



Through E-Mail

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MIN / 2022 -BDR/050

01st December, 2022

To.

Director

Ministry of Environment & Forests and Climate Change

Regional Office, Western Region

Kendriya Paryavaran Bhavan

Link Road No. 3

E - 5, Ravishankar Nagar

Bhopal - 462016

Sub: Six Monthly Compliance report of Environment Clearance over 40.236 ha area of Limestone Mine of M/s Prism Johnson Ltd. In Village Bandarakha, Tehsil Rampur Baghelan, Dist. Satna (M.P.)

Ref: Your letter no. vide no. 3080/SEIAA/13, dated 20.08.2013,

Dear Sir,

We are sending enclosed herewith the six monthly compliance report (period April-22 to September 2022) of the environmental clearance granted for limestone deposit at Village- Bandarakha, Tehsil-Rampur Baghelan, Dist. Satna (M.P.) vide the letter no.3080/SIEAA/13, dated 20.08.2013, along with necessary enclosures.

We hope you will find the same in order.

Thanking you.

Yours faithfully,

For Prism Johnson Limited

Mines Manager

Bandarakha Limestone Mines

Encl: As above

PRISM JOHNSON LIMITED

(Cement Division)





COMPLIANCE OF CONDITIONS AS STIPULATED BY MOEF LETTER VIDE NO. 3080/SEIAA/13, DATED 20.03.2013, LIMESTONE DEPOSIT OVER 40.236 HECT. AREA IN VILLAGE BANDARAKHA, TEHSIL RAMPUR BAGHELAN, DIST. SATNA (M.P.)

•	ecific Conditions :-	
	Conditions	Compliance status
1.	If the land belongs to the tribal person the Collector shall ensure that the tribal person gets compensation as per rule 72 of the Mineral Concession Rule 1960 and his interests are safeguarded as per State plicy.	The land of the core area is devoid of any tribal person, therefore not applicable.
2.	Controlled blasting will be done as per guidelines of IBM; delay detonating technique will be adopted and down hole initiation system will be adopted.	Controlled blasting is being practiced using delay detonators and down the hole initiation system.
3.	All pollution control devices will be installed as per guidelines of CPCB/MPPCB.	Air, Noise & Water Quality is being monitored regularly and found within the limit. Ambient Air quality and Noise quality data attached as Annexure-2 & 3
4.	Appropriate measures to control the silt shall be taken and reported to avoid the possible disturbance of aquatic eco system of river Tamas.	Garland drain and siltation pond have been constructed to arrest the silt and sediment flow
5.	Dense plantation all along the transportation road has to be taken up immediately	Extensive plantation is being done along the road.
6.	Mine wise production record shall be maintained at site.	Mine production is being maintained. Mining is being carried out as per approved Mining Plan.
7.	The water reservoir as proposed in 21.12 ha shall be fenced and aesthetically developed.	Will be developed as per approved mining plan and scheme of mining by IBM. Fencing is done around mine boundary.
8.	Afforestation on 17 Ha area with minimum 17,020 numbers of trees as proposed shall be taken up with mining.	Plantation has been done in phase manner annually. Total 3645 plants have been planted on 3.4 ha area maintaining the plantation density as per the condition. 30,000 no.s of substitute plantation on 14

B. GENERAL CONDITIONS:-							
Conditions	Compliance status						
Any addition of mining area, change of Khasra numbers, enhancement of capacity, change in mining technology, modernization and scope of working shall again require	• • •						

prior environment clearance as per					
EIA notification, 2006.					
All activities / mitigate measures proposed by PP in Environmental Impact Assessment and approved	All types of mitigation measures are taken by us as per proposed plan and are mentioned below:				
by SEAC must be ensured.		Mitigation Measures as per REIA			
	1	Wet Drilling or dry drilling with in-built cyclone and bag filter arrangement is being deployed.			
	2	Water is sprayed on haul roads using water tanker.			
	3	Maintenance and PUC of vehicles is done regularly to prevent air pollution, smoke and gaseous pollution.			
	4	Teeth of shovel are kept sharpened to avoid dust emission.			
	5	Plantation is done in phase manner to prevent dust, smoke etc.			
	7	Plantation is done on dumps for slope stabilization.			
	8	Controlled blasting with down the hole initiation is adopted which produces less noise, vibration and better fragmentation.			
	9	NONEL system of initiation is followed to minimize noise.			
	10	No. of blast holes per day are kept to a minimum.			
	11	PPEs are distributed to workers for their safety.			
	12	Appropriate subgrade drilling is being followed.			
	13	Pattern blasting is being practiced which produces less noise and vibration.			
	14	Physical barriers such as bunds/embankment and green belt are developed to prevent noise from going outside.			
	15	Garland drains and siltation tank have been constructed to prevent water pollution and inrush of water.			
	16	Water is discharged/stored into adjoining pit after treatment with the settling pond.			
	17	Extensive plantation is being carried out around the lease periphery and Tamas River			
		side to prevent air and noise pollution.			

	18	Limestone and Overburden is properly	
		handled to prevent dust emission and its	
		impact on nearby flora and fauna.	
	19	There is a school in colony in which children	
		of employees and villagers study.	
	20	A well-equipped dispensary has been	
		provided with 3 full time medical officers	
		assisted by adequate paramedical staff, for	
		the local villagers. Also, a mobile clinic van	
		along with a doctor and paramedical staff	
		makes regular visits to the nearby villages	
		and provided free medical advice and medicines to the local habitants.	
	21	A two lane WBM road has been constructed	-
	41	by the lessee connecting the national	
		highway-75 with Sljahtta village via	
		Mankahari and Bamhauri village.	
	22	Aid is provided to the needy in the villages in	
		the form of scholarships. Donations for	
		conducting sports have been given.	
		5 1	
All activities / mitigative measures	ΔΙΙ	, , ,	hy us as ner
proposed by PP in Environmental		types of mitigate measures are taken	by us as per
proposed by PP in Environmental Management Plan and approved by		types of mitigate measures are taken cosed plan and are mentioned below:	by us as per
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manner.

Green belt development is in progress and the same will be continued in phased

A major portion of the transportation comes under mine lease area with 250 m minimum distance between the lease and village. Trees

	are being planted on both sides of the						
	approach roads.						
3	Regular maintenance and lubrication of						
	machineries is done.						
4	PPEs like ear plugs are provided to the						
•	workers and employees.						
5	Controlled blasting with muffles are used to						
	minimize noise.						
Water Environment 1 To reduce suspended solids, coming to m pits, garland drains are being constructed							
							around the pit and around the dumps also. All
							garland drains are connected to the settling
	tank and the water is being used for dust						
	suppression.						
2	Mine has started its production recently. No						
	area at the pit bottom is completely						
	excavated out till now. The Sump will be						
developed in due course of time. A si pond has already been constructe earmarked location.							
							earmarked location.
						3	Garland drains are regularly de-silted.
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No change in calendar plan including excavation, quantum of mineral and waste shall be made.		s of lim	ave been ma nestone produ action Plan for I	ıction to be fu		
	No cha	anges h	ave been ma	de.		
A final mine closure plan, along with details of Corpus Fund, shall be submitted to the Regional Office, MoEF, Gol, Bhopal and MP PCB within 5 years in advance of final mine closure for approval.						
Slope of mining bench and ultimate pit limit shall be as per the mining scheme approved by Indian Bureau of Mines.	Mining benches and ultimate pit limit shall be maintained as per mining scheme approved by Indian Bureau of Mines for ensuing period.					
	All the suggestion and finding of study are implemented and all the provisions of applicable statutes and all directions/guidelines of approving authorities, like DGMS, IBM are strictly followed.					
Controlled blasting techniques with sequential drilling shall be adopted. The blasting shall be carried out in the day time only.	We practice controlled blasting using Non electric delay detonators (Nonel), limiting charge per delay and blast size. Moreover, periodical blasting study is conducted by scientific bodies, like AKS University, to evaluate and establish the safe practice of blasting so as to eliminate/minimize any adverse impact of blasting in nearby surrounding area.					
Blast vibration study shall be conducted and submitted to the Regional Office, MoEF, Gol, Bhopal and MP PCB within six months. The study shall also provide measures for prevention of blasting associated impact on nearby houses and agricultural fields.	The Blast vibration study has been conducted by AKS University Satna. The recommended blast designs in the report are being followed for day-to-day blasting operations for safe and efficient blasting operations. The copy of the same is attached as Annexure-5					
All parameters listed in Environmental Monitoring Plan approved by SEAC must be monitored at approved locations and frequencies.	Monitoring is being done at designated locations and analysis report is being submitted to MPPCB on monthly basis.					

	3.	2020- 21	240003	2400000	239923	
	4.	2021- 22	500000	2400000	239685	
	5.	2022- 23 (till Sep)	500013	2400000	4430	
Mining will be carried out as per the	Minino	ı ic hai	na carried o	ut as nor the	annroved r	mining

Mining will be carried out as per the approved mining plan. In case of any violation of mining plan, the Environmental clearance given by SEIAA will be stand cancelled.

Mining is being carried out as per the approved mining plan by IBM.

Adequate buffer zone shall be maintained between two consecutive mineral bearing deposits.

NOT APPLICABLE.

The deposit is single mineral deposit hence, condition not applicable.

The transportation of the minerals extracted from the mining area shall be limited to day hour time only.

Limestone Mineral is strictly transported during day hours only.

Maintenance of nearby local roads through which transportation of minerals are undertaken shall be carried out by company regularly at its own expenses. The roads shall be blacked topped.

All transportation is through internal roads which are motorable, rehabilitated with stone chips and stone dust on regular basis. No local roads are being used for mineral transportation and, the roads are maintained regularly.

Measures of prevention and control of soil erosion and management of slit shall be undertaken. Protection of dumps against erosion shall be carried out with geo textile matting or other suitable mineral and thick plantations of native trees and shrubs shall be carried out at the dump slopes. Dumps shall be protected by retaining walls.

Soil and waste dumps are stacked as per approved scheme of mining and are protected from erosion by carrying out suitable plantation, construction of toe drains and retaining wall. Also, no permanent dumps are present and temporary dumps will be used for backfilling.





Trenches/garland drains shall be constructed at foot of dumps and coco filters installed at regular intervals to arrest slit from being carried to water bodies. Adequate number of check dams and gully plugs shall be constructed across seasonal/perennial Nallahs, if any, flowing through the ML area and silts arrested. De-silting at regular intervals shall be carried out.

Trenches/garland drains with settling pond is being constructed at foot of dumps and these drains connect to settling pond which is de-silted at regular intervals. There is no water body, streams exist within the ML area neither seasonal nor perennial. The water discharge from the mine is nil. Siltation pond has been constructed to arrest the silt.



The project proponent will ensure necessary protection measures around the mine pit, waste dumps and garland drain.

Proper berms garland drains and fensing are constructed around mine pit area and garland drains with retaining wall have been provided.



Top soil / solid waste shall be stacked properly with proper slope and adequate safeguards and shall be utilized for backfilling (where ever applicable) for reclamation and rehabilitation of mined out area. Top soil shall be separately stacked for utilization later for reclamation and shall not be stacked along with over burden.

Top soil/ solid waste generated during mining is stacked separately & will be used for reclamation of mined out area by spreading it over the waste rock after backfilling. Dumps are maintained as per mine plan. Dumps are temporary. The top soil is being used for greenbelt development. The stored soil will also used for plantation in barrier zones and over backfilled area to be developed in future.

Over burden(OB)shall be stacked at earmarked dumpsite(s) only and shall not be kept active for long period., The maximum height of dump shall not exceed 20m, each stage shall preferably be of

The Overburden generated during mining has been stacked at earmarked dump site only and is being stacked in 1 or 2 stages, height of each stack not exceeding 10m and slope not exceeding 35°. The dumps shall be backfilled as approved mine plan by IBM. Plantation is being done on dumps for slope stabilization and to prevent

maximum 10 m and overall slope of the dump shall not exceed 35°. The OB dump shall be backfilled and shall be scientifically vegetated with suitable native species to prevent erosion and surface run off. surface runoff.



Minimum 1000 plants shall be planted in one year and 5000 plants shall be planted in first five years.

Plantation has been done in phase manner annually. Total 3645 plants have been planted on 3.4 ha area maintaining the plantation density as per the condition.

30,000 no.s of substitute plantation on 14 acre area has been done at Satri village.

Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Regional Office, MoEF, Gol, Bhopal and MP PCB on six monthly basis.

Requirement is being complied. The compliance reports are being sent every six months to the Regional Office, MoEF, Gol, Bhopal and MPPCB.

Year	Bandarkha Limestone Mine						
	Dispatch no.	Date					
2019	MIN/2019/ BDR/038	01.06.2019					
	MIN/2019- BDR/90	04.12.2019					
2020	MIN/2020- BDR/0140	01.06.2020					
	MIN/2020- BDR/0169	02.12.2020					
2021	MIN/2021- BDR/087	01.06.2021					
	MIN/2021- BDR/058	01.12.2021					
2022	MIN/2022-BDR/31	01.06.2022					

By the end of the lease period 33% of the area should be brought under plantation.

Out of 32.15 ha of broken area, 10.75 ha will be reclaimed and rehabilitated by way of backfilling and plantation at the end of life of the mines.

Green belt development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with local DFO/Agricultural Deptt. Herbs / shrubs shall also form a part of afforestation programme besides

Greenbelt is being developed in phased manner. All plants species are selected on recommendations of District Forest Officer and local villagers. The compliance reports are being sent every six months to the Regional Office, MoEF, Gol, Bhopal and MPPCB. Species list from DFO & local villagers

tree plantation. The company shall involve local people for plantation programme. Details of year wise afforestation programme including rehabilitation of mined out area shall be submitted to the Regional Office, MoEF, Gol, Bhopal and MP PCB every year.

Year	Bandarkha Limestone Mine				
Teal	Dispatch no.	Date			
2019	MIN/2019/ BDR/038	01.06.2019			
	MIN/2019- BDR/90	04.12.2019			
2020	MIN/2020- BDR/0140	01.06.2020			
	MIN/2020- BDR/0169	02.12.2020			
2021	MIN/2021- BDR/087	01.06.2021			
	MIN/2021- BDR/058	01.12.2021			
2022	MIN/2022-BDR/31	01.06.2022			

Vehicular emissions shall be kept under control and regularly monitored. Vehicles used for transportation of minerals and others shall have valid permissions as prescribed under Central Motor Vehicle Rules.1989 and its amendments. The vehicles transporting minerals shall be covered with a tarpaulin or other suitable enclosures so that no dust particles / fine matters escape during the course of transportation. No overloading of minerals for transportation shall be committed. The truck transporting minerals shall not pass through wild life sanctuary, if any in the study area.

