)

Sr. No.	Parameters	Unit	* Requirement (Acceptable Limits)	* Permissible Limit	Result
01	Date of Sample	----	----	----	26/06/2020
02	Colour	Hazen Units	5.0	15	Colourless
03	Odour	-----	Agreeable	Agreeable	Agreeable
04	Taste	-----	Agreeable	Agreeable	Agreeable
05	pH	pH Unit.	6.5 to 8.5	No Relaxation	7.57
06	Total Dissolved Solids (TDS)	mg/l.	500	2000	189
07	Suspended Solids(SS)	mg/l.	---	---	NIL
08	Total Solids (TS)	mg/l.	---	---	189
09	Chloride (as Cl)	mg/l.	250	1000	69.4
10	Sulphates (as SO ₄)	mg/l.	200	400	21.8
11	Total Hardness (as CaCO ₃)	mg/l.	200	600	90
12	Calcium (as Ca)	mg/l.	75	100	20
13	Magnesium (as Mg)	mg/l.	30	1000	9.76
14	Total Alkalinity	mg/l.	200	600	50
15	Turbidity	NTU	1.0	5.0	NIL
16	Fluoride (as F)	mg/l.	01	1.5	0.082
17	Free Residual Chlorine	mg/l.	0.2	1.0	NIL
18	Nitrate (as NO ₃)	mg/l.	45	100	NIL
19	Iron (as Fe)	mg/l.	0.3	1.0	0.024
20	Zinc (as Zn)	mg/l.	05	15	0.16

Test Method : Reference Standard Methods for the Examination of Water & Waste Water - Prepared & Published jointly By American Public Health Asso. American Water Works Asso. & Water Env. Federation (23rd Edn)
* Desirable & Permissible Limits as per IS 10500 - 2012, Guidelines for Drinking Water Specification (Second Revision)

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Ankleshwar Office	A-43, Ramvatika, Hasot Road, Ankleshwar - 393 001. Phone (02646) 245263 Email: ccs.ankleshwar@gmail.com

ABL/NHAI/Expressway/VME-Pkg-IV/2020-2021/Site/054

Date: 20.05.2020

To,
The Regional Office,
Gujarat Pollution Control Board,
C-1/119/3, GIDC Phase, Narmada Nagar,
Bharuch- 392015.

Subject: Construction of 8 lane Vadodara KIM Expressway from Km 279.000 to 292.000 (Ankleshwar to Manubar section of Vadodara Mumbai Expressway) in the State of Gujarat under NHDP Phase IV on EPC/Hybrid Annuity (Phase-I (A)-Package-IV)-Reg. Submission of Environment Statement

Reference: **Consent Order No.: AWH-36322, Dated 14.05.2019**

Plant Address: Ashoka Buildcon Ltd.

Plot No: 185, 186, 190, 193, 194, 203, 202/1, 202/3 \u0026 201/2,
Dahegam: 392012, TAL & DIST: Bharuch, Gujarat.

Dear Sir,

This refers to the subject cited above and consent order No.: **AWH-36322, Dated 14.05.2019**, regarding Consolidated Consent and Authorization (CC&A) of RMC of Ashoka Buildcon Limited. under section 25 & 26 of the water (prevention & control of pollution) Act 1974, under section 21 of Air (prevention & control of pollution) Act 1981, and Authorization / renewal of Authorization under Rule 5 of Hazardous Material (Management, Handling and Transboundary Movement) Rules, 2008 by the Government of India.

The clause wise Environment Statement and analysis report is enclosed herewith for your information and records please.

