



# SHREE CEMENT LTD.

An ISO 9001, 14001, 45001 & 50001 Certified Company

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SCL/Nawalgarh/EC/2021-2022 8029

Date: 25/05/2021

To,  
Deputy Director General of Forests (C),  
Ministry of Environment, Forest and Climate Change,  
Integrated Regional Office, Jaipur , A-209&218, Aranya Bhawan,  
Mahatma Gandhi Road, Jhalana Institutional Area,  
Jaipur - 304002, Rajasthan

Sub:- Half yearly compliance report of condition of environmental clearance granted for establishment of 2.0 million TPA Clinker, 3.0 million TPA cement, 2\*18 MW CPP, 10 MW WHR and 3.2 million TPA limestone mining at village-Gothra, Tehsil-Nawalgarh, District-Jhunjhunu (Rajasthan) of M/s. Shree Cement Limited.

Ref: EC letter no. J-11011/1173/2007- IA II (I) dated 15/07/2009 & 29.09.2016

Dear Sir,

Kindly refer to the above subject matter and referred letters. We are submitting herewith the compliance status of above EC conditions from **October-2020 to March-2021**.

This is for your kind information please.

Thanking you,  
Yours faithfully,  
For Shree Cement Limited,

(Dr. Anil Kumar Trivedi)  
Sr. General Manager (Environment)

Copy to:-

1. The Director (Industry) Ministry of Environment , Forest & CC, Indira Paryavaran Bhawan, Jor Bagh Road, Ali Ganj, New Delhi-110003
2. Zonal Officer, Central pollution Control Board, Zonal Office (Central) Vithal Market, Paryavaran Parisar, E-5, Arera Colony, Bhopal, Madhya Pradesh 462016
3. The Member Secretary, Rajasthan Pollution Control Board, 4, Institutional Area, Jhalana Doongri, JAIPUR-302004 (Rajasthan).

**Compliance Status of Environment Clearance**  
**EC Letter No. J-11011/1173/2007- IA II (I) Dated 15/07/2009 & 29.09.2016**  
**October-2020 to March-2021.**

Above Environmental Clearance (EC) issued by MoEF, New Delhi vide letter no. F. No. J-11011/1173/2007-IA.II (I) dated 15.07.2009 for Integrated Cement Plant (Cement- 3.0 MTPA, Clinker- 2.0 MTPA), Captive Power Plant (Pet Coke based 2x18 MW and WHRB 10 MW) and Limestone Mining (3.2 MPTA, ML Area: 624 ha.) at Village: Gothra, Tehsil: Nawalgarh, District: Jhunjhunu (Raj.) of M/s. Shree Cement Limited. Environmental Clearance (EC) validity for Limestone Mining (3.2 MPTA, ML Area: 624 ha.) is for 30 years and 10 years for in case of industry. Hence existing EC is active for 30 years. Mining lease was granted on 12.04.2019 valid up to 11.04.2069 (50 years).

Further fresh Environment Clearance has been granted by the MoEF&CC vide Letter No. J-11011/1173/2007- IA II (I) Dated 08/02/2021 for Integrated Cement Plant (Cement- 3.0 MTPA, Clinker- 2.0 MTPA), Captive Power Plant (Pet Coke based 2x18 MW and WHRB 10 MW) at Village: Gothra, Tehsil: Nawalgarh, District: Jhunjhunu (Raj.) of M/s. Shree Cement Limited.

CGWA issued a NOC for abstraction of the Ground Water 1200 KLD, vide letter no. 21-4(258)/WR/CGWA/2008-567 dated 05.08.2008 for Integrated Cement Plant and Limestone Mine at Gothra village, Nawalgarh block, Jhunjhunu (Raj). Recommendation letter for extension of CGWA NOC (1200 m<sup>3</sup>/day) has been sent by CGWB (Western Region), Jaipur Rajasthan to CGWA, New Delhi vide letter no. TS/21B(535)/CGWA/ 2012-1882 dated 14.08.2019 for Integrated Cement Project (3.0 MTPA Cement, 2.0 MTPA Clinker, Air Cooled CPP, 3.2 MTPA Limestone Mine and Residential Colony) near village Gothra, Nawalgarh, Jhunjhunu (Raj.) of M/s. Shree Cement Limited. Further,

CTE was issued for Gothra Limestone Mine in ML Area: 624 ha (ML No: 47/07) with production capacity of 3.2 MTPA by the RSPCB, Rajasthan vide file no. F(Mines)/Jhunjhunu(Nawalgarh)/25(1)/2019-2020/1103-1107 and with Order No. 2019-2020/Mines/9945 dated 20.06.2019 and valid up to 31.05.2024.

CTE was issued for Limestone Crusher (1200 TPH) by the RSPCB, Rajasthan vide file no. F(SCMG)/Jhunjhunu(Nawalgarh)/2(1)/ 2019-2020/2061-2063 and with Order No. 2019-2020/SCMG/4681, dated 30.08.2019 and valid from 28.07.2018 to 30.06.2023.

CTE was issued for Cement: 3.0 MTPA and Clinker: 2.0 MTPA by RSPCB, Rajasthan vide File No. F(CPM)/Jhunjhunu(Nawalgarh)/2(1)/2018-2019/7228-7230 and with Order No. 2018-2019/CPM/5424, dated 28.02.2019 and valid from 14.06.2018 to 31.05.2023.

CTE was issued for CPP- 36 MW and Waste Heat Recovery Power Plant at Nawalgarh, Jhunjhunu, Raj by the RSPCB, Rajasthan vide file no. F(CPM)/Jhunjhunu(Nawalgarh)/2(1)/2018-2019/7793-7795 and with Order No. 2018-2019/CPM/5447, dated 26.03.2019 and valid from 14.06.2018 to 31.05.2023.

CTO was issued for Gothra Limestone Mine in ML Area: 624 ha (ML No: 47/07) with production capacity of 3.2 MTPA by the RSPCB, Rajasthan vide file no. F(Mines)/Jhunjhunu(Nawalgarh)/25(1)/2019-2020/1108-1112 and with Order No. 2019-2020/Mines/9946 dated 20.06.2019 and valid from 20.06.2019 to 31.05.2024. Site development work of mine has been started.

**Pointwise compliance of conditions stipulated in Environmental Clearance letter are as under:**

S. No.	Condition	Compliance
<b>Specific Conditions</b>		
I	<p>No construction work without approvals from IBM and Raj Govt.</p> <p>Submission of copy of approvals for the linked mining component from the Indian Bureau of Mines (IBM) and State Govt. of Rajasthan. A copy of the mining lease approval from the Indian Bureau of Mines (IBM) and Govt. of Rajasthan shall be submitted to the Ministry and its Regional Office at Lucknow, U.P. before initiating any construction work related to mining at site.</p>	<p>Site development work of mine has been started and Consent to operate F(Mines)/Jhunjhunu (Nawalgarh)/25(1)/2019-2020/1108-1112 dated 20.06.2019 obtained from Rajasthan State Pollution Control Board (RSPCB) and valid up to 31.05.2024.</p> <p>Approval of mining plan and approval of mining lease has been submitted in earlier compliance reports.</p> <p>No any project activity (industrial) started yet, except boundary wall land procurement and boundary wall construction.</p>
II	<p>As proposed, Electrostatic Precipitators (ESPs) shall be provided to clinker cooler of cement plant and captive power plant to control particulate matters from the cement plant and captive power plant within 50 and 100 mg/Nm<sup>3</sup> respectively Bag house/filters to raw mill/kiln and cement mill Bag filters shall also be provided to cement mill hopper blending silo/kiln feed ,raw mill hopper, crushing plant, coal/petcoke mill, cement silo top, packing plant and at all other places including transfer points, venting auxiliaries etc. to reduce particulate matter. Lime stone shall be used in pet coke based captive power plant to control So<sub>2</sub> emissions.</p>	<p>Fresh Environment Clearance has been granted by the MoEF&amp;CC vide Letter No. J-11011/1173/2007- IA II (I) Dated 08/02/2021 for Integrated Cement Plant (Cement- 3.0 MTPA, Clinker- 2.0 MTPA), Captive Power Plant (Pet Coke based 2x18 MW and WHRB 10 MW)</p> <p>No any project activity, erection and commissioning is not started yet.</p>
III	<p>Continuous monitoring system to monitor gaseous emissions shall be provided and limits of SPM shall be controlled within 50 mg/Nm<sup>3</sup> by installing adequate air pollution control system. Data on ambient air quality, stack emissions and fugitive emissions shall be uploaded on the company's website and also regularly submitted on-line to the Ministry's Regional Office at Lucknow ,Rajasthan State Pollution Control Board (RSPCB) and Central Pollution Control Board(CPCB) as well as hard copy once in six months.</p>	<p>EC validity for Limestone Mining (3.2 MPTA, ML Area: 624 ha.) is for 30 years.</p> <p>Fresh Environment Clearance has been granted by the MoEF&amp;CC vide Letter No. J-11011/1173/2007- IA II (I) Dated 08/02/2021 for Integrated Cement Plant (Cement- 3.0 MTPA, Clinker- 2.0 MTPA), Captive Power Plant (Pet Coke based 2x18 MW and WHRB 10 MW)</p> <p>No any project activity, erection and commissioning is not started yet.</p>
IV	<p>Possibilities shall be explored for the proper and full utilization of gases generated from the kiln in waste heat recovery boiler (WHRB) and a feasibility report shall be prepared and submitted to the Ministry's Regional Office at Lucknow within 3 months from the date of issue of the letter.</p>	<p>EC validity for Limestone Mining (3.2 MPTA, ML Area: 624 ha.) is for 30 years.</p> <p>Fresh Environment Clearance has been granted by the MoEF&amp;CC vide Letter No. J-11011/1173/2007- IA II (I) Dated 08/02/2021 for Integrated Cement Plant (Cement- 3.0 MTPA, Clinker- 2.0 MTPA), Captive Power Plant</p>

