

Ref.: ACL/DCGU/Environment/EC-Comp/SEIAA/04

Date: 25.11.2024

To,

The secretary

State Environment Impact Assessment Authority, Gujarat

Gujarat Pollution Control Board

Paryavaran Bhavan, Sector-10A, Gandhinagar

Gujarat - 382010

Sub: Six monthly compliance status report of Environment Clearance of stand-alone Cement Grinding unit of Adani Cement Industries Limited at Dahej Industrial Estate Taluka Vagra, District Bharuch (Gujarat)

- Ref:**
1. EC Letter No. SEIAA/GUJ/EC/3(b)/633/2019, Dated 03.05.2019 to ACL - **Enclosure 2**
 2. Transfer of EC to ACL Letter No. SEIAA/GUJ/EC/3(b)/1752/2022, Dated 07.07.2022 - **Enclosure 2**
 3. Amendment of EC of ACL Letter No. SEIAA/GUJ/EC/3(b)/1408/2023, Dated 02.11.2023 - **Enclosure 2**
 4. Consent to operate issued by GPCB dated 22.06.2023 - **Attachment-5**

Dear sir,

With reference to above subject, please find enclosed herewith six-monthly environment clearance (EC) compliance status of stand-alone Cement Grinding Unit of Adani Cement Limited Dahej Industrial Estate Taluka vagra, district Bharuch (Gujarat) for the period of **April 2024 to September 2024**.

Above mentioned plant is in operation and started production dated 01st July 2023.

This for your kind information and record.

Thanking You

Yours faithfully

For Adani Cement Industries Limited,

(Ajay Shalma)

Plant Head



Sd/- 22.11.24
Post Received
Gujarat Pollution Control Board
BHARUCH
23/10/23

Encl.: As above

CC to:

Member Secretary

Gujarat Pollution Control Board

Paryavaran Bhavan, Sector-10A, Gandhinagar

Gujarat - 382010

The Regional Office

Deputy Director General of Forest (C), Ministry of Env, Forest and Climate Change,

Integrated Regional Office, Gandhinagar A wing - 407 & 409

Aranya Bhawan Near CH-3 Circle, Sector-10A, Gandhi Nagar - 382010

The Regional Officer

Gujarat Pollution Control Board

C-1/119/3, GIDC ESTATE, PHASE-II,

Narmada Nagar, Bharuch - 3922015

**SIX MONTHLY COMPLIANCE REPORT OF
ENVIRONMENTAL CLEARANCE
STAND-ALONE CEMENT GRINDING PLANT**

**AT
VILLAGE DAHEJ (DAHEJ INDUSTRIAL ESTATE), TALUKA VAGRA,
DISTRICT BHARUCH, GUJARAT**

Submitted to:

State Environmental Impact Assessment Authority, Gujarat.
RO - Ministry of Environment, Forests & Climate Change, Bhopal.
Gujarat Pollution Control Board, Gandhinagar (Gujarat);
RO - Gujarat Pollution Control Board, Bharuch (Gujarat)



Submitted By:

**Adani Cement Industries Limited
Dahej, Gujarat**

PERIOD: April - 2024 to September - 2024

COMPLIANCE TO THE CONDITIONS STIPULATED IN ENVIRONMENTAL CLEARANCE
[vide letter No. SEIAA/GUJ/EC/3(b)/633/2019, Dated: 3rd May, 2019] FOR STAND
ALONE CEMENT GRINDING UNIT OF ADANI CEMENTATION LIMITED (ACL) and EC
transferred to Adani Cement Industries Limited (ACIL) [vide letter no.
SEIAA/GUJ/EC/3(b)/1752/2022 dated 07.07.2022] and further EC amendment [vide
letter no. SEIAA/GUJ/EC/3(b)/1408/2023 dated 02.11.2023] AT DAHEJ INDUSTRIAL
ESTATE, TALUKA VAGRA, DISTRICT BHARUCH (GUJARAT) BY STATE
ENVIRONMENTAL IMPACT ASSESSMENT AUTHORITY (SEIAA) - GUJARAT

	Additional Condition	Compliance
	Letter No. SEIAA/GUJ/EC/3(b)/1408/2023, Dated 02.11.2023	
1	Overall production capacity shall be unchanged and shall be as per EC Granted vide order dated 03.05.2019, even after installing of new hot air generator having the capacity of 100 Lakh K/Hour with pulse jet type bag houses APCM and utilisation of chemical gypsum as a raw material in Cement manufacturing.	Noted and complied
2	Proponent shall carry out various measures for dust mitigation etc.	Noted and complied Following measures for dust mitigation being followed: 1. Dust collection systems (DCS) has been installed at every transfer point and potential source area. A consolidated list of DCS is enclosed as Attachment - 09 2. Regular cleaning and maintenance have been developed as per schedules. 3. Periodic monitoring and assessment of dust levels is in routine practice. These measures aim to minimize dust emissions and ensure compliance with Environmental regulations.
3	PP shall obtain permission under Rule 9 of	Utilization of Gypsum in standalone

ADANI CEMENT INDUSTRIES LIMITED

Enclosure-1

				chains Oil Disease through approved recycler
Cotton Rags	Maintenance Workshop	33.2	600 kg/Annum	Dispose through CHWIF
Discarded container	Paints & Oil Drums	33.1	2000 Nos./Annum	Dispose through approved Recycler
Gypsum	Receipt Storage & Consumption	Solid Waste 26.1 / 35.3 / 38.1 / C-II-12	0.3 MMTPA	Reception, Collection, transportation, storage and utilize for cement Manufacturing.
B. Non-Hazardous				
Dust from APCM	Manufacturing Process	Solid Waste	0.15 million MT/Annum	100% Recycled in process
Sludge generation from STP	STP	Solid Waste	0.365 million MT/Annum	Manure for green belt development
Fly ash	Receipt Storage & Consumption	Solid Waste	0.6MMTA	Collection, transportation, storage, receipt and consumption for Manufacturing

Rest of all the conditions of environment Clearance order no SEIAA/GUJ/EC/3(b)/1752/2022, Dated 07.07.2022 shall remain unchanged.

Verbatims as mentioned in Transfer of Environmental Clearance in the name of Adani cement Industries Limited vide letter no. SEIAA/GUJ/EC/3(b)/1752/2022 dated 07.07.2022:

- The name of the unit read as "Adani cement Industries Limited" in place of "Adani Cementation Limited" in a. Page1. – sub – Line 1, b. Page1. – para 2 – Line 1, c. page5. – issued to – Line 1 of Environmental Clearance order no. SEIAA/GUJ/EC/3(b)/633/2019, Dated 03/05/2019.
- Rest of all the conditions of the Environment Clearance orders no. SEIAA/GUJ/EC/3(b)/633/2019, Dated 03/05/2019 shall remain unchanged.

Compliance

- Noted and Compliance assured

A	Specific Condition	Compliance
1	SEIAA/GUJ/EC/3(b)/633/2019, Dated 03.05.2019 Project proponent shall procure raw materials like clinker for the proposed project from the authorized units having Environmental Clearance as per the EIA Notification 2006, CTE & CC8A	<ul style="list-style-type: none"> • Noted and being Complied • Clinker for grinding unit is being procured from Rabariyawas, Marwar, Munwa.

ADANI CEMENT INDUSTRIES LIMITED

Enclosure-1

6	The Project proponent must strictly adhere to the stipulations made by the Gujarat Pollution Control Board, State Government and/or any other statutory authority.	Noted and complied. The guidelines of GPCB are being adhered.
7	The National Ambient Air Quality Emission Standards issued by the Ministry vide G. S. R. No. 826 (E) dated 16th November, 2009 shall be complied with	CAAQMS has been installed data being monitored in CCR and local station. Also, regular monitoring by independent laboratory recognized by NABL is being carried out and submitted to GPCB and MoEFCC. Ambient air quality monitoring report is attached as Attachment 06
8	The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognized under Environment (Protection) Act, 1986	Noted and complied. Adequate air pollution control system has been provided to control fugitive dust emission at various location i.e. transfer points, raw material handling, bagging, and packing areas. Etc. All conveyors are covered with GI sheets. Finished products are dispatched by covered wagon or truck to prohibit fugitive emission. List of bag filters are given in Attachment 09
9	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six-Monthly Compliance Report	Noted and Complied Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company is in place. Year wise fund allocation under CER is given as Attachment 01
10	The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognized under Environment (Protection) Act, 1986	Noted and complied. The fugitive emission standards are being followed, and parameters are maintained within the range. The monitoring data of fugitive emission is attached as Attachment 06

	premise and hence, freshwater requirement shall not exceed 300 KL/Day and it shall be met through ground water. Necessary permission from concern authority in this regard shall be obtained.					
18	The industrial effluent generation from the project shall not exceed 171 KL/day					Noted and complied
19	Total industrial effluent 171 KL/Day of cooling reject shall be used for dust suppression and no effluent shall be discharged outside premises by any means					Noted and complied
20	Domestic wastewater generation shall be 9 KL/Day and it shall be treated through adequate capacity STP and treated sewage shall be reused for gardening/plantation within premises					Noted and complied One STPs with capacity of 10 KLD has been installed at plant. The treated domestic wastewater is used for green belt development and water spraying on road for dust suppression. Photographs of STPs are enclosed as Attachment 12
21	During monsoon season when treated sewage effluent may not be required for the plantation/Gardening/Green Belt purpose, it shall be stored within premises. There shall be no discharge of wastewater outside the premises in any case.					Noted and complied
22	Unit shall provide buffer water storage tank of adequate capacity for storage of treated wastewater during rainy days					Noted and complied
23	The company shall harvest rainwater from the rooftop of the building to recharge the ground water and to use the same water for the various activities of the project to conserve fresh water. Before recharging the surface run off, pre-treatment must be done to remove suspended matter					RWHS has been installed at plant to rooftop rainwater. Photographs are enclosed as Attachment 13
A3	Air					
24	Unit shall not exceed fuel consumption for stand by DG set as mentioned below:					Noted and complied as mentioned above
Sr. No.	Source of emission	Stack Height (meter)	Type of Fuel	Qty. of Fuel MT/Day	Type of emissions i.e., Air Pollutants	Air Pollution Control Measure (APCM)
1	DG Set (500 KVA)	18	Diesel	25 Ltr/hour	PM, SO2, NOX	Adequate stack height
25	Unit shall provide adequate APCM with flue gas generation sources as mentioned above.					Noted and complied.
						All equipment are installed with pollution control devices to maintain the emission well within the limits at bag filter.
26	Unit shall provide adequate APCM with process gas generation sources as mentioned below.					Complied
S.N.	Source of emission	Type of	Stack / Vent Height	Air Pollution Control Measures (APCM)		

	indicative guidelines shall be followed to reduce the fugitive emission.				
a)	Enclosure shall be provided at all loading and unloading operations.			Noted and compliance assured.	
b)	Water shall be sprayed on all raw materials stockpile periodically to retain some moisture in top layer except wet gypsum to reduce the fugitive emission.			Noted and compliance assured.	
c)	All transfer points shall be fully enclosed			Noted and compliance assured.	
d)	Accumulated dust on the ground and other surfaces shall be removed / swept regularly and water the area after sweeping			Noted and compliance assured.	
e)	Internal roads shall be either asphalted or paved properly to reduce the fugitive emission during vehicular movement			Noted and compliance assured.	
f)	The company shall install adequate dust collection and extraction system to control fugitive dust emissions at various material handling areas (i.e. Raw material loading, unloading, conveying, transporting, stacking, bagging and packing etc.) Guidelines/Code of Practice issued by the CPCB for prevention and control of the fugitive emission shall be followed.			Noted and compliance assured to install dust collection and extraction system at each dust emitting sources during both construction and operation stage.	
37	Regular monitoring of ground level concentration of PM ₁₀ , PM _{2.5} , SO ₂ & NO _x shall be carried out in the impact zone and its records shall be maintained. Ambient Air Quality levels shall not be exceeding the standards stipulated by the GPCB. If at any stage these levels are found to exceed the prescribed limits, necessary additional control measures shall be taken immediately. The location of the stations and frequently of monitoring shall be decided in consultation with the GPCB.			Noted and compliance assured make provision for regular monitoring of AAQ in impact zone and results are being reported to GPCB periodically. Plant is under operation since July 2024 Quarterly Ambient Air Quality monitoring report for April 2024 to September 2024 is enclosed (Attachment – 6)	
A4	SOLID/HAZARDOUS WASTE				
38	All the hazardous waste management shall be taken care as mentioned below;			Noted and being complied	
S.N.	Type of Waste	Source	Category as per Haz. Waste Rules, 2016	Quantity MT/Annum	Management of HW
A.	Hazardous				
	Used Oil	Utilities & Operation	5.1	0.1 MT/Annum	Grease: Reused internally for lubrication of scraper chains Oil Disease through approved recycler
	Cotton Rags	Maintenance Workshop	33.2	600 kg/Annum	Dispose through CHWIF
	Discarded container	Paints & Oil Drums	33.1	2000 Nos./Annum	Dispose through approved Recycler
B.	Non-Hazardous				
	Dust from Manufacturer	Solid Waste		0.15 million	100% Recycled in process

A8 GREEN BELT AND OTHER PLANTATION	
49	Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant.
50	The unit shall develop green belt within the factory premises as per the CPCB guidelines, consisting of at least three rows of trees of local species on periphery. However, if the adequate land is not available within the premises the unit shall take up adequate plantation at suitable open land on roadsides and other open areas in nearby locality or schools in consultation with the Gram Panchayat / GPCB and submit an action plan of plantation for next three years to the GPCB.
B OTHER CONDITIONS	
51	Unit shall comply all the applicable standard conditions prescribed in Office Memorandum (OM) published by MoEF&CC vide no. F. No.22-34/2018-IA.III dated 09/08/2018
52	In case of use of spray dryer, the unit shall provide the adequate & efficient APCMs with spray dryer so that there should not be any adverse impact on human health & environment. Unit shall carry out third party monitoring of the proposed Spray dryer & its APCM through the credible institutes and study report for impacts on Environment and Human Health shall be submitted to GPCB every year along with half yearly compliance report.
53	The project proponent shall allocate the separate fund for Corporate Environment Responsibility (CER) in accordance to the MoEF&CC's Office Memorandum No. F.No.22-65/2017-IA.III date 04/05/2018 to carry out the activities under CER in affected area around the project. The entire activities proposed under CER shall be monitored and the monitoring report shall be submitted to the
	Noted and compliance assured.
	Plantation being carried out in phased manner. About 1000 Trees have been planted during 1 st phase of plantation all along plant boundary covering about 1 ha. area
	It is planned to complete 33% of plant area before end of year 2025. Considering 2 nd & 3 rd phase of plantation.
	Photographs of the existing green belt area are enclosed as Attachment-14 for your perusal.
	Noted and compliance assured
	• Noted. • Compliance to the applicable standard conditions are enclosed as Attachment-2
	Noted and compliance assured
	Budget allocated for Corporate Environmental Responsibility (CER) in EIA report to be used in line with suggested activities simultaneously with construction activities. Detailed year wise action plan for implementation of CER is enclosed as Attachment-1

ADANI CEMENT INDUSTRIES LIMITED

Enclosure-1

	(Corporate Social Responsibility Policy) Rules, 2014" and its amendments from time to time in a letter and spirit.	
65	The project management shall ensure that unit complies with all the environment protection measures, risk mitigation measures and safeguards recommended in the EMP report and Risk Assessment study report as well as proposed by project proponent.	Noted and compliance assured
66	The project authorities shall earmark adequate funds to implement the conditions stipulated by SEIAA as well as GPCB along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.	Budget estimated for Environmental Pollution Control Measures (EPCM) including CER & CSR in EIA report to be used for implementation of stipulated conditions simultaneously with construction activities
67	The applicant shall inform the public that the project has been accorded environmental clearance by the SEIAA and that the copies of the clearance letter are available with the GPCB and may also be seen at the Website of SEIAA/ SEAC/ GPCB. This shall be advertised within seven days from the date of the clearance letter, in at least two local newspapers that are widely circulated in the region, one of which shall be in the Gujarati language and the other in English. A copy each of the same shall be forwarded to the concerned Regional Office of the Ministry.	<ul style="list-style-type: none"> ● Complied ● information to the public regarding EC issued by the SEIAA for this project is published on 14th May 2019 both in "INDIAN EXPRESS" (English) and "GUJARAT SAMACHAR" (Gujarati) ● Copy of advertisement is enclosed as Attachment-4
68	The project proponent shall also comply with any additional condition that may be imposed by the SEAC or the SEIM or any other competent authority for the purpose of the environmental protection and management.	Noted
69	It shall be mandatory for the project management to submit half-yearly compliance report in respect of the stipulated prior environmental clearance terms and conditions in hard and soft copies to the regulatory authority concerned, on 1st June and 1st December of each calendar year.	Noted and Complied (This compliance report is from April-2024 to September-2024 being submitted by ACIL for Dahej Cement Grinding Unit)
70	Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provision of Environment (Protection) Act, 1986	Noted
71	The project authorities shall also adhere to the stipulations made by the Gujarat Pollution Control Board.	Noted
72	The SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not found satisfactory.	Noted
73	The company in a time bound manner shall	Noted

PRAKASH K. MAJUMDAR
MEMBER SECRETARY
SEIAA (GUJARAT)



STATE LEVEL ENVIRONMENT
IMPACT ASSESSMENT
AUTHORITY
GUJARAT

No. SEIAA/GUJ/EC/3(b)/1752/2022

Date: 07 JUL 2022 BY R.P.A.D.

Transfer of Environment Clearance Order No.: SEIAA/GUJ/EC/3(b)/633/2019, Dated 03/05/2019.

(Under the provision of Environmental Impact Assessment (EIA) Notification, 2006)

In exercise of the power conferred under the provision of Environmental Impact Assessment (EIA) Notification, 2006 under sub-rule (3) of Rule 5 of the Environment (Protection) Rules, 1986, the Environment Clearance granted to M/s. Adani Cementation Limited at Survey No. 136/P, 137/P, 138/P, 139/P, 140/P, 141/P, 144/P, 145/P, 151/P, 152/P, 153/P, 154/P, 155/P, 162/P, 174/P, 175/P, 176/P, 178/P, 179/P, 187/P, 188/P, 189/P, 190/P, 191/P of Village Dahaj and Survey No. 125/P, 124/P of Village Lakhigam in Dahaj Industrial Estate, Tal. Vagra, Dist. Bharuch vide this office letter no. SEIAA/GUJ/EC/3(b)/633/2019, Dated 03/05/2019, is being subjected to EC transfer for the following change in the project.

And whereas SEIAA has granted Environment Clearance vide office order letter no. SEIAA/GUJ/EC/3(b)/633/2019, Dated 03/05/2019, under the provisions of the aforesaid Notification.

And whereas project proponent has applied for Name change and EC transfer in the environmental clearance vide their online application vide No. SIA/GUJ/IND/2/16009/2021

The SEAC, Gujarat had recommended the project vide their letter dated 21/05/2022 to grant transfer in Environmental Clearance to the SEIAA, Gujarat based on the decision taken during SEAC meeting held on 24/03/2022. The proposal was considered by SEIAA, Gujarat in its meeting held on 01/07/2022 at Gandhinagar. After careful consideration, Environment Clearance order No. SEIAA/GUJ/EC/3(b)/633/2019, Dated 03/05/2019 is hereby transferred to M/s. Adani Cement Industries Limited from M/s. Adani Cementation Limited.

The name of the unit read as "Adani Cement Industries Limited" in place of "Adani Cementation Limited" in a. Page 1, - Sub. - Line 1, b. Page 1, - Para 2 - Line 1, c. Page 5, - Issued to - Line 1 of Environment Clearance order No. SEIAA/GUJ/EC/3(b)/633/2019, Dated 03/05/2019.

Rest of all the conditions of the Environment Clearance orders no. SEIAA/GUJ/EC/3(b)/633/2019, Dated 03/05/2019 shall remain unchanged

(PRAKASH K. MAJUMDAR)
Member Secretary

Issued to:

Adani Cement Industries Limited
Adani Corporate House,
Shantigram, Near Vaishno Devi Circle,
S.G. Highway, Khodiyar,
Ahmedabad -382421



Copy to:-

1. The Secretary, SEAC, C/O. G.P.C.B. Gandhinagar - 382010.
2. The Additional Chief Secretary, Forests & Environment Department, Govt. of Gujarat, Block 14, 8th floor, Sachivalaya, Gandhinagar-382010.
3. The Chairman, Central Pollution Control Board, Parivesh Bhavan, CBD -cum-Office Complex, East Arjun Nagar, New Delhi-110032

Office : Gujarat Pollution Control Board, "Parivash Bhavan" Sector-10 A, Gandhinagar-382010

Phone No.: (079) 232-3252, 232-41514 Fax No.: (079) 232-22784

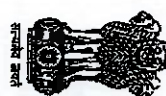
E-mail : industrial@seiaa.gujarat.gov.in Website: www.seiaa.gujarat.gov.in

Page 1 of 2

- EC transfer letter Uploaded in XGN on 28/07/2022 18:02:22 from IP No: 172.16.31.15.

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S. M. SAIYAD, IFS
MEMBER SECRETARY
SEIAA (GUJARAT)



STATE LEVEL ENVIRONMENT
IMPACT ASSESSMENT
AUTHORITY
GUJARAT

Government of Gujarat

No. SEIAA/GUJ/EC/3(b)/ 6 3 3 /2019

Date: 3 MAY 2019

By R P A D

Sub: Environment Clearance to M/s. Adani Cementation Limited for setting up of stand-alone Cement grinding unit at Survey 138/P, 137/P, 138/P, 139/P, 140/P, 141/P, 144/P, 145/P, 151/P, 152/P, 153/P, 154/P, 155/P, 176/P, 178/P, 179/P, 187/P, 188/P, 189/P, 190/P, 191/P, of village: Dahaj and Survey no. 125/P, 124/P of village: Lakhigam, Dahaj Industrial Estate, Ta- Vagra, Dist - Bharuch. In Category 3(b) of Schedule annexed with EIA Notification dated 14/09/2006.

Ref: Your Proposal No. SIAG/JIND/30696/2017.

Dear Sir,

This has reference to your application along with EIA report dated 04/02/2019 submitted to SEIAA, seeking Environmental Clearance under Environment Impact Assessment Notification, 2006.

