



Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

To,

The President (O) & Unit Head

JK CEMENT LTD KANPUR

JK Cement Works Kailash Nagar Nimbahera,,chittorgarh,Rajasthan-312617

Subject: Grant of Environmental Clearance (EC) to the proposed Project Activity under the provision of EIA Notification 2006-regarding

Sir/Madam,

This is in reference to your application for Environmental Clearance (EC) in respect of project submitted to the Ministry vide proposal number IA/MP/MIN/193710/2021 dated 26 Aug 2021. The particulars of the environmental clearance granted to the project are as below.

- | | |
|---|--|
| 1. EC Identification No. | EC22A001MP190962 |
| 2. File No. | IA-J-11015/7/2021-IA-II(M) |
| 3. Project Type | New |
| 4. Category | A |
| 5. Project/Activity including Schedule No. | 1(a) Mining of minerals |
| 6. Name of Project | Nayagaon & Chenpura Limestone Deposit (ML Area: 206.354 ha) proposed Production Capacity 2.502 Million TPA ROM (Cement Grade Limestone: 0.876 Million TPA & Subgrade Limestone: 1.626 Million TPA), Soil/Alluvium: 0.048 Million TPA, Waste: 0.5 Million TPA; Total Excavation: 3.05 Million TPA along with 2 x 500 TPH Capacity of Crusher with Screening |
| 7. Name of Company/Organization | JK CEMENT LTD KANPUR |
| 8. Location of Project | Madhya Pradesh |
| 9. TOR Date | 02 Mar 2021 |

The project details along with terms and conditions are appended herewith from page no 2 onwards.

Date: 22/04/2022

(e-signed)
Pankaj Verma
Scientist E
IA - (Non-Coal Mining sector)

Note: A valid environmental clearance shall be one that has EC identification number & E-Sign generated from PARIVESH. Please quote identification number in all future correspondence.

This is a computer generated cover page.



No. IA-J-11015/7/2021-IA-II (M)

Government of India
Ministry of Environment, Forest and Climate Change
Impact Assessment Division

2nd Floor, Prithvi Wing,
Indira Paryavaran Bhavan,
Jor Bagh Road, Aliganj,
New Delhi-110 003

Dated: 22nd April, 2022

To

M/s J K Cement Ltd,
Bangur Nagar, Post Box No. 33,
Beawar 305901, Rajasthan.

Subject: - Proposal for Environmental Clearance of M/s J K Cement Ltd for Chenpura Limestone Deposit with total excavation of 3.05 MTPA [Limestone: 2.502 MTPA (Cement Grade: 0.876 MTPA & Sub grade: 1.626 MTPA), Topsoil: 0.008 MTPA, Sub soil/ alluvium: 0.040 MTPA and Waste 0.5 MTPA] along with 2 x 500 TPH capacity of crusher with screening in the mine lease area of 206.354 ha, located at Village: Nayagaon, Tehsil: Jawad & Village: Chenpura, Tehsil: Neemuch, District: Neemuch, State: Madhya Pradesh – Environmental Clearance (EC) regarding.

Sir,

This has reference to your online proposal no. IA/MP/MIN/193710/2021 of M/s J K Cement Ltd for grant of Environmental Clearance for Chenpura Limestone Deposit with total excavation of 3.05 MTPA [Limestone: 2.502 MTPA Limestone (Cement Grade: 0.876 MTPA & Sub grade: 1.626 MTPA), topsoil: 0.008 MTPA, Sub soil/ alluvium: 0.040 MTPA and Waste 0.5 MTPA] along with 2 x 500 TPH capacity of crusher with screening in the mine lease area of 206.354 ha, located at Village: Nayagaon, Tehsil: Jawad & Village: Chenpura, Tehsil: Neemuch, District: Neemuch, Madhya Pradesh. The mine lease area is located between Latitude 24°31'35.78"N to 24°34'33.65"N and Longitude 74°44'53.91"E to 74°46'27.65"E. The mine lease area falls under the Survey of India Toposheet No: G43U10, G43U11, G43U14, G43U15 and falls in Seismic Zone – II. The PP presented the KML file during the presentation to indicate the location of mine lease on Google Earth.

2. The Project Proponent (PP) has made an online application vide proposal no: IA/MP/MIN/193710/2021 dated 26.08.2021 and submitted Form2 and EIA report under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed project activity is listed at schedule no. 1(a) Mining of Minerals and 2(b) Mineral Beneficiation and falls under Category "A" as the mining lease area is greater

EC - M/s J K Cement Ltd

Page 1 of 23

than 100ha and appraised at the Central level. PP also submitted that Interstate boundary of Rajasthan-Madhya Pradesh found adjacent to the mine lease area in Northern direction.

3. The proposal for Environmental Clearance was considered in the 37th EAC (Non-Coal) meeting held on 15th – 17th September, 2021. After detailed deliberations made by the Project Proponent and the Consultant, the Committee noted that the railway line is running parallel to 30-60m away from mine lease area. The Committee also noted that the following villages Nayagaon (~130 m, NE), Chenpura (~200 m, SW), Gandhi Colony (adjacent to SE) and School (~100 m, W) are located in the vicinity of the mine lease area. Therefore, the Committee deferred the proposal for want of following requisite information. (i): Since the Drilling and Blasting activities are proposed in mining operations, the Project Proponent should obtain the NOC from Railway Department for mining within 100m. (ii): The Project Proponent shall submit the measures taken for strengthening of mine pit and protection of railway line which is running parallelly along the mine lease. (iii): As the drilling & blasting activity is proposed and the railway line is passing parallelly the lease boundary, the Project Proponent should carry out the scientific study from CIMFR or any other recognized institution of repute which is approved for carrying out such studies. The study should be clearly demonstrated that whether there are any adverse impacts and it can be controlled by adopting mitigative measures or not?. (iv): The Project Proponent should explore the possibility of shifting the crusher to other location. (v): The Project Proponent should revisit the data submitted on noise level monitoring. The average data should be taken for every 15 minutes interval instead of 60 minutes interval in view of the sensitivity of the railway line passing parallelly the lease boundary. (vi): The Project Proponent shall submit the quantity to be handled annually of top soil and sub soil/ alluvium and the same should be reflected in total excavation. Utilization and management practices of the same to be adopted shall be submitted. (vii): The Project Proponent shall adopt the water softening techniques. The water facility should be provided throughout the year to the villagers instead of summer season only. The Project Proponent vide Lr NM/EMD/MoEF/ F01/010 dated 11.10.2021 submitted the information sought in the 37th EAC (Non-Coal) meeting held on 15th – 17th September, 2021.