		(Pet Coke based 2x18 MW and WHRB 10 MW) No any project activity, erection and commissioning is not started yet.
V	The company shall install adequate dust collection and extraction system to control fugitive dust emission at various transfer points raw mill handling (Unloading, conveying, transporting, stacking), vehicular movement, bagging and packing areas etc. crusher shall be operated with high efficiency bag filters. All conveyers shall be covered with GI sheets. Covered sheds for storage of raw materials and fully covered conveyers for transportation of materials shall be provided besides coal, cement, fly ash and clinker shall be stored in silos. Pneumatic system shall be used for fly ash handling.	EC validity for Limestone Mining (3.2 MPTA, ML Area: 624 ha.) is for 30 years. Fresh Environment Clearance has been granted by the MoEF&CC vide Letter No. J-11011/1173/2007- IA II (I) Dated 08/02/2021 for Integrated Cement Plant (Cement- 3.0 MTPA, Clinker- 2.0 MTPA), Captive Power Plant (Pet Coke based 2x18 MW and WHRB 10 MW) No any project activity, erection and commissioning is not started yet.
VI	Dust suppression by regular water sprinkling in cement plant, CPP, limestone mine lease critical areas prone to air pollution and having high levels of SPM and RPM such as haul road. Loading and unloading points, transfer points and other vulnerable areas to control fugitive emissions. Fugitive emissions shall also be controlled by dust suppression and atomized water spray systems during excavation, handling overburden and its transport and dumping in mine lease area. It shall be ensured by that the ambient air quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regards.	Water sprinkling arrangements shall be provided in mines at loading, unloading points and on haul roads.  Ambient air quality will be maintained well within the prescribed norms.
VII	Secondary fugitive emissions from all the sources shall be controlled within the latest permissible limits issued by Ministry and regularly monitored guidelines/ Code of practice issued by the CPCB shall be followed.	Fresh Environment Clearance has been granted by the MoEF&CC vide Letter No. J-11011/1173/2007- IA II (I) Dated 08/02/2021 for Integrated Cement Plant (Cement- 3.0 MTPA, Clinker- 2.0 MTPA), Captive Power Plant (Pet Coke based 2x18 MW and WHRB 10 MW) Presently, no any project activity, erection and commissioning is not started yet.
VIII	Efforts shall be made to reduce impacts of the transport of the raw materials and end products on the surrounding environment in the closed containers only and should not be overload. Vehicular emission shall be regularly monitored.	Effort will be made in environmentally sound manners. Materials will be transported in covered vehicles. Fresh Environment Clearance has been granted by the MoEF&CC vide Letter No. J-11011/1173/2007- IA II (I) Dated 08/02/2021 for Integrated Cement Plant (Cement- 3.0 MTPA, Clinker- 2.0 MTPA), Captive Power Plant (Pet Coke based 2x18 MW and WHRB 10 MW)

		Presently, no any project activity, erection and commissioning is not started yet.
IX	Possibilities shall be explored for the transportation of pet coke and fly ash by rail and an action plan shall be submitted to the Ministry and its Regional Office at Lucknow.	Agreed with. Measures will be taken for maintenance of vehicles used in mining operations and in transportation of mineral. Presently, no any project activity, erection and commissioning is not started yet.
X	Efforts shall be made to reduce impacts of the transport of the raw materials and end products on the surrounding environment including agricultural land. All the raw material including fly ash shall be transported in the closed containers covered with a tarpaulin only and shall not be overloaded. vehicular emissions shall be kept under control and regularly monitored. Measures shall be taken for maintenance of vehicles used in mining operations and in transportation of mineral.	Agreed with. Limestone will be transported from crusher to plant through closed conveyor belt. Only PUC certified vehicles will be allowed. Measures will be taken for maintenance of vehicles used in mining operations and in transportation of mineral.
XI	Asphalting /Concreting of roads and water spray all around the critical areas prone to air pollution and having high levels of SPM and RPM shall be ensured.	Water sprinkling arrangements will be provided at loading, unloading points and on haul roads.
XII	Total requirement of ground water should not exceed 1200 m3/day ground water as per the permission accorded by the CGWA vide letter no. 21-4 (258)/WR/CGWA/2008-567 dated 5 <sup>th</sup> August,2008. The water stored in the artificial reservoir made in the mine pit shall be used maximum to reduce ground water consumption. Water efficient technology like air- cooled condenser to captive power plant shall be provided to conserve water. the effluent from demineralization plant of captive power plant shall be neutralized in neutralization pit and recycled /reused in the process and other plant related activities i.e. cooling, dust suppression and green belt development etc. 'Zero' discharge shall be strictly adopted and no effluent from the process and mine shall be discharged from the cement plant and mine outside the premises to any nearby water body/river etc.	Total water requirement will not exceed from 1200 m3/day. Rain water collected in mine pit will be used in process. New ToR issued for integrated Cement plant. Zero discharge policy will be adopted. CGWA NOC extension application submitted to CGWB dated 30.04.2018 for 1200 KLD. Subsequently CGWB Jaipur forwarded to CGWA Delhi for extension of validity of NOC on 08.05.2018. Further CGWA Delhi sent a mail to submit recommendation from DC, Jhunjhunu on 26.09.2018. CGWB, Jaipur forwarded site inspection report to CGWA, Delhi on 14.08.2019 for recommendation of extension of NOC.
XIII	Domestic effluent shall be treated in Sewage Treatment Plant (STP) in colony and in septic pits followed by soak pits in mine lease area. All the treated waste water shall be used for gardening /agricultural purpose and dust suppression. Domestic waste from colony and STP shall be segregated into bio-	EC validity for Limestone Mining (3.2 MPTA, ML Area: 624 ha.) is for 30 years. Fresh Environment Clearance has been granted by the MoEF&CC vide Letter No. J-11011/1173/2007- IA II (I) Dated 08/02/2021 for Integrated Cement Plant (Cement- 3.0 MTPA, Clinker- 2.0 MTPA), Captive Power Plant