The proposal is for Environmental Clearance to M/s. Adani Cementation Limited for setting up of stand-alone Cement grinding unit at Survey 138/P, 137/P, 138/P, 139/P, 140/P, 141/P, 144/P, 145/P, 151/P, 152/P, 153/P, 154/P, 155/P, 176/P, 178/P, 179/P, 187/P, 188/P, 189/P, 190/P, 191/P, of village: Dahaj and Survey no. 125/P, 124/P of village: Lakhigam, Dahaj Industrial Estate, Ta- Vagra, Dist - Bharuch. It is a proposed unit for manufacturing following products, which falls in the category - 3(b) of the schedule of the EIA Notification-2006:

Sr. No.	Name of the Products	CAS no./CI no.	Quantity, MT/Month	End-use of products
1	Portland Pozzolana Cement (PPC)	65997-15-1	2 Million MTPA	Cement will be used
2	Ordinary Portland Cement (OPC)	65997-15-1	(in two phases each	as Raw material for
3	Portland slag Cement (PSC)	65997-15-1	with 1 MMTPA	infrastructure
4	Portland Composite Cement (PCC)	65997-15-1	Capacity)	construction
Total			2 Million MTPA	

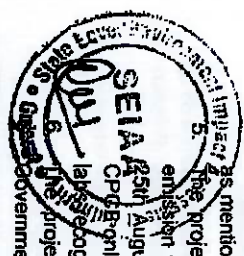
The project activity is covered in 3(b) and is of 'B' Category. Public hearing was conducted on 07/12/2018.

The SEAC, Gujarat vide their letter dated 20/03/2019 had recommended to the SEIAA, Gujarat, to grant the Environment Clearance for the above-mentioned project based on its meeting held on 26/02/2019. The proposal was considered by SEIAA, Gujarat in its meeting held on 25/03/2019 at Gandhinagar. After careful consideration, the SEIAA hereby accords Environmental Clearance to above project under the provisions of EIA Notification dated 14th September, 2006 subject to the compliance of the following conditions.

A. CONDITIONS:

A.1 SPECIFIC CONDITION:

1. Project proponent shall procure raw materials like clinker for the proposed project from the authorized units having Environmental Clearance as per the EIA Notification 2006, CTE & CC&A.
2. Complete Zero Liquid Discharge (ZLD) status shall be maintained all the time and there shall be no drainage connection from the premises.
3. The project proponent shall allocate the separate fund of Rs. 6.65 Crores i.e. 1.2 % of the capital investment for activities mentioned in EIA report under Corporate Environment Responsibility (CER) in accordance to the MoEF&CC's Office Memorandum No. F.No.22-65/2017-IA.III dated 01/05/2018. The entire activities proposed under CER shall be monitored and the monitoring report shall be submitted to the regional office of MoEF&CC as a part of half-yearly compliance report and to district collector. The monitoring report shall be posted on the website of the project proponent.
4. Unit shall comply all the applicable standard conditions prescribed in Office Memorandum (OM) published by MoEF&CC vide no. F. No. 22-54/2018-IA.III dated 09/08/2018 for Stand-alone Cement grinding units without Captive Power Plant as mentioned at Sr. no. xii.



The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R. No. 612 (E) dated 01/08/2014 (Cement) and subsequent amendment dated 9th May, 2016 (Cement) and connected to SPCB and CPCR online servers and calibrate these system from time to time according to equipment supplier specification through laboratory recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

The project proponent must strictly adhere to the stipulations made by the Gujarat Pollution Control Board, State Government and/or any other statutory authority.

fabricated, erected and commissioned under guidance and supervision of the said institute.

30. The APCM shall be operated efficiently and effectively to achieve the norms prescribed by the GPCB at stack outlet.

31. Acoustic enclosure shall be provided to the DG sets to mitigate the noise pollution and shall conform to the EPA Rules for air and noise emission standards.

32. Stack/Vents of adequate height shall be provided as per the prevailing norms for flue gas emission/Process gas emission.

33. Interlocking facility of the pollution control equipment and the equipment(s) to which it is attached should be provided in such a manner that in the event of pollution control equipment(s) not working, the respective unit(s) is shut down automatically.

34. Regular periodic preventive maintenance of the air pollution control systems shall be carried out during the operation phase.

35. The applicant shall carry out yearly performance evaluation of the air pollution control equipments through any reputed institute and furnish the reports in this regard to the Gujarat Pollution Control Board every year.

36. The fugitive emission in the work zone environment and ambient air quality shall be monitored. The emission shall conform to the standards prescribed by the concerned authorities including Director of Industrial Health and Safety as well as Gujarat Pollution Control Board from time to time. Following indicative guidelines shall be followed to reduce the fugitive emission.

a) Enclosure shall be provided at all loading and unloading operations.

b) Water shall be sprayed on all raw materials stock pile periodically to retain some moisture in top layer except wet gypsum to reduce the fugitive emission.

c) All transfer points shall be fully enclosed.

d) Accumulated dust on the ground and other surfaces shall be removed / swept regularly and water the area after sweeping.

e) Internal roads shall be either asphalted or paved properly to reduce the fugitive emission during vehicular movement.

f) The company shall install adequate dust collection and extraction system to control fugitive dust emissions at various material handling areas (eg. raw material loading, unloading, conveying, transporting, stacking, bagging and packing etc.) Guidelines / Code of Practice issued by the CPCB for prevention and control of the fugitive emission shall be followed.

37. Regular monitoring of ground level concentration of PM₁₀, PM_{2.5}, SO₂ & NO_x shall be carried out in the impact zone and its records shall be maintained. Ambient air quality levels shall not exceed the standards stipulated by the GPCB. If at any stage these levels are found to exceed the prescribed limits, necessary additional control measures shall be taken immediately. The location of the stations and frequency of monitoring shall be decided in consultation with the GPCB.

6.1.4 SOLID/HAZARDOUS WASTE

38. All the hazardous waste management shall be taken care as mentioned below:

S.N.	Type of Waste	Source	Category as per Haz. Waste Rules, 2016	Quantity, MT/ Annum	Management of HW
A. Hazardous					
1	Used Oil	Utilities & Operation	5.1	0.1 MT/Annum	Grease: Reused internally for lubrication of scraper chains. Oil: Dispose through approved recycler
2	Cotton Rags	Maintenance work shop	33.2	600 kg/Annum	Dispose through CHWIF
3	Discarded containers	Paints and oil drums	33.1	2000 Nos./Annum	Dispose through approved Recycler
B. Non Hazardous					
4	Dust from APCM	Manufacturing process	Solid Waste	0.15 Million MT/Annum	100% Recycled in process
5	Sludge generation from STP	STP	Solid Waste	0.366 MT/Annum	Manure for green belt development
6	Gypsum	Receipt, Storage & Consumption	Solid Waste	0.1MMTA	Collection, transportation, storage, receipt and consumption for cement manufacturing
7	Fly ash	Receipt, Storage & Consumption	Solid Waste	0.6MMTA	Collection, transportation, storage, receipt and consumption for cement manufacturing

A.5 SAFETY

39. Proper ventilation shall be provided in the work area.


40. Personal Protective Equipments shall be provided to workers and its usage shall be ensured and supervised.

41. First Aid Box shall be made readily available in adequate quantity in the unit.

42. Regular periodic work zone ambient air monitoring shall be carried out for measuring concentrations of cement dust.

65. The project management shall ensure that unit complies with all the environment protection measures, risk mitigation measures and safeguards recommended in the EMP report and Risk Assessment study report as well as proposed by project proponent.
66. The project authorities shall earmark adequate funds to implement the conditions stipulated by SEIAA as well as GPCB along with the implementation schedule for all the conditions stipulated herein. The funds so provided shall not be diverted for any other purpose.
67. The applicant shall inform the public that the project has been accorded environmental clearance by the SEIAA and that the copies of the clearance letter are available with the GPCB and may also be seen at the Website of SEIAA/ SEAC/ GPCB. This shall be advertised within seven days from the date of the clearance letter, in at least two local newspapers that are widely circulated in the region, one of which shall be in the Gujarati language and the other in English. A copy each of the same shall be forwarded to the concerned Regional Office of the Ministry.
68. The project proponent shall also comply with any additional condition that may be imposed by the SEAC or the SEIAA or any other competent authority for the purpose of the environmental protection and management.
69. It shall be mandatory for the project management to submit half-yearly compliance report in respect of the stipulated prior environmental clearance terms and conditions in hard and soft copies to the regulatory authority concerned, on 1st June and 1st December of each calendar year.
70. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.
71. The project authorities shall also adhere to the stipulations made by the Gujarat Pollution Control Board.
72. The SEIAA may revoke or suspend the clearance, if implementation of any of the above conditions is not found satisfactory.
73. The company in a time bound manner shall implement these conditions. The SEIAA reserves the right to stipulate additional conditions, if the same is found necessary.
74. The project authorities shall inform the GPCB, Regional Office of MoEF and SEIAA about the date of financial closure and final approval of the project by the concerned authorities and the date of start of the project.
75. This environmental clearance is valid for seven years from the date of issue.
76. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
77. Submission of any false or misleading information or data which is material to screening or scoping or appraisal or decision on the application makes this environment clearance cancelled.

With regards,
Yours sincerely,


(Mr. Sanjay Prasad)
Member Secretary

Issued to:
Mr. Adani Cementation Limited
Mr. Sanjay Prasad (DGM),
Cl-28, Ground Floor, South Block, Adani Corporate House,
Shantigram, S G Highway, Ahmedabad-382421

Under CER activity 2024-2025

Background

Adani Cement Industries Ltd. proposed to install a 1.0 Mtpa cement grinding unit at Dahej.

Proposal

A-Infrastructure development for Water: Amount {0.35 Cr.}

- 1- Water conservation campaign through workshop program.
- 2- Rainwater harvesting either by percolation wells or tanks
- 3- Drinking water supply,

- 4- Sanitation,
- 5- Health,
- 6- Education
- 7- Skill development,
- 8- Roads,
- 9- Cross drains,

B-Contribution to various Govt. Schemes: {0.23 Cr.}

- 1- Solar lighting in nearby locality.
- 2- Taking up the cleanliness drive for nearby Areas.
- 3- Installation of Green energy charging station.
- 4- Solid waste management facilities,

C-Plantation in Communities Areas: {0.35 Cr.}

Scientific Support and Awareness to local Farmers: {0.17Cr.}

- 1- Awareness in near-by villages farmers to increase yield of crop.
- 2- Third party audit of CER activities.

D-Contingency Budget: {0.06 Cr.}

Total amount (A+B+C+D) required 2022-23 = {0.35+0.23+0.35+0.17+0.06= 1.16 Cr}

Functions for CER implementation:

- i. Monitor the overall implementation of the CER activities and the disbursement of the funds.
- ii. Examine the annual targets and activities of proposed CER allocated.
- iii. Review the progress of the targets and activities of proposed CER allocated.
- iv. Prepare the half yearly report for the compliance providing evaluation and documentation of progress made, targets achieved, and performance of the activities carried out.
- v. Ensure that the funds are used only for the prescribed for CER activities.
- vi. ACIL shall release funds annually as per the allocated budget for various CER activities.
- vii. A 3rd party annual audit of the CER activities shall be carried out.

Stand Alone Dahel Grinding Unit

Compliance to the Standard conditions prescribed in Office Memorandum (OM) published by MoEF&CC vide no. F. No. 22-34/2018-IA.III dated 09/08/2018 for Stand-alone Cement grinding units without Captive Power Plant as mentioned at Sr. no. xii

Standard EC Conditions for Cement Grinding Units without Captive Power Plants:		
I.	Statutory compliance	
i.	The project proponent shall obtain forest clearance under provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest propose involved in the project.	Not Applicable No forest land involved in project area
ii.	The project proponent shall obtain clearance from the National Board for Wildlife. If applicable.	Not Applicable (There is no Wildlife Sanctuary or National Park in the proposed project area.)
iii.	The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented tin consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report (in case of the presence of schedule-I species in the study urea).	Not Applicable
iv.	The project proponent shall obtain Consent to Establish Operator under the provisions of Air (Prevention Control of Pollution) Act, 1981 and the Water (Perversion & Control of Pollution) Act 1974 from the concerned Suite pollution Control Board Committee.	CTE has been obtained and transferred in the name of Adani Cement Industries Limited (ACIL). Attachment – 5

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	and three outside the plant area at an angle of 120° each), covering upwind and downwind direction (case to case basis small plant Manual, Large plants Continuous)	Ambient air quality monitoring report is attached as Attachment - 06
IV	The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stock monitoring and manual monitoring of air quality fugitive emissions to regional office of MOEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.	Monthly Summary report of emission and AAQM data is being monitored and submitted to GPCB and MOEF&CC. Attachment 06
	Appropriate Air Pollution Control (APC) system shall be provided or all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.	Noted and Complied Adequate air pollution control system has been provided to control fugitive dust emission at various locations i.e. transfer points, raw material handling, bagging, and packing areas. Etc. All conveyors are covered with GI sheets. Finished products are dispatched by covered wagon or truck to prohibit fugitive emission. List of bag filters are given in Attachment 10
	The project proponent shall provide leakage detection and mechanised bag cleaning facilities for better maintenance of bags.	Noted and Complied A leakage bag detector has been installed at VRM bag house. Mechanized bag cleaning devices have been installed for all bag filters for efficient operations.
	Pollution control system in the cement plant shall be provided as per the CREP guidelines of CPCB.	Compliance to the Corporate Responsibility for Environment Protection (CREP) is enclosed as Attachment 02
	Sufficient number of mobile or stationary vacuum cleaners shall be provided to clean plant roads shop floors, roof regularly.	Regular water sprinkling on the roads and truck parking area is done being through water tanker.

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	Ventilation system shall be designed for adequate air changes as per ACGIH document for all tunnels, motor houses cement bagging plants.	Noted and Complied The ventilation system for tunnels, packing plants and compressor rooms has been designed and implemented.
Water quality monitoring and preservation		
	The project proponent shall install effluent monitoring system with respect to Standards prescribed in Environment (Protection) Rules 1986 vide G.S.R No. 612 (E) dated 25 August, 2014 (Cement) and subsequent amendment dated 9 th May, 2016 (Cement) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through lab recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories (case to case basis small plants; Manual: Large plants: Continuous).	Dahej Cement Grinding Unit is a dry process Zero Liquid discharge (ZLD) plant. Water is required during the manufacturing of cement only for cooling of plant machinery and green belt development. Hence the water is completely consumed during the process. As a result, no effluent is generated. In view of this, effluent treatment plant is not required and hence installation of effluent monitoring system is not applicable to the unit. One STP's with capacity of 10 KLD has been installed at plant. The treated domestic wastewater is used for green belt development and water spraying on road for dust suppression. Water quality monitoring of STP treated water is being done and the monitoring report is being submitted to MoEF&CC with half yearly compliance report. The copy of the STP water test report is attached as Attachment 13
ii.	The project proponent shall monitor regularly ground water quality at least twice a layer (pre and post monsoon) at sufficient numbers of piezometer sampling wells in the plant and adjacent areas through labs recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.	Noted
iii.	The project proponent shall submit monthly summary report of continuous effluent monitoring and result of manual effluent testing and natural monitoring of ground Water quality	Dahej Cement Grinding Unit is dry process Zero Liquid discharge (ZLD) plant. Water is required during the manufacturing of cement only for cooling of plant machinery and green belt development. Hence the water is completely

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	Water meters shall be provided at the inlet to all unit processes in the cement plant	Noted and complied.
viii.		Water meters are installed at all main water withdrawal and consumption points and water consumption is being monitored on a regular basis.
ix.	The project proponent shall make efforts to minimize water consumption in the cement plant complex by segregation of used water, practicing cascade use and by recycling treated water.	The water consumption is being monitored on a regular basis to minimize the water consumption. To minimize the water consumption, the treated wastewater from STP is used for green belt development and water spraying on road for dust suppression.
III.	Noise monitoring and prevention	
i.	Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Office of the ministry as a part of six-Monthly compliance report.	Noise monitoring is periodically carried out through NABL recognized laboratory. The copy of the noise monitoring report is attached in Attachment 06.
ii.	The ambient noise levels should confirm to the standards prescribed under E(P)A Rules 1986 viz. 75 dB(A) during daytime and 70 dB(A) during nighttime	Noise control measure i.e. acoustic hoods, silencers and enclosures have been provided at all sources of noise generation so that noise levels in and around the plant remain below 75 dB(A) at daytime and 70 dB(A) at nighttime respectively. The copy of noise monitoring report is attached in Attachment 06
IV.	Energy Conservation measures	
i.	Provide solar power generation on roof tops of buildings, for solar light system for all common	Initiatives towards reduction power consumption have been taken.

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	greenbelt shall inter alia cover the entire periphery of the plant.	Plantation is being carried out in a phased manner. About 1000 trees have been planted during the 1 st phase of plantation all along the plant boundary covering about 1 ha. Area.
		It is planned to complete 33% of the plant area before the end of the year 2025. Considering the 2 nd & 3 rd phase of plantation.
		Photographs of the existing green belt area are enclosed as Annexure-15 for your perusal.
ii.	The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programmed for reduction of the same including carbon sequestration including plantation.	Efforts are being taken for reduction of Green House Gases in terms of CO2 by installation of LED lights. The CO2 emissions inventory report is being generated on a monthly basis.
VII.	Public hearing and Human health issues	
i.	Emergency preparedness plan based on the Hazard Identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.	Noted and complied. Emergency preparedness plan, Disaster management plan and HIRA has been prepared and implemented.
ii.	The PP shall provide Personal Protection Equipment (PPE) as per the norms of the Factory Act.	Noted and complied. PPE's have been made mandatory for all workers, employees, and visitors, and incorporated in regular practice. PPEs are regularly issued and recorded as per the Factory Act.
iii.	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP. Safe drinking water, medical health care crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	Not Applicable. No housing facility is proposed for construction labour within the proposed project area. However mobile toilets, drinking water facilities are being provided. Medical health care and crèche facilities are already running by Adani Foundation in a nearby village.

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	earmarked for environmental protection measures shall be kept in separate accounts and not to be diverted or for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/ Regional Office along with the Six-Monthly Compliance Report.	The detail of the CSR & CER activities along expenditure incurred out during the period is given as Attachment 09
v.	Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.	Noted and Compliance assured
vi.	All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the cement plants shall be implemented.	CREP is being implemented. Compliance to the Corporate Responsibility for Environmental Protection (CREP) is enclosed as Attachments 8A
IX.	Miscellaneous	
i.	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by Prominently advertising it at last in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.	<ul style="list-style-type: none"> ● Complied ● Information to the public regarding EC issued by the SEIAA for this project is published on 14th May 2019 both in "INDIAN EXPRESS" (English) and "GUJARAT SAMACHAR" (Gujarati) ● Copy of advertisement is enclosed as Attachment-4
ii.	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.	Noted and complied.
iii.	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of	Noted and Complied

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ix.	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitments made during Public Hearing and also that during their presentation to the Export Appraisal Committee.	Noted and Compliance assured. Commitments made in the EIA/EMP report are being followed. The detail of EIA/EMP expenditure are attached as Attachment 03
x.	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).	Noted and Compliance assured
xi.	Concealing factual data or submission of false/fabricated data may result revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.	Noted
xii.	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	Noted
xiii.	The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time-bound manner shall implement these conditions.	Noted
xiv.	The Regional Office of this Ministry shall monitor compliance of the stipulated conditions the project authorities should extend full cooperation to the officer(s) of the Regional Office by furnishing the requisite data/information/ monitoring reports.	Noted
xv.	The above conditions shall be enforced, inter-alia under the provision of the Water (Prevention & Control of Pollution) Act. 1974, the Air (Prevention & Control of Pollution) Act. 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Trans boundary Movement) Rules 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other	Noted

ATTACHMENT - 3

POINTWISE RESPONSE TO THE ISSUES RAISED DURING PUBLIC HEARING

The Public consultation for the proposed Dahej Cement Grinding Plant (DCGP) of 2.0 MMTPA Capacity, was conducted on 07/12/2018 at 11:00 Hrs by Gujarat State Pollution Control Board at Project site of Dahej Cement Grinding Plant at Dahej, Taluka Vagra, District Bharuch (Gujarat).

Public hearing was chaired by Hon. J.P. Asari (G.A.S.), Additional District Collector & Additional District Magistrate and Chairman of the Public Hearing Committee, district Bharuch and assisted by Mr. R.R. Vyas, Regional Officer, GPCB, Bharuch & representative of Gujarat Pollution Control Board (GPCB).

Total **225** persons signed on the attendance sheet; out of which **29** persons raised verbal issues while **71** nos. written issues/suggestions/objections/opinion has been raised before as well as during public hearing.

ISSUES RAISED BY PUBLIC	RESPONSE BY PROJECT PROPONENT WITH ACTION PLAN
<p>Shri Jaydeepsinh Ramsinh Rana (Sarpanch Village: Dahej, Taluka : Vagra, District: Bharuch):-</p> <ul style="list-style-type: none"> As the Sarpanch of the village and a fellow villager we welcome the project of Adani Cementation Limited. We appreciate the various activities carried out under CSR by Adani Company like education, RO facility for drinking water. Company has also assured to aid us with collection of rain water in the pond. We request them to work in that direction. We also request the company to provide Job to the land losers and keep the issue of local employment on priority. 	<p>We thank the representator and assure them that the relevant work will be carried out accordingly.</p>
<p>Shri Ishwarbhai Melabhai Gohil Village: Lakhigam, Taluka: Vagra, District: Bharuch):-</p> <ul style="list-style-type: none"> The project is welcomed. My survey no. is 118, GIDC has given me the land looser form but my son in spite of being educated has not been provided a job by the company. Also plot has not been allotted to me. Vacant my land or give a job to my son. In similar case others are getting job. I supply labour, I have not been offered work order, which is injustice to me. My son has studied MSW but still company is not giving the job. 	<ul style="list-style-type: none"> Part of land allotted to company gets utilized as RoU. We have requested the GIDC and The Collector to come up with a policy. Once the rules of the policy get decided we will be able to take steps to solve the problems of the land loser and till the policy has not been decided the issues faced by the land loser will be solved indirectly. Once policy will be decided, company will act accordingly. No such case of land losers has been received for this particular project. If such case will be received, prompt response will be given. He will be given priority whenever there is a vacancy for MSW post.