Emission from the vehicles engaged in the Prism Cement is kept under control.

A centralized workshop has been established. Regular maintenance of all vehicles is done as per manufacturer's maintenance schedule i.e. changing of timely diesel filters, calibration of Fuel pump, overhauling of engines etc.

No vehicles without valid PUC area allowed to be deployed inside the plant and mines area. The vehicles engaged in transportation of minerals outside the core zone will be provided with tarpaulin and overloading is not allowed.

For ambient air quality monitoring stations shall be established in core zone as well as in the buffer zone for RSPM,SPM,SO2,NOx monitoring. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with State Pollution Control Board. The monitored data for criteria pollutants shall be regularly uploaded and

Ambient air quality monitoring for the given parameters will be done as per the directions given and data generated is being uploaded on company website. displayed on the company's website.

Data on ambient air quality (RPM, SPM, SO2, and NOx) should be regularly submitted to the Regional Office, MoEF, Gol, Bhopal and state Pollution Control Board / Central pollution control Board once in six months.

Being done.

The compliance reports are being sent every six months to the Regional Office, MoEF, Gol, Bhopal and MPPCB.Ambient air quality monitoring results from April 2021 to March 2022 have been given in **Annexure 02**.

Year	Bandarkha Limestone Mine						
	Dispatch no.	Date					
2019	MIN/2019/ BDR/038	01.06.2019					
	MIN/2019- BDR/90	04.12.2019					
2020	MIN/2020- BDR/0140	01.06.2020					
	MIN/2020- BDR/0169	02.12.2020					
2021	MIN/2021- BDR/087	01.06.2021					
	MIN/2021- BDR/058	01.12.2021					
2022	MIN/2022-BDR/31	01.06.2022					

Ambient air quality at the boundary of mine premises shall confirm to the norms prescribed in MoEF notification No. GSR/826(E) dtd. 16.11.09.

Being complied. All Air quality parameters monitored are within NAAQS standards. Ambient air quality monitoring results from April 2022 to September 2022 are attached as **Annexure** 2.

Fugitive dust emissions from all sources shall be controlled. Water spraying arrangement on haul, roads, loading and unloading at transfer points shall be provided and properly maintained. The dust emission shall be monitored regularly as per norms and records to be submitted to the Regional Office, MoEF, Gol, Bhopal and MP PCB regularly.

Water sprinkling is being done on haul roads for dust suppression. Wet drilling is being practiced. Vehicle speed is limited below 20 km/hr. Regular monitoring of dust emission is being done through NABL/ MoEFCC accredited laboratory. Dust emission norms are being complied and the report is being submitted.

The compliance report are being sent every six months to the Regional Office, MoEF, Gol, Bhopal and MPPCB.

Measures shall be taken control of noise level below 75dBA in the work environment. Workers engaged in operations of HEMM, etc. shall be provided with ear plugs/muffs and health records of workers shall be Ambient Noise level is monitored at designated locations and report is being submitted to MPPCB on monthly basis. Noise monitoring reports from April 2022 to September 2022have been given in **Annexure-3**.

All the workers engaged in mining activity shall be provided the PPEs including ear plugs and muffs and health checkup maintained. is being done and records being maintained.

Total PPE's for Mines- Apr 22 to Sep 22					
Material	Qty.	Amount in Rs.			
Dust Mask	100	1,550			
Goggle Safety Glass PVC,	10	330			
Hand Gloves	68	4,454			
Helmet Industrial Safety	41	4,669			
Jacket fluorescent High Visibility Wear	200	25,400			
Plug Ear muff	250	2,000			
Safety Shoes	307	273,537			
TOTAL	976	311,940			

Rain water harvesting shall be undertaken to recharge the ground water source. Status of implementation shall be submitted to the Regional Office, MoEF, Gol, Bhopal and MP PCB within six months and thereafter every year from the next consequent year.

Rainwater harvesting practices have been implemented. 12 Nos of rooftop rainwater harvesting system, 4 abandoned pits and 4 nos of recharge pits have been constructed inside plant, mines and township.

Other than this, the company has taken various initiatives like, construction of water harvesting structures on wells, ponds, pond deepening, maintenance of check dams, perforated drum water harvesting structures.

Regular monitoring of ground and surface water sources for level and quality shall be carried out by establishing a network of existing wells and constructing new piezometers during the mining operation. The monitoring shall be carried four times a year i.e. premonsoon (April-May) ,Monsoon Post monsoon (August), (November) and winter(January) and the data thus collected shall be regularly sent to the Regional Office, MoEF, Gol, Bhopal and MP PCB ,Central Ground Authority and Regional Director, Central Ground Water Board.

Piezometers have been constructed to monitor ground level. Water level and quality is analyzed in Pre-Monsoon, Monsoon, Post Monsoon, and winter seasons. Report of monitoring is generated and submitted to MoEF-&CC Bhopal, MPPCB, and CGWA & CGWB. Groundwater quality report is attached is **Annexure- 4.**

Since the mine working is restricted above the ground water table, there is no chance of contamination of ground water.

The waste water from the mine if any shall be treated to confirm to the standards prescribed under GSR 422(E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time. The oil and grease trap shall be installed

Not Applicable.

No workshop in lease area, we have a common workshop for all leases with appropriate arrangements.

for the effluents generated from the workshop, if any, before discharging into the natural stream. The discharged water from tailing dam,if any shall be regularly monitored and report submitted to the Regional Office, MoEF, Gol, Bhopal, Central Pollution Control Board, and the State Pollution Control Board.

Hydro-geological study of the area shall be reviewed by project proponent annually. In case adverse effect on ground water quality and quantity is observed mining shall be stopped and resumed only after mitigating steps to contain any adverse impact on ground water is implemented.

The hydrogeological study of the area is conducted regularly.

Excavation of limestone is proposed up to only 16m and currently we are working at a depth of 10m to 14m only. Water table will not be intersected.

Regular monitoring if groundwater is carried out via piezometers.

Occupational health checkup for workers including identification of related work health hazards. training on malaria eradication, HIV, and health effects on exposure to mineral dust etc. shall be carried out. Periodic monitoring exposure to respirable mineral dust on the workers shall be conducted and records maintained including health records of the workers. Awareness programme for workers on impact of mining on their health and precautionary measures like use of personal equipment etc. shall be carried out periodically. Review impact of various health measures shall be conducted follow followed by up action wherever required. It should be made available for inspection whenever asked. Necessary funds for this also should be earmarked.

Periodical Medical Examinations are conducted for each employee by outside specialists once in every 5 years. Under this scheme each employee undergoes Pathological tests, blood group test, chest X-Rays, Audiometry tests, eye test etc. once every 5 years. Proper records of such tests are maintained.

All the workers engaged in mining activityis provided with the PPEs including ear plugs and muffs and health checkup is being done and records being maintained.

Awareness training programs related to health and safety is given to all workers at VT centre.

OHC has been conducted in November 2022 however the reports have not been received. The Purchase Order of the same is attached as **Annexure 6** for reference.

Project proponent shall ensure appropriate arrangement for shelter and drinking water for the mine Appropriate arrangements shelter and drinking water is provided in the adjacent mine for all the mine workers. Drinking water is supplied through 20Litre capacity thermo

workers.	flasks				
Person working in dusty areas shall be provided with protective respiratory devices and they shall also be imported adequate training and information on safety and health aspects.	PPE's are provided to each employees. Respiratory devices are being used by the person working in dusty areas. Adequate training on Integrated Management system safety and health awareness is being provided to worker frequently.				
	PPEs distribution de	etails a	re as follows:		
	Total PPE's for N	lines- A	or 22 to Sep 22		
	Material	Qty.	Amount in Rs.		
	Dust Mask	100	1,550		
	Goggle Safety Glass PVC,	10	330		
	Hand Gloves	68	4,454		
	Helmet Industrial Safety Jacket fluorescent	41	4,669		
	High Visibility Wear	200	25,400		
	Plug Ear muff	250	2,000		
	Safety Shoes TOTAL	307 976	273,537 311,940		
Commitment towards CSR has to be followed strictly.	Various programs for training for community welfare have been taken up by the company. Various social educational, healthcare and environment initiatives have been taken by the company. Drinking water facility has been provided; Construction of WBM roads, Toilets have been done. Installation of new hand-pumps with borewell whitewash of Government Middle & Primary School renovation of Bahuuddeshiya Bhavan has been done. Free consultation & medicines distribution from PCL Medical centre Out door patient to nearby villagers. Organisation eye Camp for cataract patients from nearby villages (20 Nos.). 24 hrs ambulance facility to nearby villagers free of cost and many other activities have been undertaken in CSR.CSR expenditure for the period April 22- September				
Special measures shall be adopted to prevent the nearby settlements from the impacts of mining activities.	22 is attached as Annexure-7 . There is no nearby settlement in the close vicinity to the mines. the nearest settlement is more than 250m away. All measures is being adopted while mining as per guidelines of MMR 1961 and Mines Act 1952 and as per the benefit of the community.				
The project proponent shall inform to the to the Regional Office, MoEF,	The intimation has MPPCB regarding			•	

Gol, Bhopal and MP PCB regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.

approval of the project by the concerned authorities and the date of start of land development work after the start of the project.

The necessary funds as per mandate shall kept for environmental protective measures which should be kept in separate account and shall not be diverted for other purpose. Year wise expenditure shall be reported to the Regional Office, MoEF, Gol, Bhopal and MP PCB.

Complying with the given condition, we have earmarked a fund for environmental protection equipment the fund will not diverted for any other purpose.

The capital cost and recurring cost annum earmarked for environmental protection is given below:

Year wise expenditure is being reported through the six monthly compliance report.

S. No.	Particulars	Proposed Capital cost	Proposed Annual recurring cost*
1.	Pollution Control	4.19	0.23
2.	Pollution Monitoring	-	2
3.	Occupational Health & Safety	-	1.31
4.	Afforestation	-	1.4
5.	Reclamation / Rehabilitation of mined out area	0	3
6.	Others (Fencing and safety)	5.76	-
7. Environmental Studies & Fees		0.8	0.44
	Total	10.75	8.38

(in Lac Rupees)

The Regional Office, MoEF, Gol, Bhopal and MP PCB shall monitor compliance of the stipulated conditions. A complete set of documents including Environment impact Assessment Report, Environmental Management Plan, public Hearing and other relevant documents should be given to the

Agreed. The Six monthly Compliance is being submitted to MoEFCC, Bhopal and MPPCB regularly and the same is being monitored as per the norms. The reference letter nos are mentioned in table below:

Year	Bandarkha Limestone N	/ line
	Dispatch no.	Date
2019	MIN/2019/ BDR/038	01.06.2019

Regional Office, MoEF, Gol, Bhopal and MP PCB.			MIN/2019- BDR/90	04.12.2019	
and min 1 GD.		2020	MIN/2020- BDR/0140	01.06.2020	
			MIN/2020- BDR/0169	02.12.2020	
		2021	MIN/2021- BDR/087	01.06.2021	
			MIN/2021- BDR/058	01.12.2021	
		2022	MIN/2022-BDR/31	01.06.2022	
A copy of the environmental clearance shall be submitted by the project proponent to the Heads of the local Bodies, Panchayat and Municipal Bodies, as applicable, in addition to the relevant officers of the Government who in turn has to display the same for 30 days from the date of receipt.		ted to	environmental clearan Panchayat and SD		
The project proponent shall advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and also at website of State Level Environment Impact Assessment Authority (SEIAA) website at www.mpseiaa.nic.in and a copy of the same shall be forwarded to the Regional Office, MoEF, Gol, Bhopal.			ws of accorded EC w 02.04.13.	ras published	in two
The project proponent has to strictly follow directions/guideline issued by MoEF, Gol, CPCB and other Govt. agencies from time to time.	Agreed	J.			
Action plan with respect to suggestion/ improvement and recommendations made and agreed during public hearing consultation			tus of suggestions ar g public hearing is end		

shall be submitted to the regional Office, , MoEF, Gol, Bhopal and MP PCB and to the competent authority of state govt. within six months.					
The project proponent has to submit half yearly compliance report of the stipulated prior environmental			hly Compliance report e reference letter nos a		
clearance terms and conditions in hard and soft copy to the regulatory		Year	Bandarkha Limestone	Mine	
Authority on 1st June and 1st		real	Dispatch no.	Date	
December of each calendar year.		2019	MIN/2019/ BDR/038	01.06.2019	
		2019	MIN/2019- BDR/90	04.12.2019	
		2020	MIN/2020- BDR/0140	01.06.2020	
		2020	MIN/2020- BDR/0169	02.12.2020	
		2021	MIN/2021- BDR/087	01.06.2021	
		2021	MIN/2021- BDR/058	01.12.2021	
		2022	MIN/2022-BDR/31	01.06.2022	
The SEIAA of MP reserves the right to add additional safeguard measures subsequently, if found necessary and to take action including revoking of the environment clearance under the provisions of the environmental (protection) Act,1986,to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.	Agreed	I.			
These stipulations would be enforced among others under the provisions of water(Prevention and control of pollution) act,1974,the air(Prevention and control of pollution) Act 1981,the Environment(Protection) Act,1986 the public Liability (insurance) Act 1991 and EIA Notification,2006.	Agreed	J.			
The Ministry or any other competent authority may alter/modify the conditions or stipulate any further	Agreed	I.			

condition in the interest of environment Protection. Concealing factual data We understand that concealing factual data or submission submission of false/fabricated data of false/fabricated data and failure to comply with any of the conditions mentioned above may results In withdrawal and failure to comply with any of the conditions mentioned above may of this clearance and attract action under the provisions of environment (protection) Act, 1986. results In withdrawal clearance and attract action under the provisions of environment (protection) Act, 1986. Any appeal against this prior. Agreed. Environmental Clearance shall lie with the green tribunal, If necessary, within a period of 30 days as prescribed under section 16 of the national Green tribunal Act. 2010. All other statutory clearances such Not applicable. as the approvals for storage of diesel from chief controller of explosives, fire department, civil aviation department. Forest conservation act, 1980 and wildlife (protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective component authorities. The six-monthly EC compliance report is being uploaded The proponent shall upload the status of compliances of stipulated on company website. EC conditions, including results of The six monthly Compliance report is submitted twice monitored data on their website and every year to the regional office of MoEF, the respective shall update the same periodically. zonal office of CPCB and the SPCB.. The reference letter It shall simultaneously be sent to nos are mentioned in table below: the regional office of MoEF, the Bandarkha Limestone Mine respective zonal office of CPCB and Year the SPCB. The criteria pollutant Dispatch no. Date levels namely, SPM, RSPM, SO2, MIN/2019/ BDR/038 01.06.2019 NOx (ambient levels as well as 2019 stack emissions) or critical sectoral MIN/2019- BDR/90 04.12.2019 parameters. indicated for MIN/2020- BDR/0140 01.06.2020 projected shall be monitored and 2020 displayed at a convenient location MIN/2020- BDR/0169 02.12.2020 near the main gate of the company

In the public domain.	2021	MIN/2021- BDR/087	01.06.2021	
		MIN/2021- BDR/058	01.12.2021	
	2022	MIN/2022-BDR/31	01.06.2022	

The environmental statement for each financial Year ending 31st march in form-V as is mandated to be submitted by the project Concerned state proponent to the pollution control board Prescribed under the environment (protection) Rules, 1986, amended subsequently, shall also be put on the website of the company along with the status of compliances of EC condition and shall also be sent to the regional office of MoEF.