4. The details of the Terms of References (TOR) are furnished as below:

Date of application	Proposal No	Consideration	Details	Date of accord
19.01.2021	IA/MP/MIN/193710/2021	27 th EAC meeting (non-coal mining) held during 3 rd - 5 th Feb, 2021	ToR accorded for both 1(a) Mining of Minerals and 2(b) Mineral Beneficiation with the production capacity of 2.502 Million TPA ROM	02.03.2021

			(Cement Grade Limestone: 0.876 Million TPA & Sub grade Limestone: 1.626 Million TPA), Soil/Alluvium: 0.048 Million TPA, Waste: 0.5 Million TPA; Total Excavation: 3.05 Million TPA along with 2 x 500 TPH Capacity of Crusher with Screening in the mine lease area of 206.354ha	
--	--	--	--	--

5. Details of Mine lease:

S.no	Lease particulars	Date of the grant	Name of the Mineral	Period of Grant	Granted by	Mine lease area in Ha
1	Prospecting License vide Lr F2-125/2012/12/1 Bhopal,	18.04.2013	Limestone	12.02.2015 to 11.02.2018	Govt., of Madhya Pradesh	450.465
2	Letter of Intent vide Lr F 3-57/2018/12/ 1	29.09.2018	Limestone	50 years	Govt., of Madhya Pradesh	206.354
3	Grant of Mining Lease vide Lr F3-57/2018/12/1	01.12.2020	Limestone	50 years	Govt., of Madhya Pradesh	206.354

6. Details of executed Mine leases.

S.no	Date of grant of Lease execution	Period of Grant		Details
		From	To	
1	Date of entering into original lease deed.	04.12.2020	03.12.2070	MP279462020A1810452 dated 04.12.2020

7. Details of Mine Plan

S.no	Mining Plan along with the Conceptual Plan Approved By	Letter no	Dated of Approval	For a period	Details
1	Mining Plan with Progressive Mine	MP/Neemuch/Limestone/MPLN/G-	10.11.2020	5 years from the date of	206.354ha

EC - M/s J K Cement Ltd

Page 3 of 23

	Closure Plan approved by IBM	10/ 2020-21/3274, Jabalpur		registration of lease deed	
--	------------------------------	----------------------------	--	----------------------------	--

8. The Project Proponent submitted that mining operations will be carried out by fully mechanized opencast method. PP reported that total Geological Resources of Cement Grade Limestone is 29.067 Million Tonnes & Sub-grade Limestone is 105.275 Million Tonnes and Mineable Reserves of Cement Grade Limestone: 21.636 Million Tonnes & Sub-grade Limestone: 79.71 Million Tonnes. Life of the mine will be 44 years. PP also reported that the total excavated limestone will be 8340 TPD. Peak production and transportation per day will be 9591 TPD based on 15% increase in total production capacity. The proposed bench height will be 6 meters maximum and width of working bench will be 10 meters. Overall pit Slope will be 45°. Drilling will be carried out by compressed air fed wagon drills. Conventional blasting will be done using SME/ ANFO. Loading will be done by 3.9 cu.m bucket capacity of Hydraulic Excavators and transport of mineral will be done by dumper (55 Tonnes capacity) to crusher via haul road. Further crushed limestone to be transported to the existing interlinked Cement Plants located at Kailash Nagar, Tehsil: Nimbahera, District: Chittorgarh, Rajasthan and at Village: Mangrol, Tehsil: Nimbahera, District: Chittorgarh, Rajasthan through tippers (35 Tonnes capacity) via road (eastern side) adjacent to the Railway track nearby the NH-79. Capacity of Crusher is 2 x 500 TPH with Screening (In Phased Manner, initially 500 TPH will be installed and later on additional 500 TPH crusher will be installed) and proposed to be installed in southern block of Limestone mine. The limestone is utilized for cement manufacturing by dry process. There is no wet processing or beneficiation necessary to upgrade the limestone. The input size of the material being dumped in Crusher hopper is 1.2 X 1.2 X 1.2 Cu.m and the output size is 50 mm. A screen is installed at Crusher which screen out fine clay of -6 mm size and segregated by screen reject belt conveyor. The screen reject material is further used in haul road maintenance, levelling and balance reject material is being dumped in waste dumps. Total top soil to be generated during plan period will be 19865.10 Tonnes which will be used for plantation and green belt development simultaneously. During the plan period about 89580 CuM (0.12541 Million Tonnes) of soil/ alluvium will be generated which will be temporarily dumped in the western side of the proposed five year working area and these dumps will be re-handled and used for backfilling when the mineral will be exhausted in the working pit. At conceptual stage, total 0.35 million tonnes Top Soil, 1.86 million tonnes Soil/alluvium & 18.74 million tonnes of OB waste will be generated which will be backfilled & reclaimed by plantation. PP submitted that the mining shall be carried out initially at a distance of 300 meters away from the railway line using Controlled Blasting technique. NOC from railway department will be obtained for mining within 100 meters. PP also submitted that the adequate safety barrier will be left between the railway line and pit. Slope stability will be carried out through the scientific agency within first 5 years of mining after developing 3 benches of Limestone and the

recommendations will be strictly complied. Further, PP submitted that as per the advice of the Hon'ble EAC Committee members, location of Crusher-1 has been shifted from near eastern site (distance from railway track 70 meters) to western direction (distance from railway track 590 meters).

9. The Project Proponent reported that the general ground level is 467 AMSL and depth of the water level in pre-monsoon period ranges between 18 to 20m bgl while in post-monsoon season, water level ranges between 16 to 18m bgl. Working depth during plan period will be 448m AMSL (19m bgl), working depth during conceptual period (Southern Block) will be 393m AMSL (79m bgl) and working depth during Conceptual Period (Northern Block) will be 388m AMSL (84m bgl). Hence, there will be ground water intersection.