<p>Shri. Bhavesh Gohil Village: Lakhigam, Taluka: Vagra, District: Bharuch</p> <ul style="list-style-type: none"> • How many land losers and local villagers have been given jobs in the projects earlier established by Adani Company? • According to the earlier EIA report it is stated that the measures will be taken to control air pollution caused due to conveyor belt. Provide details. As stated earlier the coal will be brought in the ratio of 60:40, but it seems that this ratio of coal and water is not maintained, is the coal brought in the ratio of 60:40? • Whether these teams are coming to villages? • It is well known fact that there is problem of dusting in our village. If your vehicles would have been cleaned then roads would not have been in such bad conditions. • In the situation accident/ mishap what should be done? How should be inform? 	<p>At present, the Adani Company is providing job to 25 local villager of Lakhigam, out of which 10 are land losers. Also 75 villagers of Lakhigam are provided employment indirectly. Provisions have been made to prevent dust emission from the belt conveyor. Step has been taken to prevent the coal dusting like installation of hopper at jetty, installation of dust suppression system, covering of the conveyor belt, installation of wind shield. The wind shield is 1.5 to 2 m. taller than the coal storage. Sprinkling of water is done manually. For the continuous sweeping of the road, two mounted trucks and one mounted tractor are functional. Total 5 teams (each team comprises of 6 persons) are involved in this activity. Truck tyres are washed. Increase in the green belt as much as possible and time to time monitoring will be conducted. Currently AAQM station near GCPTL is in function. Further suggestions are also welcomed. Let us know about the help is needed and team will definitely come and act accordingly.</p>
<p>Shri. Lakshman Singh Gohil, Village Lakhigam, Taluka: Vagra, District: Bharuch</p> <ul style="list-style-type: none"> • We appreciate that Adani Company has done some good works in our village. Ours is big village. Earlier if any function was to be organized, there was only one temple available. We used to face lot of problems when three or more functions were to be organized simultaneously. Adani Company helped by building community hall of capacity of 1000 persons. Moreover, facilities such as medical checkup, mobile clinic are provided by company. It is our request that there should be improvement in medical facility. Permanent 	<p>Steps will be taken positively as per suggestions given related to health.</p>

	<p>same department and if at the state level environmental clearance is obtained from SEAC then state level forest and environment department shall process for EC condition verification. Recently it is decided that state pollution control board can also monitor the compliance of E.C conditions and if the EIA norms are violated then you can inform the board.</p> <p>• The Regional officer stated that the details of Public Hearing is available on the website.</p>
<p>• Shri Aahir Rahulkumar Lakshmanbhai Village: Luvera, Taluka: Vagara, Dist: Bharuch</p> <p>• 75% of the progress of Lakhigam Village is due to Adani and still we expect the company to continue the same in future along with that we welcome the upcoming project. The company will take action to prevent pollution.</p>	<p>• Expressing gratitude, the modern technology will be set up in the company. And the work related to the development of the village will be increased gradually.</p>
<p>• Manharbhai makwana – majiSarpach, Village: Lakhigam, Taluka: Vagara, Dist: Bharuch</p> <p>• I welcome the Adani Cementation Plant. We do not oppose if people are getting employment.</p> <p>• An incident took place in 2012 in Lakhigam, for which 75 number of people still have to go to the court frequently. We asked for the settlement of the same because people have to go to the court leaving their jobs daily. They are poor people. We request Adani for coming up with the solutions for the guiltless people and we have no problem in that. And take care for the greenbelt also.</p> <p>• Steps should be taken for the students of primary school walking to the school from Navinagri.</p>	<p>• Thank you so much. If we have the opportunities for employment, we will give information and prefer to be employed in the employment.</p> <p>• The incident which occurred in 2012 was unfortunate. It is a legal matter now but we show affirmation for the same. And after 2012 the relationship between company and village has improved. The company guarantees positive attitude.</p> <p>• The company has built a bus stand in the village and regarding the safety for students, we will along with the people of the village, will work towards it to provide safe route for the students to go to school.</p>
<p>• Shri NareshGohil, Vill: Lakhigam, Taluka: Vagara, Dist: Bharuch</p> <p>• Is the raw material brought via sea route or via truck? Will the conveyor shut down at night or keep functioning? It is difficult to sleep at night. Noise pollution occurred during night hours.</p> <p>• Ask to GIDC that will GIDC give its return if the land is gone in silo. We gave land 18 years ago</p>	<p>• The raw material is clinker which is brought via trucks. We have analyzed the noise in 16 places. Apart from this, surveys will be done at different places in the village.</p> <p>• Remarks:- GIDC representative said that while the plot is allotted to GIDC, a list of company landlords is given.</p>
<p>• Shri Narendrasinh Rana, Vill: Dahel, Taluka: Vagara, Dist: Bharuch</p> <p>• Who will get jobs for landlords who have landed in a channel or road. GIDC urges that this question be taken seriously and will not be</p>	<p>•</p>

interviews should be conducted in the colleges of the Bharuch district. Gram panchayat should be informed about the same.	
Mrs. Nirmalaben Thakorthal Gohil Village: Lakhigam, Taluka: Vagra. District: Bharuch Keeping in mind the Transportation Safety for children coming from navinagar in Lakhigam, a suitable transport service is available to go to school.	•Answer Regarding Safety is mentioned above
Shri Vijaysinh Rana , Village: Dahej, Taluka: Vagra, District: Bharuch The lake located near the temple of lakhabava should be properly cleaned and activity of boating should be developed so that faith may be restored.	<ul style="list-style-type: none">
Ashwini Rana, Village: Dahej, Taluka: Vagra, District: Bharuch Due to Adani Limited employment is provided to me. Others should also be provided with same employment opportunities as promised.	<ul style="list-style-type: none">
Rakshaben Parmar, Village: Jageshwar, Taluka: Vagra, District: Bharuch Sakhi Mandal is operated by Adani Foundation due to which employment is provided to us. We suggest to you that same should be done in other near-by villages.	<ul style="list-style-type: none">
Rekhaben Kamleshbhai, Village: Jageshwar, Taluka: vagra, District: Bharuch Five machines have been provided to us by Adani foundation. By the use of which we make school bags as per the order from Adani Limited but the employment is intermittent and not throughout the year.	<ul style="list-style-type: none">

[illegible]

- [illegible]

*Information to the
public regarding EC
issued by the SEIAA for
this project is published
on 14th May 2019 in
“GUJARAT SAMACHAR”,
Vadodara Edition
(Gujarati)*

4. CONDITIONS UNDER THE AIR ACT:

4.1

The condition No. 4.1 for Fuel Consumption under Air Act of the CCA order No: AWH-126677, issued vide letter no. GPCB/BRCH/ CCA-1671/ID-82422/745621 dated 22/06/2023 is amended and shall now be read as under.

Sr. No.	Name of fuel	Quantity	
		Existing	Proposed
1	Diesel	600 Lit/Year	
2	LNG	--	5 KLD
3	Bio Diesel	--	5 KLD
4	Coal	--	100 MT/Day

4.2

The condition No. 4.2 for Flue gas stacks under Air Act of the CCA order No: AWH-126677, issued vide letter no. GPCB/BRCH/ CCA-1671/ID-82422/745621 dated 22/06/2023 is amended and shall now be read as under.

Stack No.	Stack attached to	Stack Height	Air Pollution Control Measure (APCM)	Parameter	Permissible limit
Existing					
1	D.G. Set (Cap: 500 KVA)	18 m	--	PM SO ₂ NO _x	150 mg/Nm ³ 100 ppm 50 ppm
Proposed					
1	Hot Air Generator (Cap: 100 lac Kcal/Hr)	70 m	Pulse Jet Type Bag House	PM SO ₂ NO _x	150 mg/Nm ³ 100 ppm 50 ppm

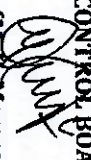
4.3

The condition No. 4.3 for Process gas stacks under Air Act of the CCA order No: AWH-126677, issued vide letter no. GPCB/BRCH/ CCA-1671/ID-82422/745621 dated 22/06/2023 is amended and shall now be read as under.

Stack No.	Stack attached to	Stack Height	Air Pollution Control Measure (APCM)	Parameter	Permissible limit
1	Packing Plant (1 No.) (Existing)	50 m	Bag Filter		
2	All Conveyor belts and transfer points (6 Nos.) (Existing)	30 m	Bag Filter	PM SO ₂ NO _x	150 mg/Nm ³ 40 mg/Nm ³ 25 mg/Nm ³
3	All Raw material (1 No.) and finished product silos (2 Nos.) (Existing)	30 m	Bag Filter		

4	Gypsum	35.3, 26.1, 38.1,	--	0.3 MMT/Year	0.3 MMT/Year	Reception, Collection, Storage, Transportation and utilize for Cementmanufacturing as per CPCB guidelines for co-processing of Hazardous wastes.
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6 All other conditions of the CCA order No: AWH-126677, issued vide letter no. GPCB/BRCH/ CCA-1671/ID-82422/745621 dated 22/06/2023 shall remain unchanged.

For and on behalf of
GUJARAT POLLUTION CONTROL BOARD

(M. R. Macwana)
UNIT HEAD-BHARUCH

Outward No: 786132,14/03/2024

- e) Unit shall not carry out any construction activities and production which attracts provisions of Environment Clearance without obtaining EC from competent authority under EIA notification dated 14/09/2006 and amended thereafter.
- f) All the efforts shall be made to send hazardous waste to Co- processing/Pre-processing facility first & there after it shall be disposed through other options.
- g) **Unit shall comply environmental guidelines for prevention and control of Fugitive Emissions from Cement Plants published by CPCB.**

3. CONDITION UNDER THE WATER ACT:

- 3.1 The quantity of total water consumption shall not exceed **193 KLD** as per below break up:
 - a) Domestic: 10 KLD
 - b) Industrial: 174 KLD
 - c) Gardening: 9 KLD

- 3.2 The quantity of total waste water generation shall not exceed **13 KLD** as per below break up:
 - a) Domestic: 9 KLD
 - b) Industrial: 4 KLD

- 3.3 Mode of disposal of wastewater:
 - a) 4 KLD Industrial wastewater generated from cooling tower shall be neutralized and used for dust suppression within premises. **Hence, unit shall maintain ZLD.**
 - b) Domestic wastewater 9 KLD shall be treated in STP. After conforming following standards, treated domestic wastewater shall be reused for gardening/plantation purpose within premises.

Parameters	Norms
pH	6.5 to 9
TSS	< 100 mg/l
Fecal Coliform (Most Probable Number per 100 milliliter , MPN/100ml)	<1000 MPN/100ml
BOD (3 days 27 degree C)	<30 mg/l

- 3.4 Unit shall affix of water meters for the purpose of measuring and recording the quantity of water consumed at such places as may be required, within 15 days and it shall be presumed that the quantity indicated by the meter has been consumed by the unit until the contrary is proved.
- 3.5 The GIDC drainage connection given by the GIDC for discharge of industrial effluent shall be disconnected & the outlet shall be sealed.
- 3.6 Leachate from the hazardous solid waste, if any shall also be connected into a collection tank through leachate collection facilities and shall be treated along with industrial effluent.
- 3.7 The Environmental Management Unit/Cell shall be setup to ensure implementation on and monitoring of environment safeguards and other conditions stipulated by

- 4.4 The concentration of the following parameters in the ambient air within the premises of the unit shall not exceed the limits specified hereunder.

Sr. No.	Parameters	Permissible Limit (microgram /m ³)	
		Annual	24 Hours Average
1.	Particulate Matter (PM ₁₀)	60	100
2.	Particulate Matter (PM _{2.5})	40	60
3.	Oxides of Sulphur (SO ₂)	50	80
4.	Oxides of Nitrogen (NO _x)	40	80

- Annual arithmetic mean of minimum 104 measurements in a year at a particular site taken twice a week 24 hourly at uniform intervals.
 - 24 hourly or 08 hourly or 01 hourly monitored values, as applicable, 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 Unit shall operate industrial plant / air pollution control equipment very efficiently and continuously so that the gaseous emission always conforms to the standards specified as above.
- 4.6 The consent to operate the industrial plant shall lapse if at any time the parameters of the gaseous emission are not within the tolerance limits specified as above.
- 4.7 Unit shall provide portholes, ladder, platform etc at chimney(s) for monitoring the air emissions and the same shall be open for inspection to/and for use of Board's staff. The chimney(s) vents attached to various sources of emission shall be designed by numbers such as S-1, S-2, etc. and these shall be painted/ displayed to facilitate identification.
- 4.8 Unit 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 75 dB(a) during day time and 70 dB (A) during night time. Daytime is reckoned in between 6a.m. and 10 p.m. and nighttime is reckoned between 10 p.m. and 6 a.m.
- 4.9 All efforts shall be made to control VOC emissions and odor problem, if any.
- 5 **GENERAL CONDITIONS:-**
- 5.1 In case of change of ownership/ management the name and address of the new ownership/ partners/ directors/ proprietor should immediately be intimate to the Board. Also any change in equipment or working conditions as mentioned in the consents form/ order should immediately be intimated to this Board.
- 5.2 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 and a green belt of 5 meters width is developed.
- 5.3 Unit shall put up at the entrance a board displaying the name of unit, particulars of the products/ process and the name of proprietor/partners /directors of the unit and the electricity consumer number as on the record.

- 7.6 The person authorised shall comply with the provisions outlined in the Central Pollution Control Board guidelines on "Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty"
- 7.7 It is the duty of the authorised person to take prior permission of the Gujarat Pollution Control Board to close down the facility.
- 7.8 The imported hazardous and other wastes shall be fully insured for transit as well as for any accidental occurrence and its clean-up operation.
- 7.9 The record of consumption and fate of the imported hazardous and other wastes shall be maintained.
- 7.10 The hazardous and other waste which gets generated during recycling or reuse or recovery or pre-processing or utilization of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of authorization.
- 7.11 The importer or exporter shall bear the cost of import or export and mitigation of damages if, any.
- 7.12 An application for the renewal of an authorization shall be made as laid down under Hazardous & Other Wastes (Management and Transboundary Movement) Rules-2016.
- 7.13 Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time.
- 7.14 Annual return shall be filed by June 30th for the period ensuring 31st March of the year.
- 7.15 Unit shall have to display the relevant information with regard to hazardous waste as indicated in the Court's order in W.P. No. 657 of 1995 dated 14th October 2003.
- 7.16 Unit shall have to display on-line data outside the main factory gate with regard to and nature of hazardous chemicals being handled in the plant, including waste water and air emission and solid hazardous waste generated within the factory premises.
- 7.17 Unit shall have to manage used or spent oil; empty or discarded barrels /containers /liners contaminated with hazardous chemicals /wastes, process waste as per Hazardous & Other Wastes (Management and Transboundary Movement) Rules-2016, framed under the E(P)Act-1986 and shall apply Authorization for all applicable waste.

FOR AND ON BEHALF OF
GUJARAT POLLUTION CONTROL BOARD
(IREAN KJGZI)
ENVIRONMENT ENGINEER

ATTACHMENT-6

**Environmental Monitoring
(April – 2024 to September – 2024)**



Royal
Environment Auditing & Consultancy Service
Plot No. 19 & 20, B6, The North Star Nest School, Masoom School Road, Moha Mara, PAKISTAN.
Ph: +91 9099319354 ■ E-mail: royalenvironment@live.com ■ admin@royalconsultancy.com

Ref. No. : 802/04/2024-25

Date: 01/05/2024

STACK EMISSION MONITORING ANALYSIS

Name of Company : M/s. Adani Cement Industries Limited,
Plot No. 136/P to 141/P, 144/P, 145/P, 151/P to 155/P,
162/P, 174/P to 176/P, 178/P, 179/P, 187/P to 191/P of
Village: Dahej in Dahej Industrial Estate,
Tal. : Vagra, Dist. : Bharuch.

Test Method : As per IS Standards - 11255_1/2/3/7

Sr. No.	Particulars	Unit	Stack- 1
01	Date of Sampling	---	25/04/2024
02	Time of sampling	Hr.	11:45
03	Stack Attached to	---	Cement Mill
04	Air Pollution Control Measures	---	Bag Filter
05	Stack Height	Meter	70
06	Stack Diameter	Meter	---
07	Stack Temperature	°C	80
08	Ambient Temperature	°C	31
09	Average Velocity of Flue Gases	m/Sec.	7.4
10	Isokinetic flow rate for P.M. Sampling	LPm	22
11	Gaseous Sampling Flow Rate	LPm	2.0
12	Permissible limits for PM	mg/Nm ³	150
13	Measured Concentration of PM.	mg/Nm ³	22
14	Permissible limits for SO ₂ .	ppm	100
15	Measured Concentration of SO ₂	ppm	0.0
16	Permissible limits for NO _x	ppm	50
17	Measured Concentration of NO _x	ppm	0.0

Instruments Used : Ecotech Stack Kit model No ESS - 100
Calibration done on : 14/01/2024.

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Ref. No. : 804/04/2024-25

Date: 01/05/2024

STACK EMISSION MONITORING ANALYSIS

Name of Company : M/s. Adani Cement Industries Limited,

Plot No. 136/P to 141/P, 144/P, 145/P, 151/P to 156/P,
162/P, 174/P to 176/P, 178/P, 179/P, 187/P to 191/P of
Village: Dahel in Dahel Industrial Estate,
Tal. : Vagra, Dist. : Bharuch.

Test Method : As per IS Standards - 11255_1/2/3/7

Sr. No.	Particulars	Unit	Stack- 3
01	Date of Sampling	—	25/04/2024
02	Time of sampling	Hr.	14:00
03	Stack/Vent Attached to	—	Conveyor belt L11BC1 Vent
04	Air Pollution Control Measures	—	Bag Filter
05	Stack/Vent Height	Meter	30
06	Stack/Vent Diameter	Meter	---
07	Stack/Vent Temperature	°C	62
08	Ambient Temperature	°C	31
09	Average Velocity of Flue Gases	m/Sec.	7.1
10	Isokinetic flow rate for P.M. Sampling	LPM	21
11	Gaseous Sampling Flow Rate	LPM	2.0
12	Permissible limits for PM	mg/Nm ³	150
13	Measured Concentration of PM.	mg/Nm ³	38
14	Permissible limits for SO ₂	ppm	100
15	Measured Concentration of SO ₂	ppm	0.0
16	Permissible limits for NO _x	ppm	50
17	Measured Concentration of NO _x	ppm	0.0

Instruments Used : EcoLech Stack Kit model No ESS - 100
Calibration done on : 14/01/2024

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Ref. No. : 806/04/2024-25

Date: 01/05/2024

STACK EMISSION MONITORING ANALYSIS

Name of Company : M/s. Adani Cement Industries Limited,
Plot No. 136/P to 141/P, 144/P, 145/P, 151/P to 155/P,
162/P, 174/P to 176/P, 178/P, 179/P, 187/P to 191/P of
Village: Dahej in Dahej Industrial Estate,
Tal. : Vagra, Dist. : Bharuch.

Test Method : As per IS Standards - 11255_1/2/3/7

Sr. No.	Particulars	Unit	Stack- 5
01	Date of Sampling	—	09/04/2024
02	Time of sampling	Hr.	11:00
03	Stack/vent Attached to	—	Conveyor belt K11BC1 transfer point vent
04	Air Pollution Control Measures	—	Bag Filter
05	Stack/vent Height	Meter	30
06	Stack/Vent Diameter	Meter	—
07	Stack/Vent Temperature	°C	68
08	Ambient Temperature	°C	32
09	Average Velocity of Flue Gases	m/Sec.	6.8
10	Isokinetic flow rate for P.M. Sampling	LPM	19
11	Gaseous Sampling Flow Rate	LPM	2.0
12	Permissible limits for PM	mg/Nm ³	150
13	Measured Concentration of PM.	mg/Nm ³	35
14	Permissible limits for SO ₂	ppm	100
15	Measured Concentration of SO ₂	ppm	0.0
16	Permissible limits for NO _x	ppm	50
17	Measured Concentration of NO _x	ppm	0.0

Instruments Used : Ecotech Stack Kit model No ESS - 100
Calibration done on 14/01/2024

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Ref. No. : 808/04/2024-25

Date: 01/05/2024

STACK EMISSION MONITORING ANALYSIS

Name of Company : M/s. Adani Cement Industries Limited,
Plot No. 136/P to 141/P, 144/P, 145/P, 151/P to 155/P,
162/P, 174/P to 176/P, 178/P, 179/P, 187/P to 191/P of
Village: Dahej in Dahej Industrial Estate,
Tal. : Vagra, Dist. : Bhavnagar.

Test Method : As per IS Standards - 11255_1/2/3/7

Sr. No.	Particulars	Unit	Stack-7
01	Date of Sampling	--	09/04/2024
02	Time of sampling	Hr.	14:00
03	Stack/Vent Attached to	--	Conveyor belt 491BC2 transfer point
04	Air Pollution Control Measures	--	Bag Filter
05	Stack/Vent Height	Meter	30
06	Stack/Vent Diameter	Meter	---
07	Stack/ Vent Temperature	°C	72
08	Ambient Temperature	°C	32
09	Average Velocity of Flue Gases	m/Sec.	7.1
10	Isokinetic flow rate for P. M. Sampling	LPM	20
11	Gaseous Sampling Flow Rate	LPM	2.0
12	Permissible limits for PM	mg/Nm ³	150
13	Measured Concentration of PM.	mg/Nm ³	26
14	Permissible limits for SO ₂	ppm	100
15	Measured Concentration of SO ₂	ppm	0.0
16	Permissible limits for NO _x	ppm	50
17	Measured Concentration of NO _x	ppm	0.0

Instruments Used : Ecotech Stack Kit model No. ESS - 100
Calibration done on : 14/01/2024

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Ref. No. : 810/04/2024-25

Date: 01/05/2024

STACK EMISSION MONITORING ANALYSIS

Name of Company : **M/s. Adani Cement Industries Limited,**
Plot No.136/P to 141/P, 144/P, 145/P, 151/P to 155/P,
162/P, 174/P to 176/P, 178/P, 179/P, 187/P to 191/P of
Village: Dahej in Dahej Industrial Estate,
Tal. : Vagra, Dist. : Bharuch.

Test Method : As per IS Standards - 11255_1/2/3/7

Sr. No.	Particulars	Unit	CS-01 Vent	CS-02 Vent
01	Date of Sampling	---	25/04/2024	25/04/2024
02	Time of sampling	Hr.	14:45	15:30
03	Stack/Vent Attached to	---	Cement Silo -1	Cement Silo -2
04	Air Pollution Control Measures	---	Bag Filter	Bag Filter
05	Stack/Vent Height	Meter	30	30
06	Stack/Vent Diameter	Meter	---	---
07	Stack/Vent Temperature	°C	66	68
08	Ambient Temperature	°C	32	33
09	Average Velocity of Flue Gases	m/Sec.	7.8	8.2
10	Isokinetic flow rate for P.M. Sampling	LPM	22	23
11	Gaseous Sampling Flow Rate	LPM	2.0	2.0
12	Permissible limits for PM	mg/Nm ³	150	150
13	Measured Concentration of PM ₁₀	mg/Nm ³	26	28
14	Permissible limits for SO ₂	ppm	100	100
15	Measured Concentration of SO ₂	ppm	0.0	0.0
16	Permissible limits for NO _x	ppm	50	50
17	Measured Concentration of NO _x	ppm	0.0	0.0

Instruments Used : Ecotech Stack Kit model No. ESS - 100
Calibration done on : 14/01/2024

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Ref. No. : 812/04/2024-25
Date: 01/05/2024

AMBIENT NOISE LEVEL MEASUREMENT

Name of Company : M/s. Adani Cement Industries Limited,
Plot No. 136/P to 141/P, 144/P, 145/P, 151/P to 155/P,
162/P, 174/P to 176/P, 178/P, 179/P, 187/P to 191/P of
Village: Dahej in Dahej Industrial Estate,
Tal. : Vagra, Dist. : Bharuch.