The environmental statement for financial Year has been submitted to MPPCB Vid letter no. PJL/ENV/2022/546 dated 12/09/2022.

Suggestions received during Public Hearing of 40.236 Ha Badarkha Limestone Mines of M/s Prisn Cement Limited at Govt. Primary Shala, Badarkha Dated 07.07.2012

Ceme	nt Limited at Govt. Pr	imary Shala, Badarkha Dated 07.07.201	2
S. No	Name and Address	Query	Reply
1	Shri Chhatrapati Singh, President, Seva Sahkari Samiti Vill- Sijahata	Agree with project implementation, development of the area will take place, social status of general public of the area will be improved	Thanks for your co-operation, employment will be given according to eligibility & requirement
2	Smt. Shanti Kori, Sarpanch, Vill – Hinauti, Dist - Satna	Requested for employment to villagers, plantation, requested the villagers to cooperate the company in establishing the mines	Thanks for your co-operation. Dense plantation will be done in mines periphery, employment will be given according to eligibility & requirement
3	Shri Jagdish Singh S/O Sukhdev Singh Vill- Badarkha, Distt – Satna	Area will be developed, employment will be given to villagers, no objection in establishing mines	Thanks for your co-operation, employment will be given according to eligibility & requirement
4	Shri Mohit Singh, S/O Shri Ram Charit Singh Vill- Badarkha, Distt – Satna	Area will be developed, employment will be given to villagers	Thanks for your co-operation, employment will be given according to eligibility & requirement
5	Shri Rohini Singh, Vill - Badarkha, Distt - Satna	Agree with project implementation, Area will be developed, employment will be given to villagers	Thanks for your co-operation, employment will be given according to eligibility & requirement
6	Shri Ganesh Singh, Vill – Badarkha, Distt – Satna	Agree with project implementation, Area will be developed, employment will be given to villagers	Thanks for your co-operation, employment will be given according to eligibility & requirement
7	Shri Ramesh Singh, Vill – Badarkha, Distt – Satna	Agree with project implementation, Area will be developed, employment will be given to villagers	Thanks for your co-operation, employment will be given according to eligibility & requirement
8	Shri Hari Shankar Tiwari, Vill – Mau, Distt – Rewa	 Noise Pollution due to blasting hearing impairment, mental ill health etc. 	Controlled blasting will be done as per guidelines of IBM, delay detonating technique will be adopted due to which no hearing impairment or mental ill health is possible
		 Air pollution due to Blasting, cement manufacturing process 	Air pollution control devices will be installed at all the point sources and have been already installed at various locations (emission points) in plant.
		 Increase of pollutant matter in air 	Wet drilling will be done, water spray on haul roads.
		4- Water pollution due to settling of dust, stone and smoke from air into water body, ground water level will also be affected.	All due care will be made to arrest the dust generated at source, ground water level will be improved due to collection of rainy water in abandoned mine pits
		5- Geological problems – all the living being will be scared of vibration caused due to blasting. Mining will be deeper enough due to which earth strata will become weak,	No mining will be done beyond permitted depth assigned by IBM by which no effect is envisaged on earth strata and no possibility of release of poisonous gases, earthquake and landslide
		release of poisonous gases,	

- earthquake and landslide may be caused
- 6- Mental problems pollutants released may cause mental ill health, man of an ordinary prudence, thinking ability etc will also be affected.
- 7- Physical problems mining will cause physical problems in 50 km of radius. Progenies will face problems of infertility, handicapped, dwarfness, annoyance, madness etc.
- 8- Problems of Homes- cracks in walls or collapse of buildings within 10-15 years
- Effects on youths & pregnant ladies- development of infants, youths and pregnant ladies will be affected.
- Effects on farmers life of farmers will be ill affected who are tolally dependent on agriculture
- 11- Affection with parental birth place- people who leaves their homes even without their own will

All the pollution control devices will be installed as per guidelines of CPCB/ MPPCB to avoid the release of pollutant. Cause of mental ill health is not possible.

No possibility of any such physical problems

Mining will be done as per guidelines of IBM and ground vibration will be monitored regularly, vibration will not be enough to cause harm to the homes as all the guidelines of IBM will be followed

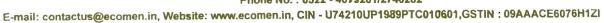
Not acceptable, no effect on development of infants, youths and pregnant ladies, with the compliance of statutory guidelines

Not acceptable, due to compliance of related guidelines of the Govt., there will be no adverse effect. Life style will be improved.

There is no habitation in the lease area hence the allegation is not acceptable



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TEST REPORT

- FURMAT NO. ECO/OS/FURMAT/II	FORMAT	NO.	ECO/OS/FORMAT/10
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NAME & ADDRESS OF	Prism Johnson Lt	d.	Test Report No.	ECO/LAB/AA/0517/4122-4125/09/2022		
CUSTOMER:	Village – Mankahari, Tehsil- Rampur, Baghelan, District Satna (M.P.)		Issue Date of Test Report	29.09.2022		
Type of Sample	Ambient Air Sample					
Sample Registration No.	517		Name of Location	-		
Sampling Method	As per Reference Method		Sample Collected By	ELPL Representative		
Date of Sample Collection	12.09.2022 to 16.09.2022		Time of Sample Collection	11.00 AM		
Date of Sample Received	17.09.2022		Time of Sample Received	10.50 AM		
Start Date of Analysis	17.09.2022		End Date of Analysis	28.09.2022		
Weather Condition	Partially Cloudy		Sampling Duration	-		
Laboratory Environmental	Temperature:	25 ±2 °C	Sample ID Code	ECO/LAB/4122-4125/09/2022		
Condition	Humidity:	68 %	Sample 1D Code	ECO/LAB/4122-4123/09/2022		
Details of Instrument used	Instrument ID	Envirotech ECO/AR/FD/1:	5 and ECO/AR/FD/16			
	Calibration due on	01.06.2023				

		Result					Limit as per
S. No.	Tests Conducted	Method	Badarkha Village	Hinauta Village (Mines 04)	Chulhi Village (Mines 04)	Kulhari Village	National Ambient Air Quality
			15.09.2022	15.09.2022	15.09.2022	15.09.2022	Standards
1.0	Particulate Matter (PM _{2.5}) (μg/m ³)	IS 5182:Part-24	25.72	28.18	23.42	26.50	60
2.0	Particulate Matter (PM ₁₀) (μg/m³)	IS 5182: Part 23: 2006 (Reaf Year:2017)	51.67	53.94	47.28	53.69	100
3.0	Sulphur Dioxide (SO ₂) (µg/m ³)	IS 5182: Part 2:2001 (Reaff Year:2017)	8.20	10.35	11.47	13.60	80
4.0	Oxides of Nitrogen (NOx) (μg/m³)	IS 5182: Part 6:2006 (Reaff Year:2017)	14.62	17.08	16.53	18.14	80
5.0	CO (mg/m³)	IS:5182 (Part-10)	0.31	0.43	0.37	0.41	02

Opinion/Observation: Analyzed parameters in above tested sample are within standard limit as per NAAQMS Guidelines.

Note:

- I. Test results relate to the items sampled & tested.
- 2. Test report shall not be reproduced except in full without approval of the laboratory.
- 3. The test samples will be disposed of after one Month from the date of issue of test report.

Verified By

Technical Manager

Authorized By

Quality Manager

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----End of Report----



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TEST REPORT

FORMAT NO. ECO/QS/FORMAT/10

NAME & ADDDESS OF	NAME & ADDRESS OF Prism Johnson Ltd.		Test Report No.	ECO/LAB/AA/0517/4104/09/2022
CUSTOMER: Village – Mank Tehsil- Rampu District Satna (Baghelan,	Issue Date of Test Report	29.09.2022
Type of Sample	Ambient Air Sample			
Sample Registration No.	517		Name of Location	Near Crusher Unit-II
Sampling Method	As per Reference Method		Sample Collected By	ELPL Representative
Date of Sample Collection	12.09.2022 to 16.09.2	022	Time of Sample Collection	9:30 AM
Date of Sample Received	17.09.2022		Time of Sample Received	10.20 AM
Start Date of Analysis	17.09.2022		End Date of Analysis	28.09.2022
Weather Condition	Partially Cloudy		Sampling Duration	-
Laboratory Environmental	Temperature:	25 ±2 °C	Samula ID Code	ECO/LAB/4104/09/2022
Condition	Humidity:	68 %	Sample ID Code	ECO/LAB/4104/09/2022
Details of Instrument used	Instrument ID	Enviro Instrument ECO/AR/FD/12		
	Calibration due on	12.06.2023		

S. No.	Tests Conducted	Method	Results	NAAQ Standards as per CPCB, New Delhi, Nov. 18 th , 2009
1.	$PM_{2.5} (\mu g/m^3)$	IS:5182 (Part-24)	38.84	60
2.	$PM_{10}(\mu g/m^3)$	IS:5182 (Part-23)	93.20	100
3.	$SO_2(\mu g/m^3)$	IS:5182 (Part-2)	15.00	80
4.	$NO_2(\mu g/m^3)$	IS:5182 (Part-6)	23.40	80
5.	CO (mg/m ³)	IS:5182 (Part-10)	0.58	04
6.	$Pb(\mu g/m^3)$	IS:5182(Part-22)	<1.0	1.0
7.	$C_6H_6 (\mu g/m^3)$	IS:5182(Part-11)	<5.0	05
8.	BaP (ng/m ³)	IS:5182(Part-12)	<1.0	01
9.	As (ng/m ³)	CPCB (Volume-I)	< 6.0	06
10.	Ni (ng/m³)	IS:5182(Part-26)	<20.0	20
11.	$NH_3(\mu g/m^3)$	IS:5182(Part-25)	12.60	400
12.	$O_3 (\mu g/m^3)$	IS:5182(Part-9)	17.56	180

Opinion/Observation: Analyzed parameters in above tested sample are within standard limit as per NAAQMS Guidelines.

----End of Report----

Note:

- I. Test results relate to the items sampled & tested.
- 2. Test report shall not be reproduced except in full without approval of the laboratory.
- 3. The test samples will be disposed of after one Month from the date of issue of test report.

Verified By

Authorized By

Technical Manager

Quality Manager

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TEST REPORT

FORMAT NO. ECO/QS/FORMAT/13 Test Report No. ECO/LAB/AN/0517/4146-4149/09/2022 Prism Johnson Ltd. NAME & ADDRESS Village - Mankahari, OF CUSTOMER: Issue Date of Test Report 29.09.2022 Tehsil- Rampur, Baghelan, District Satna (M.P.) Type of Sample Ambient Noise Sample Registration 517 Name of Location Sampling Method IS:4412, Part-1 & 2, 1991 Sample Collected By Mr. Arvind Date of Sample 12.09.2022 to 16.09.2022 Time of Sample Collection Collection Date of Sample Receipt 17.09.2022 Time of Sample Receipt 17.09.2022 28.09.2022 Start Date of Analysis **End Date of Analysis** Weather Condition Partially Sunny Sampling Duration Temperature: 25±2 °C Number of Observation 30.0 Environmental Condition Humidity: 65 % Sample ID Code ECO/LAB/4146-4149/09/2022 Instrument Name & Sound Level Meter Lutron Lab ID

S. No.	Locations	Day Time Leq Value in dB(A)	Night Time Leq Value in dB(A)
1.	Village Badarkha (Mines 4)	47.80	40.52
2.	Village Hinauta (Mines 4)	44.68	42.58
3.	Village Chulhi (Mines 4)	43.40	40.70
4.	Village Kulhari (Mines 4)	42.90	37.10

Opinion/Observation: Noise Level is meeting requirements as per CPCB Guidelines.

Noise (Ambient Standard)

		* 10100 (1111		
	Area Code	Category o	of area	Limit in dB (A) Leq
			Day Time	Night Time
Α	Industr	ial Area	75	70
В	Comme	ercial Area	65	55
C	Resider	ntial Area	55	45
D	Silence	Zone	50	40

- Note:
- 1. Day time is reckoned in between 6:00 AM and 10:00 PM.
- 2. Night time is reckoned in between 10:00 PM and 6:00 AM
- 3. Silence zone is defined as area up to 100m around such premises as hospitals, educational institutions & courts. The silence zones are to be declared by a competent authority.
- 4. Mixed categories of areas should be declared as one of the four above-mentioned categories by the competent authority and the corresponding standard shall apply.