Thanking you,

Yours Sincerely

For Ashoka Buildcon Limited



Prem Shankar Rai
(Authorized Signatory)



Enclosures:

1. Annexure 1: Environment Statement of Vadodara Mumbai Expressway Road Project.
2. Annexure 2: Water Analysis Reports
3. Annexure 3. Ambient Air monitoring reports


Post Received
Gujarat Pollution Control Board
BHARUCH

Ashoka Buildcon Limited

**Plot No: 185, 186, 190, 193, 194, 203, 202/1,
202/3\0026 201/2,
Dahegam: 392012,
Tal & Dist: Bharuch, Gujarat.**

Consent Operate Number: AWH-36322

**ENVIRONMENT
STATEMENT FOR
YEAR – 2019-2020**

ENVIRONMENTAL STATEMENT
[FORM-V]
(See rule 14)

Environmental Statement for the financial year ending with 31st March-2020

PART-A

i. Name and address of the owner/occupier of the industry operation or process : ASHOKA BUILDCON LIMITED,
Plot No:185,186,190,193,194,203,202/1,202/3 \u0026 201/2,
Dahegam: 392012,
TAL & DIST: Bharuch, Gujarat.

ii. Industry category Primary Small Scale Industry

iii. Production capacity -

Product	Production Capacity /hr	Year Of Establishment
RMC	120 cum/hr	2018

iv. Year of establishment 2018

v. Date of the last environmental statement submitted. 13.09.2019

PART .B

Water and Raw Material Consumption:

i. Water consumption in m³/d

Process : 1 m³/ Day
Cooling : 0.5 m³/ Day
Domestic : 0.5 m³/ Day

Name of Products	Process water consumption per unit of products	
	During the previous financial year	During the current financial year
	2018-2019	2019-2020
1. RMC Plant	45.26 KL	142.80 KL

ii. Raw material consumption

Name of raw materials*	Name of Products	Consumption of raw material per unit of output	
		During the previous financial year	During the current financial year
2.Cement,Sand & Stone	RMC	13066.435 M ³	38199.65 M ³

* Industry may use codes if disclosing details of raw material would violate contractual obligations, otherwise all industries have to name the raw materials used.

PART-C

Pollution discharged to environment/unit of output

(Parameter as specified in the consent issued)

Pollutants	Quantity of Pollutants discharged (mass/day)	Concentration of Pollutants discharged (mass/volume)	Percentage of variation From prescribed standards with reasons.
(a) Water	Please refer test report Annexure No.2		
(b) Air	Please refer test report Annexure No.3		

PART-D

HAZARDOUS WASTES

(as specified under Hazardous Wastes (Management & Handling Rules, 1989).

Hazardous Wastes	Total Quantity (Kg)	
	During the previous financial year	During the current financial year
1. From Process 2. From Pollution Control Facilities	NA	NA

PART- E

SOLID WASTES:

	Total Quantity (kg)	
	During the previous financial year	During the current financial year
a. From process	NA	
b. From Pollution Control Facility		
c.Quantity recycled or reutilized within the unit.		

PART -F

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

PART-G

Impact of the pollution control measures taken on conservation of natural resources and consequently on the cost of production.: - NA

PART -H

Additional measures/investment proposal for environmental protection including abatement of pollution.
: - NA

PART - I

MISCELLANEOUS:

Any other particulars in respect of environmental protection and abatement of pollution.
:-NA



Ref No. : 14/03/2019-2020..

Registered Office:

201/2/3/4, 2nd Floor, Sterling
Apartments, Opp. Alfred High School,
Jawahar Road, Rajkot - 360 001.
Tel.: +91 281 2225676, 2226399
E-mail: rjt@cometconserve.com
Website: www.cometconserve.com

Date : 26/03/2020.

Report of Water Analysis

Name of Industry : M/s. Ashoka Buildcon Limited,
Plot No. 184,185,186,190,191,193,194,203,202/1,201/2,
DAHEGAM - 392 012., Dist. BHARUCH

Source of Sample Collection : Drinking Water.(RMC Plant)