Sample Collection Date :25/04/2024

Sr. No.	Location of Sampling	Results in dB(A)	
		(Day Time) 6:30am to 10:30pm	(Night Time) 10:30pm to 6:30am
Permissible Limits		75.0	70.0
01.	Security Main gate (East)	69.1	62.1
02.	Packing plant (South)	70.3	64.1
03.	Cement mill (North)	71.1	65.3
04.	Clinker Silo (West)	73.2	64.2

CPCB Standards		
Area Code	Category of Area / Zone	Limit in dB(A) Leq.
		Day TimeNight Time
A	Industrial Area	75.070.0
B	Commercial Area	65.055.0
C	Residential Area	55.045.0
D	Silence Zone	50.040.0

Instruments used : Sound level meter, Model : SL 4030 (Lutron)
Range : A - 30 to 80 dB, B-50 to 100 dB, C-80 to 130 dB.
Calibration is done on : 01/01/2024

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Ref. No. : 814/04/2024-25

Date: 01/05/2024

REPORT OF EFFLUENT ANALYSIS

Name of company : M/s. Adani Cement Industries Limited,

Plot No.136/P to 141/P, 144/P, 145/P, 151/P to 155/P,

162/P, 174/P to 176/P, 178/P, 179/P, 187/P to 191/P of

Village: Dahej in Dahej Industrial Estate,

Tal. : Vagra, Dist. : Bharuch.

Source of Sample Collection : Sewage Treatment Plant

Date of Sampling :09/04/2024

Sr. No. Parameters	Unit	Permissible Limit*	STP O/L
01. pH	mg/l	6.5-9	7.6
01. Total Suspended Solids	mg/l	<100	49
02. B.O.D. (3 days at 27 °C)	mg/l	<30	25.1
03. Fecal Coliform	MPN	<1000MPN/100ml	0.5

* Permissible limit is only applicable to STP O/L (Treated Water)

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Ref No 81604/2024-25

Date: 01/05/2024

RESULTS OF AMBIENT AIR QUALITY MONITORING FOR THE MONTH : APRIL 2024

Name of company : M/s. Adani Cement Industries Limited,
Plot No.138/P to 141/P, 144/P, 145/P, 151/P to 155/P,
162/P, 174/P to 178/P, 178/P, 179/P, 187/P to 191/P of
Village: Dabai in Dabai Industrial Estate,
Tal.: Vagra Dist. : Bhavnagar.

S. No	Particulars	Unit	Nt. Main Security Main gate (East)									
			1	2	3	4	5					
01.	No. of Week	-	-	-	-	-	-	-	-	-	-	-
02	Date & Time Starting of Monitoring	-	01/04/2024 11:45	02/04/2024 12:00	08/04/2024 12:15	09/04/2024 12:30	15/04/2024 12:00	16/04/2024 12:15	24/04/2024 11:30	25/04/2024 11:45	29/04/2024 12:15	30/04/2024 12:30
03	Date & Time - Ending of Monitoring	-	02/04/2024 11:45	03/04/2024 12:00	09/04/2024 12:15	10/04/2024 12:30	16/04/2024 12:00	17/04/2024 12:15	25/04/2024 11:30	26/04/2024 11:45	30/04/2024 12:15	01/05/2024 12:30
04	Duration of Sampling	Min	1440	1440	1440	1440	1440	1440	1440	1440	1440	1440
05.	Dominant Wind Direction (From)	-	NE	NE	SE	SE	NE	SE	SE	SE	NE	SE
06	Wind Speed Velocity	km/Hr	1 to 18	1 to 15	2 to 17	4 to 22	5 to 20	4 to 20	2 to 13	1 to 12	3 to 18	3 to 12
07	Average Flow Rate For PM2.5	m3/Hr	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
08	Average Flow Rate For PM10	m3/Hr	1.13	1.12	1.18	1.14	1.12	1.11	1.12	1.21	1.16	1.11
09	Average Flow Rate for Gaseous	ppm	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
10.	Permissible Limits of PM2.5 *	µgm³	60	60	60	60	60	60	60	60	60	60
11	Measured Concentration of PM2.5	µgm³	32.2	34.1	36.2	29.1	31.1	32.1	36.2	41.2	39.2	44.1
12.	Permissible Limits of PM10 *	µgm³	100	100	100	100	100	100	100	100	100	100
13	Measured Concentration of PM10	µgm³	63.2	65.1	62.2	69.1	72.1	59.2	73.1	65.2	67.1	78.1
14	Permissible Limits of SO ₂ *	µgm³	80	80	80	80	80	80	80	80	80	80
15	Measured Concentration of SO ₂	µgm³	13.1	14.2	16.1	15.1	16.3	17.1	11.2	15.2	16.2	18.2
16.	Permissible Limits of NO ₂ *	µgm³	80	80	80	80	80	80	80	80	80	80
17	Measured Concentration of NO ₂	µgm³	26.1	24.2	21.2	20.3	19.2	25.2	22.3	25.1	20.2	21.1

Instrument Used: Ecotech model (7) PDS, APIV - 217EL (2) Gaseous Pollutants Sampler-AAS-109 (3) Gaseous PM2.5 Sampler-AAS-127
Calibration Done on 13/01/2024

Royal Environment Auditing & Consultancy Service, Rajkot

Analyst



RESULTS OF AMBIENT AIR QUALITY MONITORING FOR THE MONTH :APRIL 2024

Name of company : M/s. Adani Cement Industries Limited,
Plot No. 138/P to 141/P, 144/P, 145/P, 151/P to 155/P,
162/P, 174/P to 176/P, 178/P, 179/P, 187/P to 191/P of
Village: Dahaji in Dahaji Industrial Estate,
Tal. : Vagra, Dist. : Bhavnagar.

S. No	Particulars	Unit	Cement mill (North)									
			1	2	3	4	5					
01.	No. of Week	-										
02	Date & Time Starting of Monitoring	-	01/04/2024 11:45	02/04/2024 12:00	08/04/2024 12:15	09/04/2024 12:30	15/04/2024 12:00	16/04/2024 12:15	24/04/2024 11:30	25/04/2024 11:45	29/04/2024 12:15	30/04/2024 12:30
03	Date & Time - Ending of Monitoring	-	02/04/2024 11:45	03/04/2024 12:00	09/04/2024 12:15	10/04/2024 12:30	16/04/2024 12:00	17/04/2024 12:15	25/04/2024 11:30	26/04/2024 11:45	30/04/2024 12:15	01/05/2024 12:30
04	Duration of Sampling	hr	1440	1440	1440	1440	1440	1440	1440	1440	1440	1440
05	Dominant Wind Direction (From)	-	NE	NE	SE	SE	NE	SE	SE	SE	NE	SE
06	Wind Speed Velocity	km/hr	1 to 18	1 to 15	2 to 17	4 to 22	5 to 20	4 to 20	2 to 13	1 to 12	3 to 18	3 to 12
07	Average Flow Rate For PM2.5	mg/hr	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
08	Average Flow Rate For PM10	mg/hr	1.13	1.12	1.18	1.14	1.12	1.11	1.12	1.21	1.16	1.12
09	Average Flow Rate for Gaseous	lpm	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
10.	Permissible Limits of PM2.5 *	µgm³	60	60	60	60	60	60	60	60	60	60
11	Measured Concentration of PM2.5	µgm³	38.2	42.2	48.1	52.1	39.1	46.1	42.3	38.3	41.1	32.2
12.	Permissible Limits of PM10 *	µgm³	100	100	100	100	100	100	100	100	100	100
13	Measured Concentration of PM10	µgm³	59.1	63.1	64.2	72.1	78.2	68.1	71.2	62.3	64.1	71.2
14.	Permissible Limits of SO ₂ *	µgm³	80	80	80	80	80	80	80	80	80	80
15	Measured Concentration of SO ₂	µgm³	16.2	12.1	11.1	16.3	15.1	14.3	17.1	15.2	14.2	13.1
16.	Permissible Limits of NO ₂ *	µgm³	80	80	80	80	80	80	80	80	80	80
17	Measured Concentration of NO ₂	µgm³	26.1	22.1	25.3	22.3	20.1	21.1	24.2	23.2	21.2	20.1

Instrument Used: Eutech make (1) RDS, APM - 217BL (2) Gaseous Pollutants Sampler - AS-109, (3) Gaseous PM2.5 Sampler - AS-127
Calibration Done on: 13/01/2024

Royal Environmental Auditing & Consultancy Service, Rajkot

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REAS/ACIL/2024-25/05-03

Date: 31/05/2024

To;
M/s. Adani Cement Industries Limited,
Plot No.136/P to 141/P, 144/P, 145/P, 151/P to 155/P,
162/P, 174/P to 176/P, 178/P, 179/P, 187/P to 191/P of
Village: Dahej in Dahej Industrial Estate,
Tal. : Vagra, Dist. : Bhavnagar.

Kind attn.: **Mr. Kalubhai Goyani**

Sub.: Report of Stack Emission Analysis, Waste water analysis.

Ref.: Our visit at ACIL Plant is on **May 2024.**

Dear Sir,

Please find enclosed following analysis report in one copy:

1. Report of Waste Water Analysis	01 Samples
2. Report of Stack Emission Monitoring	10 Locations
3. Report of National Ambient Air Quality Monitoring	32 Locations
4. Report of Drinking Water Analysis	01 Samples
5. Report of Ambient Noise Level Monitoring	08 Samples
6. Report of Work Place Noise Level Monitoring	06 Samples
7. Report of Fugitive Emission	05 Samples

Thanking you,

Yours faithfully,

Royal Environment Auditing & Consultancy Service,

Digvijay Jadeja

Encl: As above.





Ref. No. : 903/05/2024-25
Date: 31/05/2024

STACK EMISSION MONITORING ANALYSIS

Name of Company : M/s. Adani Cement Industries Limited,
Plot No.136/P to 141/P, 144/P, 145/P, 151/P to 155/P,
162/P, 174/P to 176/P, 178/P, 179/P, 187/P to 191/P of
Village: Dahej in Dahej Industrial Estate,
Tal. : Vagra, Dist. : Bharuch.

Test Method : As per IS Standards - 11255_1/2/3/7

Sr. No.	Particulars	Unit	Stack- 2
01	Date of Sampling	—	29-05-2024
02	Time of sampling	Hr.	11:45
03	Stack Attached to	—	Packing Plant (1 No.)
04	Air Pollution Control Measures	—	Bag Filter
05	Stack Height	Meter	50
06	Stack Diameter	Meter	—
07	Stack Temperature	°C	61
08	Ambient Temperature	°C	32
09	Average Velocity of Flue Gases	m/Sec.	7.1
10	Isokinetic flow rate for P.M. Sampling	LPM	20
11	Gaseous Sampling Flow Rate	LPM	2.0
12	Permissible limits for PM	mg/Nm ³	150
13	Measured Concentration of PM.	mg/Nm ³	19
14	Permissible limits for SO ₂	ppm	100
15	Measured Concentration of SO ₂	ppm	0.0
16	Permissible limits for NO _x	ppm	50
17	Measured Concentration of NO _x	ppm	0.0

Instruments Used : Ecotech Stack Kit model No ESS - 100
Calibration done on : 14/01/2024



Royal
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Ref. No. : 905/05/2024-25

Date: 31/05/2024

STACK EMISSION MONITORING ANALYSIS

Name of Company : M/s. Adani Cement Industries Limited,

Plot No.136/P to 141/P, 144/P, 145/P, 151/P to 155/P,

162/P, 174/P to 176/P, 178/P, 179/P, 187/P to 191/P of

Village: Dahej in Dahej Industrial Estate,

Tal. : Vagra, Dist. : Bharuch.

Test Method : As per IS Standards - 11255_1/2/3/7

Sr. No.	Particulars	Unit	Stack- 4
01	Date of Sampling	---	29-05-2024
02	Time of sampling	Hr.	12:30
03	Stack/Vent Attached to	---	Conveyor belt 531BC1 transfer point Vent
04	Air Pollution Control Measures	---	Bag Filter
05	Stack/ vent Height	Meter	30
06	Stack/Vent Diameter	Meter	---
07	Stack/Vent Temperature	°C	62
08	Ambient Temperature	°C	32
09	Average Velocity of Flue Gases	m/Sec.	7.5
10	Isokinetic flow rate for P.M. Sampling	LPM	22
11	Gaseous Sampling Flow Rate	LPM	2.0
12	Permissible limits for PM	mg/Nm ³	150
13	Measured Concentration of PM.	mg/Nm ³	32
14	Permissible limits for SO ₂	ppm	100
15	Measured Concentration of SO ₂	ppm	0.0
16	Permissible limits for NO _x	ppm	50
17	Measured Concentration of NO _x	ppm	0.0

Instruments Used : Ecotech Stack Kit model No. ESS - 100

Calibration done on : 14/01/2024

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Analyst



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Ref. No. : 907/05/2024-25

Date: 31/05/2024

STACK EMISSION MONITORING ANALYSIS

Name of Company : **M/s. Adani Cement Industries Limited,**
Plot No.136/P to 141/P, 144/P, 145/P, 151/P to 155/P,
162/P, 174/P to 176/P, 178/P, 179/P, 187/P to 191/P of
Village: Dahej in Dahej Industrial Estate,
Tal. : Vagra, Dist. : Bharuch.

Test Method : As per IS Standards - 11255_1/2/3/7

Sr. No.	Particulars	Unit	Stack- 6
01	Date of Sampling	---	29-05-2024
02	Time of sampling	Hr.	14:45
03	Stack/Vent Attached to	---	Conveyor belt 491BC1 transfer point
04	Air Pollution Control Measures	---	Bag Filter
05	Stack/Vent Height	Meter	30
06	Stack/Vent Diameter	Meter	---
07	Stack/Vent Temperature	°C	66
08	Ambient Temperature	°C	30
09	Average Velocity of Flue Gases	m/Sec.	7.5
10	Isokinetic flow rate for P.M. Sampling	LPM	22
11	Gaseous Sampling Flow Rate	LPM	2.0
12	Permissible limits for PM	mg/Nm ³	150
13	Measured Concentration of PM.	mg/Nm ³	45
14	Permissible limits for SO ₂	ppm	100
15	Measured Concentration of SO ₂	ppm	0.0
16	Permissible limits for NO _x	ppm	50
17	Measured Concentration of NO _x	ppm	0.0

Instruments Used : Ecotech Stack Kit model No ESS - 100
Calibration done on : 14/01/2024

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Ref. No. : 909/05/2024-25

Date: 31/05/2024

STACK EMISSION MONITORING ANALYSIS

Name of Company : **M/s. Adani Cement Industries Limited,**
Plot No.136/P to 141/P, 144/P, 145/P, 151/P to 155/P,
162/P, 174/P to 176/P, 178/P, 179/P, 187/P to 191/P of
Village: Dahel in Dahel Industrial Estate,
Tal. : Vagra, Dist. : Bharuch.

Test Method : As per IS Standards - 11255_1/2/3/7

Sr. No.	Particulars	Unit	Stack - 8
01	Date of Sampling	---	29-05-2024
02	Time of sampling	Hr.	14:45
03	Stack/Vent Attached to	---	Conveyor belt K11BC2
04	Air Pollution Control Measures	---	Bag Filter
05	Stack/Vent Height	Meter	30
06	Stack/Vent Diameter	Meter	---
07	Stack/Vent Temperature	°C	67
08	Ambient Temperature	°C	32
09	Average Velocity of Flue Gases	m/Sec.	8.1
10	Isokinetic flow rate for P.M. Sampling	LPm	23
11	Gaseous Sampling Flow Rate	LPm	2.0
12	Permissible limits for PM	mg/Nm ³	150
13	Measured Concentration of PM.	mg/Nm ³	45
14	Permissible limits for SO ₂	ppm	100
15	Measured Concentration of SO ₂	ppm	0.0
16	Permissible limits for NO _x	ppm	50
17	Measured Concentration of NO _x	ppm	0.0

Instruments Used : Ecotech Stack Kit model No. ESS - 100
Calibration done on : 14/01/2024

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Ref. No. : 91105/2024-25

Date: 31/05/2024

WORK ZONE NOISE LEVEL MEASUREMENT

Name of Company : M/s. Adani Cement Industries Limited,

Plot No.136/P to 141/P, 144/P, 145/P, 151/P to 155/P,
162/P, 174/P to 176/P, 178/P, 179/P, 187/P to 191/P of

Village: Dahej in Dahej Industrial Estate,

Tal. : Vagra, Dist. : Bharuch.

Sample Collection Date :29/05/2024

Sample Collection Date :29/05/2024			
Sr. No.	Location of Sampling	Results in dB(A)	
		Day Time 06:30am to 10:30pm	Night Time 10:30pm to 06:30am
Permissible Limits for 08:00 Hrs.		90.0 dB(A)	
01.	Main Compressor Room	83.6	75.8
02.	Cement Mill	82.6	74.8
03.	Fly Ash Compressor Room	81.5	73.6

Instruments used : Sound level meter, Model : SL 4030 (Lutron)

Range : A - 30 to 80 dB, B-50 to 100 dB, C-80 to 130 dB.

Calibration is done on : 17/05/2024

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Ref. No: 915/05/2024-25

Date: 17/05/2024

REPORT OF DRINKING WATER SAMPLES

Name of company : M/s. Adani Cement Industries Limited,
Plot No. 136/P to 141/P, 144/P, 145/P, 151/P to 155/P,
162/P, 174/P to 176/P, 178/P, 179/P, 187/P to 191/P of
Village: Dahej in Dahej Industrial Estate,
Tal. : Vagra, Dist. : Bharuch.

Source of Sample : Drinking Water (Admin Office)
Date of Sampling : 13/05/2024

Sr. No.	Parameters	Unit	Acceptable Limits(*)	Results
01.	pH	pH Units	6.5 to 8.5	7.5
02.	Colour	Hazen	5	Colourless
03.	Turbidity	NTU	1	< 1.0
04.	Total Dissolved Solids	mg/l	500	125
05.	Total Suspended Solids	mg/l	---	13
06.	Total Solids	mg/l	---	140
07.	Chlorides	mg/l	250	52
08.	Sulphates	mg/l	200	12.9
09.	Total Hardness (As CaCO_3)	mg/l	200	67.9
10.	Calcium (as Ca)	mg/l	75	21.9
11.	Magnesium (as Mg)	mg/l	30	6.7
12.	Total Alkalinity	mg/l	200	32
13.	Nitrates	mg/l	45	4.5
14.	Flouride	mg/l	1.0	0.06
15.	E-Coli	MPN/100ml	Absent	Absent

(*) Acceptable Limit as per IS 10500 : 2012, Drinking Water Specification

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Ref No : 917/05/2024-25

Date: 31/05/2024

RESULTS OF AMBIENT AIR QUALITY MONITORING FOR THE MONTH : MAY 2024

Name of company : M/s. Adani Cement Industries Limited,
Plot No.135IP to 141IP, 144IP, 145IP, 151IP to 155IP,
152IP, 174IP to 176IP, 178IP, 179IP, 187IP to 191IP of
Village: Dabej in Dabej Industrial Estate,
Tal. : Vagra, Dist. : Bhavnagar.

S. No.	Particulars	Unit	Packing Plant (South)							
			1	2	3	4				
01.	No. of Week	-	1	2	3	4				
02.	Date & Time Starting of Monitoring	-	06/05/2024 09:00	07/05/2024 09:10	13/05/2024 09:30	14/05/2024 09:40	20/05/2024 10:00	21/05/2024 10:10	27/05/2024 11:15	28/05/2024 11:30
03.	Date & Time - Ending of Monitoring	-	07/05/2024 09:00	08/05/2024 09:10	14/05/2024 09:30	15/05/2024 09:40	21/05/2024 10:00	22/05/2024 10:10	28/05/2024 11:15	29/05/2024 11:30
04.	Duration of Sampling	Min	1440	1440	1440	1440	1440	1440	1440	1440
05.	Dominant Wind Direction (From)	-	NE	NE	SE	SE	NE	SE	SE	SE
06.	Wind Speed Velocity	Km/h	2 to 13	1 to 13	2 to 12	2 to 16	3 to 16	1 to 16	3 to 15	3 to 14
07.	Average Flow Rate For PM2.5	mg/m ³	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
08.	Average Flow Rate For PM10	mg/m ³	1.13	1.12	1.18	1.14	1.12	1.11	1.12	1.21
09.	Average Flow Rate for Gaseous	LPM	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
10.	Permissible Limits of PM2.5 *	µg/m ³	60	60	60	60	60	60	60	60
11.	Measured Concentration of PM2.5	µg/m ³	41.5	40.3	45.8	51.6	40.6	36.8	45.8	49.2
12.	Permissible Limits of PM10 *	µg/m ³	100	100	100	100	100	100	100	100
13.	Measured Concentration of PM10	µg/m ³	63.8	62.5	70.5	73.5	59.3	63.8	65.8	71.6
14.	Permissible Limits of SO ₂ *	µg/m ³	80	80	80	80	80	80	80	80
15.	Measured Concentration of SO ₂	µg/m ³	14.5	12.3	13.6	17.5	13.5	15.1	16.2	15.2
16.	Permissible Limits of NO ₂ *	µg/m ³	80	80	80	80	80	80	80	80
17.	Measured Concentration of NO ₂	µg/m ³	20.3	23.6	25.1	22.4	19.6	18.2	20.3	21.8

Instrument Used: Ecotech make (1) RDS, APV - 27BL, (2) Gaseous Pollutants Sampler- AAS-109, (3) Ecotech PM2.5 Sampler- AAS-127

Calibration Done on : 13/01/2024

Royal Environment Auditing & Consultancy Services, Rajkot

Analyst



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Ref No: 91905/2024-25

Date: 31/05/2024

RESULTS OF AMBIENT AIR QUALITY MONITORING FOR THE MONTH : MAY 2024

Name of company : M/s. Adani Cement Industries Limited,
Plot No.136IP to 141IP, 144IP, 145IP, 151IP to 155IP,
162IP, 174IP to 176IP, 178IP, 179IP, 187IP to 191IP of
Village: Dahaj in Dahaj Industrial Estate,
Tal.: Vagra, Dist.: Bharuch.