Verified By

Technical Manager

Authorized By

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TEST REPORT

FORMAT NO. ECO/OS/FORMAT/09

		FORMAT NO. ECO/QS/FORMAT/09			
	Prism Johnson Ltd.	ohnson Ltd. ULR No.			
NAME & ADDRESS OF	Village – Mankahari,	Test Report No.	ECOLAB/DW/0492/3888/09/2022		
CUSTOMER:	Tehsil- Rampur, Baghelan,	Issue Date of Test Report	28.09.2022		
	District Satna (M.P.)				
Type of Sample	Ground Water				
Sample Registration No.	492	Name of Location	Badarkha Village – Bore Well		
Sampling Method	АРНА	Sample Collected By	ELPL Representative		
Date of Sample Collection	13.09.2022	Time of Sample Collection	-		
Date of Sample Received	17.09.2022	Time of Sample Received	2.20 PM		
Start Date of Analysis	17.09.2022	End Date of Analysis	28.09.2022		
Laboratory Environmental	Temperature: 25 ± 2 °C	Sample Quantity	As per Requirement		
Condition	Humidity: 62 %	Sample ID Code	ECO/LAB/3888/09/2022		

Sl. No.	TESTS	Unit	PROTOCOL.	Detection Range	RESULT	INDIAN STANDARDS as per IS 10500:2012(Reaff:2018)	
						Desirable	Permissible
1.	Colour	Hazen	APHA, 23 rd Ed. 2017, 2120 B	5-100	<5.0	5.00	15.0
2.	Odour	-	APHA, 23 rd Ed. 2017, 2150 B	PHA, 23 rd Ed. 2017, 2150 B Qualitative Agr		Agreeable	Agreeable
3,	Turbidity	NTU	APHA, 23 rd Ed. 2017, 2130-A+B	HA, 23 rd Ed. 2017, 2130-A+B 1 - 100		1.0	5.0
4.	рН	mg/l	APHA, 23rd Ed. 2017, 4500H+ A+B	2.0 -12	7.29	6.5-8.5	No Relax.
5,	Total Dissolved Solids as TDS	mg/l	APHA, 23rd Ed. 2017, 2540-C	5 - 5000	559.0	500	2000
6.	Alkalinity	nig/l	APHA, 23 rd Ed. 2017, 2320 A+ B	5-1500	180.0	200	600
7.	Total Hardness as CaCO3	mg/l	APHA, 23rd Ed. 2017, 2340 A+C	5-1500	216.0	200.0	600.0
8.	Calcium as Ca	mg/l	APHA, 23rd Ed. 2017, 3500 Ca A+B	5 - 1000	56.0	75.0	200.0
9.	Magnesium as Mg	mg/l	APHA, 23rd Ed. 2017, 3500 Mg A+B	5-1000	18.46	30.0	100.0
10.	Chloride as Cl	mg/l	APHA, 23rd Ed. 2017, 4500 Cl A+B	5-1000	22.0	250.0	1000.0
11.	Fluorides as F	mg/l	APHA, 23rd Ed. 2017, 4500-C	0.05-10	0.21	1.0	1,5
12.	Sulfate as SO ₄	mg/l	APHA, 23 rd Ed. 2017, 4500-SO ₄ ² - E	1.0 -250	81.5	200.0	400,0
13.	Nitrate Nitrogen as NO ₃	mg/l	APHA, 23 rd Ed. 2017, 4500-NO ₃ ⁻ B	5.0 - 100	13.5	45.0	No Relax.
14.	Manganese as Mn	mg/l	APHA, 23rd Ed. 2017, 3111 A+B	0.1-5	BDL	0.10	0.30
15.	Zinc as Zn	mg/l	APHA, 23rd Ed. 2017, 3111 A+B	0.02-50	0.09	5.0	15
16.	Arsenic as As	mg/l	APHA, 23rd Ed. 2017, 3114 C	0.01-2	BDL	0.01	0,05
17.	Total Chromium as Cr	mg/l	APHA, 23rd Ed. 2017, 3111 - A +B	0.04-10	BDL	0.05	No Relax
18.	Copper as Cu	mg/l	APHA, 23rd Ed. 2017, 3111 A+B	0.05-5	BDL	0.05	1.5
19.	Aluminium as Al	mg/l	APHA, 23rd Ed. 2017(3111-A+B)	1.0-100	BDL	0.03	0.2
20.	Free Residual Chlorine	mg/l	APHA, 23rd Ed. 2017, 4500-CI B	0.5-10	BDL	0.20	1.0
21.	Sulphide as H ₂ S	mg/l	APHA, 23rd Ed. 2017, Reprint 2007	0.04-10	BDL	0.05	No Relax
22.	Iron as Fe	mg/l	APHA, 23rd Ed. 2017, 3500 Fe B	0.02-50	0.17	0.3	No Relax.

Statement of Conformity: The above tested parameters confirm as per IS-10500-2012 (Reaff.-2018) limits for above tested parameters and the results are related to the sample tested. Note:- BDL-Below Detection Limit. Opinion/Observation:

- 1. Test results relate to the items sampled & tested.
- 2. Test report shall not be reproduced except in full without approval of the laboratory.
- 3. The test samples will be disposed of after one Month from the date of issue of test report.

Verified By

Authorized By

Technical Manager

Quality Manager

Ecomen Laboratories Pvt. Ltd. Second Floor Hall, House No. 8-1/8, Sector-H, Aliganj, Lucknow-226024

----End of Report----



Second Floor Hall, House No. B-1/8, Sector-H, Aliganj, Lucknow - 226 024 Phone No.: 0522 - 4079201/2746282

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An approved Laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India, New Delhi

TEST REPORT

FORMAT NO FCO/OS/FORMAT/00

		FORMAT NO. ECO/QS/FORMAT/05				
	Prism Johnson Ltd.	ULR No.	TC953922000003888P			
NAME & ADDRESS OF	Village – Mankahari,	Test Report No.	ECOLAB/DW/0492/3888/09/2022			
CUSTOMER:	Tehsil- Rampur, Baghelan,	Issue Date of Test Report	28.09.2022			
	District Satna (M.P.)	•				
Type of Sample	Ground Water					
Sample Registration No.	492	Name of Location	Badarkha Village – Bore Well			
Sampling Method	APHA	Sample Collected By	ELPL Representative			
Date of Sample Collection	13.09.2022	Time of Sample Collection	-			
Date of Sample Received	17.09.2022	Time of Sample Received	2.20 PM			
Start Date of Analysis	17.09.2022	End Date of Analysis	28.09.2022			
Laboratory Environmental	Temperature: 25 ± 2 °C	Sample Quantity	As per Requirement			
Condition	Humidity: 62 %	Sample ID Code	ECO/LAB/3888/09/2022			

SI. No.	TESTS	Unit	PROTOCOL	Detection Range	RESULT	INDIAN STANDARDS as per IS 10500:2012(Reaff:2018)	
						Desirable	Permissible
1.	Taste	-	APHA, 23 rd Ed. 2017, A+B	Qualitative	Agreeable	Agreeable	Agreeable
2.	Lead as Pb	mg/l	APHA, 23rd Ed. 2017, 3111 A+B	0.01-2	BDL	0.01	No Relax.
3.	Cadmium as Cd	mg/l	APHA, 23rd Ed. 2017, 3111 A+B	0.002-2	BDL	0.003	No Relax
4.	Nickel as Ni	mg/l	APHA, 23 rd Ed. 2017, 3111 A+B	0,02-5	BDL	0.02	No Relax
5.	Mercury as Hg	mg/l	APHA, 23 rd Ed. 2017, 3112 A+B	0.001-1	BDL	0.001	No Relax.
6.	Boron as B	mg/l	APHA, 23 rd Ed. 2017, 4500 B A+C	0.2 - 10	0.20	0.5	1.0
7.	Iodide as I	mg/l	APHA, 23 rd Ed. 2017, 4500 – IB	0.1-10	BDL		-
8.	Total coliform	MPN/100 ml	APHA, 23 rd Ed. 2017, 9221 B+C	1.8	Absent	Absent	Absent
9.	E.coli	MPN/100 ml	APHA, 23 rd Ed. 2017, 9221B+E	1.8	Absent	Absent	Absent

Statement of Conformity: The above tested parameters confirm as per IS-10500-2012 (Reaff.-2018) limits for above tested parameters and the results are related to the sample tested. Note:- BDL-Below Detection Limit. Opinion/Observation:

----End of Report----

- Test results relate to the items sampled & tested. 1.
- Test report shall not be reproduced except in full without approval of the laboratory.
- The test samples will be disposed of after one Month from the date of issue of test report.

Verified By

Technical Manager

Authorized By

Ecomen Laboratories Pvt. Ltd. Second Floor Hall, House No. B-1/8,

Sector-H, Aliganj, Lucknow-226024

Report on Scientific Study on Controlled Blasting at Badarkha Limestone Mines

of

M/s Prism Johnson Ltd, Dt. Satna (M.P.)

Project Number: 31/2018-19

Project Leader

Prof G.K.Pradhan

Project Collaborators

Ajeet Mehra, M.Tech(Mining), Asst. Professor

Department of Mining Engineering

December 2019



Acknowledgement

Department of Mining Engineering, Faculty of Engineering & Technology, AKS University, Satna (MP) acknowledges with thanks the support and cooperation extended by:

- 1. Shri Manoj Singh, head-Mines, Prism Johnson Ltd
- 2. Shri C.S.Pandit, Joint General Manager, Prism Johnson Ltd
- 3. Sri Deo Prakash, Mines Manager-cum-Blasting Manager
- 4. Sri Kamlesh Soni, Asst. Manager

We thank the Management of AKS University, Satna for giving us permission to undertake the Study and the following team members for their active support and co-operation:

- 1. Dr B.K.Mishra, Head of the Department, Mining Engineering
- 2. Sri Ajeet Mehra, Asst. Professor (Mining)
- 3. Sri Manish Agarwal, Asst. Prof(Physics), Coordinator, Dean Office

We are pleased to present our Report on this scientific study based on our field visits and analyses of data collected from the mines vis-à-vis various Regulatory requirements.

Prof G.K.Pradhan

Recipient of National Geosciences Award Professor of Mining Engineering & Dean Faculty of Mining Engineering

Email: gkpradhan58@gmail.com

While granting Consent to Operate under section 25 of the Water (Prevention & Control of Pollution) Act, 1974 under section 21 of the Air (Prevention & Control of Pollution) Act, 1981 and Authorization under Hazardous and other Waste (Management & Tran boundary Movement) Rules, 201, vide PCB ID: 14462 dated 30.6.2018, it was stated at *Sl. No. 14. Controlled blasting should be practiced with the use of delay detonators and only during daytime. The mitigative measures for control of ground vibrations and to arrest the fly rocks and boulders should be implemented. Blasting shall be done during day time only.* Copy of the Consent to operate is placed at Annexure I.

The Department of Mining Engineering, AKS University, Satna was entrusted to design, evaluate/supervise/monitor the 'controlled blasting' as per the provisions of MMR 1961 and the Permission granted by Director of Mines Safety, Jabalpur (DGMS Office).

Vide letter no. J.R/Metal/Permission-34/2016/77 dated 6.1.17, DMS Jabalpur Region had granted exemption from the provisions of Metalliferous Mines Regulations (MMR) 1961, 106(2)(b) of MMR, 1961, to work by system of deep hole blasting and deployment of Heavy Earth Moving Machineries. Sl. No. 7.0, 8.0, sl. No. 23(4), (5), (7), indicated various precautions to be taken to ensure safety while blasting. Copy of the Permission is placed at Annexure II. The above Permission was later supplemented with the Deep hole Blasting Permission for use of Bulk SME Explosives.

The scientific study undertaken by AKS University covered –

- a) Blasting techniques for Over Burden and Limestone benches.
- b) Site visits to monitor adoption of safe procedures during handling, transport, and use of explosives and accessories as per S-O-P
- c) Study of Explosive use and optimisation
- d) Study of Initiation system as a part of Controlled blasting
- e) Management of blasting operation and schedule vis-à-vis blasting during daytime.
- f) Methods for monitoring, analyses of ground vibrations and associated problems as part of mitigative measure.
- g) Study of fly rocks and boulders during blasting and strict implementation of methods to reduce their generation etc.
- h) Training the workmen, supervisors and officials attached with blasting.

Blasting Manpower

Entire blasting operation is undertaken under the charge of the Mines Manager, holdiong First Class Mine Manager's Certificate of Competency (UR). He is being assisted by statutory persons as per provisions of MMR 1961, including Blasting Engineer, Blaster, Helpers, Mining Mate and others.

Selection, Procurement, Storage, Transport and Handling of Explosives

During the study period the various activities involved in explosives and accessories selection, procurement, storage, transport and use have been studied. The Mine holds a valid Explosive Magazine Licence and Explosive Transport by approved type of Explosive vans, as per various provisions of Indian Explosives Rules, 2008.

The mine uses only cartridge type explosives and have a system of explosive selection based on

- Density,
- Velocity of Detonation (VOD) etc.

The pattern of procurement is high energy primer 25 % and 75% column charge. The handling, charging and conducting of the blasting operations is done by trained manpower of the mine. Table 1, presents the quantities of different types of explosives used in study in the mine.

Table 1: Presents the quantities of different types of explosives used in study in the mine

Year	Large dia Cartridge	Large dia Cartridge	Total		
	explosives (kg) (Column charge)	explosives (kg) (Booster charge)	Explosives Qty(in kgs)		
2018	1450	383.32	1833.32		
2019	3987.1	1350.00	5337.1		

Initiation system

Initiation of the primed cartridge of the explosive in 100 to 110 mm dia blast hole drills is an essential feature to trigger any blast. In these blast holes blasting of deep holes column charge is being primed by booster type of explosives. Shock tubes having 7 to 8m length is used down-the-hole, along with the surface trunk line shock tubes. Down-the-delay detonator of 25, 450MS had provided bottom initiation and Trunk line detonators of 17, 25 and 41 MS are used thereby providing hole to hole initiation.

Use of Shock Tubes(Nonel)

This as entirely non-electric and ultra safe. Shock tubes(Nonel) are safest and offer excellent results in blasting. These have revolutionised initiation by offering true in-hole delay to the booster ensuring better movement of the shock waves and the blasted material. The very low content of explosive material in the plastic tube offers insignificant or no sound during blasting. True bottom priming has enhanced explosive use and also helped in planning large size blasts safely. Trunk line delay detonators in the shock tubes additionally eliminate sound and also ensure perfect blast timings in MS range. Thus there has been a fall in sound level (expressed in dB) as recorded in the blast vibration recorder, control on fly rocks, elimination of misfires, and maintaining MAXIMUM CHARGE PER DELAY which is the single most contributing factor for BLAST VIBRATION level. Table 2, shows the DGMS standard on blast vibration and this is being strictly followed in almost all blasts.