Sr. No.	Parameters	Unit	* Requirement (Acceptable Limits)	*Permissible Limit	Result
01.	Date of Sample	----	----	----	18/03/2020
02.	Colour	Hazen Units	5.0	15	Colourless
03.	Odour	-----	Agreeable	Agreeable	Agreeable
04.	Taste	-----	Agreeable	Agreeable	Agreeable
05.	pH	pH Unit.	6.5 to 8.5	No Relaxation	7.41
06.	Total Dissolved Solids (TDS)	mg/l.	500	2000	112
07.	Suspended Solids(SS)	mg/l.	---	---	NIL
08.	Total Solids (TS)	mg/l.	---	---	112
09.	Chloride (as Cl)	mg/l.	250	1000	40.12
10.	Sulphates (as SO ₄)	mg/l.	200	400	13.8
11.	Total Hardness (as CaCO ₃)	mg/l.	200	600	30
12.	Calcium (as Ca)	mg/l.	75	100	04
13.	Magnesium (as Mg)	mg/l.	30	1000	4.88
14.	Total Alkalinity	mg/l.	200	600	20
15.	Turbidity	NTU	1.0	5.0	NIL
16.	Fluoride (as F)	mg/l.	01	1.5	NIL
17.	Free Residual Chlorine	mg/l.	0.2	1.0	NIL
18.	Nitrate (as NO ₃)	mg/l.	45	100	NIL
19.	Iron (as Fe)	mg/l.	0.3	1.0	0.032
20.	Zinc (as Zn)	mg/l.	05	15	0.081

Test Method : Reference Standard Methods for the Examination of Water & Waste Water – Prepared & Published jointly By American Public Health Asso. American Water Works Asso. & Water Env. Federation (23rd Edn.)

* Desirable & Permissible Limits as per IS 10500:2012, Guidelines for Drinking Water Specification (Second Revision).

Comet Consultancy Services



Analyst

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Ankleshwar Office	A-43, Ramvatika, Hasot Road, Ankleshwar - 393 001. Phone (02646) 245263 Email: ccs.ankleshwar@gmail.com

Report of Water Analysis

Name of Industry : M/s. Ashoka Buildcon Limited,
Plot No. 184,185,186,190,191,193,194,203,202/1,201/2,
DAHEGAM - 392 012., Dist. BHARUCH

Source of Sample Collection : Drinking Water.(Canteen)

Sr. No.	Parameters	Unit	* Requirement (Acceptable Limits)	*Permissible Limit	Result
01.	Date of Sample	----	----	----	18/03/2020
02.	Colour	Hazen Units	5.0	15	Colourless
03.	Odour	-----	Agreeable	Agreeable	Agreeable
04.	Taste	-----	Agreeable	Agreeable	Agreeable
05.	pH	pH Unit.	6.5 to 8.5	No Relaxation	7.13
06.	Total Dissolved Solids (TDS)	mg/l.	500	2000	130
07.	Suspended Solids(SS)	mg/l.	---	---	NIL
08.	Total Solids (TS)	mg/l.	---	---	130
09.	Chloride (as Cl)	mg/l.	250	1000	49.6
10.	Sulphates (as SO ₄)	mg/l.	200	400	17.6
11.	Total Hardness (as CaCO ₃)	mg/l.	200	600	50
12.	Calcium (as Ca)	mg/l.	75	100	08
13.	Magnesium (as Mg)	mg/l.	30	1000	7.32
14.	Total Alkalinity	mg/l.	200	600	30
15.	Turbidity	NTU	1.0	5.0	NIL
16.	Fluoride (as F)	mg/l.	01	1.5	NIL
17.	Free Residual Chlorine	mg/l.	0.2	1.0	NIL
18.	Nitrate (as NO ₃)	mg/l.	45	100	NIL
19.	Iron (as Fe)	mg/l.	0.3	1.0	0.08
20.	Zinc (as Zn)	mg/l.	05	15	0.098

Test Method : Reference Standard Methods for the Examination of Water & Waste Water – Prepared & Published jointly By American Public Health Asso. American Water Works Asso. & Water Env. Federation (23rd Edn.)
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Report of Water Analysis

Name of Industry

M/s. Ashoka Buildcon Limited,
Plot No. 184,185,186,190,191,193,194,203,202/1,201/2,
DAHEGAM - 392 012., Dist. BHARUCH

Source of Sample Collection

Drinking Water.(Canteen)