S. No.	Particulars	Unit	Clinker Silo (West)							
			1	2	3	4				
01.	No. of Week	-								
02.	Date & Time Starting of Monitoring	-	06/05/2024 12:00	07/05/2024 12:15	13/05/2024 12:30	14/05/2024 12:45	20/05/2024 13:00	21/05/2024 13:15	27/05/2024 13:15	28/05/2024 13:30
03.	Date & Time - Ending of Monitoring	-	07/05/2024 12:00	08/05/2024 12:15	14/05/2024 12:30	15/05/2024 12:45	21/05/2024 13:00	22/05/2024 13:15	28/05/2024 13:15	29/05/2024 13:30
04.	Duration of Sampling	Min	1440	1440	1440	1440	1440	1440	1440	1440
05.	Dominant Wind Direction (From)	-	NE	NE	SE	SE	NE	SE	SE	SE
06.	Wind Speed Velocity	km/h	2 to 13	1 to 13	2 to 12	2 to 16	3 to 16	1 to 16	3 to 15	3 to 14
07.	Average Flow Rate For PM2.5	mg/hr	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
08.	Average Flow Rate For PM10	mg/hr	1.13	1.12	1.18	1.14	1.12	1.11	1.12	1.21
09.	Average Flow Rate for Gaseous	LPm	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
10.	Permissible Limits of PM2.5 *	µgm³	60	60	60	60	60	60	60	60
11.	Measured Concentration of PM2.5	µgm³	35.2	41.6	44.8	51.3	39.6	33.8	36.8	42.6
12.	Permissible Limits of PM10 *	µgm³	100	100	100	100	100	100	100	100
13.	Measured Concentration of PM10	µgm³	61.5	58.3	62.8	69.2	63.5	51.8	67.5	68.2
14.	Permissible Limits of SO ₂ *	µgm³	80	80	80	80	80	80	80	80
15.	Measured Concentration of SO ₂	µgm³	12.6	13.5	15.2	16.2	11.5	15.4	16.5	13.5
16.	Permissible Limits of NO ₂ *	µgm³	80	80	80	80	80	80	80	80
17.	Measured Concentration of NO ₂	µgm³	21.4	23.6	25.4	22.3	21.6	23.6	24.8	22.5

Instrument Used: Ecomet-400 (1) 305, 4P4, 211B, (2) Gascon Pollution Sampler, A4E-102 (3) Beckman PM2.5 Sampler, A4E-121
Calibrated Date: 13/1/2024

Royal Environment Auditing & Consultancy Service, Rajkot

Analyst



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Ref. No. : 102/06/2024-25

Date: 01/07/2024

STACK EMISSION MONITORING ANALYSIS

Name of Company : M/s. Adani Cement Industries Limited,
Plot No.136/P to 141/P, 144/P, 145/P, 151/P to 155/P,
162/P, 174/P to 176/P, 178/P, 179/P, 187/P to 191/P of
Village: Dahej in Dahej Industrial Estate,
Tal. : Vagra, Dist. : Bharuch.

Test Method : As per IS Standards - 11255_1/2/3/7

Sr. No.	Particulars	Unit	Stack-1
01	Date of Sampling	---	27/06/2024
02	Time of sampling	Hr.	11:15
03	Stack Attached to	---	Cement Mill
04	Air Pollution Control Measures	---	Bag Filter
05	Stack Height	Meter	70
06	Stack Diameter	Meter	---
07	Stack Temperature	°C	80
08	Ambient Temperature	°C	30
09	Average Velocity of Flue Gases	m/Sec.	7.1
10	Isokinetic flow rate for P. M. Sampling	LPM	20
11	Gaseous Sampling Flow Rate	LPM	2.0
12	Permissible limits for PM	mg/Nm ³	150
13	Measured Concentration of PM.	mg/Nm ³	24
14	Permissible limits for SO ₂	ppm	100
15	Measured Concentration of SO ₂	ppm	0.0
16	Permissible limits for NO _x	ppm	50
17	Measured Concentration of NO _x	ppm	0.0

Instruments Used : EcoTech Stack Kit model No ESS - 100
Calibration done on : 14/01/2024

Royal Environment Auditing & Consultancy Service

Analyst



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Ref. No. : 104/06/2024-25

Date: 01/07/2024

STACK EMISSION MONITORING ANALYSIS

Name of Company : M/s. Adani Cement Industries Limited,

Plot No. 136/P to 141/P, 144/P, 145/P, 151/P to 155/P,

162/P, 174/P to 176/P, 178/P, 179/P, 187/P to 191/P of

Village: Dahej in Dahej Industrial Estate,

Tal. : Vagra, Dist. : Bharuch.

Test Method : As per IS Standards - 11255_1/2/3/7

Sr. No.	Particulars	Unit	Stack-3
01	Date of Sampling	—	27/06/2024
02	Time of sampling	Hr.	12:00
03	Stack/Vent Attached to	—	Conveyor belt L11BC1 Vent
04	Air Pollution Control Measures	—	Bag Filter
05	Stack/Vent Height	Meter	30
06	Stack/Vent Diameter	Meter	—
07	Stack/Vent Temperature	°C	62
08	Ambient Temperature	°C	30
09	Average Velocity of Flue Gases	m/Sec.	7.1
10	Isokinetic flow rate for P.M. Sampling	LPM	22
11	Gaseous Sampling Flow Rate	LPM	2.0
12	Permissible limits for PM	mg/Nm ³	150
13	Measured Concentration of PM.	mg/Nm ³	40
14	Permissible limits for SO ₂	ppm	100
15	Measured Concentration of SO ₂	ppm	0.0
16	Permissible limits for NO _x	ppm	50
17	Measured Concentration of NO _x	ppm	0.0

Instruments Used : Ecotech Stack Kit model No ESS - 100

Calibration done on : 14/01/2024

Royal Environment Auditing & Consultancy Service

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Ref. No. : 106/06/2024-25 Date: 01/07/2024

STACK EMISSION MONITORING ANALYSIS

Name of Company : M/s. Adani Cement Industries Limited,
Plot No.136/P to 141/P, 144/P, 145/P, 151/P to 155/P,
162/P, 174/P to 176/P, 178/P, 179/P, 187/P to 191/P of
Village: Dahel in Dahel Industrial Estate,
Tal. : Vagra, Dist. : Bharuch.

Test Method : As per IS Standards - 11255_1/2/3/7

Sr. No.	Particulars	Unit	Stack- 5
01	Date of Sampling	---	27/06/2024
02	Time of sampling	Hr.	14:00
03	Stack/Vent Attached to	---	Conveyor belt K11BC1 transfer point vent
04	Air Pollution Control Measures	---	Bag Filter
05	Stack/Vent Height	Meter	30
06	Stack/Vent Diameter	Meter	---
07	Stack/Vent Temperature	°C	63
08	Ambient Temperature	°C	31
09	Average Velocity of Flue Gases	m/Sec.	6.9
10	Isokinetic flow rate for P.M. Sampling	LPM	20
11	Gaseous Sampling Flow Rate	LPM	2.0
12	Permissible limits for PM	mg/Nm ³	150
13	Measured Concentration of PM.	mg/Nm ³	43
14	Permissible limits for SO ₂	ppm	100
15	Measured Concentration of SO ₂	ppm	0.0
16	Permissible limits for NO _x	ppm	50
17	Measured Concentration of NO _x	ppm	0.0

Instruments Used : EcoTech Stack Kit model No. ESS - 100
Calibration done on : 14/01/2024

Royal Environment Auditing & Consultancy Service



Analyst

5



Ref. No. : 108/06/2024-25
Date: 01/07/2024

STACK EMISSION MONITORING ANALYSIS

Name of Company : M/s. Adani Cement Industries Limited,
Plot No. 136/P to 141/P, 144/P, 145/P, 151/P to 155/P,
162/P, 174/P to 176/P, 178/P, 179/P, 187/P to 191/P of
Village: Dahel in Dahel Industrial Estate,
Tal. : Vagra, Dist. : Bharuch.

Test Method : As per IS Standards - 11255_1/2/3/7

Sr. No.	Particulars	Unit	Stack- 7
01	Date of Sampling	---	27/06/2024
02	Time of sampling	Hr.	15:00
03	Stack/Vent Attached to	---	Conveyor belt 491BC2 transfer point
04	Air Pollution Control Measures	---	Bag Filler
05	Stack/Vent Height	Meter	30
06	Stack/Vent Diameter	Meter	---
07	Stack/Vent Temperature	°C	65
08	Ambient Temperature	°C	30
09	Average Velocity of Flue Gases	m/Sec.	7.4
10	Isokinetic flow rate for P.M. Sampling	LPM	20
11	Gaseous Sampling Flow Rate	LPM	2.0
12	Permissible limits for PM	mg/Nm ³	150
13	Measured Concentration of PM.	mg/Nm ³	34
14	Permissible limits for SO ₂	ppm	100
15	Measured Concentration of SO ₂	ppm	0.0
16	Permissible limits for NO _x	ppm	50
17	Measured Concentration of NO _x	ppm	0.0

Instruments Used : Ecodach Stack Kit model No. ESS - 100
Calibration done on : 14/01/2024





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Ph.: +91 9099919354 ■ E-mail : royaleenvironment@live.com ■ admin@royalconsultancy.com

Ref. No. : 11/0/06/2024-25

Date: 01/07/2024

STACK EMISSION MONITORING ANALYSIS

Name of Company : M/s. Adani Cement Industries Limited,

Plot No. 136/P to 141/P, 144/P, 145/P, 151/P to 155/P,
162/P, 174/P to 176/P, 178/P, 179/P, 187/P to 191/P of
Village: Dahej in Dahej Industrial Estate,
Tal. : Vagra, Dist. : Bharuch.

Test Method : As per IS Standards - 11255_1/2/3/7

Sr. No.	Particulars	Unit	CS-01 Vent	CS-02 Vent
01	Date of Sampling	---	27/06/2024	27/06/2024
02	Time of sampling	Hr.	15:45	16:30
03	Stack/Vent Attached to	---	Cement Silo -1	Cement Silo -2
04	Air Pollution Control Measures	---	Bag Filter	Bag Filter
05	Stack/Vent Height	Meter	30	30
06	Stack/Vent Diameter	Meter	---	---
07	Stack/Vent Temperature	°C	60	64
08	Ambient Temperature	°C	30	31
09	Average Velocity of Flue Gases	m/Sec.	7.6	8.2
10	Isokinetic flow rate for P.M. Sampling	LPM	22	23
11	Gaseous Sampling Flow Rate	LPM	2.0	2.0
12	Permissible limits for PM	mg/Nm ³	150	150
13	Measured Concentration of PM.	mg/Nm ³	27	32
14	Permissible limits for SO ₂	ppm	100	100
15	Measured Concentration of SO ₂	ppm	0.0	0.0
16	Permissible limits for NO _x	ppm	50	50
17	Measured Concentration of NO _x	ppm	0.0	0.0

Instruments Used : Ecotech Stack Kit model No. ESS - 100

Calibration done on : 14/01/2024

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Ref. No.: 112/06/2024-25

Date: 01/07/2024

AMBIENT NOISE LEVEL MEASUREMENT

Name of Company : M/s. Adani Cement Industries Limited,

Plot No.136/P to 141/P, 144/P, 145/P, 151/P to 155/P,

162/P, 174/P to 176/P, 178/P, 179/P, 187/P to 191/P of

Village: Dahej in Dahej Industrial Estate,

Tal.: Vagra, Dist.: Bharuch.

Sample Collection Date : 18/06/2024

Sr. No.	Location of Sampling	Results in dB(A)	Results in dB(A)
		(Day Time) 6:30am to 10:30pm	(Night Time) 10:30pm to 6:30am
Permissible Limits		75.0	70.0
01.	Security Main gate (East)	69.3	61.2
02.	Packing plant (South)	70.2	64.2
03.	Cement mill (North)	71.3	65.8
04	Clinker Silo (West)	73.2	64.2

CPCB Standards			
Area Code	Category of Area / Zone	Limit in dB(A) Leq.	
		Day Time	Night Time
A	Industrial Area	75.0	70.0
B	Commercial Area	65.0	55.0
C	Residential Area	55.0	45.0
D	Silence Zone	50.0	40.0

Instruments used : Sound level meter, Model : SL 4030 (Lutron)
Range : A - 30 to 80 dB, B-50 to 100 dB, C-80 to 130 dB.
Calibration is done on : 17/05/2024

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Analyst



Date: 01/07/2024

REPORT OF EFFLUENT ANALYSIS

Name of company : M/s. Adani Cement Industries Limited,

Plot No. 136/P to 141/P, 144/P, 145/P, 151/P to 155/P, 162/P, 174/P to 176/P, 178/P, 179/P, 187/P to 191/P of

Village: Dahej in Dahej Industrial Estate,

Tal. : Vagra, Dist. : Bharuch.

Source of Sample Collection : Sewage Treatment Plant

Date of Sampling : 18/06/2024

Sr. No.	Parameters	Unit	Permissible Limit*	STP O/L
01.	pH	mg/l	6.5-9	7.6
01.	Total Suspended Solids	mg/l	<100	45
02.	B.O.D. (3 day's at 27 °C)	mg/l	<30	23.6
03.	Fecal Coliform	MPN	<1000MPN/100ml	0.5

* Permissible limit is only applicable to STP O/L (Treated Water)

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Ref. No : 11606/2024-25

Date: 01/07/2024

RESULTS OF AMBIENT AIR QUALITY MONITORING FOR THE MONTH : JUNE 2024

Name of company : M/s. Adani Cement Industries Limited.
Plot No. 136/P to 141/P, 144/P, 145/P, 151/P to 155/P,
162/P, 174/P to 176/P, 179/P, 187/P to 191/P of
Village: Dahej in Dahej Industrial Estate,
Tal. : Vagra, Dist. : Bhavnagar.

S. No.	Particulars	Unit	Nr. Main Security Main gate (East)							
			1		2		3		4	
01.	No. of Week	—	—		—		—		—	
02.	Date & Time Starting of Monitoring	—	03/06/2024 11:30	04/06/2024 11:45	10/06/2024 12:00	11/06/2024 12:15	17/06/2024 12:30	18/06/2024 12:45	24/06/2024 13:00	25/06/2024 13:15
03.	Date & Time - Ending of Monitoring	—	04/06/2024 11:30	05/06/2024 11:45	11/06/2024 12:00	12/06/2024 12:15	18/06/2024 12:30	19/06/2024 12:45	25/06/2024 13:00	26/06/2024 13:15
04.	Duration of Sampling	Min	1440	1440	1440	1440	1440	1440	1440	1440
05.	Dominant Wind Direction (From)	—	NE	NE	SE	SE	NE	SE	SE	SE
06.	Wind Speed Velocity	km/hr	2 to 15	3 to 17	2 to 11	2 to 14	4 to 18	2 to 13	3 to 12	2 to 14
07.	Average Flow Rate For PM2.5	mg/hr	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
08.	Average Flow Rate For PM10	mg/hr	1.13	1.12	1.18	1.14	1.12	1.11	1.12	1.21
09.	Average Flow Rate for Gaseous	PPM	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
10.	Permissible Limits of PM2.5 *	µg/m ³	60	60	60	60	60	60	60	60
11.	Measured Concentration of PM2.5	µg/m ³	30.2	32.5	34.5	29.3	29.1	32.5	34.5	39.1
12.	Permissible Limits of PM10 *	µg/m ³	100	100	100	100	100	100	100	100
13.	Measured Concentration of PM10	µg/m ³	63.1	65.8	62.3	69.1	72.1	65.8	73.0	65.8
14.	Permissible Limits of SO ₂ *	µg/m ³	80	80	80	80	80	80	80	80
15.	Measured Concentration of SO ₂	µg/m ³	11.2	12.6	14.5	13.6	16.5	17.5	11.5	13.5
16.	Permissible Limits of NO ₂ *	µg/m ³	80	80	80	80	80	80	80	80
17.	Measured Concentration of NO ₂	µg/m ³	24.6	22.6	19.6	17.5	18.6	20.0	20.3	24.1

Instrument Used: EcoTech make (1) RDS, APM - 211BL, (2) Gaseous Pollutants Sampler - AAS-109, (3) EcoTech PM2.5 Sampler - AAS 127
Calibration Done on : 13/01/2024



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Ref No: RA/06/2024-25

Date: 01/07/2024

RESULTS OF AMBIENT AIR QUALITY MONITORING FOR THE MONTH : June 2024

Name of company : M/s. Adani Cement Industries Limited,
Plot No.136IP to 141IP, 144IP, 145IP, 151IP to 155IP,
162IP, 174IP to 176IP, 178IP, 179IP, 187IP to 191IP of
Village: Dahel in Dahel Industrial Estate,
Tal. : Vagra, Dist. : Bhavnagar.

S. No.	Particulars	Unit	Cement mill (North)							
			1	2	3	4				
01.	No. of Week	—	1	2	3	4				
02.	Date & Time Starting of Monitoring	—	06/06/2024 09:15	07/06/2024 09:25	13/06/2024 09:45	14/06/2024 09:55	20/06/2024 10:15	21/06/2024 10:25	27/06/2024 12:15	28/06/2024 12:30
03.	Date & Time - Ending of Monitoring	—	07/06/2024 09:15	08/06/2024 09:25	14/06/2024 09:45	15/06/2024 09:55	21/06/2024 10:15	22/06/2024 10:25	28/06/2024 12:15	29/06/2024 12:30
04.	Duration of Sampling	Min	1440	1440	1440	1440	1440	1440	1440	1440
05.	Dominant Wind Direction (From)	—	NE	NE	SE	SE	NE	SE	SE	SE
06.	Wind Speed Velocity	Km/hr	2 to 13	1 to 13	2 to 12	2 to 16	3 to 16	1 to 16	3 to 15	3 to 14
07.	Average Flow Rate For PM2.5	mg/hr	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
08.	Average Flow Rate For PM10	mg/hr	1.13	1.12	1.18	1.14	1.12	1.11	1.12	1.21
09.	Average Flow Rate for Gaseous	PPM	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
10.	Permissible Limits of PM2.5 *	µg/m ³	60	60	60	60	60	60	60	60
11.	Measured Concentration of PM2.5	µg/m ³	37.5	41.6	47.5	51.6	40.2	47.5	43.5	39.2
12.	Permissible Limits of PM10 *	µg/m ³	100	100	100	100	100	100	100	100
13.	Measured Concentration of PM10	µg/m ³	60.5	64.8	65.8	71.5	75.8	69.5	70.2	65.5
14.	Permissible Limits of SO ₂ *	µg/m ³	80	80	80	80	80	80	80	80
15.	Measured Concentration of SO ₂	µg/m ³	15.2	11.5	10.6	15.8	14.5	13.5	16.5	14.2
16.	Permissible Limits of NO ₂ *	µg/m ³	80	80	80	80	80	80	80	80
17.	Measured Concentration of NO ₂	µg/m ³	25.3	21.5	24.5	23.6	20.9	23.5	24.5	25.9

Instrument Used: Ecotech make (1) ROS, APM - 217BL, (2) Gaseous Pollutants Sampler, AAS-105, (3) Ecotech PM2.5 Sampler, AAS 127
Calibration Done on: 13/01/2024

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REAS/ACIL/2024-25/06-01

Date: 01/08/2024

To,

M/s. Adani Cement Industries Limited,
Plot No.136/P to 141/P, 144/P, 145/P, 151/P to 155/P,
162/P, 174/P to 176/P, 178/P, 179/P, 187/P to 191/P of
Village: Dahel in Dahel Industrial Estate,
Tal. : Vagra Dist. : Bharuch.

Kind attn.: Mr. Kalubhai Goyani

Sub.: Report of Stack Emission Analysis, Waste water analysis.

Ref.: Our visit at AWL Plant is on July2024.

Dear Sir,

Please find enclosed following analysis report in one copy:

1. Report of Waste Water Analysis	01 Samples
2. Report of Stack Emission Monitoring	10 Locations
3. Report of National Ambient Air Quality Monitoring	40 Locations
4. Report of Drinking Water Analysis	01 Samples
5. Report of Ambient Noise Level Monitoring	04 Samples
6. Report of Work Place Noise Level Monitoring	03 Samples
7. Report of Fugitive Emission	05 Samples

Thanking you,

Yours faithfully,

Royal Environment Auditing & Consultancy Service,



Digvijay Jadeja

Encl: As above.



Ref. No : 203/07/2024-25 Date: 01/08/2024

STACK EMISSION MONITORING ANALYSIS

Name of Company : M/s. Adani Cement Industries Limited,
Plot No. 136/P to 141/P, 144/P, 145/P, 151/P to 155/P,
162/P, 174/P to 176/P, 178/P, 179/P, 187/P to 191/P of
Village: Dahej in Dahej Industrial Estate,
Tal. : Vagra, Dist. : Bharuch.

Test Method : As per IS Standards - 11255_1/2/3/7

Sr. No.	Particulars	Unit	Stack-2
01	Date of Sampling	---	12-07-2024
02	Time of sampling	Hr	14:00
03	Stack Attached to	---	Packing Plant (1 No.)
04	Air Pollution Control Measures	---	Bag Filter
05	Stack Height	Meter	50
06	Stack Diameter	Meter	---
07	Stack Temperature	°C	56
08	Ambient Temperature	°C	30
09	Average Velocity of Flue Gases	m/Sec.	7.3
10	Isokinetic flow rate for P.M. Sampling	LPM	19
11	Gaseous Sampling Flow Rate	LPM	2.0
12	Permissible limits for PM	mg/Nm ³	150
13	Measured Concentration of PM.	mg/Nm ³	21
14	Permissible limits for SO ₂	ppm	100
15	Measured Concentration of SO ₂	ppm	0.0
16	Permissible limits for NO _x	ppm	50
17	Measured Concentration of NO _x	ppm	0.0

Instruments Used : EcoLech Stack Kit model No. ESS - 100
Calibration done on : 14/01/2024

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Ref. No. : 205/07/2024-25

Date: 01/08/2024

STACK EMISSION MONITORING ANALYSIS

Name of Company : **M/s. Adani Cement Industries Limited,**

Plot No. 136/P to 141/P, 144/P, 145/P, 151/P to 155/P,

162/P, 174/P to 176/P, 178/P, 179/P, 187/P to 191/P of

Village: Dahej in Dahej Industrial Estate,

Tal. : Vagra, Dist. : Bharuch.