10. Water requirement

Total water requirement	96.5 KLD (Fresh water – 92.5 KLD & Treated water – 4.0 KLD)	Wet Drilling, Crushing, Dust Suppression on haul roads and OB dumps	65.0 KLD
		Plantation and Greenbelt Development	20.0 KLD
		HEMM Washing	5.0 KLD
		Drinking water & Domestic Purpose	2.5 KLD
Source	Ground Water and mine sump		
Permission	PP submitted the NOC obtained from CGWA for ground water abstraction vide NOC no CGWA/NOC/MIN/ORIG/2021/11940 dated 21.05.2021 for abstraction of 147.50 m ³ /day of fresh water and is valid for the period up to 20.05.2023		
Additional information	PP submitted that initially, during the plan period total fresh water 92.5 KLD water will be sourced from ground water after taking the prior approval from CGWA. From, fifth year onwards, 2.5 KLD water for drinking & domestic purpose will be sourced from ground water while remaining 90.0 KLD water will be sourced from the mine sump. Waste water of 4.0 KLD from HEMM washing will be used for dust suppression in crushing after removal of oil & grease content. PP also submitted that water softener plant will be installed in consultation with the Panchayat for drinking water availability throughout the year and PP earmarked a budget of Rs.15.0 Lakh as capital cost and Rs. 4.0 Lakh as recurring cost for the same.		

11. Land Area Breakup

Private land	140.039ha
Government land	62.688ha
Industrial land	3.627ha

EC - M/s J K Cement Ltd

Page 5 of 23

Total Mining lease area (MLA)	206.354
-------------------------------	---------

12. Nearest village / town/ highway/railway station / water bodies

Particulars	Details	Distance & Direction
Nearest Village	Nayagaon Village	~130 m, North East
	Chenpura Village	~ 200 m, South west
	Gandhi Colony	Adjacent, South East
Nearest Town/ City	Nimbahera	~ 7.0 km, North
Nearest Highway	NH-79	~200 m, NE
	NH-56	~7.5 km, WNW
Nearest Railway Station	Jawad Road Railway Station	~60 m, East
	Bisalwas Kalan Railway Station	~2.5 Km, SSE
Water Bodies	<p>i. PP submitted that there are two small seasonal nallas in the area with westerly flows. One is located in southern block trending NW-SE. Another one is located in the northern block trending east-west occurs in the northernmost part of the lease area, forming the boundary. Both nallas have already deducted from the granted lease area. Other water bodies found in the study area are</p> <p>i. Daru Nadi (~2.5 Km in West direction)</p> <p>ii. Nimbahera Nadi (~ 7.0 km in NW direction)</p> <p>iii. Kadamali Nadi (~4.0 Km in WNW direction)</p> <p>iv. Gambhir Nadi (~ 9.0 Km in ENE direction)</p>	

13. Presence of Environmentally Sensitive areas in the study area

Forest Land/Protected Area/ Environmental Sensitivity Zone	Yes/No	Details of Certificate/letter/Remarks
Forest Land	No	PP submitted that there is no forest land involved in mining lease area. There is no National Park, Wildlife Sanctuary, Biosphere Reserves, Tiger Reserves and Wildlife Corridors etc. within 10 km radius of the mining lease area. PP also submitted that NOC for the same has been obtained from DFO, Neemuch vide letter no Maa. Chi/2021/3878 dated 11.08.2021 and from APCCF vide letter no F-1/Env/2021/2788 dated 16.08.2021.
National Park	No	
Wildlife Sanctuary	No	
Details of Reserve Forest/ Protected Forest		
Name of Reserve Forest/ Protected Forest	Distance	Direction
Chaprol Bir Block	~7.0 Km	SSW

Motatonk PF	~8.0 Km	SW
Reserved Forest	~8.5 Km	South

Availability of Schedule-I species in study area – Available

If available - authenticated list of flora/fauna details

Schedule-1 species	Yes/No	Details of Certificate/letter/Remarks
Schedule-I species	Yes	PP submitted that there are 4 Schedule I faunal species [Indian Peafowl (<i>Pavo cristatus</i>), Monitor Lizard (<i>Varanus bengalensis</i>), Python (<i>Pythonidae</i>) and Leopard (<i>Panthera Pardus</i>)] observed in the study area.
Authentication of Flora and Fauna	Yes	PP submitted the authentication of flora & fauna along with conservation plan for schedule I species has been approved from DFO, Neemuch vide letter no Maa. Chi/2021/3880 dated 11.08.2021 and from CCF, Ujjain vide letter no Maa. Chi/2021/4967 dated 16.08.2021.
Wildlife Conservation Plan	Yes	PP submitted the Wildlife Conservation Plan approved from Chief Wildlife Warden for an amount of Rs. 132 Lakh vide letter no WL/Maa. Chi/GEN-274/6096 dated 18.08.2021 for the period of 10 years.

14. Green belt/plantation details

Proposed area for green belt/plantation	80.03 ha
Budget for green plant & plantation till the end of life of mine.	Capital Cost Rs. 4.0 Crore & Recurring Cost: Rs. 48 Lakh
Budget for nursery	Nil
Particulars for Green belt/plantation	Area covered (in Ha)
7.5 m barrier & non-mineralized zone	Greenbelt will be developed covering 11.0ha area along the 7.5m of the lease periphery. Out of the 11.0ha, 4.0ha will be covered in southern part of the lease area during 1 st year and 7.0ha will be covered in middle and northern part of the lease area in 2 nd year. Plantation along the 7.5m safety zone of road, nalla and habitation will be carried out covering 4.0 ha area within 3 rd year.
50 m safety zone of nallah, roads, electric lines	
50 m safety zones of nearest habitation villages	
Backfilled area	Plantation & re-grassing will be carried out on 44.50 ha of backfilled area.
Bench Plantation	Bench plantation will be developed over an area of 20.53 ha
Proposed Plantation during Plan	An area of 15.0ha will be covered with 37,500 no.s