	degradable and non- biodegradable. Biodegradable waste shall be composted and non-biodegradable waste shall be disposed off in environment -friendly manner or filled at identified sited only after proper treatment. Effluent Treatment Plant (ETP) shall also be provided for workshop and mineral separation plant for the treatment of wastewater.	(Pet Coke based 2x18 MW and WHRB 10 MW) Presently, no any project activity, erection and commissioning is not started yet. In mine lease area soak pits will be provided for domestic sewage.
XIV	Detailed hydrological study shall be carried out and implementation of recommendations of the detailed hydrological study shall be ensured.	Hydrological study has been carried out and recommendations will be implemented.
XV	Project proponent shall ensure that no natural water course shall be obstructed due to any mining operations.	Agreed with. No natural water course will be obstructed due to mining operations.
XVI	The project proponent shall take appropriate mitigate measures to prevent pollution of nearby river and other surface water body, if any.	Appropriate mitigate measures will be taken to prevent pollution of nearby river and other surface water body.
XVII	Suitable conservation measures to augment ground water resources in the area shall be planned and implemented in consultation with Regional Director, Central Ground Water Board.	Rain water harvesting measures, including construction of check dam and roof top rain water harvesting in and around will be implemented for augmentation of ground water.
XVIII	All the bag filter dust, raw mill dust, coal dust, clinker dust and cement dust from pollution control devices shall be recycled and reused in the process and used for cement manufacturing. Domestic solid waste from colony shall be used as manure for green belt development within the premises. Waste oil shall be provided to the authorized recyclers/re processors.	EC validity for Limestone Mining (3.2 MPTA, ML Area: 624 ha.) is for 30 years. Fresh Environment Clearance has been granted by the MoEF&CC vide Letter No. J-11011/1173/2007- IA II (I) Dated 08/02/2021 for Integrated Cement Plant (Cement- 3.0 MTPA, Clinker- 2.0 MTPA), Captive Power Plant (Pet Coke based 2x18 MW and WHRB 10 MW) Presently, no any project activity, erection and commissioning is not started yet.
XIX	All the fly ash shall be utilized as per Fly Ash Notification, 1999 subsequently amended in 2003. Efforts shall be made to use fly ash maximum in making Pozollona Portland Cement (PPC). Fly Ash shall be stored in silos and other materials in covered sheds.	Fresh Environment Clearance has been granted by the MoEF&CC vide Letter No. J-11011/1173/2007- IA II (I) Dated 08/02/2021 for Integrated Cement Plant (Cement- 3.0 MTPA, Clinker- 2.0 MTPA), Captive Power Plant (Pet Coke based 2x18 MW and WHRB 10 MW) Presently, no any project activity, erection and commissioning is not started yet.
XX	An effort shall be made to use of high calorific hazardous waste in the cement kiln and necessary provision shall be made accordingly.	Fresh Environment Clearance has been granted by the MoEF&CC vide Letter No. J-11011/1173/2007- IA II (I) Dated 08/02/2021 for Integrated Cement Plant (Cement- 3.0 MTPA, Clinker- 2.0 MTPA), Captive Power Plant (Pet Coke based 2x18 MW and WHRB 10 MW) Presently, no any project activity, erection and commissioning is not started yet. EC validity for

		Limestone Mining (3.2 MPTA, ML Area: 624 ha.) is for 30 years.
XXI	Efforts shall be made to use low grade lime, more fly ash and solid waste in the cement manufacturing.	Fresh Environment Clearance has been granted by the MoEF&CC vide Letter No. J-11011/1173/2007- IA II (I) Dated 08/02/2021 for Integrated Cement Plant (Cement- 3.0 MTPA, Clinker- 2.0 MTPA), Captive Power Plant (Pet Coke based 2x18 MW and WHRB 10 MW) Presently, no any project activity, erection and commissioning is not started yet. EC validity for Limestone Mining (3.2 MPTA, ML Area: 624 ha.) is for 30 years.
XXII	Open cast fully mechanized method of mining shall be adopted and no change in mining technology and scope of working shall be made without prior approval of the Ministry of Environment & Forests.	Noted and no change in mining technology and scope of working will be made without prior approval of the Ministry of Environment, Forests and climate change.
XXIII	Wet drilling, blasting method and provision for the control air emissions during blasting using dust collectors etc. shall be used.	Wet drilling and dry drilling with dust extractor arrangement will be used. Water spray on haul roads will be practiced.
XXIV	Deep hole wet drilling sequential blasting method shall be adopted to control ground vibration and noise and provision for the control air emissions during blasting using such as dust collectors/extractors etc. shall be made .blasting operation shall be carried out only during the daytime and one bench at a time shall be blasted. Controlled blasting shall be practiced. The mitigative measures for control of ground vibrations and to arrest fly rocks and boulders shall be implemented. 'No objection Certificate' from the Chief Controller of Explosives shall be obtained.	Controlled Blasting will be done during the daytime with Shock Tube Detonator i.e. Non-Electric Bottom Initiation & use of rock breaker for secondary breaking.  NOC will be obtained from Chief Controller of Explosives.
XXV	Top soil, if any, shall be stacked with proper slope at earmarked non-mineralized site(s) only with adequate measures and shall be used for reclamation and rehabilitation of mined out areas.	Top soil will be stacked with proper slope at earmarked site(s) and will be used for reclamation and rehabilitation of mined out areas.
XXVI.	The inter burden and other waste generated shall be stacked at earmarked dump site(s) only and should not be kept active for long period. The total height of the dumps shall not exceed 30 m in the three terraces of 10 m each and the overall slope of the dump shall be maintained to 28 degree. The inter burden dumps shall be scientifically vegetated with suitable native species to prevent erosion and surface run off. Monitoring and management of rehabilitated areas should continue until the	Inter burden and OB will be stacked at earmarked dump site(s). The total height of the dumps will be 30m in three terraces of 10m each and the overall slope of the dump will be maintained to 28°. The inter burden dumps will be vegetating with native species. Compliance status will be submitted to the Ministry of Environment & Forests and its Regional Office on six monthly basis.

	vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry & Forests and its Regional Office, Lucknow on six monthly bases.	
XXVII.	As proposed, green belt shall be developed in at least 6.5 acres (33 %), out of 16 acres area in the cement plant area and all the mined out area except used for reservoir.	Green belt will be developed in 33% of mining lease area at the end of mine life. Native species will be planted.
XXVIII	The void left unfilled in the mining area shall be converted into water body. The higher benches of excavated void/mining pit shall be terraced and plantation done to stabilize the slopes. The slope of higher benches shall be made gentler for easy accessibility by local people to use the water body. Peripheral fencing shall be carried out along the excavated area.	Void left unfilled in the mining area will be converted into water body. Higher benches of excavated void/mining pit will be terraced and plantation will be done to stabilize the slopes. Slope of higher benches will be made gentler for easy accessibility by local people to use the water body. Peripheral fencing will be carried out along the excavated area.
XXIX.	Catch drains and siltation ponds of appropriate size shall be constructed for the working pit, inter burden and mineral dumps to arrest flow of slit and sediment. The water so collected shall be utilized for watering the mine area, roads, green belt development etc. The drains shall be regularly desilted, particularly after monsoon, and maintained properly.	Catch drains and siltation ponds shall be constructed.  Rain water collected in mine pit will be utilized for plantation, road spray and process.
XXX.	Garland drain of appropriate size, gradient and length shall be constructed for both mine pit and inter burden dumps and sump capacity shall be designed keeping 50% safety margin over and above peak sudden rainfall ( based on 50 years data) and provide adequate retention period to allow proper settling of silt material. Sedimentation pits shall be constructed at the corners of the garland drains and desilted at regular intervals.	Garland drain along with sedimentation pits will be constructed for both mine pit and inter burden dumps.
XXXI.	Regular monitoring of ground water level and quality shall be carried out by establishing a network of existing wells and constructing new piezometers at suitable locations by the project proponent in and around project area in consultation with Regional Director, Central Ground Water Board. The frequency of monitoring shall be four times a year – pre-monsoon (April/May), monsoon (August), post-monsoon (November), and winter (January). Data thus collected shall be sent at regular intervals to Ministry & Forests and its	Regular monitoring of ground water level and quality will be carried out by establishing a network of existing well and constructing new piezometer. The frequency of monitoring will be four times a year- pre-monsoon (April/ May), monsoon (August), post-monsoon (November), and winter (January). Data collected shall be sent to MOEF and its Regional Office, Central Ground Water Authority and State Ground Water Board annually. Reports from MoEF & NABL approved laboratory of ground water quality analysis is attached as <b>Annexure-1</b> .