Pre and Post Blast Management

In compliance of provisions under MMR 1961 and Indian Explosives Rules 20008, and various norms set in S-O-P and DMS JR Permissions/DGMS Circulars each and every blast is undertaken. The blast details are recorded and maintained in the mine.

Mining Operations

Figure 1, presents the approved working plan of the mine. The mine had a single overburden bench comprising of top soil and sub soil which is handled purely by dozer and loading machines. The limestone bench below having a thickness of 5 to 15m, is mined in two to three benches. Each bench has been planned with 5 to m6 m height only. Hydraulic Excavators dig the un-blasted as well as blasted material and load into tippers. Figure 1, shows the site plan showing limestone bench where blasting is conducted.

Controlled blasting is defined as a blast in which –

- (1) All the blast design parameters at the blasting site.
- (2) Blast which was approved type of explosives.
- (3) Only Delay detonators including Shock tubes(Nonel) or Electronic Delay Detonators to be used (to control ground vibrations and to arrest flyrocks and boulder generations).
- (4) Monitoring of blasts vis-à-vis blast induced ground vibration level & frequency (Hz). Examining the vibration level (mm/s) & frequency with DGMS standards.
- (5) Following all terms and conditions as stated in the Permission granted by Director of Mines Safety, Jabalpur vide J.R/Metal/Permission -34/2016 dated 06-01-2017 (Copy enclosed). Also following norms of other statutory bodies.
- (6) Flyrock management ,generation and control by proper stemming by assuming proper free face ensuring use of quality and explosives & accessories. There by eliminating MISFIRES.
- (7) Following approval S-O-P for blasting.
- (8) Minimum generation of boulders thereby eliminating secondary blasting. However secondary blasting need to be replaced by use of Hydraulic Rock breakers only be replaced by use of Hydraulic Rock Breakers only.
- (9) Complained free or less complaints from nearby habitants.
- (10) Only during the day time and the blasting time should be prominently displayed in the area.
- (11) Every mine should draw plans to have mitigative measures as per recommendations of the scientific study and provisions of MMR 1961 or DGMS Guidelines.

Blast Measurement

Instantel Inc. Canada make Blast Vibration instrument is being used by the mine management to record blast vibration level, sound level and maintain the soft copy of each and every recorded blasts for analysis and review. From AKS University also Instantel make Blastmate Instrument is used. These instruments are regularly calibrated by the authorised representative/agency.

Table 2 : DGMS Standards (1997)

Type of structure	Dominant excitation frequency, Hz							
	< 8 Hz	8 - 25 Hz	> 25 Hz					
(A) Buildings/structures not belonging to the owner								
i) Domestic houses/structures (Kuchha brick and cement)	5	10	15					
ii) Industrial Buildings RCC and framed structures)	10	20	25					
iii)Objects of historical importance and sensitive	2	5	10					
structures								
(B) Buildings belonging to owner with limited span	n of life							
i) Domestic houses/structures (Kuchha brick and cement)	10	15	25					
ii) Industrial buildings (RCC & framed structures)	15	25	50					

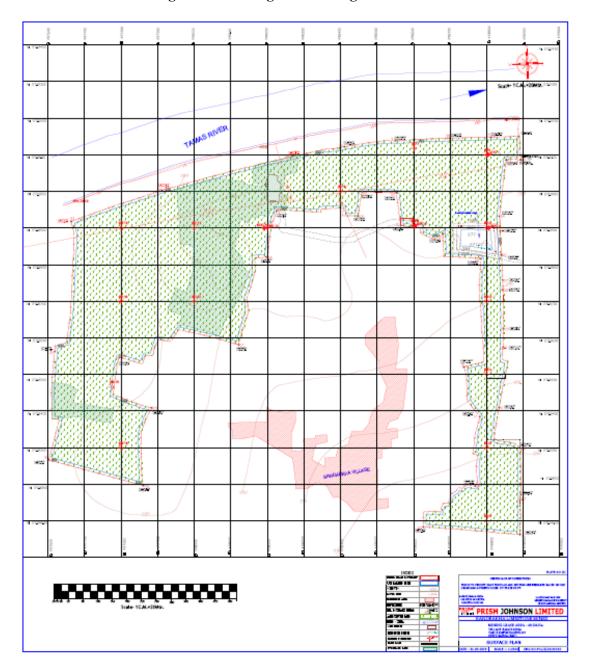


Figure 1 : Showing the Working Plan of the Mine

Figure 2, shows the print out of the Blast Vibration and Sound level as recorded at the blast site. The other such reports are placed at Annexure 1. Table 3: presents the blast design information of the blasts which were studied and monitored by AKS University.

Table 2: Blast Design Information's Using Cartridge Explosives

Hole diameter = 100 to 110 mm

Max. Burden = 4 M

Max. Spacing = 3 M

Average Hole depth = 5 to 6.0 M.

No. of holes = as per blasting block size and maintaining face length and width in 3:1 ratio

Drilling pattern = staggered

Average Stemming length =2 to 3 M

Firing pattern = linear

No. of rows depend on the block size and face conditions

Explosives

Prime charge and column charge at an average ratio of: 1: 2.5

Delay Type

Surface delay = 17 MS (hole to hole in a row) & 25 MS and/or 42 MS (row to row)

Down the hole delay = 250 ms

Trial blast data was analyzed for arriving at permissible levels of ground vibration and same is presented in Table 3. Table 4, presents the analysis of blast vibration data. Predictor Equation has been drawn based on the field data as recorded.

Table 3: SUMMARY OF BLASTS - GROUND VIBRATION RCORDED AT BADARKHA MINE

Blast	Date	Radial	Max	Total	PPV	Frequency	Burden	No.	Avg.
No.		distance	charge	weight	(mm/sec.	Hz	X	of	Hole
		(m)	per	(TQ))		Spacing	holes	Depth
			delay	(kg)					(m)
			(Q)(kg)						
1	06-02-2018	250	16.7	433.32			4x3	30	5
2	08-05-2018	250	13.9	325			4x3	25	5
3	04-12-2018	160	16.70	325	0.126	4.2	4x3	20	5
4	31-12-2018	200	27.78	750	2.52	23	4x3	27	6
5	01-03-2019	180	19.44	725	1.54	15	4x3	37	5
6	05-03-2019	160	22.22	1325	1.927	15	4x3	64	5.5
7	11-03-2019	250	30.56	2211.11	2.136	12	4x3	78	6
8	19-03-2019	200	27.78	1075	5.56	16	4x3	41	6

Figure 2 : Shows Blast Vibration recording Event report(Other reports at Annexure 1)

Event Report Instantel Tran at 13:41:35 December 31, 2018 Serial Number UM8131 V 10-76 Micromate ISEE Trigger Source Geo: 0.900 mm/s, Mic: 2.000 pa.(L) Battery Level 3.8 Volts Unit Calibration February 26, 2018 by UES New Delhi Geo: 254 0 mm/s Range Record Time 5.0 sec at 1024 sps File Name UM8131_20181231134135.IDFW Operator/Setup: Operator/SSB.mmb Post Event Notes Bandarkha/1st Bench (L/S), No of holes 27 nos, Depth - 8.0 Mtrs. Notes Charge/delay - 27.77 Kg/delay, Obsevation Distance - 160 mts Client: User Name: PRISM JOHNSON LIMITED DGMS India (A) Extended Notes BANDARKHA LIMESTONE MINE Microphone Linear Weighting 15.69 pa.(L) at 0.597 sec ZC Freq 23 Hz Channel Test Passed (Freq = 19.7 Hz Amp = 1307 mv) 50 Velocity (mm/s) Tran Vert Long 2.262 1.745 2.396 1.624 mm/s 20 PPV (Ponderated) 2.012 1.506 mm/s PPV 58.09 58.59 55.21 dB ZC Freq 37 Hz Time (Rel. to Trig) 0.359 0.250 0.317 sec Peak Acceleration 0.056 0.043 0.054 8 Peak Displacement 0.043 0.012 0.011 mm Sensor Check Frequency 7.3 7.3 Hz Overswing Ratio 3.4 3.6 3.7 Peak Vector Sum 2.520 mm/s at 0.358 sec Frequency (Hz) Tran: + Vert: x Long: 0 a)Industrial Buildings b)Domestic houses/structures c)Historic objects, sensitive structu MicL 0.0 0.0 Long Vert 0.0

Figure - 4: Below explains the method of blasting using trunk line shock tubes of varying delays and.

1.0

Format @ 1995-2014 Xmark Corporation

Time scale has been modified and may not represent the actual length of the event record Time Scale: 0.20 seo'div_ Amplitude Scale: Geo: 2.000 mm/s/div Mic: 5.000 ps.(L)/div 0.0

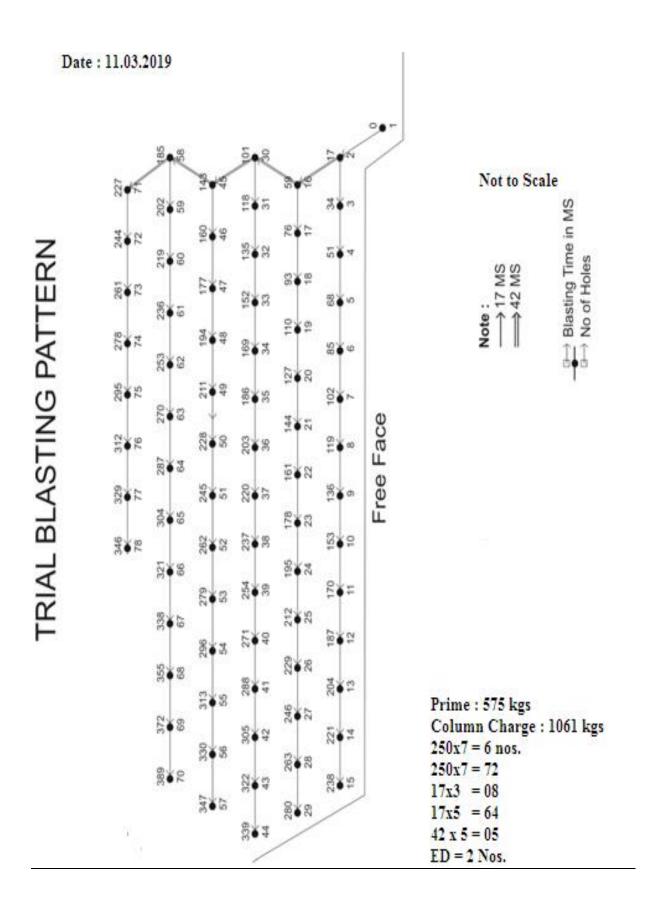
2.0

Sensor Check

Tran

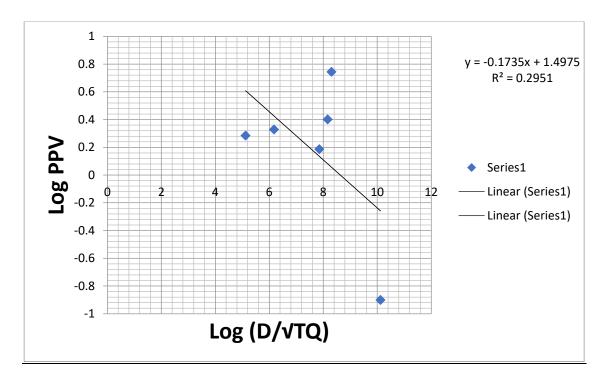
0.0

Printed: February 3, 2022 (V 10.72 - 10.72)



1. Vibration predictor equation : For total charge per round (TQ)

$$PPV = 31.40 * (\frac{D}{\sqrt{TQ}})^{-0.173}$$



2. Ground vibration predictor equation : for max charge per delay(Q)

$$PPV = 0.056 * (\frac{D}{\sqrt{Q}})^{0.032}$$

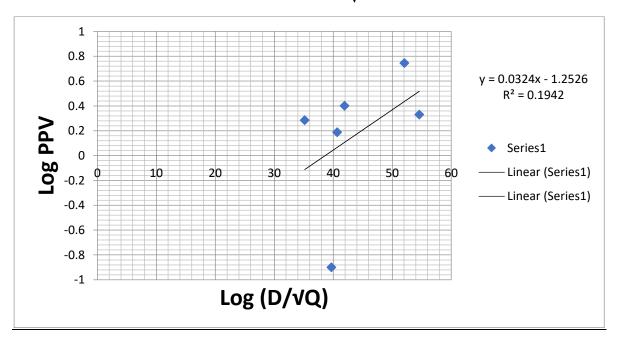


Table 4: Analysis of blast monitoring data

Parameter	Range	Class	No. of events	Remark			
		interval					
Max.Charge	14.75 to 27.77	0-20	5				
Per Delay (kg)		>20	3	Within stipulated			
PPV (mm/sec.)	0.126 to 5.56	<2	5	limits			
		2-6	3				
Distance (m)	160 to 250	160 to 250	8				
Frequency	<8I	Hz	0	More than 71% event			
(Hz)	8-25Hz >25Hz		8	recorded more than 8			
			0	Hz. This has bearing on fixing allowable PPV.			

RECOMMENDATIONS & SUGGESTIONS

For undertaking blasts with Cartridge Explosives on regular basis the conclusion/completion of blasts conducted in our presence, as per terms and conditions of the Permission Director of Mines Safety, Jabalpur vide by No.J.Region/Metal/Permission-34/2016/77 dated 6.1.17, regarding Relaxation from the provisions of Regulation 106(2)(b)of the Metalliferous Mines Regulations, 1961, to work the mine by system of deep hole blasting and deployment of Heavy Earth Moving Machineries at Badarkha Limestone Mine of M/s Prism Cement Limited and norms of Consent Order of M.P.Pollution Control Board (sl. No. 14 at page no. page8, 'Controlled blasting should be practiced with the use of delay detonators and only during daytime. The mitigative measures for control of ground vibrations and to arrest the fly rocks and boulders should be implemented. Blasting shall be done during day time only'.).

Some of the salient clasues related to Explosives and Blasting(Shot firing) is stated at Annexure 2 (p.1, 3,4 and 5).

Blast design parameters

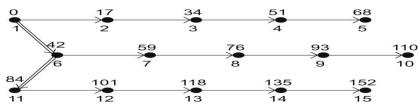
1.1 Drilling dia. of 100-110 mm is best suited for 6m high benches. For 100-110 mm dia blast hole the true burden may be 2.5 to 4.0 M and true spacing of 3.0 to 4.5m.