EC - M/s J K Cement Ltd

Page 7 of 23

period	of saplings and Survival rate will be maintained at 90%. Species proposed to be planted are <i>Aegle marmelos</i> , <i>Albizia lebbbeck</i> , <i>Azadirachta indica</i> , <i>Bauhinia racemosa</i> , <i>Cassia fistula</i> , <i>Dalbergia sissoo</i> , <i>Ficus religiosa</i> , <i>Mangifera indica</i> , <i>Ailanthus excels</i> , <i>Madhuca indica</i> , <i>Tamarindus indica</i> etc. An budget of Rs 75 Lakhs (Capital cost) and Rs 9 Lakhs (Recurring) towards development of greenbelt during plan period.
--------	---

15. Baseline details

The primary baseline data for specific micro-meteorology data, ambient air quality, waste quality, noise level, soil and flora & fauna has been collected during Post Monsoon season. The Monitoring results of ambient air, surface water, soil, ambient noise and ground water for the month of October to December, 2020 have been reported and no major divergence was observed with respect to concentration values of various parameters of collected samples.

Baseline Data (Air / Water / Noise / Soil / Ground water table/ others)					
Period of baseline data collection			October to December, 2020		
Season (Summer / Pre-monsoon / Post-monsoon / Winter)			Post Monsoon		
Period	Results of Baseline monitoring				
AAQ parameters at 10 locations	Pollutant	Min, µg/m³	Max, µg/m³	98 %ile , µg/m³	Standard, µg/m³
	PM2.5	28.9	55.8	55.2	60
	PM10	58.4	93.2	92.0	100
	SO2	5.7	13.5	13.4	80
	NOx	13.4	28.9	28.6	80
AAQ modelling (Incremental GLC)	Pollutant	Baseline Concentration, µg/m³	Incremental Concentration, µg/m³	Total GLC, µg/m³	Standard
	PM2.5	38.3	1.3	39.6	60
	PM10	73.7	2.8	76.5	100
	SO2	13.0	1.5	14.5	80
	NOx	20.8	1.7	22.5	80
Noise level at 10 locations	Day Time: 51.7 to 59.1 Leq dB (A) Night Time: 40.8 to 47.7 Leq dB (A)				
Ground water quality at 8 locations	pH varied from 7.12 to 7.84, Total hardness varied from 210 mg/l to 534.6 mg/l Total dissolved solids varied from 440 mg/l to 834 mg/l. The water samples contain, chloride from 94.9 to 167.4 mg/l, SO4 varied from 30.2 to 132.5 mg/l, Ca from 40.08 to 120.07 mg/l and Mg varied from 14.58 to 56.5 mg/l. Overall quality of water found to be potable. The villagers use ground water for drinking purposes and also rain water stored in small				

	tanks, village ponds etc.,
Soil quality at 8 locations	The soil samples exhibit brown and blackish which indicates good fertility and presence of organic matter (0.72% to 1.49%) and organic carbon (0.42% to 0.87) observed to be appropriate for the plant growth. The texture of the soil sample found to be sandy loam. All soil samples have slightly alkaline having pH ranging from 6.75 to 8.87 which is an optimal range for most the plant to thrive and grow.

16. Public Hearing (PH) Details

Advertisement for PH with date	"Dainik Bhaskar and Times of India" on 13.06.2021
Date of PH	15.07.2021
Venue	Govt. Primary school, Village-Chenpura Mine, Tehsil & District-Neemuch (M.P.)
Chaired by	1. Chairperson: Shri S. R Nayar, Additional District Magistrate, Neemuch. 2. Officers: Shri H.K Tiwari, Regional Officer, Madhya Pradesh Pollution Control Board
Main issues raised during PH	Education, Employment, Land compensation, Health and Medical facilities, Livelihood, Skill development, water facilities, Environment pollution, Plantation and poor infrastructure etc.
Budget proposed for addressing issues raised during PH	Rs. 2.67 Crore

17. The Project Proponent submitted that total mining lease area is 206.354 ha, out of which 140.039 ha is Pvt. land, 3.627 ha is Industrial Land and 62.688 ha is Govt. land which spreads in 2 villages namely Nayagaon & Chenpura. Out of the total 140.039 ha of Pvt. Land, 4.057 ha land has been purchased by mutual agreement and rest will be undisturbed and will not be purchased. As per khasra details there are 156 PAFs involved in which 147 PAFs having land only and 9 PAFs having houses on Govt. Land (8 in Nayagaon village and 1 in Chenpura village) which will be displaced due to the mining activity. Land will be purchased in transparent manner in mutual agreement with the land holders at mutually agreeable rates. Total budget for Land and R&R is estimated as Rs. 91.192 Crore. However, the actual cost will be as per the mutual agreement with the land owners.

18. Court case details

Court Case	There is no any Court Cases pending against the project and/or land in which the project is proposed to be set up
------------	---


EC - M/s J K Cement Ltd

Page 9 of 23

19. Affidavit/Undertaking details

Affidavit in a Non-Judicial Stamp paper of Rs 100 bearing AW 722631 dated 18.01.2021	The Company with all the statutory requirement & judgment of Hon'ble Supreme Court dated 2nd August 2017 in writ Petition (civil) No. 114 of 2014 in the matter of common cause versus Union of India & Ors.
PP submitted an undertaking dated 26.08.2021	The conditions laid down in Terms of Reference prescribed by MoEF&CC, New Delhi vide letter no. J-11015/7/2021-IA.II (M) dated 02.03.2021 have been complied with, and the data submitted and information presented in this report are factually correct.
Consultant submitted an Undertaking dated 10.08.2021	The conditions laid down in Terms of Reference prescribed by MoEF&CC, New Delhi vide letter no. J-11015/7/2021-IA.II (M) dated 02.03.2021 have been complied as per data/details provided by Project Proponent & as per Approved Scheme of Mining approved by IBM, Ajmer and the data submitted are factually correct.
Plagiarism Certificate checked on 10.08.2021	The Head of the Accredited Consultant Organization/ Authorized person certified that this EIA Report has been evaluated by using online in-house software viz. small tools https://smalltools.com/plagiarism-checker/ . The report produced has been analyzed by the system and based on it, I certify that the EIA Report produce in accordance with good scientific practice.