	Regional Office, Lucknow, Central Ground Water Board.	
XXXII	Suitable conservation measures to augment ground water resources in the area shall be planned and implemented in consultation with Regional Director, Central Ground Water Board.	Rain water harvesting measures, including construction of check dam and roof top rain water harvesting in and around will be implemented for augmentation of ground water.
XXXIII.	Rain water collected from the roof top shall be injected into the ground through injection wells to recharge the ground water table.	Rain water collected from the roof top shall be injected into the ground through injection wells to recharge the ground water table.
XXXIV	Bench height. Width and slope for individual bench shall be properly assessed and implemented. Adequate measures shall be adopted to stabilize the slope before abandonment. The fencing around the reservoir shall be provided to prevent accidents.	Approved mining plan will be followed. Adequate measures will be adopted to stabilize the slope. Fencing will be provided to prevent accidents.
XXXV.	Dimensions of the retaining wall at the toe of inter burden dumps and inter burden benches within the mine to check run-off and siltation shall be based on the rain fall data.	Retaining wall having suitable dimensions at the toe of inter burden dumps and inter burden benches will be provided to check the run-off and siltation.
XXXVI.	As proposed, green belt shall be developed in at least 50 ha (33 %) out of total 152.5 ha. In the cement plant area and in 332.82 ha (53 %), out of total 624 ha. In the mine lease are as per the CPCB guidelines in consultation with local DFO to mitigate the impact of fugitive emissions A 7.5 meter wide green belt shall also be developed all around the mine area. A long term action plan for the plantation / afforestation / green belt development etc. shall be prepared and submitted to the Ministry and its Regional Office at Lucknow and implemented. Further efforts shall be made to maintain the area properly already afforested.	Green belt will be developed in 53% of mining lease area at the end of mine life. Native species will be planted.  New ToR received F.No.J-11011/1173/2007-IA.II(I) dated 23.09.2019 for integrated cement plant as Environment clearance letter No. J-11011/1173/2007-IA-II(I) Dated 15/07/2009 & 29.09.2016 was expired on 14.07.2019. EC validity for Limestone Mining (3.2 MPTA, ML Area: 624 ha.) is for 30 years.
XXXVII	Action plan for the mining, management of over burden (removal, storage, disposal etc.), reclamation of the mined out area and mine closure shall be submitted to the Ministry and its Regional Office at Bangalore and implemented in a time bound manner.	Action plan for the mining, management of over burden (removal, storage, disposal etc.), reclamation of the mined out area has been given in approved mining plan and submitted to the ministry. Mine closure will be submitted to the Ministry and its Regional Office at the end of mining operation.
XXXVIII	A fine mine closure plan along with details of Corpus Funds shall be submitted to the Ministry of Environment & Forests 5 years in advance of final mine closure for approval.	Mine closure plan along with Corpus Funds will be submitted to the Ministry of Environment & Forests timely.

XXXIX	The project proponent shall modify the mine plan of the project at the time of seeking approval for the next mining scheme from the Indian Bureau of Mines so as to reduce the area for external over burden dump by suitable increasing the height of the dumps with proper terracing. It shall be ensured that the overall slope of the dump does not exceed 28 degree.	Mine plan shall be modified at the time of approval for the next mining scheme to reduce the area for external over burden dump by suitably increasing the height of the dumps with proper terracing. The overall slope of the dump will be maintained to 28°.
XXXX	The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna. Action plan for conservation of flora and fauna shall be prepared and implemented in consultation with the State Forest and Wildlife Department. Necessary allocation of funds for implementation of the conservation plan shall be made and the funds so allocated shall be included in the project cost. Copy of action plan may be submitted to the Ministry and its Regional office within 3 months from the date issue of this letter.	There is no endangered fauna in the project area. However local species will be plant in and around the project area.
XXXXI	Rehabilitation and Resettlement Plan for the project affected population including tribals as per the policy of the State Govt. shall be implemented. Compensation paid in any case shall not be less than norms prescribed under the National Resettlement and Rehabilitation Policy, 2007	Not applicable.
XXXXII	Permission and Recommendations of the State Forest Department regarding impact of cement plant and mining activities on the surrounding reserves forests, if any, shall be obtained and implemented, Further, Conservation Plan for the Conservation of wild fauna in consultation with the State Forest Department shall be prepared and implemented.	No reserved forest falls in the mining area. EC validity for Limestone Mining (3.2 MPTA, ML Area: 624 ha.) is for 30 years. Fresh Environment Clearance has been granted by the MoEF&CC vide Letter No. J-11011/1173/2007- IA II (I) Dated 08/02/2021 for Integrated Cement Plant (Cement- 3.0 MTPA, Clinker- 2.0 MTPA), Captive Power Plant (Pet Coke based 2x18 MW and WHRB 10 MW) Presently, no any project activity, erection and commissioning is not started yet.
XXXXIII	All the safety norms stipulated by the Director General, Mine & Safety (DGMS) shall be implemented.	All the safety norms stipulated by the Director General, Mine & Safety (DGMS) will be implemented.
XXXXIV	'Consent to Operate' shall be obtained from Rajasthan State Pollution Control Board (RSPCB) before starting enhanced production from the mine.	Consent to operate for mines vide RSPCB letter No. F(Mines)/Jhunjhunu(Nawalgarh)/25(1)/2019-2020/1108-1112 dated 20.06.2019 obtained from Rajasthan State Pollution Control Board (RSPCB) and valid up to 31.05.2024.
XXXXV	Acoustic enclosures shall be provided to control noise wherever necessary, Mine	Proper maintenance and lubrication will be done for all machines to maintain the noise level

	machine shall be provided with silencers, Noise shall also be controlled from cooler fans, compressor house, cement mill and raw mill, cement plant and drilling machines, excavator, blasting at mine site using appropriate noise control measures.	at mine site. EC validity for Limestone Mining (3.2 MPTA, ML Area: 624 ha.) is for 30 years. Fresh Environment Clearance has been granted by the MoEF&CC vide Letter No. J-11011/1173/2007- IA II (I) Dated 08/02/2021 for Integrated Cement Plant (Cement- 3.0 MTPA, Clinker- 2.0 MTPA), Captive Power Plant (Pet Coke based 2x18 MW and WHRB 10 MW) Presently, no any project activity, erection and commissioning is not started yet.
XXXXVI	All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Steel plants shall be implemented.	Corporate Responsibility for Environment Protection (CREP) will be implemented.
XXXXVII	The company shall be comply with the commitments made during public hearing / public consultation held on 27 February, 2009.	Commitments made during public hearing / public consultation held on 27 February, 2009 will be scomplied. Fresh Environment Clearance has been granted by the MoEF&CC vide Letter No. J-11011/1173/2007- IA II (I) Dated 08/02/2021 for Integrated Cement Plant (Cement- 3.0 MTPA, Clinker- 2.0 MTPA), Captive Power Plant (Pet Coke based 2x18 MW and WHRB 10 MW) Presently, no any project activity, erection and commissioning is not started yet.
XXXXVII I	The company shall provide housing for construction labor 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.	Agreed.
<b>General conditions</b>		
I	The project authority shall adhere to the stipulations made by Rajasthan State Pollution Control Board (RSPCB) and State Government.	All recommendation of Rajasthan State Pollution Control Board (RSPCB) and State Government will be implemented.
II	No further or modification of the plant shall be carried out without prior approval of this Ministry.	Fresh Environment Clearance has been granted by the MoEF&CC vide Letter No. J-11011/1173/2007- IA II (I) Dated 08/02/2021 for Integrated Cement Plant (Cement- 3.0 MTPA, Clinker- 2.0 MTPA), Captive Power Plant (Pet Coke based 2x18 MW and WHRB 10 MW) Presently, no any project activity, erection and commissioning is not started yet.
III	The gaseous and particulate matter emission from various units shall conform to the standards prescribed by the RSPCB. At no time, particulate emissions from the	Fresh Environment Clearance has been granted by the MoEF&CC vide Letter No. J-11011/1173/2007- IA II (I) Dated 08/02/2021 for Integrated Cement Plant (Cement- 3.0 MTPA,