Test Method : As per IS Standards - 11255_1/2/3/7

Sr. No.	Particulars	Unit	Stack- 4
01	Date of Sampling	---	12/07/2024
02	Time of sampling	Hr.	14:55
03	Stack/Vent Attached to	---	Conveyor belt S31BC1 transfer point Vent
04	Air Pollution Control Measures	---	Bag Filter
05	Stack/ vent Height	Meter	30
06	Stack/Vent Diameter	Meter	---
07	Stack/Vent Temperature	°C	58
08	Ambient Temperature	°C	31
09	Average Velocity of Flue Gases	m/Sec.	7.8
10	Isokinetic flow rate for P.M. Sampling	LPM	20
11	Gaseous Sampling Flow Rate	LPM	2.0
12	Permissible limits for PM	mg/Nm ³	150
13	Measured Concentration of PM.	mg/Nm ³	38
14	Permissible limits for SO ₂	ppm	100
15	Measured Concentration of SO ₂	ppm	0.0
16	Permissible limits for NO _x	ppm	50
17	Measured Concentration of NO _x	ppm	0.0

Instruments Used : EcoLech Stack Kit model No ESS - 100

Calibration done on : 14/01/2024

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Analyst

Ref No 207/07/2024-25

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STACK EMISSION MONITORING ANALYSIS

Name of Company : M/s. Adani Cement Industries Limited,

Plot No.136/P to 141/P, 144/P, 145/P, 151/P to 155/P,

162/P, 174/P to 176/P, 178/P, 179/P, 187/P to 191/P of

Village: Dahej in Dahej Industrial Estate,

Tal : Vagra, Dist : Bharuch

Test Method : As per IS Standards - 11255_1/2/3/7

Sr. No.	Particulars	Unit	Stack- 6
01	Date of Sampling	---	20/07/2024
02	Time of sampling	Hr.	12:30
03	Stack/Vent Attached to	---	Conveyor belt 491BC1 transfer point
04	Air Pollution Control Measures	---	Bag Filter
05	Stack/Vent Height	Meter	30
06	Stack/Vent Diameter	Meter	---
07	Stack/Vent Temperature	°C	64
08	Ambient Temperature	°C	31
09	Average Velocity of Flue Gases	m/Sec.	7.6
10	Isokinetic flow rate for P.M Sampling	L.PM	21
11	Gaseous Sampling Flow Rate	L.PM	2.0
12	Permissible limits for PM	mg/Nm ³	150
13	Measured Concentration of PM	mg/Nm ³	36
14	Permissible limits for SO ₂	ppm	100
15	Measured Concentration of SO ₂	ppm	0.0
16	Permissible limits for NO _x	ppm	50
17	Measured Concentration of NO _x	ppm	0.0

Instruments Used : EcoTech Stack Kit model No. ESS - 100

Calibration done on : 14/01/2024

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[Signature]
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Ref. No : 209/07/2024-25
Date: 01/08/2024

STACK EMISSION MONITORING ANALYSIS

Name of Company : M/s. Adani Cement Industries Limited,
Plot No. 136/P to 141/P, 144/P, 145/P, 151/P to 155/P,
162/P, 174/P to 176/P, 178/P, 179/P, 187/P to 191/P of
Village: Dahel in Dahel Industrial Estate,
Tal. : Vagra, Dist. : Bharuch.

Test Method : As per IS Standards - 11255_1/2/3/7

Sr. No.	Particulars	Unit	Stack- 8
01	Date of Sampling	—	20/07/2024
02	Time of sampling	Hr.	14:45
03	Stack/Vent Attached to	—	Conveyor belt K11BC2
04	Air Pollution Control Measures	—	Bag Filter
05	Stack/Vent Height	Meter	30
06	Stack/Vent Diameter	Meter	---
07	Stack/Vent Temperature	°C	63
08	Ambient Temperature	°C	32
09	Average Velocity of Flue Gases	m/Sec.	8.1
10	Isokinetic flow rate for P. M. Sampling	LPm	23
11	Gaseous Sampling Flow Rate	LPm	2.0
12	Permissible limits for PM	mg/Nm ³	150
13	Measured Concentration of PM.	mg/Nm ³	31
14	Permissible limits for SO ₂	ppm	100
15	Measured Concentration of SO ₂	ppm	0.0
16	Permissible limits for NO _x	ppm	50
17	Measured Concentration of NO _x	ppm	0.0

Instruments Used : Ecotech Stack Kit model No ESS - 100
Calibration done on : 14/01/2024

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Ref. No. : 21/07/2024-25
Date: 01/08/2024

WORK ZONE NOISE LEVEL MEASUREMENT

Name of Company : M/s. Adani Cement Industries Limited,
Plot No. 136/P to 141/P, 144/P, 145/P, 151/P to 155/P,
162/P, 174/P to 176/P, 178/P, 179/P, 187/P to 191/P of
Village: Dahej in Dahej Industrial Estate,
Tal. : Vagra, Dist. : Bharuch.

Sample Collection Date :20/07/2024

Sr. No.	Location of Sampling	Results in dB(A)	
		Day Time 06:30am to 10:30pm	Night Time 10:30pm to 06:30am
Permissible Limits for 08:00 Hrs.		90.0 dB(A)	
01	Main Compressor Room	83.1	70.1
02	Cement Mill	80.2	68.1
03	Fly Ash Compressor Room	78.2	71.1

Instruments used : Sound level meter, Model : VSLM-932 (Vaibhav)
Range : A - 30 to 80 dB, B-50 to 100 dB, C-80 to 130 dB
Calibration is done on : 17/05/2024

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[Signature]
Analyst



Ref No : 213/07/2024-25

Date: 01/08/2024

REPORT OF FUGITIVE EMISSION ANALYSIS

Name of company : M/s. Adani Cement Industries Limited,
Plot No.136/P to 141/P, 144/P, 145/P, 151/P to 155/P,
162/P, 174/P to 176/P, 179/P, 179/P, 187/P to 191/P of
Village: Daheji in Daheji Industrial Estate,
Tal. : Vagra, Dist. : Bharuch.

Test Method : As per IS Standards - 5182_23/4/6

Sr. No.	Particulars	Unit	Location No. 1	Location No. 2	Location No. 3	Location No. 4	Location No. 5
01.	Location of Sampling	—	Clinker shed	Gypsum shed	Packing plant	Truck loading/ Parking area	Cement mill
02	Date of sampling	—	20/07/2024	20/07/2024	20/07/2024	20/07/2024	20/07/2024
03	Time of sampling	Hr	08:00	10:45	11:00	12:00	10:00
04	Duration of Sampling	Min	480	480	480	480	480
05	Dominant Wind Direction (From)	—	SW	SW	SW	SW	SW
06	Average Wind Speed	Km/h	1 to 18	4 to 20	2 to 11	2 to 20	2 to 21
07	Flow rate during sampling	m ³ /hr	1.0	1.0	1.0	1.0	1.0
08	Average flow rate for Gas sampling	LPM	0.2	0.2	0.2	0.2	0.2
09.	Permissible Limits of SPM *	µg/m ³	5000	5000	5000	5000	5000
10	Measured Concentration of SPM	µg/m ³	2875	3012	3214	3412	3715

Instrument used : Envirotech make (HVS), Model No. APM-430BL, Gaseous Sampling Kit,
Calibration done on : 01/01/2024

* Permissible limits of fugitive emission based on CPCB Guidelines

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Ref. No: 215/07/2024-25

Date: 01/08/2024

REPORT OF DRINKING WATER SAMPLES

Name of company : **M/s. Adani Cement Industries Limited,**
Plot No. 136/P to 141/P, 144/P, 145/P, 151/P to 155/P,
162/P, 174/P to 176/P, 178/P, 179/P, 187/P to 191/P of
Village: Dahel in Dahel Industrial Estate,
Tal. : Vagra, Dist. : Bharuch.

Source of Sample : Drinking Water (Admin Office)
Date of Sampling : 12/07/2024

Sr. No.	Parameters	Unit	Acceptable Limits(*)	Results
01.	pH	pH Units	6.5 to 8.5	7.21
02.	Colour	Hazen	5	Colourless
03.	Turbidity	NTU	1	< 1.0
04.	Total Dissolved Solids	mg/l	500	135
05.	Total Suspended Solids	mg/l	---	18
06.	Total Solids	mg/l	---	145
07.	Chlorides	mg/l	250	56
08.	Sulphates	mg/l	200	13.2
09.	Total Hardness (As CaCO ₃)	mg/l	200	62.2
10.	Calcium (as Ca)	mg/l	75	24.1
11.	Magnesium (as Mg)	mg/l	30	6.2
12.	Total Alkalinity	mg/l	200	35
13.	Nitrates	mg/l	45	3.8
14.	Flouride	mg/l	1.0	0.07
15.	E-Coli	MPN/100ml	Absent	Absent

(*) Acceptable Limit as per IS 10500 : 2012, Drinking Water Specification

Royal Environment Auditing & Consultancy Service



Analyst



Idt No : 21/07/2024-25

Date 01/08

RESULTS OF AMBIENT AIR QUALITY MONITORING FOR THE MONTH : JULY 2024

Name of company : M/s Adani Cement Industries Limited,
Ptd No. 158IP to 141IP, 144IP, 145IP, 151IP to 155IP,
162IP, 174IP to 176IP, 178IP, 179IP, 187IP to 191IP of
Village: Dahi in Dahi Industrial Estate,
Tal. : Vagra Dist. : Bhavnagar.

S No	Particulars	Unit	Packing Plant (South)									
			1	2	3	4	5					
01	No. of Week	—										
02	Date & Time Starting of Monitoring	—	01/07/2024 08:45	02/07/2024 08:55	08/07/2024 09:00	09/07/2024 09:10	15/07/2024 09:30	16/07/2024 09:40	22/07/2024 10:00	23/07/2024 10:10	29/07/2024 11:15	30/07/2024 11:30
03	Date & Time - Ending of Monitoring	—	02/07/2024 08:45	03/07/2024 08:55	09/07/2024 09:00	10/07/2024 09:10	16/07/2024 09:30	17/07/2024 09:40	23/07/2024 10:00	24/07/2024 10:10	30/07/2024 11:15	31/07/2024 11:30
04	Duration of Sampling	Min	1440	1440	1440	1440	1440	1440	1440	1440	1440	1440
05	Direction of Wind (from)	—	NE	NE	SE	SE	NE	SE	SE	SE	NE	SE
06	Wind Speed Velocity	Km/hr	3 to 17	4 to 18	2 to 13	2 to 14	2 to 14	4 to 18	3 to 15	2 to 16	4 to 19	3 to 15
07	Average Flow Rate For PM2.5	m3/hr	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
08	Average Flow Rate For PM10	m3/min	1.13	1.12	1.18	1.14	1.12	1.11	1.12	1.21	1.16	1.12
09	Average Flow Rate for Gaseous	LPM	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
10	Permissible Limits of PM2.5 *	µgm³	60	60	60	60	60	60	60	60	60	60
11	Measured Concentration of PM2.5	µgm³	38.1	43.1	48.2	56.2	41.2	52.1	40.1	50.2	46.2	52.2
12	Permissible Limits of PM10 *	µgm³	100	100	100	100	100	100	100	100	100	100
13	Measured Concentration of PM10	µgm³	66.2	60.2	58.2	62.2	63.1	68.1	72.1	62.2	57.1	53.2
14	Permissible Limits of SO ₂ *	µgm³	80	80	80	80	80	80	80	80	80	80
15	Measured Concentration of SO ₂	µgm³	12.2	14.2	16.2	18.1	13.2	15.1	13.2	17.2	18.2	13.2
16	Permissible Limits of NO ₂ *	µgm³	80	80	80	80	80	80	80	80	80	80
17	Measured Concentration of NO ₂	µgm³	20.1	23.2	26.1	21.2	22.3	24.1	25.2	25.2	22.3	24.2

Instrument Used : Easotech make (1) RD5, APIV - 2113, (2) Gaseous Pollutants Sampler - AS-109, (3) Gaseous PM2.5 Sampler - AS-127
Calibration Done on : 13/01/2024

Royal Environment Auditing & Consultancy Service, Rajkot



[Signature]
ANILJIJI

RESULTS OF AMBIENT AIR QUALITY MONITORING FOR THE MONTH : JULY 2024

Name of company : M/s. Adani Cement Industries Limited,
Plot No.13&1P to 14&1P, 14&1P, 14&1P, 14&1P to 15&1P,
16&1P, 17&1P to 17&1P, 17&1P, 17&1P, 17&1P to 18&1P of
Village: Dabhi in Dahel Industrial Estate,
Tal : Vagra Dist : Bhauach.

S. No.	Particulars	Unit	Clinker Silo (West)									
			1	2	3	4	5	6	7	8	9	10
01.	No. of Week		1	2	3	4	5	6	7	8	9	10
02.	Max. & Time Starting of Monitoring		07/07/2024 11:30	08/07/2024 11:45	09/07/2024 12:00	10/07/2024 12:15	11/07/2024 12:30	12/07/2024 12:45	13/07/2024 13:00	14/07/2024 13:15	15/07/2024 13:30	16/07/2024 13:45
03.	Min. & Time Ending of Monitoring		07/07/2024 11:30	08/07/2024 11:45	09/07/2024 12:00	10/07/2024 12:15	11/07/2024 12:30	12/07/2024 12:45	13/07/2024 13:00	14/07/2024 13:15	15/07/2024 13:30	16/07/2024 13:45
04.	Duration of Sampling	Min	1440	1440	1440	1440	1440	1440	1440	1440	1440	1440
05.	Dominant Wind Direction (From)		NE	NE	SE	SE	NE	SE	SE	SE	NE	SE
06.	Wind Speed Velocity	km/hr	7 to 13	3 to 17	4 to 18	2 to 13	2 to 14	2 to 14	4 to 18	3 to 15	2 to 18	4 to 19
07.	Average Low Rate for PM2.5	µg/m³	1.0	1.2	1.3	1.0	1.0	1.6	1.0	1.0	1.0	1.0
08.	Average Flow Rate for PM10	µg/m³	1.13	1.12	1.18	1.14	1.12	1.11	1.12	1.21	1.16	1.12
09.	Average Flow Rate for Gaseous	µg/m³	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
10.	Permissible Limits of PM2.5 *	µg/m³	60	60	60	60	60	60	60	60	60	60
11.	Permissible Limits of PM2.5 *	µg/m³	41.2	36.2	46.1	52.2	40.1	37.2	43.2	29.1	30.1	36.2
12.	Permissible Limits of PM10 *	µg/m³	100	100	100	100	100	100	100	100	100	100
13.	Measured Concentration of PM10	µg/m³	62.2	54.2	64.1	66.2	68.2	70.1	74.2	63.2	66.1	66.1
14.	Permissible Limits of SO ₂ *	µg/m³	80	80	80	80	80	80	80	80	80	80
15.	Measured Concentration of SO ₂	µg/m³	13.2	14.1	16.2	11.2	12.1	17.2	15.2	12.2	14.1	16.2
16.	Permissible Limits of NO ₂ *	µg/m³	80	80	80	80	80	80	80	80	80	80
17.	Measured Concentration of NO ₂	µg/m³	23.2	20.1	19.1	26.1	24.2	21.2	26.2	20.2	24.1	27.2



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Ref. No. : 302/08/2024-25
Plot No. 19 & 20, B/S. The North Star Nest School, Massam School Road, Mata Mara, PAKOT - 360 005.
Ph. +91 9099319954 ■ E-mail : royalenvmonitor@live.com ■ admin@royalconsultancy.com
Date: 05/09/2024

STACK EMISSION MONITORING ANALYSIS

Name of Company : **M/s. Adani Cement Industries Limited,**
Plot No.136/P to 141/P, 144/P, 145/P, 151/P to 155/P,
162/P, 174/P to 176/P, 178/P, 179/P, 187/P to 191/P of
Village: Dahej in Dahej Industrial Estate,
Tal : Vagra, Dist. : Bharuch.

Test Method : As per IS Standards - 11255_1/2/3/7

Sr. No.	Particulars	Unit	Stack- 1
01	Date of Sampling	---	31/08/2024
02	Time of sampling	Hr.	12:15
03	Stack Attached to	---	Cement Mill
04	Air Pollution Control Measures	---	Bag Filter
05	Stack Height	Meter	70
06	Stack Diameter	Meter	---
07	Stack Temperature	°C	69
08	Ambient Temperature	°C	30
09	Average Velocity of Flue Gases	m/Sec.	7.6
10	Isokinetic flow rate for P.M. Sampling	LPM	21
11	Gaseous Sampling Flow Rate	LPM	2.0
12	Permissible limits for PM	mg/Nm ³	150
13	Measured Concentration of PM ₁₀	mg/Nm ³	22
14	Permissible limits for SO ₂	ppm	100
15	Measured Concentration of SO ₂	ppm	0.0
16	Permissible limits for NO _x	ppm	50
17	Measured Concentration of NO _x	ppm	0.0

Instruments Used : Ecotech Stack Kit model No. ESS - 100
Calibration done on : 14/01/2024

Royal Environment Auditing & Consultancy Service

Analyst



Royal
Environment Auditing & Consultancy Service

Plot No. 19 & 20 B/s, The North Star Nest School, Masoom School Road, Mota Mara, RAJKOT - 360 005.
Ph: +91 9099919994 • E-mail : royaleenvironment@live.com • admin@royalconsultancy.com

Ref No. : 304/08/2024-25

Date: 05/09/2024

STACK EMISSION MONITORING ANALYSIS

Name of Company : M/s. Adani Cement Industries Limited,

Plot No 136/P to 141/P, 144/P, 145/P, 151/P to 155/P,
162/P, 174/P to 176/P, 178/P, 179/P, 187/P to 191/P of
Village: Dahej in Dahej Industrial Estate,
Tal : Vagra, Dist. : Bharuch

Test Method : As per IS Standards - 11255_1/2/3/7

Sr. No.	Particulars	Unit	Stack- 3
01	Date of Sampling	—	31/08/2024
02	Time of sampling	Hr	13:20
03	Stack/Vent Attached to	—	Conveyor belt L11BC1 Vent
04	Air Pollution Control Measures	—	Bag Filter
05	Stack/Vent Height	Meter	30
06	Stack/Vent Diameter	Meter	---
07	Stack/Vent Temperature	°C	50
08	Ambient Temperature	°C	29
09	Average Velocity of Flue Gases	m/Sec.	7.1
10	Isokinetic flow rate for P.M. Sampling	LPm	18
11	Gaseous Sampling Flow Rate	LPm	2.0
12	Permissible limits for PM	mg/Nm ³	150
13	Measured Concentration of PM ₁₀	mg/Nm ³	21
14	Permissible limits for SO ₂	ppm	100
15	Measured Concentration of SO ₂	ppm	0.0
16	Permissible limits for NO _x	ppm	50
17	Measured Concentration of NO _x	ppm	0.0

Instruments Used : Ecotech Stack Kit model No ESS - 100
Calibration done on : 14/01/2024

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[Signature]



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Ph: +91 9699919954 • Email : roydenvironment@bva.com • admin@roydenvironment.com

Ref. No. : 306/08/2024-25

Date: 05/09/2024

STACK EMISSION MONITORING ANALYSIS

Name of Company : M/s. Adani Cement Industries Limited,
Plot No. 136/P to 141/P, 144/P, 145/P, 151/P to 155/P,
162/P, 174/P to 176/P, 178/P, 179/P, 187/P to 191/P of
Village: Dahel in Dahel Industrial Estate,
Tal. : Vagra, Dist. : Bharuch.

Test Method : As per IS Standards - 11255_1/2/3/7

Sr. No.	Particulars	Unit	Stack- 5
01	Date of Sampling	---	31/08/2024
02	Time of sampling	Hr.	15:20
03	Stack/Vent Attached to	---	Conveyor belt K11BC1 transfer point vent
04	Air Pollution Control Measures	---	Bag Filter
05	Stack/Vent Height	Meter	30
06	Stack/Vent Diameter	Meter	---
07	Stack/Vent Temperature	°C	58
08	Ambient Temperature	°C	31
09	Average Velocity of Flue Gases	m/Sec.	7.8
10	Isokinetic flow rate for P.M. Sampling	LPM	22
11	Gaseous Sampling Flow Rate	LPM	2.0
12	Permissible limits for PM	mg/Nm ³	150
13	Measured Concentration of PM.	mg/Nm ³	19
14	Permissible limits for SO ₂	ppm	100
15	Measured Concentration of SO ₂	ppm	0.0
16	Permissible limits for NO _x	ppm	50
17	Measured Concentration of NO _x	ppm	0.0

Instruments Used : EcoTech Stack Kit model No. ESS - 100
Calibration done on : 14/01/2024

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Ref No. : 308/08/2024-25
Date: 05/09/2024

STACK EMISSION MONITORING ANALYSIS

Name of Company : **M/s. Adani Cement Industries Limited,**
Plot No. 136/P to 141/P, 144/P, 145/P, 151/P to 155/P,
162/P, 174/P to 176/P, 178/P, 179/P, 187/P to 191/P of
Village: Dabhel in Dahel Industrial Estate,
Tal. : Vagra, Dist. : Bharuch.

Test Method : As per IS Standards - 11255_1/2/3/7

Sr. No.	Particulars	Unit	Stack- 7
01	Date of Sampling	---	31/08/2024
02	Time of sampling	Hr.	16:30
03	Stack/Vent Attached to	---	Conveyor belt 491BC2 transfer point
04	Air Pollution Control Measures	---	Bag Filter
05	Stack/Vent Height	Meter	30
06	Stack/Vent Diameter	Meter	---
07	Stack/ Vent Temperature	°C	57
08	Ambient Temperature	°C	31
09	Average Velocity of Flue Gases	m/Sec.	7.3
10	Isokinetic flow rate for P.M. Sampling	LPM	17
11	Gaseous Sampling Flow Rate	LPM	2.0
12	Permissible limits for PM	mg/Nm ³	150
13	Measured Concentration of PM.	mg/Nm ³	19
14	Permissible limits for SO ₂	ppm	100
15	Measured Concentration of SO ₂	ppm	0.0
16	Permissible limits for NO _x	ppm	50
17	Measured Concentration of NO _x	ppm	0.0

Instruments Used : Ecotect Stack Kit model No. ESS - 100
Calibration done on : 14/01/2024

Royal Environment Auditing & Consultancy Service



Analyst



Ref No : 310/08/2024-25
Date: 05/09/2024

STACK EMISSION MONITORING ANALYSIS

Name of Company : M/s. Adani Cement Industries Limited,
Plot No 136/P to 141/P, 144/P, 145/P, 151/P to 155/P,
162/P, 174/P to 176/P, 178/P, 179/P, 187/P to 191/P of
Village: Dahej in Dahej Industrial Estate.
Tal : Vagra, Dist : Bharuch.