20. Details of the EMP

S. No	Particulars	Capital Cost (Rs. In Lacs)	Recurring Cost/ Annum (Rs. In Lacs)
1	One no of high-efficiency nozzle mounted water tanker for water sprinkling on haul roads.	35	5
2	Plantation on 7.5 mtr of periphery of mining lease area and road, Nallah etc. (15 ha) will be done in initial three year of plan period @ 2500 plants per ha (37500 nos.)	75	9
3	Plantation will be done till the end of mine life 162575 nos of plant in 65.03 ha.	325.15	39

4	01 nos. of Continuous Ambient Air Quality Monitoring Station at Mine office for the measurement of air quality for PM10, PM2.5, SO2, NOx and CO and real time data connectivity with CPCB/SRPCB server	50	4
5	Emission Monitoring of air quality, water quality and Noise by NABL accredited laboratory on quarterly basis. (Rs. 50000/- quarterly)	0	2
6	Peak Particle Velocity monitoring (Vibration monitoring)	3.5	0.5
7	Installation of 1 no.s of piezometer along the periphery.	0.5	0.2
9	Installation of Water Sprinkler system	1.5	0.25
10	01 no of Rainwater Harvesting structure	10.5	2.5
11	Strengthening of road from mine face to highway	10	0.5
12	Construction of garland drain (total length 681 mtr (1.5m (width) and 1.0m (depth)) and de-silting pit / settling pond for two nos. of dump (soil & subgrade) and Catch drain along the lease periphery (total length 11 km, 1.5m (width) and 1.0m (depth))	2	0.5
13	Construction of septic tank & soak pit or Modular STP for office utility	1	0
14	Roof top rainwater harvesting for mine office	2	0.2
15	4 nos. of Bag-filter for crusher system& dry-fog system	50	5
16	Public Hearing Action Plan for three year	267	18
17	Wildlife Conservation Plan (for 6 Schedule-I species) for ten year	132	
Total		965.15	86.65

21. Details of project cost and employment:

Particulars	Budget
Capital Cost for Environment Protection	Rs 698.15 Lakh
Budget for addressing the Public Hearing issues	Rs 267 Lakh
Total Cost for EMP	Rs 965.15 Lakh
Recurring Cost for EMP	Rs 86.65 lakh/annum
Project Cost	Rs 133.40 Cr
Employment	58 Persons

22. Observation and Recommendation of the Committee:



EC - M/s J K Cement Ltd

Page 11 of 23

The proposal for Environmental Clearance was considered in the 40th EAC (Non-Coal Mining) meeting held during 26th – 27th October, 2021. After detailed deliberations made by the Project Proponent and the Consultant, the Committee **recommended** the proposal for grant of Environmental Clearance for M/s J K Cement Ltd for Chenpura Limestone Deposit with total excavation of 3.05 MTPA [Limestone: 2.502 MTPA (Cement Grade: 0.876 MTPA & Sub grade: 1.626 MTPA), Topsoil: 0.008 MTPA, Sub soil/ alluvium: 0.040 MTPA and Waste 0.5 MTPA] along with 2 x 500 TPH capacity of crusher with screening in the mine lease area of 206.354 ha, located at Village: Nayagaon, Tehsil: Jawad & Village: Chenpura, Tehsil: Neemuch, District: Neemuch, Madhya Pradesh subject to the specific conditions in addition to the standard EC conditions applicable for non-coal mining projects.

23. The Ministry of Environment, Forest and Climate Change has examined the proposal in accordance with the Environmental Impact Assessment Notification, 2006 and further amendments thereto and hereby accords the above mentioned Environmental Clearance after accepting the recommendation of EAC during its 40th EAC (Non-Coal Mining) meeting held during 26th – 27th October, 2021 for M/s J K Cement Ltd for Chenpura Limestone Deposit with total excavation of 3.05 MTPA [Limestone: 2.502 MTPA (Cement Grade: 0.876 MTPA & Sub grade: 1.626 MTPA), Topsoil: 0.008 MTPA, Sub soil/ alluvium: 0.040 MTPA and Waste 0.5 MTPA] along with 2 x 500 TPH capacity of crusher with screening in the mine lease area of 206.354 ha, located at Village: Nayagaon, Tehsil: Jawad & Village: Chenpura, Tehsil: Neemuch, District: Neemuch, Madhya Pradesh subject to compliance of the terms & conditions and the environmental safeguards mentioned below:-

A. SPECIFIC CONDITIONS

- i. Environmental Clearance will be functional only after obtaining No-objection Certificate (NOC) from Railway Board and no production and dispatch will be carried out without obtaining NOC from Railway Board. A copy of the NOC must be submitted to the Ministry, Integrated Regional Office and Madhya Pradesh Pollution Control Board. The conditions/preventive measures prescribed by the Railway Board, if any shall be complied by the Project Proponent and implementation status should be submitted to the IRO & Railway Board.
- ii. The Project Proponent shall ensure that no mining activity will be carried out within the distance of 300m from the **railway boundary**. The pit embankment along the direction of railway should be strengthen using cement mortar or other measures to avoid any danger to railway line. For working beyond 300 m of the **railway boundary** all the precautionary measures for fly rock as mentioned in

the section 4.2 of the scientific study report of CIMFR, Dhanbad should be followed.