	cement plant including kiln, coal mill, and cement mill, cooler shall exceed beyond the permissible limit. Interlocking facility shall be provided in the pollution control respective unit (s) is shut down automatically.	Clinker- 2.0 MTPA), Captive Power Plant (Pet Coke based 2x18 MW and WHRB 10 MW) Presently, no any project activity, erection and commissioning is not started yet.
IV	At least four ambient air quality monitoring stations shall be established in the down wind direction as well as where maximum ground level concentration of SPM, SO <sub>2</sub> and NO <sub>x</sub> are anticipated in consultation with the RSPCB. Ambient air quality including ambient noise levels shall not exceed the standards stipulated under EPA or regularly in consultation with RSPCB and data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office at Lucknow, RSPCB and CPCB once in six months. The instruments used for ambient air quality monitoring shall be calibrated time to time.	Fresh Environment Clearance has been granted by the MoEF&CC vide Letter No. J-11011/1173/2007- IA II (I) Dated 08/02/2021 for Integrated Cement Plant (Cement- 3.0 MTPA, Clinker- 2.0 MTPA), Captive Power Plant (Pet Coke based 2x18 MW and WHRB 10 MW) Presently, no any project activity, erection and commissioning is not started yet.
V	Industrial wastewater shall be properly collected and treated so as to conform to the standards prescribed under GSR 422 (E) dated 19 May, 1993 AND 31 December, 1993 or as amended from time to time. The treated wastewater shall be utilized for plantation purpose.	Fresh Environment Clearance has been granted by the MoEF&CC vide Letter No. J-11011/1173/2007- IA II (I) Dated 08/02/2021 for Integrated Cement Plant (Cement- 3.0 MTPA, Clinker- 2.0 MTPA), Captive Power Plant (Pet Coke based 2x18 MW and WHRB 10 MW) Presently, no any project activity, erection and commissioning is not started yet.
VI	The overall noise levels in and around the plant area shall be kept well within the standards (85Dba) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under Environmental (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).	EC validity for Limestone Mining (3.2 MPTA, ML Area: 624 ha.) is for 30 years. Fresh Environment Clearance has been granted by the MoEF&CC vide Letter No. J-11011/1173/2007- IA II (I) Dated 08/02/2021 for Integrated Cement Plant (Cement- 3.0 MTPA, Clinker- 2.0 MTPA), Captive Power Plant (Pet Coke based 2x18 MW and WHRB 10 MW) Presently, no any project activity, erection and commissioning is not started yet.
VII	Proper housekeeping and adequate occupational health programmes shall be taken up. Occupational Health Surveillance Programme shall be done on regular basis and records maintained properly for at least 30-40 years. The programme shall include lung function and sputum analysis taste once in six month. Sufficient preventive measures shall be adopted to avoid direct exposure to dust etc.	Occupational health program will be organized on a regular basis and records as maintained. The programme will be organized once in six months. PPEs will be provided.
VIII	The company shall harvest the rainwater from the roof tops and storm water drains	Rain water harvesting measures such as construction of earthen pond inside the plant

	to recharge the ground water and use the same water for the various activities of the project to conserve fresh water.	and mine area and roof top harvesting etc will be implemented.
IX	The company shall undertake eco-development measures including community welfare measures in the project area.	Plantation in and around the project area will be done. Various community welfare measures including education, healthcare and infrastructure etc will be done for betterment of the surrounding area.
X	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA /EMP.	Environmental protection measures and safeguards recommended in EIA/ EMP will be implemented.
XI	A separate environmental management cell with full fledged laboratory facilities to carry various management and monitoring function shall be set up under the control of senior executive.	Environment Management Cell with qualified staff will be establish.
XII	As proposed Rs. 30.00 Crores and Rs. 1.00 crores earmarked towards the capital cost and recurring cost/annum for environment pollution control measures and Rs. 50.00 Lakhs/annum for CSR activities shall be used judiciously to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. Time bound implementation schedule for implementing all the conditions stipulated herein shall be submitted to the Ministry. The funds so provided shall not be diverted for any other purpose.	EC validity for Limestone Mining (3.2 MPTA, ML Area: 624 ha.) is for 30 years. Fresh Environment Clearance has been granted by the MoEF&CC vide Letter No. J-11011/1173/2007- IA II (I) Dated 08/02/2021 for Integrated Cement Plant (Cement- 3.0 MPTA, Clinker- 2.0 MPTA), Captive Power Plant (Pet Coke based 2x18 MW and WHRB 10 MW) Presently, no any project activity, erection and commissioning is not started yet.
XIII	The project authorities shall inform the Regional Office as well as the Ministry, The date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.	Financial closure and final approval of the project will be informed the Regional Office as well as the Ministry.
XIV.	The project proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the Rajasthan State Pollution Control Board and may also be seen at Website of the Ministry of Environment AND Forests at <a href="http://envfor.nic.in">http://envfor.nic.in</a> . This should be advertised within seven days from the date of issue of the clearance letter at least in two local newspapers that are widely circulated in the region of which one shall be forwarded to the Regional Office at Lucknow.	Advertised in two local news papers widely circulated in the region namely, Rajasthan Patrika & Dainik Navjyoti on 22/7/2009. Copies have been submitted to the Ministry.

XV.	A Copy of clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad / Municipal Corporation. Urban Local Body and the local NGO, if any from whom suggestion /representations, if any, were received while processing the proposal. The clearance letter shall also be put on the web site of the company by proponent.	Copy of environment clearance letter has been sent on 26/07/2009.  EC letter available on our web site:- <a href="http://www.shreecement.in">www.shreecement.in</a> .
XVI.	The project proponent shall upload the status of compliance of the stipulated environmental clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MOEF. The respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO <sub>2</sub> , NO <sub>x</sub> (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	Compliance status uploaded to company website and also sent to the Regional Office of the MOEF, Zonal Office of CPCB and the SPCB.  PM <sub>10</sub> , PM <sub>2.5</sub> , SO <sub>2</sub> and NO <sub>x</sub> level will be monitored on regular basis and data will be submitted to the authorities timely.
XVII	The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental condition including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB. The Regional Office of this Ministry at Lucknow/ CPCB/ RSPCB shall monitor the stipulated conditions.	Six monthly compliance reports is being submitted to Regional Office of MOEF&CC, the respective Zonal Office of CPCB and the SPCB.
XVIII	The environmental statement for each financial year ending 31 March in forms- V as mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environmental (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the respectively Regional Officers of the MOEF by e-mail.	Environmental statement for each financial year ending 31st March in Form-V will be submitted to the State Pollution Control Board and Regional Office of the MoEF&CC by e-mail, after starting operation and production; also it will be available on the website of the Company along with the status of compliance of EC conditions. Compliance report is being submitted to the regional Office of the MoEF by e-mail.





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**EKO PRO ENGINEERS PVT. LTD.**Environmental Consultants and Analytical Laboratory  
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Contact No. : 9711159210, 9711159427, SMS/Whatsapp No. : 9711163422, E-mail : email@ekopro.in, ekoproengineers@gmail.com, website : www.ekopro.in**TEST REPORT**  
**Water Sample Analysis**

Test Report No : EKO/147/161020

Issue Date : 21/10/2020

Issued To

: SHREE CEMENT LIMITED

Village - Gothra

Tehsil - Nawalgarh District- Jhunjhunu

Rajasthan

Sample Description : Ground Water  
Sample Drawn on : 15/10/2020  
Sample Drawn by : EPEPL (Mr. K.K.Mishra)  
Sample Received on : 16/10/2020  
Sampling Location : Near kanah wali jodi (Mines Area)  
Sampling Plan & Procedure : SOP-W/66  
Sample Quantity : 1.0 Litre  
Environmental Conditions : Normal  
Analysis Duration : 16/10/2020 To 21/10/2020  
Remark (if any) : NA