		Pattern (Maximum)			
Depth	Depth Hole dia		Spacing		
(m)	(mm)	(m)	(m)		
6	110	4	3		
5	110	4	3		
4	110	4	3		
3	110	4	3		

1.2 No. of Rows – During the trial blast the length of the blast was more than the width of the blast. In most blasts length of the blasting block has been more than 5 to 6 times the width of the blasted block. In these cases number of rows can result PPV within laid down norms and a maximum of 6 rows are recommended. For example – if length of the blasting block is 100M, and width is 30 M with true burden of 3m then no. of rows should not exceed 9 Rows. This is because more number of rows may result in cut off of the tie-ins.

2.0 Initiation arrangements/tie-ins

- 2.1 NONEL which has been used is best suitable to contain blast induced ground vibration and air blast. Besides, it also give very good fragmentation, less back break, and controlled throw on free face.
- 2.1.1 The delay between the hole is 17 MS and between rows may be 42 MS (Refer attached figure).-



- 2.1.2 Misfires can be totally eliminated with the use of NONEL or shock tubes.
- 2.1.3 Using a high delay interval of 250 MS down-the-hole delay with 17/25/42MS surface delay ensures that the detonation of the surface tie line would be several rows or blast holes ahead before the first blasthole gets initiated (after 250MS) and ground movement starts subsequently. This makes the blast free from any misfires due to initiation resulted by cut-off of in hole or downline initiator due to ground movement. Besides, the very geology of the area also indicate near uniformity of geological set up.
- **3.0 SUGGESTIONS WHICH WERE IMPLEMENTED AT SITE** The blast hole initiation pattern should use one delay period of 17 MS between the two holes and 42 MS between the rows.
- 3.1.1 Initiation pattern While drilling holes staggered pattern may be adopted. It has been observed that staggered pattern with equilateral triangular give better fragmentation as compared to square pattern. During trial blasts square pattern was adopted and results were quite satisfactory.
- 3.1.2 Period of blast The total period of blast from the initiation of the first hole to the last hole should preferably be not more than 1000 MS

4.0 Before commencing Drilling

- 4.1 Face preparation before commencement of drilling The bench must be properly dozed to ensure no flying fragments of the previous blast or boulders are present. On the free face side the face need to be dressed properly so that no loose overhangs are present. The blaster must mark the location of holes after measuring the burden and spacing. The driller must report any deviations observed in burden and spacing and also hole collapse during withdrawal of the drill rod.
- 4.2 Free Face The key to success of any safe blast is the free face. It must be noted that the direction of throw must be towards free face. Whenever two free faces are available, the direction of throw can be diagonal for better muckpile and uniform throw.

5.0 Stemming and stemming material

- 5.1 To hold the post detonation fumes inside the blasthole is essential to ensure movement and breakage of the in-situ rock. The blasting crew should have specially trained workmen who can ensure tight stemming. If watery holes are encountered it has to be with lot of care so as to ensure settlement of explosive and stemming material. In all the blasts dry drill cuttings were used and care was taken to see no damages to the shock tube down-line.
- 5.2 It is suggested to measure the stemming column depth so as to ensure proper delivery of planned quantity of explosives.
- 5.3 Muffling of holes In all the blasts sand bags were placed on the conveyor belts so as to provide additional precaution to restrict flying fragments' movement. It is therefore suggested that this need to be carried out till the restrictions are overcome.
- 5.4 Charging of explosives on the last row of holes In case of more than 3 rows, of blasting on the last row of holes, the quantity of explosive can be reduced by 10 to 15% so as to ensure better stability, reduction in back break, less dressing required before finishing excavation due to less loose overhangs and less overhang areas.,

ADDITIONAL PRECAUTIONS

- **6.0 Maximum charge per delay** currently adopted is ultra safe and well within the blast vibration and frequency range stated in DGMS Standards.
- 6.1 Blast Area Security The mine management strictly follow blasting time and adequate number of guards were posted on all roads leading to the mine. All the machineries need to be parked at safer distances following parking norms of each machinery. Before blasting 'Safety Warning' is done, and all persons evacuated out of the prescribed "Danger Zone".

- 6.2 Recording of blast vibration Follow the instructions of the instrument manufacturer while setting the instrument. Measure the distance of the instrument from the centre of the blast. The instrument need to be properly placed on a firm ground and a place not on the probable flyrock zone.
- 6.3 The engineer concerned must move to the shelter after setting the instrument with proper time lags etc.
- 6.4 Secondary Blasting NEVER ADOPTED in this mine and hydraulic Rock Breakers are being used to break oversize boulders.
- **TRAINING**: Safety awareness and training needs of the blasting crew The mine management held training programs for engineers and statutory persons to deliberate on various aspects of blast design, charging, field management, blast area security, provisions of MMR and Mine Vocational Training Rules 1966, and other guidelines. Blasting crew had adequate knowledge of safety during handling, charging, stemming, priming, tie-line hook up, following the siren etc.
- 8.0 PPE all persons engaged in blasting had been provided PPE and also other essential gadgets like whistle, red flags and hand gloves etc. The same need to be strictly adhered to in all time to come.
- 9.0 Post Blast Observations: blast vibration, frequency, flyrock range, dust generation/quantum, fumes etc are observed. It has been observed that by systematic stemming of holes, having mats/conveyor belts cover dust and flyrock under control.
- 10.0 Impact of blasting on health and safety Use of Shock Tubes(Nonel) had eliminated noise/sound level during blasting due to the technological development in initiation. This also had helped in controlling dust generation and the level of dust during post-blast.

CONCLUSION & RECOMMENDATION

The report presents the details of the blasts designed, monitored and studied using Cartridged explosives, for establishing a blasting pattern and allowable maximum charge per delay and per round based on the ground vibration, air overpressure and other post blast details (like fly rock, muck pile, misfires if any, back break, throw etc).

In view of the successful, safe conclusion of the blasts with cartridged explosives by following norms set in the Permission letter, other guidelines, the mine is fully geared up to hold blasts on regular basis in line with the provisions of CMR 2017 etc.

${\bf Controlled\ blasting\ Compliance\ Status:} -$

	Norms	Comments after conclusion of the scientific study
1.	All the blast design parameters at the blasting site.	Being adopted
2.	Blast which was approved type of explosives.	Only approved type of explosives is used.
3.	Only Delay detonators including Shock tubes(Nonel) or Electronic Delay Detonators to be used (to control ground vibrations and to arrest flyrocks and boulder generations)	Shock tube is used. Both down-the-hole & trunk line.
4.	Monitoring of blasts vis-à-vis blast induced ground vibration level & frequency (Hz). Examining the vibration level (mm/s) & frequency with DGMS standards	Done at regular basis.
5.	Following all terms and conditions as stated in the Permission granted by Director of Mines Safety , Jabalpur vide J.R/Metal/Permission -34 /2016 dated 06 01-2017 (Copy placed at Annexure 2)	Being followed.
6.	Flyrock management, generation and control by proper stemming by assuming proper free face ensuring use of quality and explosives & accessories. There by eliminating MISFIRES. Also old conveyor belts with sand bags are used to cover the holes to eliminate fly rock and dust.	Proved effective to eliminate dust and fly rocks with cover on the holes.
7.	Following approval S-O-P for blasting	Being followed in line with Safety Management Plan and Guidelines of DGMS.
8.	Minimum generation of boulders thereby eliminating secondary blasting. However secondary blasting need to be replaced by use of Hydraulic Rock breakers only be replaced by use of Hydraulic Rock Breakers only.	Only Hydraulic Breakers used in case of oversize boulders.
9.	Complained free or less complaints from nearby habitants	There have been no complaints from the distant villagers and habitants.
10.	Only during the day time and the blasting time should be prominently displayed in the area.	Being followed.
11.	Every mine should draw plans to have mitigative measures as per recommendations of the scientific study and provisions of statutory authorities or MMR 1961 or DGMS Guidelines.	Being followed while conducting any blast.

Dr G.K.Pradhan

Professor of Mining Engineering & Dean

Faculty of Engineering & Technology



MicL at 13:33:45 December 4, 2018 Geo: 0.900 mm/s, Mic: 2.000 pa.(L) Geo: 254.0 mm/s Trigger Source

Range Record Time 5.0 sec at 1024 sps Operator/Setup: Operator/SSB.mmb

Notes Location Client:

User Name: PRISM JOHNSON LIMITED

General:

Extended Notes
BANDARKHA LIMESTONE MINE

Microphone Linear Weighting PSPL 4.437 pa.(L) at 0.301 sec

ZC Freq 4.2 Hz

Channel Test Passed (Freq = 19.7 Hz Amp = 1334 mv)

	Tran	Vert	Long	
PPV	0.102	0.102	0.039	mm/s
PPV (Ponderated)	0.026	0.021	0.029	mm/s
PPV	31.21	31.21	22.91	dB
ZC Freq	N/A	N/A	>100	Hz
Time (Rel. to Trig)	-0.112	2.543	1.130	sec
Peak Acceleration	0.005	0.005	0.005	g
Peak Displacement	0.000	0.000	0.000	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.3	7.7	7.3	Hz
Overswing Patie	2.8	2.5	27	

Peak Vector Sum 0.126 mm/s at -0.112 sec

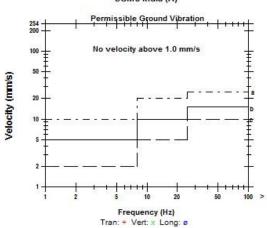
N/A: Not Applicable

Serial Number UM8131 V 10-76 Micromate ISEE Battery Level 3.8 Volts

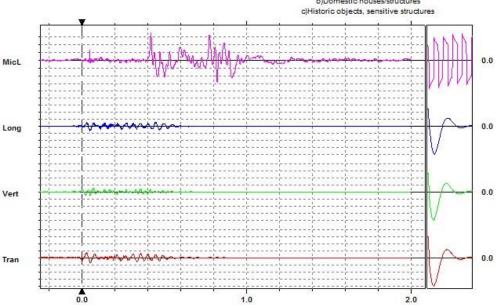
Unit Calibration September 6, 2016 by UES New Delhi File Name UM8131_20181204133345.IDFW

Post Event Notes Bandarkha/1st Bench (L/S), No of holes 20 nos, Depth - 5.0 Mtrs. Charge/delay - 16.25 Kg/delay, Obsevation Distance - 160 mts

DGMS India (A)



a)Industrial Buildings b)Domestic houses/structures



Time scale has been modified and may not represent the actual length of the event record Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 1.000 ps.(L)/div

Sensor Check

Printed: February 8, 2022 (V 10.72 - 10.72)

Format @ 1995-2014 Xmark Corporation



Date/Time Tran at 13:41:35 December 31, 2018
Trigger Source Geo: 0.900 mm/s, Mic: 2.000 pa.(L)

 Range
 Geo: 254.0 mm/s

 Record Time
 5.0 sec at 1024 sps

 Operator/Setup:
 Operator/SSB.mmb

Notes Location: Client:

User Name: PRISM JOHNSON LIMITED

General:

Extended Notes

BANDARKHA LIMESTONE MINE

Microphone Linear Weighting PSPL 15.69 pa.(L) at 0.597 sec

ZC Freq 23 Hz

Channel Test Passed (Freq = 19.7 Hz Amp = 1307 mv)

	Tran	Vert	Long	
PPV	2.396	1.624	2.262	mm/s
PPV (Ponderated)	2.012	1.506	1.745	mm/s
PPV	58.59	55.21	58.09	dB
ZC Freq	26	24	37	Hz
Time (Rel. to Trig)	0.359	0.250	0.317	sec
Peak Acceleration	0.056	0.043	0.054	9
Peak Displacement	0.043	0.011	0.012	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.3	7.7	7.3	Hz
Overswing Patie	28	24	27	

Peak Vector Sum 2.520 mm/s at 0.358 sec

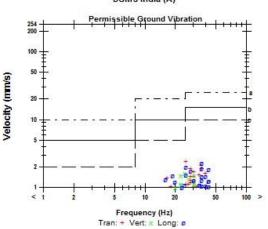
Serial Number UM8131 V 10-76 Micromate ISEE Battery Level 3.8 Volts

Unit Calibration February 26, 2018 by UES New Delhi File Name UM8131_20181231134135.IDFW

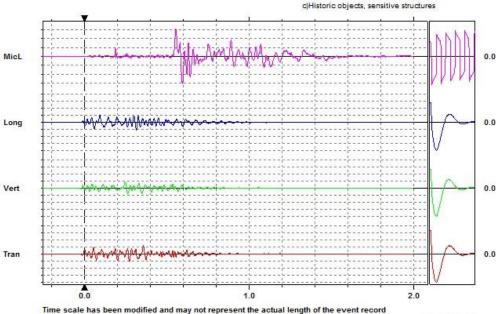
Post Event Notes

Bandarkha/1st Bench (L/S), No of holes 27 nos, Depth - 6.0 Mtrs. Charge/delay - 27.77 Kg/delay, Obsevation Distance - 160 mts

DGMS India (A)



a)Industrial Buildings b)Domestic houses/structures listoric objects, sensitive structures



Time scale has been modified and may not represent the actual length of the event record Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic. 5.000 pa.(L)/div

Sensor Check

Printed: February 3, 2022 (V 10.72 - 10.72)

Format @ 1995-2014 Xmark Corporation



Long at 13:41:18 March 1, 2019 Trigger Source Geo: 0.900 mm/s, Mic: 2.000 pa.(L) Geo: 254.0 mm/s

Range 5.0 sec at 1024 sps Record Time Operator/Setup: Operator/SSB.MMB

Notes Client:

User Name: PRISM JOHNSON LIMITED

Extended Notes
BANDARKHA LIMESTONE MINE

Microphone Linear Weighting
PSPL 6.237 pa.(L) at 0.365 sec ZC Freq 15 Hz

Channel Test Passed (Freq = 19.7 Hz Amp = 1334 mv)

	Tran	Vert	Long	
PPV	0.780	0.867	1.387	mm/s
PPV (Ponderated)	0.700	0.741	1.348	mm/s
PPV	48.85	49.76	53.84	dB
ZC Freq	18	28	19	Hz
Time (Rel. to Trig)	0.144	0.069	0.148	sec
Peak Acceleration	0.026	0.021	0.036	g
Peak Displacement	0.022	0.015	0.011	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.3	7.7	6.9	Hz
Overswing Ratio	3.6	3.4	3.7	