- iii. Scientific study carried out by CIMFR for assessment of blasting report shall be sent to Integrated Regional Office for further necessary action.
- iv. No mining activity will be allowed to undertake within a distance of 740m from Gandhi colony and 350m from Chenpura village.
- v. The Project Proponent shall strictly follow the mitigation measures provided in MoEFCC's Office Memorandum No. Z11013/57/2014-IA.II (M), dated 29th October, 2014.
- vi. The Project Proponent shall carryout the scientific study on slope stability within first 5 years of mining and the report shall be submitted to the Ministry for further review and appraisal. This will be the requisite document for mining after 5 years.
- vii. The Project Proponent shall submit the progress report on the Environmental Management Plan to the Integrated Regional Office every year.
- viii. The Project Proponent should collect six monthly data on ambient air quality, noise and ground vibration by installing adequate no. of monitoring station during blasting at the edge of the mine, near the village and railway line and such collected data should be submitted to IRO during EC Compliance monitoring.
- ix. The Project Proponent shall locate the crusher in the western direction at a distance of 590m distance from railway track as committed by PP during the presentation.
- x. The budget of Rs 2.67 Crores to address the concerns raised by the public including in the public hearing to be completed within 3 years from the date of start of mining operations. PP shall comply with all action plans made for public hearing concerns and make regular maintenance and record the progressive activity outcomes.
- xi. The Project Proponent shall carry out the plantation with the survival rate of not less than 90% by planting 10 ft seedlings. Causalities should be replaced with new saplings every year and be counted separately other than the total proposed saplings. The data for such saplings should be furnished during six monthly compliance report along with the progressive plantation. PP shall undertake the progressive bench plantation up to HFL for eco restoration of water bodies.
- xii. The Project Proponent shall also organize employment-based apprenticeship/ internship training program every year with appropriate stipend for the youth and other programs to enhance the skill of the local people. The data should be maintained for the training imparted to the persons and the outcome of the

training, for the assessment of the training program should be analyzed periodically and improved accordingly.

- xiii. The Project Proponent should implement the Rehabilitation of project affected families (PAFs) and payment of compensation to PAFs as per the policy and guidelines of the Central/State Government, as provided under the law.
- xiv. The conservation plan in consultation with the Forest Department shall be implemented and compliance of the same shall be submitted to IRO of MoEF&CC before 1st July of every year.
- xv. The Project Proponent should install suitable water softening plant and ensure the availability of adequate drinking water throughout the year for mine workers and their family as well as residents of Nayagaon & Chenpura village.
- xvi. PP should also explore the possibility of using water body surface area for installing floating solar panels to generate solar power and supply to the villages.
- xvii. The Project Proponent should explore the possibility for shifting to clean energy using electric equipment for cleaner production options to reduce the emission generated from various machinery.
- xviii. Regular surveillance on Silicosis shall be carried through regular occupational health check-up of 1/3 of the persons every year.

B. STANDARD CONDITIONS

I. Statutory compliance

- 1) This Environmental Clearance (EC) is subject to orders/ judgment of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, Common Cause Conditions as may be applicable.
- 2) The Project proponent complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Ors before commencing the mining operations.
- 3) The State Government concerned shall ensure that mining operation shall not be commenced till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining & Geology in strict compliance of Judgment of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Ors.

- 4) The Project Proponent shall follow the mitigation measures provided in MoEFCC's Office Memorandum No. Z-11013/57/2014-IA.II (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".
- 5) A copy of EC letter will be marked to concerned Panchayat / local NGO etc. if any, from whom suggestion / representation has been received while processing the proposal.
- 6) State Pollution Control Board/Committee shall be responsible for display of this EC letter at its Regional office, District Industries Centre and Collector's office/ Tehsildar's Office for 30 days.
- 7) The Project Authorities should widely advertise about the grant of this EC letter by printing the same in at least two local newspapers, one of which shall be in vernacular language of the concerned area. The advertisement shall be done within 7 days of the issue of the clearance letter mentioning that the instant project has been accorded EC and copy of the EC letter is available with the State Pollution Control Board/Committee and web site of the Ministry of Environment, Forest and Climate Change (www.parivesh.nic.in). A copy of the advertisement may be forwarded to the concerned MoEFCC Regional Office for compliance and record.
- 8) The Project Proponent shall inform the MoEF&CC for any change in ownership of the mining lease. In case there is any change in ownership or mining lease is transferred. PP needs to apply for transfer of EC as per provisions of the para 11 of EIA Notification, 2006 as amended from time to time.

II. Air quality monitoring and preservation

- 9) The Project Proponent shall install a minimum of 3 (three) online Ambient Air Quality Monitoring Stations with 1 (one) in upwind and 2 (two) in downwind direction based on long term climatological data about wind direction such that an angle of 120° is made between the monitoring locations to monitor critical parameters, relevant for mining operations, of air pollution viz. PM10, PM2.5, NO2, CO and SO2 etc. as per the methodology mentioned in NAAQS Notification No. B-29016/20/90/PCI/I, dated 18.11.2009 covering the aspects of transportation and use of heavy machinery in the impact zone. The ambient air quality shall also be monitored at prominent places like office building, canteen etc. as per the site condition to ascertain the exposure characteristics at specific places. The above data shall be digitally displayed within 03 months in front of the main Gate of the mine site.



10) Effective safeguard measures for prevention of dust generation and subsequent suppression (like regular water sprinkling, metalled road construction etc.) shall be carried out in areas prone to air pollution wherein high levels of PM10 and PM2.5 are evident such as haul road, loading and unloading point and transfer points. The Fugitive dust emissions from all sources shall be regularly controlled by installation of required equipments/ machineries and preventive maintenance. Use of suitable water-soluble chemical dust suppressing agents may be explored for better effectiveness of dust control system. It shall be ensured that air pollution level conform to the standards prescribed by the MoEFCC/ Central Pollution Control Board.

III. Water quality monitoring and preservation

11) In case, immediate mining scheme envisages intersection of ground water table, then Environmental Clearance shall become operational only after receiving formal clearance from CGWA. In case, mining operation involves intersection of ground water table at a later stage, then PP shall ensure that prior approval from CGWA and MoEFCC is in place before such mining operations. The permission for intersection of ground water table shall essentially be based on detailed hydro-geological study of the area.

12) Project Proponent shall regularly monitor and maintain records w.r.t. ground water level and quality in and around the mine lease by establishing a network of existing wells as well as new piezo-meter installations during the mining operation in consultation with Central Ground Water Authority/ State Ground Water Department. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.

13) The Project Proponent shall undertake regular monitoring of natural water course/ water resources/ springs and perennial nallahs existing/ flowing in and around the mine lease including upstream and downstream. Sufficient number of gullies shall be provided at appropriate places within the lease for management of water. The parameters to be monitored shall include their water quality vis-à-vis suitability for usage as per CPCB criteria and flow rate. It shall be ensured that no obstruction and/ or alteration be made to water bodies during mining operations without justification and prior approval of MoEFCC. The monitoring of water courses/ bodies existing in lease area shall be carried out four times in a year viz. pre- monsoon (April May), monsoon (August), post-monsoon (November) and winter (January) and the record of monitored data may be sent regularly to Ministry of Environment, Forest and Climate Change and its Regional Office, Central Ground Water Authority and Regional Director, Central

Ground Water Board, State Pollution Control Board and Central Pollution Control Board. Clearly showing the trend analysis on six-monthly basis.