Test Method : As per IS Standards - 11255_1/2/3/7

Sr. No.	Particulars	Unit	CS-01 Vent	CS-02 Vent
01	Date of Sampling	---	13/08/2024	13/08/2024
02	Time of sampling	Hr	14:00	15:00
03	Stack/Vent Attached to	---	Cement Silo -1	Cement Silo -2
04	Air Pollution Control Measures	---	Bag Filter	Bag Filter
05	Stack/Vent Height	Meter	30	30
06	Stack/Vent Diameter	Meter	---	---
07	Stack/Vent Temperature	°C	60	56
08	Ambient Temperature	°C	30	31
09	Average Velocity of Flue Gases	m/Sec.	6.9	7.2
10	Isokinetic flow rate for P.M. Sampling	LPM	18	20
11	Gaseous Sampling Flow Rate	LPM	2.0	2.0
12	Permissible limits for PM	mg/Nm ³	150	150
13	Measured Concentration of PM	mg/Nm ³	24	21
14	Permissible limits for SO ₂	ppm	100	100
15	Measured Concentration of SO ₂	ppm	0.0	0.0
16	Permissible limits for NO _x	ppm	50	50
17	Measured Concentration of NO _x	ppm	0.0	0.0

Instruments Used : EcoTech Stack Kit model No ESS - 100
Calibration done on : 14/01/2024

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Ref. No. : 312/08/2024-25

Date: 05/09/2024

AMBIENT NOISE LEVEL MEASUREMENT

Name of Company : M/s. Adani Cement Industries Limited,

Plot No. 136/P to 141/P, 144/P, 145/P, 151/P to 155/P,

162/P, 174/P to 176/P, 178/P, 179/P, 187/P to 191/P of

Village: Dahej in Dahej Industrial Estate,

Tal. : Vagra, Dist. : Bharuch

Sample Collection Date : 31/08/2024

Sr. No.	Location of Sampling	Results in dB(A)	Results in dB(A)
		(Day Time) 6:30am to 10:30pm	(Night Time) 10:30pm to 6:30am
Permissible Limits		75.0	70.0
01.	Security Main gate (East)	65.1	58.1
02.	Packing plant (South)	67.2	61.1
03.	Cement mill (North)	69.2	63.2
04.	Clinker Silo (West)	71.1	62.2

CPCB Standards			
Area Code	Category of Area / Zone	Limit in dB(A) Leq.	
		Day Time	Night Time
A	Industrial Area	75.0	70.0
B	Commercial Area	65.0	55.0
C	Residential Area	55.0	45.0
D	Silence Zone	50.0	40.0

Instruments used : Sound level meter, Model : VSLM-932 (Vaibhav)
Range : A - 30 to 80 dB, B-50 to 100 dB, C-80 to 130 dB.
Calibration is done on : 17/05/2024

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Ref. No. : 314/08/2024-25

Date: 05/09/2024

REPORT OF EFFLUENT ANALYSIS

Name of company : M/s. Adani Cement Industries Limited,

Plot No.136/P to 141/P, 144/P, 145/P, 151/P to 155/P,
162/P, 174/P to 176/P, 178/P, 179/P, 187/P to 191/P of

Village: Dahej in Dahej Industrial Estate,

Tal. : Vagra, Dist. : Bharuch.

Source of Sample Collection : Sewage Treatment Plant

Date of Sampling :31/08/2024

Sr. No. Parameters	Unit	Permissible Limit*	STP O/L
01. pH	mg/l	6.5-9	7.1
01. Total Suspended Solids	mg/l	<100	42
02. B.O.D. (3 day's at 27 °C)	mg/l	<30	22.2
03. Fecal Coliform	MPN	<1000MPN/100ml	0.7

* Permissible limit is only applicable to STP O/L (Treated Water)

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Ph.: 91 9099919954 • Email: royaleenvironment@live.com • admin@royalconsultancy.com

Ref. No. 205/08/2024-25

Sample Description: GIDC Water

Sr. No.	Parameters	Unit	Acceptable Limit (*)	Permissible Limit*	Result
21	Selenium (Se)	mg/l	0.01	No Relaxation	< 0.010
22	Arsenic (as As)	mg/l	0.05	No Relaxation	< 0.010
23	Lead (as Pb)	mg/l	0.01	No Relaxation	0.004
24	Zinc (as Zn)	mg/l	5	15	0.034
25	Chromium (Cr+6)	mg/l	0.05	No Relaxation	0.011
26	Anionic Detergents (as MBAS)	mg/l	0.2	1	< 0.010
27	Mineral Oil	mg/l	0.5	No Relaxation	< 0.010
28	Sodium (as Na)	mg/l	100	Absent	7.450
29	Potassium (as K)	mg/l	100	600	0.100
30	Aluminium (as Al)	mg/l	0.03	0.2	0.020
31	Barium (as B)	mg/l	0.7	No Relaxation	< 0.010
32	Molybdenum	mg/l	0.07	No Relaxation	< 0.010
33	Boron (as B)	mg/l	0.5	2.4	< 0.005
34	Nickel (as Ni)	mg/l	0.02	No Relaxation	< 0.010
Biological Characteristics:					
35	E-Coli	Counts/100 ml	Absent	No Relaxation	Absent
36	Coliform	Counts/100 ml	Absent	No Relaxation	Absent

(*) Acceptable Limit as per IS:15860-20-2 Drinking Water Specification

Page 2 of 2

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Analyst





Ref No 317/08/2024-25

Date: 09/09/2024

RESULTS OF AMBIENT AIR QUALITY MONITORING FOR THE MONTH : AUGUST 2024

Name of company : M/s. Adani Cement Industries Limited,
Plot No.136P to 141P, 144P, 145P, 151P to 155P,
162P, 174P to 176P, 178P, 179P, 187P to 191P of
Village: Dabhi to Dabhi Industrial Estate,
Tal. : Vagra,Dist. : Bhavnagar.

S. No	Particulars	Unit	Packing Plant (South)							
			1	2	3	4				
01	No. of Week	---	1	2	3	4				
02	Date & Time Starting of Monitoring	---	06/08/2024 08:45	06/08/2024 08:55	12/08/2024 09:00	13/08/2024 09:10	20/08/2024 09:30	21/08/2024 09:40	26/08/2024 10:00	27/08/2024 10:10
03	Date & Time - Ending of Monitoring	---	06/08/2024 08:45	07/08/2024 08:55	13/08/2024 09:00	14/08/2024 09:10	21/08/2024 09:30	22/08/2024 09:40	27/08/2024 10:00	28/08/2024 10:10
04	Duration of Sampling	Min	1440	1440	1440	1440	1440	1440	1440	1440
05	Dominant Wind Direction (From)	---	NE	NE	SE	SE	NE	SE	SE	SE
06	Wind Speed Velocity	Km/Hr	3 to 17	4 to 18	2 to 13	2 to 14	2 to 14	4 to 18	3 to 15	2 to 16
07	Average Flow Rate For PM2.5	m ³ /hr	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
08	Average Flow Rate For PM10	m ³ /hr	1.13	1.12	1.18	1.14	1.12	1.11	1.12	1.21
09	Average Flow Rate for Gaseous	CPM	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
10	Permissible Limits of PM2.5 *	µgm ³	60	60	60	60	60	60	60	60
11	Measured Concentration of PM2.5	µgm ³	32.2	46.2	41.1	52.2	38.2	47.1	42.2	53.2
12	Permissible Limits of PM10 *	µgm ³	100	100	100	100	100	100	100	100
13	Measured Concentration of PM10	µgm ³	62.1	57.1	53.2	63.2	68.1	70.1	52.2	59.2
14	Permissible Limits of SO ₂ *	µgm ³	80	80	80	80	80	80	80	80
15	Measured Concentration of SO ₂	µgm ³	13.1	15.1	17.1	12.2	14.2	11.2	16.1	14.2
16	Permissible Limits of NO ₂ *	µgm ³	80	80	80	80	80	80	80	80
17	Measured Concentration of NO ₂	µgm ³	24.2	26.1	20.2	23.2	22.1	19.2	24.1	19.1

Instrument Used: Ecolab make (1) RDS, APM - 2179L (2) Gaseous Pollutants Sampler, AAS-109, (3) Monitor PM2.5 Sampler, AAS-127
Calibration Done on 13/01/2024

Royal Environment Auditing & Consultancy Service, Rajkot



Analyst

Ref No. 31908/2024-25

Date: 05/09/2024

RESULTS OF AMBIENT AIR QUALITY MONITORING FOR THE MONTH : AUGUST 2024

Name of company : M/s. Adani Cement Industries Limited,
Plot No.136P to 141P, 144P, 145P, 151P to 155P,
162P, 174P to 176P, 178P, 179P, 187P to 191P of
Village: Dabji in Dabji Industrial Estate,
Tal. : Yagra Distl. : Bharuch.

S. No.	Particulars	Unit	Clinker Silo (West)							
			1	2	3	4				
01.	No. of Week	-	1	2	3	4				
02	Date & Time Starting of Monitoring	-	05/08/2024 09:30	06/08/2024 09:45	12/08/2024 09:45	13/08/2024 10:00	20/08/2024 10:15	21/08/2024 10:30	26/08/2024 10:45	27/08/2024 11:00
03	Date & Time - Ending of Monitoring	-	06/08/2024 09:30	07/08/2024 09:45	13/08/2024 09:45	14/08/2024 10:00	21/08/2024 10:15	22/08/2024 10:30	27/08/2024 10:45	28/08/2024 11:00
04	Duration of Sampling	Min	1440	1440	1440	1440	1440	1440	1440	1440
05	Dominant Wind Direction (from)	-	NE	NE	SE	SE	NE	SE	SE	SE
06	Wind Speed Velocity	Km/hr	2 to 13	3 to 17	4 to 18	2 to 13	2 to 14	2 to 14	4 to 18	3 to 15
07	Average Flow Rate For PM2.5	mg/hr	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
08	Average Flow Rate For PM10	mg/min	1.13	1.12	1.18	1.14	1.12	1.11	1.12	1.21
09	Average Flow Rate for Gaseous	UM	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
10.	Permissible Limits of PM2.5 *	µg/m³	60	60	60	60	60	60	60	60
11	Measured Concentration of PM2.5	µg/m³	38.2	32.2	40.2	39.2	32.2	35.1	41.2	32.2
12	Permissible Limits of PM10 *	µg/m³	100	100	100	100	100	100	100	100
13	Measured Concentration of PM10	µg/m³	58.1	52.2	62.1	54.1	60.2	63.2	67.1	59.1
14	Permissible Limits of SO ₂ *	µg/m³	80	80	80	80	80	80	80	80
15	Measured Concentration of SO ₂	µg/m³	12.2	15.2	17.1	13.2	16.2	11.2	14.2	13.1
16.	Permissible Limits of NO ₂ *	µg/m³	80	80	80	80	80	80	80	80
17	Measured Concentration of NO ₂	µg/m³	26.1	22.1	23.2	24.2	25.1	19.1	21.2	23.3

Instrument Used: Ecotech miana (1) RCS, AFM - 277BL, (2) Gaseous Pollutants Sampler: AAS-106, (3) Ecotech PM2.5 Sampler AAS V7
Calibration Done on: 13/01/2024



Royal
Environment Auditing & Consultancy Service
Plot No. 19 & 20, B/s. The North Star Nest School, Masoom School Road, Meira Hara, RAJKOT - 360 005.
Ph.: +91 9699919954 • Email: royaleenvironment@live.com • admin@royalconsultancy.com

Ref. No. : 402/09/2024-25
Date: 04/10/2024

STACK EMISSION MONITORING ANALYSIS

Name of Company : M/s. Adani Cement Industries Limited,
Plot No. 136/P to 141/P, 144/P, 145/P, 151/P to 155/P,
162/P, 174/P to 176/P, 178/P, 179/P, 187/P to 191/P of
Village: Dabej in Dabej Industrial Estate,
Tal. : Vagra, Dist. : Bharuch.

Test Method : As per IS Standards - 11255_1/2/3/7

Sr. No.	Particulars	Unit	Stack- 1
01	Date of Sampling	---	28/09/2024
02	Time of sampling	Hr.	14:15
03	Stack Attached to	---	Cement Mill
04	Air Pollution Control Measures	---	Bag Filter
05	Stack Height	Meter	70
06	Stack Diameter	Meter	---
07	Stack Temperature	°C	67
08	Ambient Temperature	°C	29
09	Average Velocity of Flue Gases	m/Sec.	76.0
10	Isokinetic flow rate for P.M. Sampling	LPM	22
11	Gaseous Sampling Flow Rate	LPM	2.0
12	Permissible limits for PM	mg/Nm ³	150
13	Measured Concentration of PM.	mg/Nm ³	24
14	Permissible limits for SO ₂	ppm	100
15	Measured Concentration of SO ₂	ppm	0.0
16	Permissible limits for NO _x	ppm	50
17	Measured Concentration of NO _x	ppm	0.0

Instruments Used : Ecotech Stack Kit model No ESS - 100
Calibration done on : 14/01/2024

Royal Environment Auditing & Consultancy Service

Analyst



Environment Auditing & Consultancy Service

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Ref. No. : 404/09/2024-25

Date: 04/10/2024

STACK EMISSION MONITORING ANALYSIS

Name of Company : M/s. Adani Cement Industries Limited,

Plot No. 136/P to 141/P, 144/P, 145/P, 151/P to 155/P,
162/P, 174/P to 176/P, 178/P, 179/P, 187/P to 191/P of
Village: Dahej in Dahej Industrial Estate,
Tal. : Vagra, Dist. : Bharuch.

Test Method : As per IS Standards - 11255_1/2/3/7

Sr. No.	Particulars	Unit	Stack- 3
01	Date of Sampling	—	28/09/2024
02	Time of sampling	Hr.	14:50
03	Stackvent Attached to	—	Conveyor belt L11BC1 Vent
04	Air Pollution Control Measures	---	Bag Filter
05	Stackvent Height	Meter	30
06	Stack/Vent Diameter	Meter	---
07	Stack/Vent Temperature	°C	52
08	Ambient Temperature	°C	29
09	Average Velocity of Flue Gases	m/Sec.	6.9
10	Isokinetic flow rate for P.M. Sampling	LPM	17
11	Gaseous Sampling Flow Rate	LPM	2.0
12	Permissible limits for PM	mg/Nm ³	150
13	Measured Concentration of PM.	mg/Nm ³	19
14	Permissible limits for SO ₂	ppm	100
15	Measured Concentration of SO ₂	ppm	0.0
16	Permissible limits for NO _x	ppm	50
17	Measured Concentration of NO _x	ppm	0.0

Instruments Used : Ecotech Stack Kit model No ESS - 100
Calibration done on : 14/01/2024

Royal Environment Auditing & Consultancy Service

Analyst



Ref No. : 406/09/2024-25
Date: 04/10/2024

STACK EMISSION MONITORING ANALYSIS

Name of Company : M/s. Adani Cement Industries Limited,
Plot No.136/P to 141/P, 144/P, 145/P, 151/P to 155/P,
162/P, 174/P to 176/P, 178/P, 179/P, 187/P to 191/P of
Village: Dahel in Dahel Industrial Estate,
Tal. : Vagra, Dist. : Bharuch.

Test Method : As per IS Standards - 11255_1/2/3/7

Sr. No.	Particulars	Unit	Stack- 5
01	Date of Sampling	---	28/09/2024
02	Time of sampling	Hr.	16:15
03	Stackvent Attached to	---	Conveyor belt K11BC1 transfer point vent
04	Air Pollution Control Measures	---	Bag Filter
05	Stackvent Height	Meter	30
06	Stackvent Diameter	Meter	---
07	Stack/Vent Temperature	°C	59
08	Ambient Temperature	°C	30
09	Average Velocity of Flue Gases	m/Sec	7.9
10	Isokinetic flow rate for P.M. Sampling	LPm	23
11	Gaseous Sampling Flow Rate	LPm	2.0
12	Permissible limits for PM	mg/Nm ³	150
13	Measured Concentration of PM.	mg/Nm ³	17
14	Permissible limits for SO ₂	ppm	100
15	Measured Concentration of SO ₂	ppm	0.0
16	Permissible limits for NO _x	ppm	50
17	Measured Concentration of NO _x	ppm	0.0

Instruments Used : EcoTech Stack Kit model No ESS - 100
Calibration done on : 14/01/2024



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Ref. No. : 408/09/2024-25

Date: 04/10/2024

STACK EMISSION MONITORING ANALYSIS

Name of Company : M/s. Adani Cement Industries Limited,

Plot No. 136/P to 141/P, 144/P, 145/P, 151/P to 155/P,
162/P, 174/P to 176/P, 178/P, 179/P, 187/P to 191/P of
Village: Dahej in Dahej Industrial Estate,
Tal. : Vagra, Dist : Bharuch.

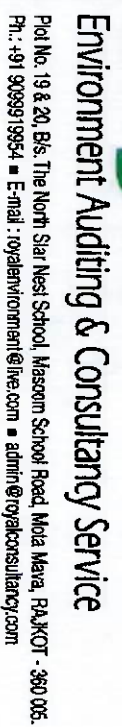
Test Method : As per IS Standards - 11255_1/2/3/7

Sr. No.	Particulars	Unit	Stack-7
01	Date of Sampling	--	13/09/2024
02	Time of sampling	Hr.	14:00
03	Stack/Vent Attached to	--	Conveyor belt 491BC2 transfer point
04	Air Pollution Control Measures	--	Bag Filter
05	Stack/vent Height	Meter	30
06	Stack/vent Diameter	Meter	...
07	Stack/ Vent Temperature	°C	55
08	Ambient Temperature	°C	30
09	Average Velocity of Flue Gases	m/Sec.	7.8
10	Isokinetic flow rate for P.M. Sampling	LPM	19
11	Gaseous Sampling Flow Rate	LPM	2.0
12	Permissible limits for PM	mg/Nm ³	150
13	Measured Concentration of PM.	mg/Nm ³	23
14	Permissible limits for SO ₂	ppm	100
15	Measured Concentration of SO ₂	ppm	0.0
16	Permissible limits for NO _x	ppm	50
17	Measured Concentration of NO _x	ppm	0.0

Instruments Used : Ecotech Stack Kit model No. ESS - 100
Calibration done on : 14/01/2024

Royal Environment Auditing & Consultancy Service

Analyst



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Date: 04/10/2024

STACK EMISSION MONITORING ANALYSIS

Name of Company : *M/s. Adani Cement Industries Limited,*
Plot No. 136/P to 141/P, 144/P, 145/P, 151/P to 155/P,
 162/P, 174/P to 176/P, 178/P, 179/P, 187/P to 191/P of
Village: Dahej in Dahej Industrial Estate,
Tal. : Vagra, **Dist. :** Bharuch

Test Method : As per IS Standards - 11255_1/2/3/7

Sr. No.	Particulars	Unit	CS-01 Vent	CS-02 Vent
01	Date of Sampling	---	13/09/2024	13/09/2024
02	Time of sampling	Hr	15:00	15:45
03	Stack/Vent Attached to	---	Cement Silo -1	Cement Silo -2
04	Air Pollution Control Measures	---	Bag Filter	Bag Filter
05	Stack/Vent Height	Meter	30	30
06	Stack/Vent Diameter	Meter	---	---
07	Stack/Vent Temperature	°C	60	62
08	Ambient Temperature	°C	31	31
09	Average Velocity of Flue Gases	m/Sec.	7.2	7.4
10	Isokinetic flow rate for P.M. Sampling	LPM	17	19
11	Gaseous Sampling Flow Rate	LPM	2.0	2.0
12	Permissible limits for PM	mg/Mm ³	150	150
13	Measured Concentration of PM.	mg/Nm ³	26	23
14	Permissible limits for SO ₂	ppm	100	100
15	Measured Concentration of SO ₂	ppm	0.0	0.0
16	Permissible limits for NO _x	ppm	50	50
17	Measured Concentration of NO _x	ppm	0.0	0.0

Instruments Used : Ecotech Slack Kit model No ESS - 100
Calibration done on : 14/01/2024

Royal Environment Auditing & Consultancy Service

Analyst



Ref. No. : 412/09/2024-25
Date: 04/10/2024

AMBIENT NOISE LEVEL MEASUREMENT

Name of Company : M/s. Adani Cement Industries Limited,
Plot No. 136/P to 141/P, 144/P, 145/P, 151/P to 155/P,
162/P, 174/P to 176/P, 178/P, 179/P, 187/P to 191/P of
Village: Dajej in Dajej Industrial Estate,
Tal. : Vagra, Dist. : Bharuch.

Sample Collection Date :28/09/2024

Sr. No.	Location of Sampling	Results in dB(A)	Results in dB(A)
		(Day Time) 6:30am to 10:30pm	(Night Time) 10:30pm to 6:30am
Permissible Limits		75.0	70.0
01.	Security Main gate (East)	68.1	56.1
02.	Packing plant (South)	66.2	62.2
03.	Cement mill (North)	70.1	64.1
04.	Clinker Silo (West)	69.1	63.2

CPCB Standards			
Area Code	Category of Area / Zone	Limit in dB(A) Leq.	
		Day Time	Night Time
A	Industrial Area	75.0	70.0
B	Commercial Area	65.0	55.0
C	Residential Area	55.0	45.0
D	Silence Zone	50.0	40.0

Instruments used : Sound level meter, Model : VSLM-932 (Vahnav)
Range : A - 30 to 80 dB, B- 50 to 100 dB, C- 80 to 130 dB.
Calibration is done on : 17/05/2024



Environment Auditing & Consultancy Service

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Ref. No. : 514/09/2024-25

Date: 04/10/2024

REPORT OF EFFLUENT ANALYSIS

Name of company : M/s. Adani Cement Industries Limited,

Plot No.136/P to 141/P, 144/P, 145/P, 151/P to 155/P,
162/P, 174/P to 176/P, 178/P, 179/P, 187/P to 191/P of

Village: Dahej in Dahej Industrial Estate,

Tal. : Vagra, Dist. : Bharuch.

Source of Sample Collection : Sewage Treatment Plant

Date of Sampling : 13/09/2024

Sr. No.	Parameters	Unit	Permissible Limit*	STP O/L
01.	pH	mg/l	6.5-9	7.3
01.	Total Suspended Solids	mg/l	<100	45
02.	B.O.D. (3 days at 27 °C)	mg/l	<30	20.2
03.	Fecal Coliform	MPN	<1000MPN/100ml	120

* Permissible limit is only applicable to STP O/L (Treated Water)

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Analyst



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Ref No : 41609/2024-25

Date: 04/10/2024

RESULTS OF AMBIENT AIR QUALITY MONITORING FOR THE MONTH : SEPTEMBER 2024

Name of company : M/s. Adani Cement Industries Limited,
Plot No.13&P to 141P, 144P, 145P, 151P to 155P,
162P, 174P to 176P, 178P, 179P, 187P to 191P of
Village: Dabej In Dabej Industrial Estate,
Tal : Vagra,Dist : Bhavnagar.