**RESULTS**

S. No.	Parameters	Test Methods	Results	Units	Limits as per IS:10500-2012 (Amd.No.2 Sep-2018)	
					Acceptable	Permissible
1	pH	IS: 3025 (P-11)	7.21	-	6.5-8.5	No relaxation
2	Total Hardness (as CaCO <sub>3</sub> )	IS: 3025 (P-21)	420.0	mg/L	200.0	600.0
3	Iron (as Fe)	EKO/CHEM/SOP-ICPMS/W-01	<0.005	mg/L	1.0	No relaxation
4	Chloride (as Cl)	IS: 3025 (P-32)	160.5	mg/L	250.0	1000.0
5	Fluoride (as F)	IS: 3025 (P-60)	<1.0	mg/L	1.0	1.5
6	Total Dissolved Solids	IS: 3025 (P-16)	790.0	mg/L	500.0	2000.0
7	Total Suspended Solids	IS: 3025 (P-17)	<5.0	mg/L	-	-
8	Calcium (as Ca)	IS: 3025 (P-40)	100.6	mg/L	75.0	200.0
9	Manganese (as Mn)	EKO/CHEM/SOP-ICPMS/W-01	<0.005	mg/L	0.1	0.3
10	Sulphate (as SO <sub>4</sub> )	IS: 3025 (P-24)	115.8	mg/L	200.0	400.0
11	Nitrate (as NO <sub>3</sub> )	IS: 3025 (P-34)	8.12	mg/L	45.0	No relaxation
12	Magnesium (as Mg)	IS: 3025 (P-46)	41.1	mg/L	30.0	100.0
13	Mercury (as Hg)	EKO/CHEM/SOP-ICPMS/W-01	<0.001	mg/L	0.001	No relaxation
14	Arsenic (as As)	EKO/CHEM/SOP-ICPMS/W-01	<0.005	mg/L	0.01	No relaxation
15	Total Alkalinity (as CaCO <sub>3</sub> )	IS: 3025 (P-23)	370.0	mg/L	200	600.0
16	Total Chromium (as Cr)	EKO/CHEM/SOP-ICPMS/W-01	<0.005	mg/L	0.05	No relaxation
17	Lead (as Pb)	EKO/CHEM/SOP-ICPMS/W-01	<0.005	mg/L	0.01	No relaxation

Remark:- Standard Applicable only for Drinking Water.

**Notes:**

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The customer asked for the above tests only.
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- Responsibility of the Laboratory is limited to the invoiced amount only.

**\*\*End of Report\*\***

For EKO PRO ENGINEERS PVT. LTD.

PURNIMA CHAUHAN  
TECHNICAL MANAGER  
(Authorised Signatory)





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**EKO PRO ENGINEERS PVT. LTD.**Environmental Consultants and Analytical Laboratory  
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Contact No. : 9711159210, 9711159427, SMS/Whatsapp No. : 9711163422; E-mail : email@ekopro.in, ekoproengineers@gmail.com, website : www.ekopro.in**TEST REPORT**  
**Water Sample Analysis**

Test Report No : EKO/148/161020

Issue Date : 21/10/2020

Issued To

: SHREE CEMENT LIMITED  
Village - Gothra  
Tehsil - Nawalgarh District- Jhunjhunu  
Rajasthan

Sample Description : Ground Water  
Sample Drawn on : 15/10/2020  
Sample Drawn by : EPEPL (Mr. K.K.Mishra)  
Sample Received on : 16/10/2020  
Sampling Location : Near Raanola Joda, Plant Boundary (Plant Area)  
Sampling Plan & Procedure : SOP-W/66  
Sample Quantity : 1.0 Litre  
Environmental Conditions : Normal  
Analysis Duration : 16/10/2020 To 21/10/2020  
Remark (if any) : NA

**RESULTS**

S. No.	Parameters	Test Methods	Results	Units	Limits as per IS:10500-2012 (Amd.No.2 Sep-2018)	
					Acceptable	Permissible
1	pH	IS: 3025 (P-11)	7.26	-	6.5-8.5	No relaxation
2	Total Hardness (as CaCO <sub>3</sub> )	IS: 3025 (P-21)	380.0	mg/L	200.0	600.0
3	Iron (as Fe)	EKO/CHEM/SOP-ICPMS/W-01	<0.005	mg/L	1.0	No relaxation
4	Chloride (as Cl)	IS: 3025 (P-32)	170.8	mg/L	250.0	1000.0
5	Fluoride (as F)	IS: 3025 (P-60)	<1.0	mg/L	1.0	1.5
6	Total Dissolved Solids	IS: 3025 (P-16)	695.0	mg/L	500.0	2000.0
7	Total Suspended Solids	IS: 3025 (P-17)	<5.0	mg/L	-	-
8	Calcium (as Ca)	IS: 3025 (P-40)	91.4	mg/L	75.0	200.0
9	Manganese (as Mn)	EKO/CHEM/SOP-ICPMS/W-01	<0.005	mg/L	0.1	0.3
10	Sulphate (as SO <sub>4</sub> )	IS: 3025 (P-24)	110.4	mg/L	200.0	400.0
11	Nitrate (as NO <sub>3</sub> )	IS: 3025 (P-34)	8.24	mg/L	45.0	No relaxation
12	Magnesium (as Mg)	IS: 3025 (P-46)	36.9	mg/L	30.0	100.0
13	Mercury (as Hg)	EKO/CHEM/SOP-ICPMS/W-01	<0.001	mg/L	0.001	No relaxation
14	Arsenic (as As)	EKO/CHEM/SOP-ICPMS/W-01	<0.005	mg/L	0.01	No relaxation
15	Total Alkalinity (as CaCO <sub>3</sub> )	IS: 3025 (P-23)	340.0	mg/L	200	600.0
16	Total Chromium (as Cr)	EKO/CHEM/SOP-ICPMS/W-01	<0.005	mg/L	0.05	No relaxation
17	Lead (as Pb)	EKO/CHEM/SOP-ICPMS/W-01	<0.005	mg/L	0.01	No relaxation

Remark:- Standard Applicable only for Drinking Water.

**Notes:**

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**\*\*End of Report\*\***

For EKO PRO ENGINEERS PVT. LTD.







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**EKO PRO ENGINEERS PVT. LTD.**Environmental Consultants and Analytical Laboratory  
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Contact No. : 9711159210, 9711159427, SMS/Whatsapp No : 9711163422, E-mail : email@ekopro.in, ekoproengineers@gmail.com, website : www.ekopro.in**TEST REPORT**  
**Water Sample Analysis**

Test Report No : EKO/149/161020

Issue Date : 21/10/2020

Issued To

: SHREE CEMENT LIMITED

Village - Gothra

Tehsil - Nawalgarh District- Jhunjhunu

Rajasthan

Sample Description : Ground Water  
Sample Drawn on : 15/10/2020  
Sample Drawn by : EPEPL (Mr. K.K.Mishra)  
Sample Received on : 16/10/2020  
Sampling Location : Near Govt. School Public Borewell (Chounadi Village)  
Sampling Plan & Procedure : SOP-W/66  
Sample Quantity : 1.0 Litre  
Environmental Conditions : Normal  
Analysis Duration : 16/10/2020 To 21/10/2020  
Remark (if any) : NA

**RESULTS**

S. No.	Parameters	Test Methods	Results	Units	Limits as per IS:10500-2012 (Amd.No.2 Sep-2018)	
					Acceptable	Permissible
1	pH	IS: 3025 (P-11)	7.41	-	6.5-8.5	No relaxation
2	Total Hardness (as CaCO <sub>3</sub> )	IS: 3025 (P-21)	420.0	mg/L	200.0	600.0
3	Iron (as Fe)	EKO/CHEM/SOP-ICPMS/W-01	<0.005	mg/L	1.0	No relaxation
4	Chloride (as Cl)	IS: 3025 (P-32)	160.5	mg/L	250.0	1000.0
5	Fluoride (as F)	IS: 3025 (P-60)	<1.0	mg/L	1.0	1.5
6	Total Dissolved Solids	IS: 3025 (P-16)	790.0	mg/L	500.0	2000.0
7	Total Suspended Solids	IS: 3025 (P-17)	<5.0	mg/L	-	-
8	Calcium (as Ca)	IS: 3025 (P-40)	100.6	mg/L	75.0	200.0
9	Manganese (as Mn)	EKO/CHEM/SOP-ICPMS/W-01	<0.005	mg/L	0.1	0.3
10	Sulphate (as SO <sub>4</sub> )	IS: 3025 (P-24)	128.4	mg/L	200.0	400.0
11	Nitrate (as NO <sub>3</sub> )	IS: 3025 (P-34)	9.14	mg/L	45.0	No relaxation
12	Magnesium (as Mg)	IS: 3025 (P-46)	41.1	mg/L	30.0	100.0
13	Mercury (as Hg)	EKO/CHEM/SOP-ICPMS/W-01	<0.001	mg/L	0.001	No relaxation
14	Arsenic (as As)	EKO/CHEM/SOP-ICPMS/W-01	<0.005	mg/L	0.01	No relaxation
15	Total Alkalinity (as CaCO <sub>3</sub> )	IS: 3025 (P-23)	360.0	mg/L	200	600.0
16	Total Chromium (as Cr)	EKO/CHEM/SOP-ICPMS/W-01	<0.005	mg/L	0.05	No relaxation
17	Lead (as Pb)	EKO/CHEM/SOP-ICPMS/W-01	<0.005	mg/L	0.01	No relaxation

Remark:- Standard Applicable only for Drinking Water.