Sr. No.	Parameters	Unit	* Requirement (Acceptable Limits)	*Permissible Limit	Result
01.	Date of Sample	----	----	----	14/11/2019
02.	Colour	Hazen Units	5.0	15	Colourless
03.	Odour	-----	Agreeable	Agreeable	Agreeable
04.	Taste	-----	Agreeable	Agreeable	Agreeable
05.	pH	pH Unit.	6.5 to 8.5	No Relaxation	6.96
06.	Total Dissolved Solids (TDS)	mg/l.	500	2000	110
07.	Suspended Solids(SS)	mg/l.	---	---	NIL
08.	Total Solids (TS)	mg/l.	---	---	110
09.	Chloride (as Cl)	mg/l.	250	1000	39.99
10.	Sulphates (as SO ₄)	mg/l.	200	400	20
11.	Total Hardness (as CaCO ₃)	mg/l.	200	600	40
12.	Calcium (as Ca)	mg/l.	75	100	04
13.	Magnesium (as Mg)	mg/l.	30	1000	7.32
14.	Total Alkalinity	mg/l.	200	600	20
15.	Turbidity	NTU	1.0	5.0	NIL
16.	Fluoride (as F)	mg/l.	01	1.5	NIL
17.	Free Residual Chlorine	mg/l.	0.2	1.0	NIL
18.	Nitrate (as NO ₃)	mg/l.	45	100	NIL
19.	Iron (as Fe)	mg/l.	0.3	1.0	0.06
20.	Zinc (as Zn)	mg/l.	05	15	0.094

Test Method : Reference Standard Methods for the Examination of Water & Waste Water – Prepared & Published jointly By American Public Health Asso. American Water Works Asso. & Water Env. Federation (23rd Edn.)
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Report of Water Analysis

Name of Industry

M/s. Ashoka Buildcon Limited,
Plot No. 184,185,186,190,191,193,194,203,202/1,201/2,
DAHEGAM - 392 012., Dist. BHARUCH

Source of Sample Collection

Drinking Water.(Q. C. Lab)

Sr. No.	Parameters	Unit	* Requirement (Acceptable Limits)	*Permissible Limit	Result
01.	Date of Sample	----	----	----	14/11/2019
02.	Colour	Hazen Units	5.0	15	Colourless
03.	Odour	-----	Agreeable	Agreeable	Agreeable
04.	Taste	-----	Agreeable	Agreeable	Agreeable
05.	pH	pH Unit.	6.5 to 8.5	No Relaxation	7.11
06.	Total Dissolved Solids (TDS)	mg/l.	500	2000	102
07.	Suspended Solids(SS)	mg/l.	---	---	NIL
08.	Total Solids (TS)	mg/l.	---	---	102
09.	Chloride (as Cl)	mg/l.	250	1000	44.99
10.	Sulphates (as SO ₄)	mg/l.	200	400	18
11.	Total Hardness (as CaCO ₃)	mg/l.	200	600	40
12.	Calcium (as Ca)	mg/l.	75	100	08
13.	Magnesium (as Mg)	mg/l.	30	1000	4.88
14.	Total Alkalinity	mg/l.	200	600	30
15.	Turbidity	NTU	1.0	5.0	NIL
16.	Fluoride (as F)	mg/l.	01	1.5	NIL
17.	Free Residual Chlorine	mg/l.	0.2	1.0	NIL
18.	Nitrate (as NO ₃)	mg/l.	45	100	NIL
19.	Iron (as Fe)	mg/l.	0.3	1.0	0.036
20.	Zinc (as Zn)	mg/l.	05	15	0.084

Test Method : Reference Standard Methods for the Examination of Water & Waste Water - Prepared & Published jointly By American Public Health Asso. American Water Works Asso. & Water Env. Federation (23rd Edn.)
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Report of Water Analysis

Name of Industry

M/s. Ashoka Buildcon Limited,
Plot No. 184,185,186,190,191,193,194,203,202/1,201/2,
DAHEGAM - 392 012., Dist. BHARUCH

Source of Sample Collection

Drinking Water.(Residence Mesh)