S. No	Particulars	Unit	M: Main Security Main gate (East)							
			1	2	3	4				
01.	No. of Week	---	1	2	3	4				
02	Date & Time Starting of Monitoring	-	02/09/2024 09:45	03/09/2024 10:00	09/09/2024 09:00	10/09/2024 09:15	16/09/2024 09:30	17/09/2024 09:45	23/09/2024 10:15	24/09/2024 10:30
03	Date & Time - Ending of Monitoring	-	03/09/2024 09:45	04/09/2024 10:00	10/09/2024 09:00	11/09/2024 09:15	17/09/2024 09:30	18/09/2024 09:45	24/09/2024 10:15	25/09/2024 10:30
04	Duration of Sampling	Min	1440	1440	1440	1440	1440	1440	1440	1440
05	Dominant Wind Direction (From)	-	NE	NE	SE	SE	NE	SE	SE	SE
06	Wind Speed Velocity	Km/hr	2 to 16	3 to 18	4 to 15	3 to 17	2 to 18	4 to 18	5 to 15	5 to 18
07	Average Flow Rate For PM2.5	µg/m ³	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
08	Average Flow Rate For PM10	µg/m ³	1.13	1.12	1.18	1.14	1.12	1.11	1.12	1.21
09	Average Flow Rate for Gaseous	LPm	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
10	Permissible Limits of PM2.5*	µg/m ³	60	60	60	60	60	60	60	60
11	Measured Concentration of PM2.5	µg/m ³	36.2	34.1	29.1	28.2	31.1	40.2	36.1	42.1
12	Permissible Limits of PM10*	µg/m ³	100	100	100	100	100	100	100	100
13	Measured Concentration of PM10	µg/m ³	60.1	53.2	59.1	65.2	68.1	62.2	60.1	59.2
14	Permissible Limits of SO ₂ *	µg/m ³	80	80	80	80	80	80	80	80
15	Measured Concentration of SO ₂	µg/m ³	13.1	14.2	16.1	11.2	15.1	12.2	17.2	15.2
16	Permissible Limits of NO ₂ *	µg/m ³	80	80	80	80	80	80	80	80
17	Measured Concentration of NO ₂	µg/m ³	20.2	26.1	24.2	23.1	21.1	19.1	20.2	22.1

Instrument Used: Ecotech make (1) ROS, APH-217BL (2) Gaseous Pollutants Sampler, AAS-108 (3) Ecotech PM2.5 Sampler, AAS-127
Calibration Done on: 13/01/2024

Royal Environment Auditing & Consultancy Service, Rajkot

Analyst



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Ref. No. : 416/09/2024-25

Date: 04/10/2024

RESULTS OF AMBIENT AIR QUALITY MONITORING FOR THE MONTH : SEPTEMBER 2024

Name of company : M/s. Adani Cement Industries Limited,
Plot No. 136/P to 141/P, 144/P, 145/P, 151/P to 155/P,
162/P, 174/P to 176/P, 178/P, 179/P, 187/P to 191/P of
Village: Dahel in Dahel Industrial Estate,
Tal.: Vagra, Dist.: Bhavnagar.

S. No.	Particulars	Unit	Cement mill (North)							
			1	2	3	4				
01.	No. of Week	-								
02	Date & Time Starting of Monitoring	-	02/09/2024 10:15	03/09/2024 10:30	09/09/2024 09:30	10/09/2024 09:45	16/09/2024 10:00	17/09/2024 10:15	23/09/2024 10:45	24/09/2024 11:00
03	Date & Time - Ending of Monitoring	-	03/09/2024 10:15	04/09/2024 10:30	10/09/2024 09:30	11/09/2024 09:45	17/09/2024 10:00	18/09/2024 10:15	24/09/2024 10:45	25/09/2024 11:00
04	Duration of Sampling	Min	1440	1440	1440	1440	1440	1440	1440	1440
05	Dominant Wind Direction (From)	-	NE	NE	SE	SE	NE	SE	SE	SE
06	Wind Speed Velocity	Km/hr	2 to 16	3 to 18	4 to 15	3 to 17	2 to 18	4 to 18	5 to 15	5 to 18
07.	Average Flow Rate For PM2.5	mg/m ³	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
08	Average Flow Rate For PM10	mg/m ³	1.13	1.12	1.18	1.14	1.12	1.11	1.12	1.21
09	Average Flow Rate for Gaseous	LPM	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
10	Permissible Limits of PM2.5 *	µg/m ³	60	60	60	60	60	60	60	60
11	Measured Concentration of PM2.5	µg/m ³	40.2	43.1	49.1	52.1	36.2	39.1	42.2	41.1
12.	Permissible Limits of PM10 *	µg/m ³	100	100	100	100	100	100	100	100
13	Measured Concentration of PM10	µg/m ³	68.2	72.2	71.1	75.2	62.2	68.2	72.2	69.1
14	Permissible Limits of SO ₂ *	µg/m ³	80	80	80	80	80	80	80	80
15	Measured Concentration of SO ₂	µg/m ³	11.2	13.2	14.1	15.2	16.2	17.1	18.2	12.2
16	Permissible Limits of NO ₂ *	µg/m ³	80	80	80	80	80	80	80	80
17	Measured Concentration of NO ₂	µg/m ³	19.1	22.2	25.1	26.2	20.2	23.1	21.3	24.1

Instrument Used: Ecomet make (1) RDS, APM - 217B, (2) Gaseous Pollutants Sampler: AAS-109, (3) Corion PM2.5 Sampler: AAS 127
Calibration Done on: 13/01/2024

Royal Environment Auditing & Consultancy Service, Rajkot

Analyst:

Ref. No.: 420/09/2024-25

Date: 04/10/2024

Form No. 37
(Prescribed under Rule 12-B)

Register containing particulars of monitoring of working environment required under Section 7-A (a)(e).

1 Name of the Department/Plant : PACKING & CEMENT MILL SECTION OF Adani Cement Industries Limited,

2 Raw materials, by products and finished products involved in the process. TOTAL DUST

3 Particulars of sampling

Date of Sampling : 13th to 28th September, 2024

Sr. No	Location monitored	Identified Contaminant	Sampling Instrument used	Airborne Contamination			TWA Concentration (As given in Second Schedule)	Method	Number of workers exposed at the location being monitored	Plant Incharge	Signature person taking samples	Name (in Block letters)
				Number of Sample	Range	Average						
1	Nr Packer	Total Dust	Personal Respirable Dust sampler VPDS 203	1	-	3.8	10	Gravimetric	10	Deodatt pattewale		Mr. HARSHIL PATEL
2	Nr Cement Mill			1	-	4.2	10	Gravimetric	30	Sunilkumar bhagat		
3	Nr Gypsum Yard			1	-	3.5	10	Gravimetric	10	Sunilkumar bhagat		
4	Nr. BRU			1	-	4.1	10	Gravimetric	2	Sunilkumar bhagat		
5	Nr. Hopper Building			1	-	4.7	10	Gravimetric	10	Sunilkumar bhagat		

Calibration Done On : 16/01/2024

Royal Environment Auditing & Consultancy Service

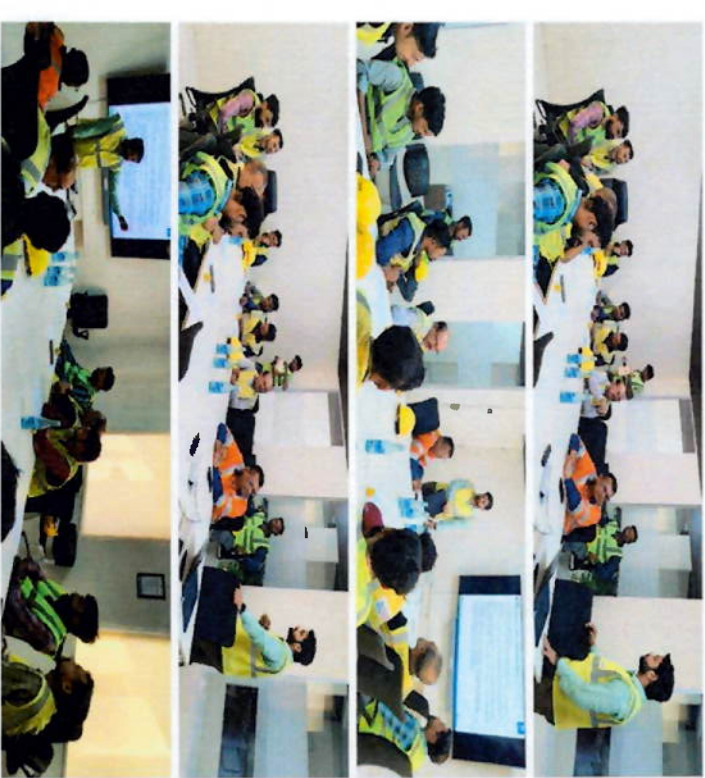


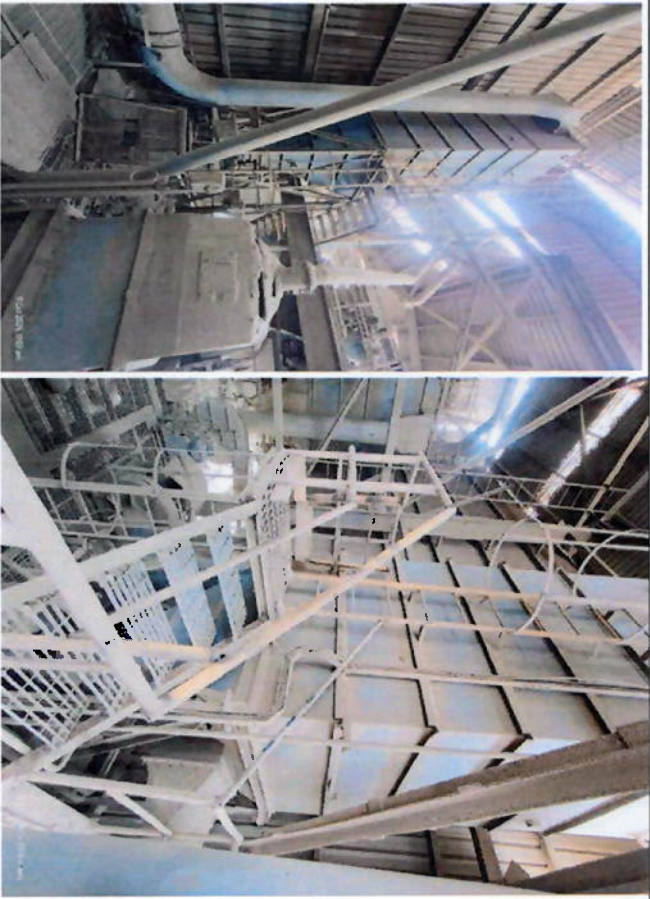

Authorized Sign

II. OHS – Statistics (April '2024 -September '2024)

S. No.	Description / Activity	Cumulative
1.	Reportable (Fatal) Accident	0
2.	Reportable (Other than Fatal) Accident	0
3.	Non-Reportable (First Aid Cases)	0
4.	Man-Days Lost (MDL)	0
5.	Man-Hours Worked	304298
6.	Frequency Rate (FR)	0
7.	Severity Rate (SR)	0
8.	Disabling Injury Index (DII)	0
9.	Near Miss	06
10.	Dangerous Occurrence (DO)	0
11.	Fire Incident	0
12.	Fire Calls Attended (By Fire Crew)	0
13.	Mock Drill (Fire)	02
14.	No of Safety Observations Issued	645
15.	No of Safety Observations Complied	579
16.	Percentage Compliance	89.76%
17.	No. of Memos / chalan Issued	00
18.	Details of award (Reward & Recognition)	15
19.	No of Safety Training	13
20.	No. of workers Safety Induction provided	256
21.	No. of Employees Covered In safety Induction	00
22.	Safety Awareness Programs Daily TBT (No's of Workman)	2091
23.	No. of Safety Committee Meeting	02

2	"Gas Cylinder handling" monthly campaign	
3	Safety TBT On Daily Basis	

5	Randomly carrying the alcohol testing at main gate	
6	"Permit to work" Training	

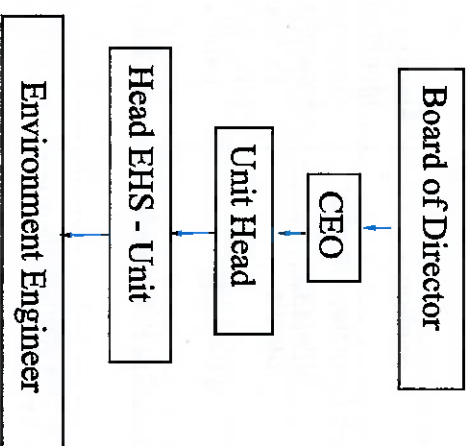
8	Monkey ladders replace with Step ladder	
9	"Safety Committee" meeting conducted	

FORMATION OF ENVIRONMENTAL MANAGEMENT CELL (EMC)

To maintain the environmental quality within the standards, regular inspections, audits & monitoring of various environmental components is required. Adani Cement Industries Limited has established an Environmental Management Cell (EMC) for environmental monitoring and control. The EMC team is responsible for pollution monitoring aspects and implementation of control measures.

Efficient engineers with technicians have been deployed for maintenance, up keeping and monitoring the pollution control equipment, to keep them in working mode at the best of their efficiencies.

Structure of Environment Management Cell



Responsibilities of EMC

The EMC functions to ensure that environmental status of the area remains within the statutory standard of MoEFCC/SEIAA and SPCB. The responsibilities of the EMC include the following:

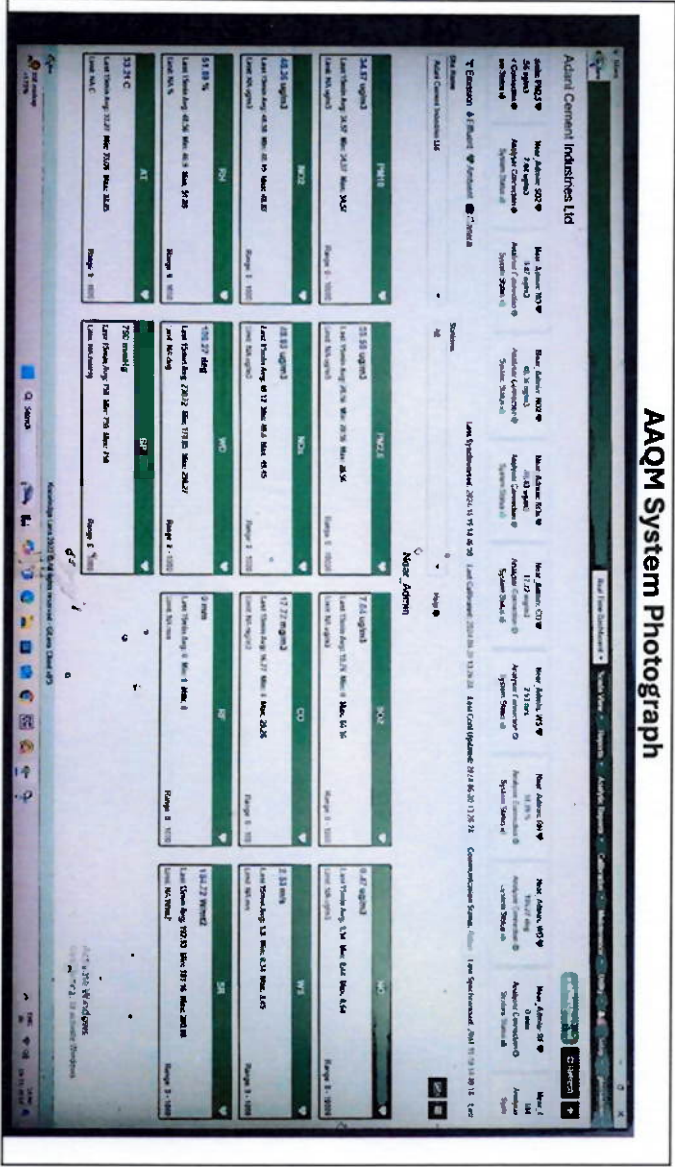
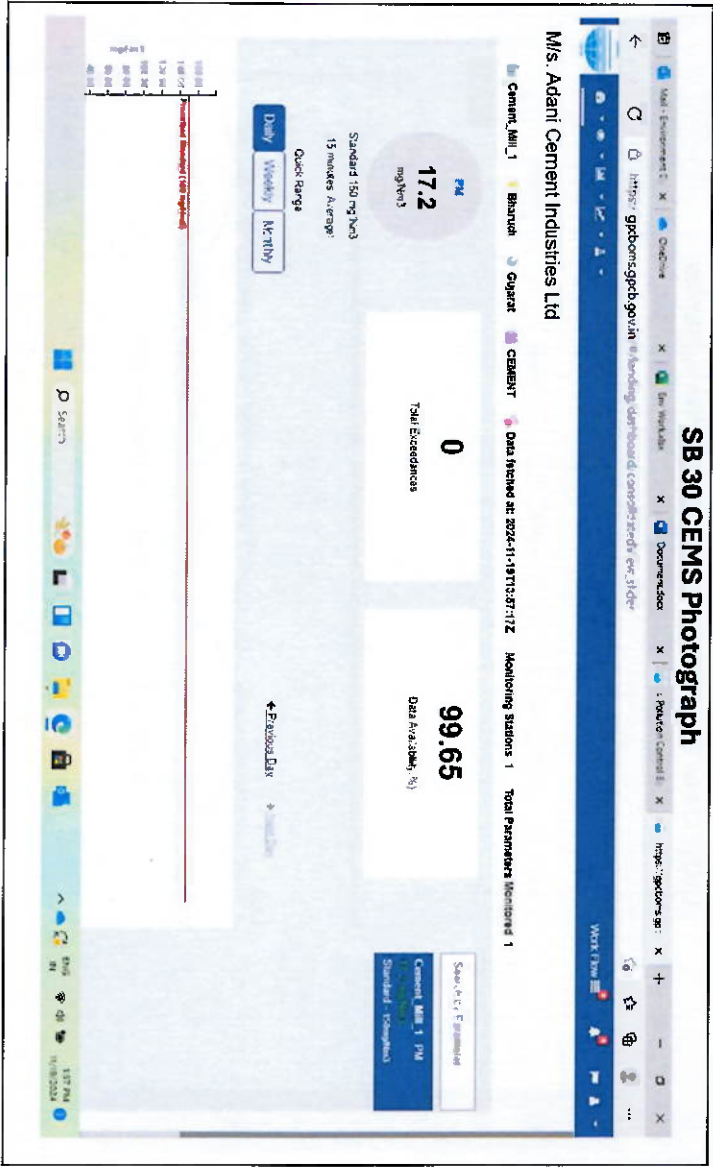
- Procurement and commissioning of Pollution Control/Monitoring Equipment
- Environmental monitoring of the core and buffer zone and evaluation of results. Keeping of records to track the surrounding environment quality status.
- Development of Maintenance schedules for pollution control equipment.
- Ensuring that prescribed standards are maintained.
- Ensuring optimum water usage.
- Implementation of the mitigation measures suggested in EIA/EMP Report.
- Ensuring greenbelt development/plantation & its maintenance
- Compliance with guidelines and statutory requirements.
- Coordination with statutory bodies, functional groups of the unit, Corporate Project/Environment & Engineering department etc.
- Regular environmental review and performance appraisal.
- Coordination with the vendors dealing in waste supplies and disposal.

ATTACHMENT 8-A

Implementation of Corporate Responsibility for Environment Protection (CREP)

Following activities as per recommendations mentioned in CREP guidelines of CPCB for Cement Plants is being implemented:

Sr. No.	CREP Condition	Action Plan
1	Cement plant, which are not complying with notified standards, shall do the following to meet the standards: Augmentation of existing Air pollution Control Devices - by July 2003. *No compliance units shall submit bank guarantee equivalent to 10% value of Pollution Control Equipment required.	Not applicable
2	Cement plants located in critically polluted or urban areas(including 5 Km distance outside urban boundary) will meet 100 mg/Nm ³ limit of particulate matter by December 2004 and continue working to reduce the emission of particulate matter 50 mg/Nm ³ .	Not Applicable
3	The new cement kiln to be accorded NOC/Environmental Clearance will meet the limit of 50 mg/Nm ³ for particulate matter emission.	All Pollution Control Equipment has been designed to meet the limit of 50 mg/Nm ³ for particulate matter emission.
4	The cement industries will control fugitive emission from all raw material and product storage and transfer. However, the National Task Force will decide the feasibility for the control of fugitive emission from limestone and coal storage areas.	Closed storage / silos for Clinker, Fly Ash, Gypsum and Cement has been provided. Bag filters are installed at all material transfer points.
5	After performance evaluation of various types of continuous monitoring equipment and feedback from the industries and equipment manufacturers, NTF will decide feasible unit operation/section for installation of continuous monitoring equipment. The industry will install the continuous monitoring system (CMS).	Continuous monitoring equipment has been installed.
6	Industries will submit the target date to enhance the utilization waste material.	ACL committed to use fly ash up to 35%. ACL is being utilizing Fly ash and Gypsum as waste material generated from pollution control equipment of Thermal Power Plant.
7	NCBM will carry out a study on hazardous waste utilization in cement kiln.	Not applicable
8	Cement industries will carry out feasible study and submit target dates to CPCB cogeneration of power by July-2003.	Not applicable



CORPORATE ENVIRONMENT POLICY

As an integral part of our business philosophy, Ambuja Cements Limited part of Adani Group is committed to contribute towards ensuring a clean and sustainable environment by continually improving our environmental performance.

This policy is applicable to all units with operational and financial control and extends to our value chain, vendors, suppliers, and logistics partners. The suppliers and value chain partners are expected to adhere to the policy and develop an Environment Policy for their own operations.

To achieve this goal, we wholeheartedly and proactively commit ourselves to:

- Conduct all our operations in an environmentally responsible manner that is better than statutory environment compliances and applicable standards.
- Ensure judicious use of resources including energy, water and raw materials.
- Adopt environmentally safe and advanced process technologies along with best practices for prevention & control of risks and adverse effects of the release of our pollutants to the environment (air, water, and soil) so as to protect health and safety of our employees, contract employees, and community.
- Continuously assess our environmental impacts and measure and improve our environmental performance by adopting best practices for prevention and control of pollution.
- Make continuous efforts to increase the use of non-carbonaceous raw material, renewable energy and fuels and co-processing of wastes to reduce our greenhouse gases (GHG) footprint as part of our Climate Change mitigation initiative.
- Promote circular economy through use of alternate fuels, raw materials and reuse and recycling of waste generated.
- Comply with applicable legal and other requirements including clearances of environment, forest and wildlife, consents, permits, licenses, standards, and leading industry initiatives.

Attachment 12