**Notes:**

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**\*\*End of Report\*\***

For EKO PRO ENGINEERS PVT. LTD.

PURNIMA CHAUDHAN  
TECHNICAL MANAGER  
(Authorised Signatory)





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Contact No. : 9711159210, 9711159427, SMS/Whatsapp No : 9711163422, E-mail : email@ekopro.in, ekoproengineers@gmail.com, website : www.ekopro.in

## TEST REPORT

### Water Sample Analysis

Test Report No : EKO/150/161020

Issue Date : 21/10/2020

Issued To

: SHREE CEMENT LIMITED

Village - Gothra

Tehsil - Nawalgarh District- Jhunjhunu

Rajasthan

Sample Description : Ground Water  
Sample Drawn on : 15/10/2020  
Sample Drawn by : EPEPL (Mr. K.K.Mishra)  
Sample Received on : 16/10/2020  
Sampling Location : Gujro ki Dhani Village- Gothra (Plant Area)  
Sampling Plan & Procedure : SOP-W/66  
Sample Quantity : 1.0 Litre  
Environmental Conditions : Normal  
Analysis Duration : 16/10/2020 To 21/10/2020  
Remark (if any) : NA

### RESULTS

S. No.	Parameters	Test Methods	Results	Units	Limits as per IS:10500-2012 (Amd No.2 Sep-2018)	
					Acceptable	Permissible
1	pH	IS: 3025 (P-11)	7.31	-	6.5-8.5	No relaxation
2	Total Hardness (as CaCO <sub>3</sub> )	IS: 3025 (P-21)	390.0	mg/L	200.0	600.0
3	Iron (as Fe)	EKO/CHEM/SOP-ICPMS/W-01	<0.005	mg/L	1.0	No relaxation
4	Chloride (as Cl)	IS: 3025 (P-32)	155.4	mg/L	250.0	1000.0
5	Fluoride (as F)	IS: 3025 (P-60)	<1.0	mg/L	1.0	1.5
6	Total Dissolved Solids	IS: 3025 (P-16)	755.0	mg/L	500.0	2000.0
7	Total Suspended Solids	IS: 3025 (P-17)	<5.0	mg/L	-	-
8	Calcium (as Ca)	IS: 3025 (P-40)	93.8	mg/L	75.0	200.0
9	Manganese (as Mn)	EKO/CHEM/SOP-ICPMS/W-01	<0.005	mg/L	0.1	0.3
10	Sulphate (as SO <sub>4</sub> )	IS: 3025 (P-24)	104.5	mg/L	200.0	400.0
11	Nitrate (as NO <sub>3</sub> )	IS: 3025 (P-34)	7.94	mg/L	45.0	No relaxation
12	Magnesium (as Mg)	IS: 3025 (P-46)	37.9	mg/L	30.0	100.0
13	Mercury (as Hg)	EKO/CHEM/SOP-ICPMS/W-01	<0.001	mg/L	0.001	No relaxation
14	Arsenic (as As)	EKO/CHEM/SOP-ICPMS/W-01	<0.005	mg/L	0.01	No relaxation
15	Total Alkalinity (as CaCO <sub>3</sub> )	IS: 3025 (P-23)	330.0	mg/L	200	600.0
16	Total Chromium (as Cr)	EKO/CHEM/SOP-ICPMS/W-01	<0.005	mg/L	0.05	No relaxation
17	Lead (as Pb)	EKO/CHEM/SOP-ICPMS/W-01	<0.005	mg/L	0.01	No relaxation

Remark:- Standard Applicable only for Drinking Water.

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- Responsibility of the Laboratory is limited to the invoiced amount only.

\*\*End of Report\*\*

For EKO PRO ENGINEERS PVT. LTD.

PURNIMA CHAUHAN  
TECHNICAL MANAGER  
(Authorised Signatory)





Contact : +91 - 9810243870

## EKO PRO ENGINEERS PVT. LTD.

Environmental Consultants and Analytical Laboratory  
(An ISO 9001:2015 Certified Company)

Office & Laboratory : 32/41, South Side of G. T. Road, UPSIDC Industrial Area, Ghaziabad - 201 009 (Delhi-NCR) INDIA.  
Contact No. : 9711159210, 9711159427, SMS/Whatsapp No. : 9711163422, E-mail : email@ekopro.in, ekoprcengineers@gmail.com, website : www.ekopro.in

### TEST REPORT

#### Ambient Air Quality Monitoring

Test Report No. : EKO/146/161020

Issue Date : 21/10/2020

Issued To

: SHREE CEMENT LIMITED

Village - Gothra

Tehsil - Nawalgarh District- Jhunjhunu

Rajasthan

Sample Description : Ambient Air  
Sample Drawn on : 15/10/2020 To 16/10/2020  
Sample Drawn by : EPEPL (Mr. K.K.Mishra)  
Sample Received on : 16/10/2020  
Sampling Location : Nawalgarh Mine Toward E Pillar  
Sampling Time : 24.0 Hrs.  
Sampling Plan & Procedure : SOP-AAQ/15  
Analysis Duration : 16/10/2020 To 20/10/2020  
Ambient Temperature (°C) : 30.0  
Average Flow Rate of SPM (m<sup>3</sup>/min.) : 1.1  
Average Flow Rate of Gases (lpm) : 1.0  
Weather Conditions : Clear  
Remark (if any) : NA

### RESULTS

S. No.	Parameters	Test Methods	Results	Units	Limits as per CPCB Notification, 18th Nov 2009
1	Particulate Matter (PM10)	IS: 5182 (P-23)	51.8	µg/m <sup>3</sup>	100.0
2	Particulate Matter (PM2.5)	EKO/CHEM/SOP/AAQ-01	30.5	µg/m <sup>3</sup>	60.0
3	Sulphur Dioxide (as SO <sub>2</sub> )	IS: 5182 (P-2)	6.98	µg/m <sup>3</sup>	80.0
4	Nitrogen Dioxide (as NO <sub>2</sub> )	IS: 5182 (P-6)	16.2	µg/m <sup>3</sup>	80.0
5	Carbon Monoxide (as CO)	IS: 5182 (P-10)	0.68	mg/m <sup>3</sup>	4.0
6	Arsenic (as As)	EKO/CHEM/SOP/AAQ-02	<5.0	ng/m <sup>3</sup>	6.0
7	Mercury (as Hg)	EKO/CHEM/SOP/FL-082	<0.1	µg/m <sup>3</sup>	-

#### Notes :

1. The results given above are related to the tested sample, for various parameters, as observed at the time of Sampling. The customer asked for the above tests only.
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3. The test report will not be used for any publicity/legal purpose.
4. The test samples will be disposed off after 15 days from the date of issue of test report, unless until specified by the customer. Sample received for biological tests will be destroyed after 7 days from the date of issue of test report.
5. Responsibility of the Laboratory is limited to the invoiced amount only.

**\*\* End of Report \*\***

For EKO PRO ENGINEERS PVT. LTD.