Peak Vector Sum 1.540 mm/s at 0.146 sec

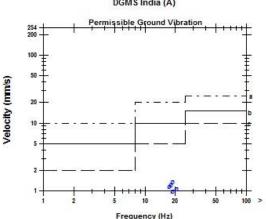
Serial Number UM8131 V 10-76 Micromate ISEE

Battery Level 3.8 Volts

Unit Calibration February 26, 2018 by UES New Delhi
File Name UM8131_20190301134118.IDFW

Post Event Notes Bandarkha/1st Bench (L/S), No of holes 37 nos, Depth - 6.0 Mtrs. Charge/delay - 19.59 Kg/delay, Obsevation Distance - 160 mts

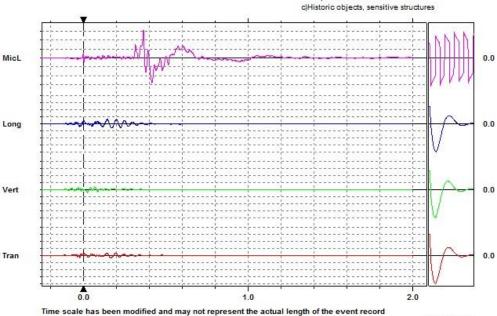
DGMS India (A)



Tran: + Vert: x Long: 0

a)Industrial Buildings b)Domestic houses/structures

Sensor Check



Printed: February 3, 2022 (V 10.72 - 10.72)

Format @ 1995-2014 Xmark Corporation

Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 2.000 pa.(L)/div



Tran at 13:38:21 March 5, 2019 Trigger Source Geo: 0.500 mm/s, Mic: 2.000 pa.(L) Geo: 254.0 mm/s

Range

10.749 sec (Auto=10Sec) at 1024 sps Record Time

Operator/Setup: Operator/SSB.MMB

Notes Client:

User Name: PRISM JOHNSON LIMITED

Extended Notes
BANDARKHA LIMESTONE MINE

Microphone Linear Weighting
PSPL 7.013 pa.(L) at 0.421 sec

ZC Freq 15 Hz

Channel Test Passed (Freq = 19.7 Hz Amp = 1307 mv)

	Tran	Vert	Long	
PPV	1.466	1.206	1.277	mm/s
PPV (Ponderated)	1.372	1.055	1.249	mm/s
PPV	54.32	52.63	53.12	dB
ZC Freq	19	26	22	Hz
Time (Rel. to Trig)	0.031	0.068	0.051	sec
Peak Acceleration	0.039	0.023	0.050	g
Peak Displacement	0.093	0.061	0.040	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.3	7.7	6.9	Hz
Overswing Ratio	3.5	3.4	3.6	

Peak Vector Sum 1.927 mm/s at 0.051 sec

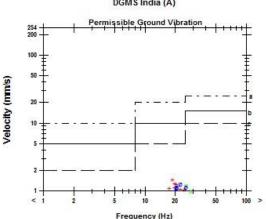
Serial Number UM8131 V 10-76 Micromate ISEE

Battery Level 3.8 Volts

Unit Calibration February 26, 2018 by UES New Delhi
File Name UM8131_20190305133821.IDFW

Post Event Notes Bandarkha/1st Bench (L/S), No of holes 64 nos, Depth - 6.0 Mtrs. Charge/delay - 20.70 Kg/delay, Obsevation Distance - 160 mts

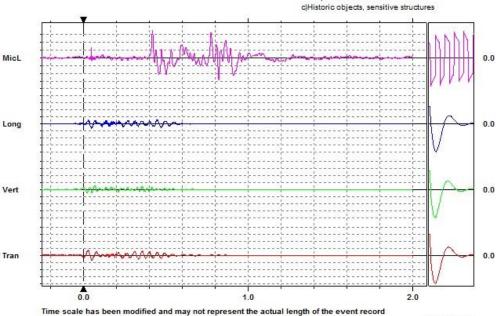
DGMS India (A)



Tran: + Vert: x Long: 0

a)Industrial Buildings b)Domestic houses/structures

Sensor Check



Printed: February 3, 2022 (V 10.72 - 10.72)

Format @ 1995-2014 Xmark Corporation

Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 2.000 pa.(L)/div



Long at 13:39:47 March 11, 2019

Trigger Source Geo: 0.500 mm/s, Mic: 2.000 pa.(L) Geo: 254.0 mm/s

Range

19.0 sec (Auto=10Sec) at 1024 sps Record Time

Operator/Setup: Operator/SSB.MMB

Notes Client:

User Name: PRISM JOHNSON LIMITED

Extended Notes
BANDARKHA LIMESTONE MINE

Microphone Linear Weighting
PSPL 8.177 pa.(L) at 1.561 sec

ZC Freq 12 Hz

Channel Test Passed (Freq = 19.7 Hz Amp = 1332 mv)

	Tran	Vert	Long	
PPV	1.829	0.875	1.797	mm/s
PPV (Ponderated)	1.785	0.700	1.345	mm/s
PPV	56.24	49.84	56.09	dB
ZC Freq	20	24	51	Hz
Time (Rel. to Trig)	0.335	0.215	0.311	sec
Peak Acceleration	0.029	0.026	0.060	9
Peak Displacement	0.116	0.101	0.077	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.3	7.7	7.1	Hz
Overswing Ratio	3.5	3.4	3.6	

Peak Vector Sum 2.136 mm/s at 0.336 sec

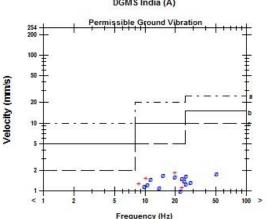
Serial Number UM8131 V 10-76 Micromate ISEE

Battery Level 3.6 Volts

Unit Calibration February 26, 2018 by UES New Delhi File Name UM8131_20190311133947.IDFW

Post Event Notes Bandarkha/1st Bench (L/S), No of holes 78 nos, Depth - 8.0 Mtrs. Charge/delay - 20.97 Kg/delay, Obsevation Distance - 300 mts

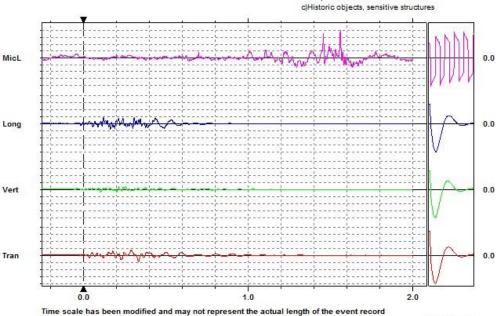




Tran: + Vert: x Long: €

a)Industrial Buildings b)Domestic houses/structures

Sensor Check



Printed: February 8, 2022 (V 10.72 - 10.72)

Format @ 1995-2014 Xmark Corporation

Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 2.000 ps.(L)/div

पंजीकृत डाक द्वार



भारत सरकार / Govt. of India श्रम एवं रोजगार मंत्रालय / Ministry of Labour & Employment खान सुरक्षा महा-निदेशालय Directorate-General of Mines Safety



जबलपुर—क्षेत्र / Jabalpur Region

प्लाट न. 1936 से 1949, जे. डी. ए. स्कीम न. 5, जॉय हायर सेकेन्डरी स्कूल के पिछे, विजय नगर, जबलपुर (म.प्र.) 482 002 फोन : कार्यालय - 0761 2640365, फेक्स - 0761 2640414

संख्या : ज.क्षे. / मेटल / अनुमति—34/2016 ,

/ जबलपुर, दिनांक

प्रेषक:

निदेशक खान सुरक्षा जनल्पर क्षेत्र

सेवा में

अभिकर्ता. बंदर्खा चुनापत्थर खान, मेसर्स प्रिज्म सीमेंट लिमिटेड. राजदीप, रीवा रोड, जिलाः सतना (म प्र) 485 001

विषयः Relaxation from the provisions of Regulation 106(2)(b) of the Metalliferous Mines Regulations, 1961, to work the mine by system of deep hole blasting and deployment of Heavy Earth Moving Machineries at Bandarkha Limestone Mine of M/s Prism Cement Limited.

महोदय.

Please refer to your application vide letter No. MIN/2016-17/BDR/007 dated 23.08.2016 and subsequent correspondence resting with your letter No. MIN/2016-17/BDR/010 dated 15.10.2016 and the plan and enclosures enclosed therewith, on the above subject.

The matter has since been examined in this Directorate on the basis of information furnished and also shown on the plan enclosed therewith.

In exercise of the powers conferred on the Chief Inspector of Mines (also designated as Director General of Mines Safety) under Regulation106(2)(b) of the Metalliferous Mines Regulations, 1961 and by virtue of the authorization granted to me by the Chief Inspector of Mines (also designated as Director General of Mines Safety) under Section 6(1) of the Mines Act, 1952, I hereby grant you relaxation from the provisions of Regulation 106(2)(b) of the Metalliferous Mines Regulations, 1961, to work the mine by system of deep hole blasting and deployment of Heavy Earth Moving Machineries at Bandarkha Limestone Mine of M/s Prism Cement Limited, as shown in red dotted colour line bounded by A-B-C-D-E-F-G-H-I-J-K-L-M-N-O-P-Q-R-S-T-U-V-W-X-Y-Z-A on plan No. PCL/B/2016/102 dated 16.08.2016 enclosed with the application, subject to the following conditions being strictly complied with:

Except where otherwise provided for in this conditional permission, all provisions of 1.0 the Metalliferous Mines Regulations, 1961, relating to opencast workings, use of explosives and machinery, etc., shall be strictly complied with.

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Page 3

- (5) No road shall have a gradient more than 1 in 16. Ramps with 1 in 10 gradients should not be more that 10m at one stretch and permissions shall be obtained from Directorate.
- (6) Where any road existing above level of surrounding area it shall be provided with strong parapet wall/embankment of following dimensions.
 - i. Width at top-not less than 1 m.
 - Width at bottom-not less than 2.5m.
 - The height not less that the diameter of tyre of largest vehicle playing on road.

It may be noted that just dumping of mud or Overburden shall not treated as strong parapet wall.

- (7) The portion of the surface haul road in the mine premises where there is heavy traffic of men and machines shall be provided with a separate lane properly fenced off from the haul road for pedestrian, two wheelers and light vehicles.
- 6.0 Precautions-while drilling.
- (1) The position of every deep hole to be drilled shall be distinctly marked by the Mine Foreman so as to be readily seen by the drillers.
- (2) (a) No drilling shall be commenced in an area where shots have been fired, until the blaster has made a thorough examination at all places, including remaining sockets of old deep holes, for unexploded charges that the drill may strike.
 - (b) No drill or bore rod or pick shall be inserted in sockets of old deep holes even if an examination under Clause (a) has failed to reveal presence of explosives.
- (3) No person shall be permitted to remain within a radius of 20 m or within 60 m on the same bench where charging of holes with explosives is being carried out.
- 7.0 Transport of Explosives: Where explosives are transported in bulk for deep hole blasting the following precautions shall be taken:
- (1) Transport of explosives from the magazine to the priming station or the site of blasting shall not be done except in the original wooden or cardboard packing cases. The quantity of explosive transported at one time to the site of blasting shall not exceed the actual quantity required for use in one round of shots. The explosives shall be transported to the site of blasting not more than 90 minutes before the commencement of charging of the holes.
- (2) (a) No mechanically propelled vehicle shall be used for the transport of explosives unless it is of a type approved in writing by the Chief Inspector provided that a Jeep or Land Rover may be used for the transport of detonators from magazines to 'priming stations' subject to the following conditions:
 - (i) Not more than 200 detonators are transported in a vehicle at a time:
 - (ii) The detonators are packed suitably in a wooden box
 - (iii) The wooden box containing detonators is placed inside an outer metal case of construction approved by the Chief Inspector;
 - (iv) The outer metal case shall be suitably bolted to the floor of the vehicle or otherwise fixed in a wooden frame so that the container does not move about

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- while the vehicle is in motion; and
- (v) No person shall ride on the rear portion of the vehicle.
- (vi) Every vehicle used for the transport of explosive shall be marked or placarded on both sides and ends with the word "Explosives" in white letters not less than 15 centimeters high on a red background.
- (vii) Every mechanically propelled vehicle transporting/explosives shall be provided with not less than two fire extinguishers (one of carbon tetrachloride type for petroleum fire and the other of carbon dioxide under pressure type for electrical fire) suitably placed for convenient use.
- (3) (a) The vehicle used for the transport of explosives shall not be overloaded and in no case shall the explosive cases be piled higher than the sides of its body.
 - (b) Explosives and detonators shall not be transported in the same vehicle, at the same time.
- (4) (a) No person other than the driver and his helper (not below 18 years of age) shall ride on a mechanically propelled vehicle used for the transport of explosives.
 - (b) A vehicle loaded with explosive shall not be left unattended.
 - (c) The engine of a vehicle transporting explosives shall be stopped and the brakes set securely before it is unloaded or left standing.
 - (d) A vehicle transporting explosives shall not be driven at a speed exceeding 25 kilometers per hour.
 - (e) A vehicle loaded with explosives shall not be taken into garage or repair shop and shall not be parked in a congested place.
 - (f) A vehicle transporting explosives shall not be refueled except in emergencies and then only when its engine is stopped and other precautions taken to prevent accidents.
 - (g) No trailer shall be attached to a vehicle transporting explosives.
- (5) (a) Every vehicle used for the transport of explosives shall be carefully inspected once in every 24 hours by a competent persons to ensure that:
 - (i) Fire extinguishers are filled and in place;
 - (ii) The electric wiring is well-insulated and firmly secured;
 - (iii) The chassis, engine and body are clean and free from surplus oil and grease;
 - (iv) The fuel tank and feed lines are not leaking; and
 - (v) Lights, brakes and steering mechanism are in good working order.
 - (b) All report of every inspection made under sub-clause (a) shall be signed and dated by competent person making the inspection.
- (6) All operations connected with the transport of explosives shall be conducted under the personal supervision of a foreman solely placed in charge of blasting operations under overall charge of a Asstt. Manager at the mine.
- (7) The blaster shall personally search every person engaged in the transport and use of explosives and shall satisfy himself that no person so engaged has in his possession any cigarette, 'biri' or other smoking apparatus, or any match or any other apparatus of any kind capable of producing a light, flame or spark.