14) Quality of polluted water generated from mining operations which include Chemical Oxygen Demand (COD) in mines run-off; acid mine drainage and metal contamination in runoff shall be monitored along with Total Suspended Solids (TDS), Dissolved Oxygen (DO), pH and Total Suspended Solids (TSS). The monitored data shall be uploaded on the website of the company as well as displayed at the project site in public domain, on a display board, at a suitable location near the main gate of the Company. The circular No. J- 20012/1/2006-IA.II (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change may also be referred in this regard.

15) Project Proponent shall plan, develop and implement rainwater harvesting measures on long term basis to augment ground water resources in the area in consultation with Central Ground Water Board/ State Groundwater Department. A report on amount of water recharged needs to be submitted to Regional Office MoEFCC annually.

16) Industrial waste water (workshop and waste water from the mine) should be properly collected and treated so as to conform to the notified standards prescribed from time to time. The standards shall be prescribed through Consent to Operate (CTO) issued by concerned State Pollution Control Board (SPCB). The workshop effluent shall be treated after its initial passage through Oil and grease trap.

17) The water balance/water auditing shall be carried out and measure for reducing the consumption of water shall be taken up and reported to the Regional Office of the MoEF&CC and State Pollution Control Board/Committee.

IV. Noise and vibration monitoring and prevention

18) The peak particle velocity at 500m distance or within the nearest habitation, whichever is closer shall be monitored periodically as per applicable DGMS guidelines.

19) The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day /night hours.

20) The Project Proponent shall take measures for control of noise levels below 85 dBA in the work environment. The workers engaged in operations of HEMM, etc. should be provided with ear plugs /muffs. All personnel including laborers working in dusty areas shall be provided with protective respiratory devices along with adequate training, awareness and information on safety and health aspects. The PP shall be held responsible in case it has been found that workers/ personals/ laborers are working without personal protective equipment.

V. Mining plan

21) The Project Proponent shall adhere to approved mining plan, inter alia, including, total excavation (quantum of mineral, waste, over burden, inter burden and top soil etc.); mining technology; lease area; scope of working (method of mining, overburden & dump management, O.B& dump mining, mineral transportation mode, ultimate depth of mining, concurrent reclamation and reclamation at mine closure; land-use of the mine lease area at various stages of mining scheme as well as at the end-of-life; etc.).

22) The land-use of the mine lease area at various stages of mining scheme as well as at the end-of-life shall be governed as per the approved Mining Plan. The excavation vis-à-vis backfilling in the mine lease area and corresponding afforestation to be raised in the reclaimed area shall be governed as per approved mining plan. PP shall ensure the monitoring and management of rehabilitated areas until the vegetation becomes self-sustaining. The compliance status shall be submitted half-yearly to the MoEFCC and its concerned Regional Office.

VI. Land reclamation

23) The Overburden (O.B.), waste and topsoil generated during the mining operations shall be stacked at earmarked OB dump site(s) only and it should not be kept active for a long period of time. The physical parameters of the OB / waste dumps / topsoil dump like height, width and angle of slope shall be governed as per the approved Mining Plan and the guidelines/circulars issued by D.G.M.S. The topsoil shall be used for land reclamation and plantation.

24) The slope of dumps shall be vegetated in scientific manner with suitable native species to maintain the slope stability, prevent erosion and surface run off. The selection of local species regulates local climatic parameters and help in adaptation of plant species to the microclimate. The gullies formed on slopes should be adequately taken care of as it impacts the overall stability of dumps. The dump mass should be consolidated with the help of dozer/ compactors thereby ensuring proper filling/ leveling

of dump mass. In critical areas, use of geo textiles/ geo-membranes / clay liners / Bentonite etc. shall be undertaken for stabilization of the dump.

25) Catch drains, settling tanks and siltation ponds of appropriate size shall be constructed around the mine working, mineral yards and Top Soil/OB/Waste dumps to prevent run off of water and flow of sediments directly into the water bodies (Nallah/ River/ Pond etc.). The collected water should be utilized for watering the mine area, roads, green belt development, plantation etc. The drains/ sedimentation sumps etc. shall be de-silted regularly, particularly after monsoon season, and maintained properly.

26) Check dams of appropriate size, gradient and length shall be constructed around mine pit and OB dumps to prevent storm run-off and sediment flow into adjoining water bodies. A safety margin of 50% shall be kept for designing of sump structures over and above peak rainfall (based on 50 years data) and maximum discharge in the mine and its adjoining area which shall also help in providing adequate retention time period thereby allowing proper settling of sediments/ silt material. The sedimentation pits/ sumps shall be constructed at the corners of the garland drains.

VII. Transportation

27) No Transportation of the minerals shall be allowed in case of roads passing through villages/ habitations. In such cases, PP shall construct a 'bypass' road for the purpose of transportation of the minerals leaving an adequate gap (say at least 200 meters) so that the adverse impact of sound and dust along with chances of accidents could be mitigated. All costs resulting from widening and strengthening of existing public road network shall be borne by the PP in consultation with nodal State Govt. Department. Transportation of minerals through road movement in case of existing village/ rural roads shall be allowed in consultation with nodal State Govt. Department only after required strengthening such that the carrying capacity of roads is increased to handle the traffic load. The pollution due to transportation load on the environment will be effectively controlled and water sprinkling will also be done regularly. Vehicular emissions shall be kept under control and regularly monitored. Project should obtain Pollution Under Control (PUC) certificate for all the vehicles from authorized pollution testing centers. [If applicable in case of road transport].