PURDHA DUAHAN  
TECHNICAL MANAGER  
(Authorized Signatory)





Contact : +91 - 9810243870

## EKO PRO ENGINEERS PVT. LTD.

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### AAQ- Nawalgah Mine Toward E Pillar



Latitude: 27.801243159662025 N  
Longitude: 75.38799572509312 E  
Elevation: 410.26 m  
Accuracy: 3.2 m  
Time: 10-15-2020 12:54  
Note: Nawalgah Mine toward E Pillar

Powered by Narvikam







Contact : +91 - 9810243870

**EKO PRO ENGINEERS PVT. LTD.**Environmental Consultants and Analytical Laboratory  
(An ISO 9001:2015 Certified Company)Office & Laboratory : 32/41, South Side of G. T. Road, UPSIDC Industrial Area, Ghaziabad - 201.009 (Delhi-NCR) INDIA.  
Contact No. : 9711159210, 9711159427, SMS/Whatsapp No. : 9711163422; E-mail : email@ekopro.in, ekoproengineers@gmail.com, website : www.ekopro.in**TEST REPORT****Ambient Air Quality Monitoring**

Test Report No. : EKO/145/161020

Issue Date : 21/10/2020

Issued To

: SHREE CEMENT LIMITED

Village - Gothra

Tehsil - Nawalgarh District- Jhunjhunu

Rajasthan

Sample Description : Ambient Air  
Sample Drawn on : 15/10/2020 To 16/10/2020  
Sample Drawn by : EPEPL (Mr. K.K.Mishra)  
Sample Received on : 16/10/2020  
Sampling Location : Nawalgarh Mine Toward I Pillar South Direction  
Sampling Time : 24.0 Hrs.  
Sampling Plan & Procedure : SOP-AAQ/15  
Analysis Duration : 16/10/2020 To 20/10/2020  
Ambient Temperature (°C) : 30.0  
Average Flow Rate of SPM (m<sup>3</sup>/min.) : 1.1  
Average Flow Rate of Gases (lpm) : 1.0  
Weather Conditions : Clear  
Remark (if any) : NA

**RESULTS**

S. No.	Parameters	Test Methods	Results	Units	Limits as per CPCB Notification, 18th Nov 2009
1	Particulate Matter (PM10)	IS: 5182 (P-23)	54.6	µg/m <sup>3</sup>	100.0
2	Particulate Matter (PM2.5)	EKO/CHEM/SOP/AAQ-01	32.8	µg/m <sup>3</sup>	60.0
3	Sulphur Dioxide (as SO <sub>2</sub> )	IS: 5182 (P-2)	6.28	µg/m <sup>3</sup>	80.0
4	Nitrogen Dioxide (as NO <sub>2</sub> )	IS: 5182 (P-6)	19.5	µg/m <sup>3</sup>	80.0
5	Carbon Monoxide (as CO)	IS: 5182 (P-10)	0.62	mg/m <sup>3</sup>	4.0
6	Arsenic (as As)	EKO/CHEM/SOP/AAQ-02	<5.0	ng/m <sup>3</sup>	6.0
7	Mercury (as Hg)	EKO/CHEM/SOP/FL-082	<0.1	µg/m <sup>3</sup>	-

**Notes :**

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**\*\* End of Report \*\***

For EKO PRO ENGINEERS PVT. LTD.

FURNIMA GHADHAN  
TECHNICAL MANAGER  
(Authorised Signatory)





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### AAQ- Nawalgarh Mine Toward I Pillar South Direction







Contact : +91 - 9810243870

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Office &amp; Laboratory : 32/41, South Side of G. T. Road, UPSIDC Industrial Area, Ghaziabad - 201 009 (Delhi-NCR) INDIA.

Contact No.: 9818405427, 9810240678, 8826344487 E-mail : email@ekopro.in, ekoproengineers@gmail.com, website : www.ekopro.in

**TEST REPORT****Ambient Air Quality Monitoring**

Test Report No. : EKO/190/260321

Issue Date : 30/03/2021

Issued To

: SHREE CEMENT LIMITED

Village - Gothra

Tehsil - Nawalgarh District- Jhunjhunu

Rajasthan

Sample Description	: Ambient Air
Sample Drawn on	: 25/03/2021 To 26/03/2021
Sample Drawn by	: EPEPL (Mr. Rohitash Rajput)
Sample Received on	: 26/03/2021
Sampling Location	: Nawalgarh Mines Toward I Pillar South Direction
Sampling Time	: 24.0 Hrs.
Sampling Plan & Procedure	: SOP-AAQ/15
Analysis Duration	: 26/03/2021 To 30/03/2021
Ambient Temperature (°C)	: 25.0
Average Flow Rate of SPM (m <sup>3</sup> /min.)	: 1.1
Average Flow Rate of Gases (lpm)	: 1.0
Weather Conditions	: Clear
Remark (if any)	: NA

**RESULTS**

S. No.	Parameters	Test Methods	Results	Units	Limits as per CPCB Notification, 18th Nov 2009
1	Particulate Matter (PM10)	IS: 5182 (P-23)	52.8	µg/m <sup>3</sup>	100.0
2	Particulate Matter (PM2.5)	EKO/CHEM/SOP/AAQ-01	31.6	µg/m <sup>3</sup>	60.0
3	Sulphur Dioxide (as SO <sub>2</sub> )	IS: 5182 (P-2)	7.58	µg/m <sup>3</sup>	80.0
4	Nitrogen Dioxide (as NO <sub>2</sub> )	IS: 5182 (P-6)	16.3	µg/m <sup>3</sup>	80.0
5	Carbon Monoxide (as CO)	IS: 5182 (P-10)	0.65	mg/m <sup>3</sup>	4.0
6	Arsenic (as As)	EKO/CHEM/SOP/AAQ-02	<5.0	ng/m <sup>3</sup>	6.0
7	Mercury (as Hg)	EKO/CHEM/SOP/FL-082	<0.1	µg/m <sup>3</sup>	-

**Notes :**

1. The results given above are related to the tested sample, for various parameters, as observed at the time of Sampling. The customer asked for the above tests only.
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**\*\* End of Report \*\***

For EKO PRO ENGINEERS PVT. LTD.

**PURNIMA CHAUHAN**  
TECHNICAL MANAGER  
(Authorised Signatory)



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### AAQ- Nawalgarh Mines Toward I Pillar South Direction



Latitude: 27.788695  
Longitude: 75.347324  
Elevation: 421.99±8 m  
Accuracy: 7.3 m  
Time: 25-03-2021 13:43  
Note: Nawalgarh Mines Toward I Pillar South Direction

Powered by NoteCam





Contact : +91 - 9810243870

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### TEST REPORT

#### Ambient Air Quality Monitoring

Test Report No. : EKO/191/260321

Issue Date : 30/03/2021

Issued To

: SHREE CEMENT LIMITED  
Village - Gothra  
Tehsil - Nawalgarh District- Jhunjhunu  
Rajasthan

Sample Description : Ambient Air  
Sample Drawn on : 25/03/2021 To 26/03/2021  
Sample Drawn by : EPEPL (Mr. Rohitash Rajput)  
Sample Received on : 26/03/2021  
Sampling Location : Nawalgarh Mines Toward E Pillar  
Sampling Time : 24.0 Hrs.  
Sampling Plan & Procedure : SOP-AAQ/15  
Analysis Duration : 26/03/2021 To 30/03/2021  
Ambient Temperature (°C) : 25.0  
Average Flow Rate of SPM (m<sup>3</sup>/min.) : 1.1  
Average Flow Rate of Gases (lpm) : 1.0  
Weather Conditions : Clear  
Remark (if any) : NA

### RESULTS

S. No.	Parameters	Test Methods	Results	Units	Limits as per CPCB Notification, 18th Nov 2009
1	Particulate Matter (PM10)	IS: 5182 (P-23)	49.8	µg/m <sup>3</sup>	100.0
2	Particulate Matter (PM2.5)	EKO/CHEM/SOP/AAQ-01	29.4	µg/m <sup>3</sup>	60.0
3	Sulphur Dioxide (as SO <sub>2</sub> )	IS: 5182 (P-2)	6.98	µg/m <sup>3</sup>	80.0
4	Nitrogen Dioxide (as NO <sub>2</sub> )	IS: 5182 (P-6)	15.3	µg/m <sup>3</sup>	80.0
5	Carbon Monoxide (as CO)	IS: 5182 (P-10)	0.61	mg/m <sup>3</sup>	4.0
6	Arsenic (as As)	EKO/CHEM/SOP/AAQ-02	<5.0	ng/m <sup>3</sup>	6.0
7	Mercury (as Hg)	EKO/CHEM/SOP/FL-082	<0.1	µg/m <sup>3</sup>	-

#### Notes :

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### AAQ- Nawalgarh Mines Toward E Pillar



Latitude: 27.798508  
Longitude: 75.37882  
Elevation: 428.82±10 m  
Accuracy: 8.1 m  
Time: 25-03-2021 13:19  
Note: Nawalgarh Mines Toward E Pillar

Photograph by Nitesh Singh