8.0 Precautions during shot-firing:

(1) (a) Shots shall not be fired except during the hours of day-light. All holes charged on any one day shall be fired on the same day.

Page 5

- (b) As far as practicable the blasting shall be carried out either between shifts or during the rest interval or at the end of work for the day.
- (2) During the approach and progress of an electric storm, the following precautions shall be taken:-
 - (a) No explosive, particularly detonators shall be handled.
 - (b) If charging operations have begun, the work shall be discontinued until the storm has passed.
 - (c) If the blast is to be fired electrically all exposed wires shall be coiled up and if possible placed in the mouth of the holes, or kept covered by something other than a metal plate.
 - (d) All wires shall be removed from contact with the steel rails of a haulage track so as to prevent the charge being exploded prematurely by a local strike of the lightening.
- (3) Blasting operation in the mine shall be placed under the charge of an Assistant manager and no blasting shall be done in the mine in the absence of the Assistant Manager.
- (4) No deep hole blasting shall be undertaken within 300m of the any structure not belonging to owner unless permission in writing is obtained from this Directorate as required under the provision of Reg. 164 of MMR, 1961.

(Cement Division)

Village: Mankahari, P.O.: Bathia Tehsil: Rampur Baghelan, Distt.: Satna, PIN- 485 111 (M.P.) India

Phone : 07672275301 Fax : 07672410357/275303 **Purchase Order**

PO No.: 3100191722 - P027

PO Date: 06.09.2022

Vendor Address

DEEPAK PANJABRAO DEOTALE

PLOT NO 1/B, PRASHANT NAGAR, AJANI

NAGPUR

440003 Maharashtra,INDIA GSTIN: 27AEDPD4007M1ZP Reference

Payment Terms

Our Reference :

1300014048

Your Reference : Offer Rate Details as mentioned below

Official

Please arrange to supply the following materials subject to terms and condition as per PO

Item/PR Material/Description Quantity UM Del. Date Rate Amount

10 1.00 AU 30.10.2022 176,000.00 176,000.00

1300014048 H

HSN Code-

IME / PME mines employees

The Item Covers the following services:

IME/PME of Mines Employess

Total Amount

INR 176,000.00

INR ONE LAC SEVENTY-SIX THOUSAND ONLY

Price: FOR, PJL Site

*Scope of Works : -

Your Scope of work consists of testing IME/PME (List of testing is mentioned) Of 176 Employees of Mines dept. at PJL Site

Flowing testing to be done during visit at site.

- 1.Chest X Ray
- 2.EYE Test
- 3. Spirometry (Lung Function Test)
- 4. ECG test
- 5.Audiometry Test
- Physical Test
- 7. Blood
- 7.1 Blood-Tc.Dc.Hb.ESR.Platelets
- 1. Price shall be firm and final till execution of order
- 2. Order Acceptance Form which is enclosed with the order should be signed and sent back to us as a token of acceptance. If not received within 15 days of dispatch of order it would be considered as acceptance of our order.
- 3. Materials to be despatched through our nominated transporter if transportation is in Prism scope

GSTIN 23AAACP6224A1Z5 FOR Prism Johnson Limited TAN No : JBPP00852F PAN No : AAACP6224A **Authorised Signatory** Registered Office: 305, Laxmi Niwas Apartments, Amarpreet ,Hyderabad - 500 016 1) Despatches are covered under Marine Insurance Policy No CIN L26942TG1992PLC014033 311700/21/2023/3 Dtd. 01.04.2022 valid upto 31.03.2023 2) In case of payment through Bank, copy of despatch documents should Mumbai Office: 'Raheja's 2nd Floor, V.P. Road, be sent to our Accounts Department without which the bank documents Santacruz(W), Mumbai - 400054 will not be honoured

Form No.: F04(PUR-P-02)

(Page 1 of 4)

(Cement Division)

Village: Mankahari, P.O.: Bathia Tehsil: Rampur Baghelan,

Distt.: Satna, PIN- 485 111 (M.P.) India

Phone : 07672275301 Fax : 07672410357/275303 **Purchase Order**

PO No.: 3100191722 - P027

PO Date: 06.09.2022

Vendor Address

DEEPAK PANJABRAO DEOTALE

PLOT NO 1/B, PRASHANT NAGAR, AJANI

NAGPUR

440003 Maharashtra,INDIA GSTIN: 27AEDPD4007M1ZP Reference

Our Reference :

1300014048 Your Reference :

Your Refere Offer Rate **Payment Terms**

Details as mentioned below

Please arrange to supply the following materials subject to terms and condition as per PO

Item/PR Material/Description Quantity UM Del. Date Rate Amount

- 7.2 Blood Sugar-Fasting & P.P.
- 7.3 Lipid Profile
- 7.4 Blood Urea, Creatinine
- 7.5 Urine Routine
- 7.6 Stool Routine
- 8. Urine:
- a)Reaction
- b)Albumin
- c) Sugar
- * You will submit the compleate report at our Medical Department in hard copy and soft copy within 15 Days of test completion.
- * Camp duration at PJL site is Minimum 5 Days.
- * PJL will provide List of employee with all required documents to Doctor.

The actual payment will be made on the basis of actual test conducted at your Hospital/site appropried by our Medical/Mines/Concern department.

- * you will submit report within 15 days.
- * Accommodation:-PJL will provide lodging Boarding and fooding on FOC Basis at PJL Site.
- *Traveling :-Traveling will be arrange by you for your team at your own cost

GST:Extra, As applicable.TDS shall be deducted as applicable

As per New Section of Income Tax Act 194Q, we f1st July 2021 Prism Johnson Limited (PAN: AAACP6224A; TAN: JBPP00852F;

- 1. Price shall be firm and final till execution of order
- 2. Order Acceptance Form which is enclosed with the order should be signed and sent back to us as a token of acceptance. If not received within 15 days of dispatch of order it would be considered as acceptance of our order.
- 3. Materials to be despatched through our nominated transporter if transportation is in Prism scope

GSTIN : 23AAACP6224A1Z5
TAN No : JBPP00852F
PAN No : AAACP6224A

FOR Prism Johnson Limited

Authorised Signatory

Registered Office: 305, Laxmi Niwas Apartments,

Amarpreet ,Hyderabad - 500 016.

CIN : L26942TG1992PLC014033

Mumbai Office: 'Raheja's 2nd Floor, V.P. Road,

Santacruz(W), Mumbai - 400054

Note

1) Despatches are covered under Marine Insurance Policy No 311700/21/2023/3 Dtd. 01.04.2022 valid upto 31.03.2023

2) In case of payment through Bank, copy of despatch documents should be sent to our Accounts Department without which the bank documents

will not be honoured

(Page 2 of 4)

Form No.: F04(PUR-P-02)

(Cement Division)

NAGPUR

Village: Mankahari, P.O.: Bathia Tehsil: Rampur Baghelan, Distt.: Satna, PIN- 485 111 (M.P.) India

07672275301

Phone 07672410357/275303

440003 Maharashtra, INDIA GSTIN: 27AEDPD4007M1ZP

Purchase Order

PO No.: 3100191722 - P027

PO Date: 06.09.2022

Reference **Payment Terms** Vendor Address Details as mentioned below **DEEPAK PANJABRAO DEOTALE** Our Reference: PLOT NO 1/B, PRASHANT NAGAR, AJANI

1300014048 Your Reference: Offer Rate

Please arrange to supply the following materials subject to terms and condition as per PO

Amount Material/Description Quantity UM Del. Date

TAN: JBPP02310A) will deduct your TDS as per the Income Tax Act for the Purchase of Goods from you

Duration: You will have to complete the job as per our instructions within given period of time.

Payment:-

The actual payment will be made after 15 days after submitted medical report and duly verified/certified by the concerned depatment.

You will raise your invoice in duplicate in the title of

PRISM JOHNSON LIMITED

(Cement Division)PO: Bathia, Tehsil: Rampur Baghelan, Vill:Mankahari, Dist: Satna (M.P.) .Please intimate us your PAN No / GSTIN. which is required for TDS purpose.

Regarding reimbursement of GST your Invoice should be submitted in duplicate and contain following information:

The invoice to be signed by Service provider or person authorized by such service provider.

You have to filing your GST return within due date without fail

Disallowance of any Input Tax Credit on GST on account of incomplete document submitted by you shall be in your account and recovered from you.

*OTHER TERMS AND CONDITIONS:

Other terms and conditions shall be as per Annexure- II & III which is an integral part of this Contract.

*TERMINATION OF WORK ORDER:

23AAACP6224A1Z5

The management reserve the right to extend terminate the purchase order before/after completion of duration with/ without assigning any reason

FOR Prism Johnson Limited

Authorised Signatory

- 1. Price shall be firm and final till execution of order
- 2. Order Acceptance Form which is enclosed with the order should be signed and sent back to us as a token of acceptance .If not received within 15 days of dispatch of order it would be considered as acceptance of our order.
- 3. Materials to be despatched through our nominated transporter if transportation is in Prism scope

: JBPP00852F TAN No PAN No : AAACP6224A

Registered Office: 305, Laxmi Niwas Apartments,

Amarpreet , Hyderabad - 500 016. CIN : L26942TG1992PLC014033

GSTIN

Mumbai Office: 'Raheja's 2nd Floor, V.P. Road,

Santacruz(W),Mumbai - 400054

Note

1) Despatches are covered under Marine Insurance Policy No 311700/21/2023/3 Dtd. 01.04.2022 valid upto 31.03.2023

2) In case of payment through Bank, copy of despatch documents should be sent to our Accounts Department without which the bank documents will not be honoured

(Page 3 of 4)

Form No.: F04(PUR-P-02)

PLOT NO 1/B, PRASHANT NAGAR, AJANI

(Cement Division)

NAGPUR

Village: Mankahari, P.O.: Bathia Tehsil: Rampur Baghelan, Distt.: Satna, PIN- 485 111 (M.P.) India

: 07672275301 Phone : 07672410357/275303 Fax

440003 Maharashtra, INDIA GSTIN: 27AEDPD4007M1ZP Purchase Order

PO No.: 3100191722 - P027

PO Date: 06.09.2022

Reference **Payment Terms Vendor Address DEEPAK PANJABRAO DEOTALE**

> Our Reference : 1300014048 Your Reference: Offer Rate

Details as mentioned below

Please arrange to supply the following materials subject to terms and condition as per PO

Item/PR Del. Date Amount Material/Description Quantity UM Rate

*ANTI BRIBERY & CORRUPTION DIRECTIVES

Prism Johnson limited (PJL) desire to engage in a business relationship with suppliers, and/or your sub-contractors/agents, that are committed to sustainable Development. PJL follows a code of conduct that demands the highest standards of moral and Ethical behavior in its business dealing. Our intent is to partner with suppliers, and/or your sub-contractors/agents, who have not only set for themselves high standards in sustainability, but have specifically targeted avoidance of bribery and corruption by following an Ethical code of Conduct.

*Please sign and return to us the duplicate copy of this Contract as token of your acceptance

1. Price shall be firm and final till execution of order

- 2. Order Acceptance Form which is enclosed with the order should be signed, and sent back to us as a token of acceptance. If not received within 15 days of dispatch of order it would be considered as acceptance of our order.
- 3. Materials to be despatched through our nominated transporter if transportation is in Prism scope

GSTIN	: 23AAACP6224A1Z5	FOR Prism Johnson Limited
TAN No	: JBPP00852F	
PAN No	: AAACP6224A	
		Authorised Signatory
Registered Office: 305,Laxmi Niwas Apartments,		Note :
Amarpreet ,Hyderabad - 500 016, CIN : L26942TG1992PLC014033		1) Despatches are covered under Marine Insurance Policy No.
CIN . L2094210	51992PLC014033	311700/21/2023/3 Dtd. 01 04:2022 valid upto 31.03:2023
Mumbai Office: 'Raheja's 2nd Floor, V.P. Road,		2) In case of payment through Bank, copy of despatch documents should
Santacruz(W), Mumbai - 400054		be sent to our Accounts Department without which the bank documents
		will not be honoured.
Amarpreet ,Hyde CIN : L26942TC	erabad - 500 016 51992PLC014033 'Raheja's 2nd Floor, V.P. Road	1) Despatches are covered under Marine Insurance Policy No. 311700/21/2023/3 Dtd. 01.04.2022 valid upto 31.03.2023 2) In case of payment through Bank, copy of despatch documents should be sent to our Accounts Department without which the bank documents

Form No.: F04(PUR-P-02)

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PRISM JOHNSON LIMITED CSR Activities Status and Expense Summary FY 2022-23 (Cement Division)

Annexure 3

From Apr to Sep 22

S.N.	Category under Schedule VII	Description of Activity Proposed Budget Amount Rs. In Crore			Crore	Expense Rs. in		
			Q-1	Q-1		Crore		
1	Availability of drinking water Schedule VII (i))	Availability of potable water through installation of hand pumps with bore well, supply through water tankers and installation of RO	0.04	0.04	0.06	0.01	0.15	0.10
2	Environment, water Conservation and Promoting renewable energy Schedule VII (iv)	Plantation and survival, construction of water harvesting structures, deepening of ponds, construction of stop dam, development of social forestry, installation of solar lights	0.35	0.62	0.46	0.02	1.45	1.06
3	Health & Hygiene Schedule VII (i)	Health check-up, medical camps, ambulance and construction of toilets	0.03	0.07	0.03	0.08	0.21	0.07
4	Promoting Education Schedule VII (ii)	Repairing & maintenance of school buildings, seating arrangement, slogan writing, installation of smart classes, support to Anganwadi, Providing AID for free coaching	0.01	0.09	0.15	0.05	0.30	0.12
5	Rural Infrastructure Development Schedule VII (X)	Construction of bus shelters, renovation of community center and development of playground	0.00	0.05	0.08	0.00	0.13	0.00
6	Social Welfare Schedule VII (iii, iv & vi)	Support to old age home, animal Welfare, support to providing equipment and other assistance required as per development activity	0.05	0.07	0.15	0.06	0.33	0.06
7	Vocational Skill Development Schedule VII (ii)	Vocational skill development trainings, livelihood training,	0.00	0.01	0.06	0.07	0.14	0.00
	Total		0.48	0.95	0.99	0.29	2.71	1.41