28) The Main haulage road within the mine lease should be provided with a permanent water sprinkling arrangement for dust suppression. Other roads within the mine lease should be wetted regularly with tanker-mounted water sprinkling system. The other areas of dust generation like crushing zone, material transfer points, material yards etc. should invariably be provided with dust suppression arrangements. The air

pollution control equipments like bag filters, vacuum suction hoods, dry fogging system etc. shall be installed at Crushers, belt-conveyors and other areas prone to air pollution. The belt conveyor should be fully covered to avoid generation of dust while transportation. PP shall take necessary measures to avoid generation of fugitive dust emissions.

VIII. Green Belt

29) The Project Proponent shall develop greenbelt in 7.5m wide safety zone all along the mine lease boundary as per the guidelines of CPCB in order to arrest pollution emanating from mining operations within the lease. The whole Green belt shall be developed within first 5 years starting from windward side of the active mining area. The development of greenbelt shall be governed as per the EC granted by the Ministry irrespective of the stipulation made in approved mine plan.

30) The Project Proponent shall carryout plantation/ afforestation in backfilled and reclaimed area of mining lease, around water body, along the roadsides, in community areas etc. by planting the native species in consultation with the State Forest Department/ Agriculture Department/ Rural development department/ Tribal Welfare Department/ Gram Panchayat such that only those species be selected which are of use to the local people. The CPCB guidelines in this respect shall also be adhered. The density of the trees should be around 2500 saplings per Hectare. Adequate budgetary provision shall be made for protection and care of trees.

31) The Project Proponent shall make necessary alternative arrangements for livestock feed by developing grazing land with a view to compensate those areas which are coming within the mine lease. The development of such grazing land shall be done in consultation with the State Government. In this regard, Project Proponent should essentially implement the directions of the Hon'ble Supreme Court with regard to acquisition of grazing land. The sparse trees on such grazing ground, which provide mid-day shelter from the scorching sun, should be scrupulously guarded/ protected against felling and plantation of such trees should be promoted.

IX. Public hearing and human health issues

32) Project Proponent shall make provision for the housing for workers/labors or shall construct labor camps within/outside (company owned land) with necessary basic infrastructure/ facilities like fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche for kids etc. The housing may be provided in the form of temporary structures which can be removed after the completion of the project

related infrastructure. The domestic waste water should be treated with STP in order to avoid contamination of underground water.

X. Corporate Environment Responsibility (CER)

33) The Project Proponent shall submit the time- bound action plan to the concerned regional office of the Ministry within 6 months from the date of issuance of environmental clearance for undertaking the activities committed during public consultation by the project proponent and as discussed by the EAC, in terms of the provisions of the MoEF&CC Office Memorandum No.22-65/2017-IA.III dated 30 September, 2020. The action plan shall be implemented within three years of commencement of the project.

XI. Miscellaneous

34) The Project Proponent shall prepare digital map (land use & land cover) of the entire lease area once in five years purpose of monitoring land use pattern and submit a report to concerned Regional Office of the MoEF&CC.

35) The Project Authorities should inform to the Regional Office regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.

36) The Project Proponent shall submit six monthly compliance reports on the status of the implementation of the stipulated environmental safeguards to the MOEFCC & its concerned Regional Office, Central Pollution Control Board and State Pollution Control Board.

37) A separate 'Environmental Management Cell' with suitable qualified manpower should be set-up under the control of a Senior Executive. The Senior Executive shall directly report to Head of the Organization. Adequate number of qualified Environmental Scientists and Mining Engineers shall be appointed and submit a report to RO, MoEF&CC.

38) The concerned Regional Office of the MoEF&CC shall randomly monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the MoEF&CC officer(s) by furnishing the requisite data / information / monitoring reports.

39) In pursuant to Ministry's O.M No 22-34/2018-IA.III dated 16.01.2020 to comply with the direction made by Hon'ble Supreme Court on 8.01.2020 in W.P. (Civil) No



EC - M/s J K Cement Ltd

Page 21 of 23

114/2014 in the matter Common Cause vs Union of India, the mining lease holder shall after ceasing mining operations, undertake regrassing the mining area and any other area which may have been disturbed due to other mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.

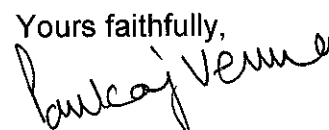
40) The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.

41) Concealing factual data failure to comply with any or submission of false/fabricated data and of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.

24. The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules made there under and also any other orders passed by the Hon'ble Supreme Court of India/High Court and any other Court of Law relating to the subject matter.

25. 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.

26. The issues with the approval of Competent Authority.

Yours faithfully,

(Pankaj Verma)
Scientist 'E'

Copy to:

- i. **The Secretary**, Ministry of Mines, Government of India Shastri Bhawan, New Delhi.
- ii. **The Secretary**, Department of Mines and Geology, Government of Madhya Pradesh, Secretariat, Bhopal.
- iii. **The Secretary**, Department of Environment, Government of Madhya Pradesh, Secretariat, Bhopal.
- iv. **The Secretary**, Department of Forests, Government of Madhya Pradesh, Secretariat, Bhopal.
- v. **The Chief wildlife Warden**, Government of Madhya Pradesh, Van Bhavan, 1st Floor, Tulsi Nagar, Bhopal - 462 003.

- vi. **The Regional Officer**, Regional Office (WZ), Regional Office (WZ), E-5, Kendriya Paryavaran Bhawan, E-5 Arera Colony, Link Road No.3, Ravishankar Nagar, Bhopal - 462 016.
- vii. **The Member Secretary**, Central Pollution Control Board, Parivesh Bhawan, CBD-Cum-Office Complex, East Arjun Nagar, New Delhi-110 032.
- viii. **The Member Secretary**, Central Ground Water Authority, 18/11, Jam Nagar House, Man Singh Road, New Delhi-110011.
- ix. **The Member Secretary**, Madhya Pradesh State Pollution Control Board, Paryavaran Parisar, E-5, Arera Colony, Bhopal - 462016.
- x. **The Controller General**, Indian Bureau of Mines, Indira Bhavan, Civil Lines, Nagpur- 440 001.
- xi. **The District Collector**, Neemuch District, Government of Madhya Pradesh.
- xii. **Guard File.**
- xiii. **PARIVESH Portal.**

Pankaj Verma

(Pankaj Verma)
Scientist 'E'