Sr. No.	Parameters	Unit	* Requirement (Acceptable Limits)	*Permissible Limit	Result
01.	Date of Sample	---	---	---	27/05/2019
02.	Colour	Hazen Units	5.0	15	Colourless
03.	Odour	----	Agreeable	Agreeable	Agreeable
04.	Taste	----	Agreeable	Agreeable	Agreeable
05.	pH	pH Unit.	6.5 to 8.5	No Relaxation	7.04
06.	Total Dissolved Solids (TDS)	mg/l.	500	2000	131
07.	Suspended Solids(SS)	mg/l.	---	---	NIL
08.	Total Solids (TS)	mg/l.	---	---	131
09.	Chloride (as Cl)	mg/l.	250	1000	44.67
10.	Sulphates (as SO ₄)	mg/l.	200	400	NIL
11.	Total Hardness (as CaCO ₃)	mg/l.	200	600	40
12.	Calcium (as Ca)	mg/l.	75	100	08
13.	Magnesium (as Mg)	mg/l.	30	1000	4.88
14.	Total Alkalinity	mg/l.	200	600	40.20
15.	Turbidity	NTU	1.0	5.0	NIL
16.	Fluoride (as F)	mg/l.	01	1.5	NIL
17.	Free Residual Chlorine	mg/l.	0.2	1.0	NIL
18.	Nitrate (as NO ₃)	mg/l.	45	100	NIL
19.	Iron (as Fe)	mg/l.	0.3	1.0	NIL
20.	Zinc (as Zn)	mg/l.	05	15	NIL

Test Method : Reference Standard Methods for the Examination of Water & Waste Water – Prepared & Published jointly By American Public Health Asso. American Water Works Asso. & Water Env. Federation (23rd Edn.)
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Ref No. : 29/05/2017-2018..

Date : 04/06/2019.

Report of Water Analysis

Name of Industry : M/s. Ashoka Buildcon Limited,
 Plot No. 184,185,186,190,191,193,194,203,202/1,201/2,
 DAHEGAM - 392 012., Dist. BHARUCH

Source of Sample Collection : Drinking Water.(Q.C. Lab)

Sr. No.	Parameters	Unit	* Requirement (Acceptable Limits)	*Permissible Limit	Result
01.	Date of Sample	---	---	---	27/05/2019
02.	Colour	Hazen Units	5.0	15	Colourless
03.	Odour	---	Agreeable	Agreeable	Agreeable
04.	Taste	---	Agreeable	Agreeable	Agreeable
05.	pH	pH Unit.	6.5 to 8.5	No Relaxation	6.98
06.	Total Dissolved Solids (TDS)	mg/l.	500	2000	124
07.	Suspended Solids(SS)	mg/l.	---	---	NIL
08.	Total Solids (TS)	mg/l.	---	---	124
09.	Chloride (as Cl)	mg/l.	250	1000	49.63
10.	Sulphates (as SO ₄)	mg/l.	200	400	NIL
11.	Total Hardness (as CaCO ₃)	mg/l.	200	600	40
12.	Calcium (as Ca)	mg/l.	75	100	08
13.	Magnesium (as Mg)	mg/l.	30	1000	4.88
14.	Total Alkalinity	mg/l.	200	600	30.15
15.	Turbidity	NTU	1.0	5.0	NIL
16.	Fluoride (as F)	mg/l.	01	1.5	NIL
17.	Free Residual Chlorine	mg/l.	0.2	1.0	NIL
18.	Nitrate (as NO ₃)	mg/l.	45	100	NIL
19.	Iron (as Fe)	mg/l.	0.3	1.0	NIL
20.	Zinc (as Zn)	mg/l.	05	15	NIL

Test Method : Reference Standard Methods for the Examination of Water & Waste Water – Prepared & Published jointly By American Public Health Asso. American Water Works Asso. & Water Env. Federation (23rd Edn.)
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Ref No. : 78/03/2019-2020

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Tel.: +91 281 2225676, 2226399
E-mail: rjt@cometconserve.com
Website: www.cometconserve.com
Date : 23/03/2020

Report of Ambient Air Monitoring :

Name of Industry : M/s. Ashoka Buildcon Limited,
ADDRESS Plot No. 184,185,186,190,191,193,194,203,202/1,201/2,
DAHEGAM - 392 012., Dist. BHARUCH

Sr. No.	PARTICULAR	SAMPLE NO.1	GPCB LIMIT In ug/m3
01.	Date & Time of Sampling	18/03/2020. 09 : 40	
02.	Location of Sampling.	Near the Q.C. Lab. Area.(RMC Plant)	
03.	Duration of Sampling. In Hrs.	24	
04.	Avg. Flow Rate of R. D..S. during Sampling., M3/min.	1.20	
05.	Avg. Concentration of P.M., (PM10) ug/m3.	92.56	100
06.	Avg. Concentration of P.M., (PM2.5) ug/m3.	45.12	60
07.	Concentration of SOx, ug/m3	12.46	80
08.	Concentration of NOx, ug/m3	20.52	80
09.	Concentration of CO, ug/m3	96	5000
10.	Concentration of HCL, ug/m3	ND	200

RSPM(PM10) : IS : 5182 (Part-IV & 23) 2006, (PM2.5) : as per manufacturing method, Sox : IS : 5182 (Part-II), Nox : IS : 5182 (Part-VI), ..

ND = Not Detecable

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Report of Ambient Air Monitoring :

Name of Industry : M/s. Ashoka Buildcon Limited,
 ADDRESS Plot No. 184,185,186,190,191,193,194,203,202/1,201/2,
 DAHEGAM - 392 012., Dist. BHARUCH

Sr. No.	PARTICULAR	SAMPLE NO.1	SAMPLE NO.2	GPCB LIMIT In ug/m3
01.	Date & Time of Sampling	14/11/2019. 09 : 45	14/11/2019. 10 : 10	
02.	Location of Sampling.	Near the Q.C. Lab. Area.	Near the Camp of Residence Area.	
03.	Duration of Sampling. In Hrs.	24	24	
04.	Avg. Flow Rate of R. D..S. during Sampling., M3/min.	1.20	---	
05.	Avg. Concentration of P.M., (PM10) ug/m3.	94.93	82.47	100
06.	Avg. Concentration of P.M., (PM2.5) ug/m3.	46.34	36.69	60
07.	Concentration of SOx, ug/m3	13.89	11.24	80
08.	Concentration of NOx, ug/m3	19.82	21.56	80
09.	Concentration of CO, ug/m3	84	48	5000
10.	Concentration of HCL, ug/m3	ND	ND	200

RSPM(PM10) : IS : 5182 (Part-IV & 23) 2006, (PM2.5) : as per manufacturing method, Sox : IS : 5182 (Part-II), Nox : IS : 5182 (Part-VI), ..

ND = Not Detecable

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Ref No. : 116/05/2019-2020

Date : 01/06/2019

Report of Ambient Air Monitoring :

Name of Industry : M/s. Ashoka Buildcon Limited,
 ADDRESS Plot No. 184,185,186,190,191,193,194,203,202/1,201/2,
 DAHEGAM - 392 012., Dist. BHARUCH

Sr. No.	PARTICULAR	SAMPLE NO.1	SAMPLE NO.2	GPCB LIMIT In ug/m3
01.	Date & Time of Sampling	27/05/2019. 10 : 05	27/05/2019. 10 : 35	
02.	Location of Sampling.	Near the Q.C. Lab. Area.	Near the Camp of Residence Area.	
03.	Duration of Sampling. In Hrs.	24	24	
04.	Avg. Flow Rate of R. D..S. during Sampling., M3/min.	1.20	1.20	
05.	Avg. Concentration of P.M., (PM10) ug/m3.	89.46	78.94	100
06.	Avg. Concentration of P.M., (PM2.5) ug/m3.	39.73	34.86	60
07.	Concentration of SOx, ug/m3	12.68	10.68	80
08.	Concentration of NOx, ug/m3	18.47	20.34	80
09.	Concentration of CO, ug/m3	56	34	5000
10.	Concentration of HCL, ug/m3	ND	ND	200

RSPM(PM10) : IS : 5182 (Part-IV & 23) 2006, (PM2.5) : as per manufacturing method, Sox : IS : 5182 (Part-II), Nox : IS : 5182 (Part-VI), ..

ND = Not Detecable

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