



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

To,

The VicePresident
SPRINGWAY MINING PRIVATE LIMITED

Coromondel Towers,93, Santhome High Road, Karpagam Avenue, R.A.
Puram, Chennai Pin - 600028,,Chennai,Tamil Nadu-600028

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

Sir/Madam,

This is in reference to your application for Environmental Clearance (EC)
in respect of project submitted to the Ministry vide proposal number
IA/MP/MIN/27304/2015 dated 17 Jun 2019. The particulars of the environmental
clearance granted to the project are as below.

- | | |
|---|--|
| 1. EC Identification No. | EC22A001MP135016 |
| 2. File No. | J-11015/114/2015-IA-II(M) |
| 3. Project Type | New |
| 4. Category | A |
| 5. Project/Activity including
Schedule No. | 1(a) Mining of minerals |
| 6. Name of Project | Proposed Limestone Mine (Applied M.L.
Area- 499.641 ha) with Production
Capacity of 4.0 MTPA at Village- Kol
Karhiya, Tehsil- Pawai, District- Panna
(Madhya Pradesh). |
| 7. Name of Company/Organization | SPRINGWAY MINING PRIVATE
LIMITED |
| 8. Location of Project | Madhya Pradesh |
| 9. TOR Date | 08 Jun 2015 |

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

Date: 18/02/2022

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

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

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F.No. J-11015/114/2015-IA.II(M)

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

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

Dated: 18th February, 2022

To,

M/s. Springway Mining Private Limited

Coromandel Towers, 93, Santhome High Road,
Karpagam Avenue, R.A. Puram, Chennai,
Chennai, Tamil Nadu-600028.

Subject: Proposal for Environmental Clearance of M/s. Springway Mining Private Limited for Proposed Limestone Mine with Total excavation of 14.11 million TPA [Limestone - 4.0 million TPA (ROM), Topsoil - 1.57 million TPA, OB - 6.51 million TPA, Mineral Rejects – 2.03 million TPA] along with the crusher of 1600 TPH in the mine lease area of 499.641 ha at Village- KolKarhiya, Tehsil Pawai, District- Panna, Madhya Pradesh –Environmental Clearance (EC)- regarding.

Sir,

This has reference to the online proposal no. IA/MP/MIN/27304/2015 of M/s. Springway Mining Private Limited is for grant of Environmental Clearance (EC) for proposed Limestone Mine with Total excavation of 14.11 million TPA [Limestone - 4.0 million TPA (ROM), Topsoil - 1.57 million TPA, OB - 6.51 million TPA, Mineral Rejects – 2.03 million TPA] along with the crusher of 1600 TPH in the mine lease area of 499.641ha located at Village- KolKarhiya, Tehsil Pawai, District- Panna, Madhya Pradesh. The mine lease area located between Latitude 24°15'29.02"N to 24°17'09.55"N and Longitude 79°48'24.91"E to 79°50'21.15" E. The mine lease area falls under the Survey of India Topo sheet No 54P/15 and falls in Seismic Zone-III. The PP presented the KML file during the presentation to indicate the location of mine lease on Google Earth/DSS.

2. M/s. Springway Mining Private Limited has made an online application vide proposal no: IA/MP/MIN/27304/2015 dated 31.05.2019 and submitted Form-2 and EIA report under the provisions of the EIA Notification, 2006 for the project mentioned above. The proposed

Pawley
EC - M/s. Springway Mining Private Limited –Madhya Pradesh

Page 1 of 25

project activity is listed at schedule no. 1(a) Mining of Minerals under Category "A" of the schedule of the EIA Notification, 2006 as the mining lease area is greater than 100 ha and appraised at Central level.

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

Date of application	Proposal No	Consideration	Details	Date of accord
01.04.2015	IA/MP/MIN/27304/2015	15 th May, 2015	Production capacity of 4.0 million TPA.	08.06.2015
03.04.2018	IA/MP/MIN/27304/2015	-	Extension of validity of ToR from 08.06.2018 to 07.06.2019.	08.05.2018

4. The proposal for Environmental Clearance was earlier considered in the 7th EAC meeting held during July 30-31, 2019 and the Committee, after detailed deliberations, deferred the proposal and sought the requisite information/clarifications. PP submitted the information vide LrRef No SMPL/DMO/Project/2021/65 dated 04.06.2021 on 17.06.2021 in parivesh portal. Then, the proposal was again considered in the 32nd EAC meeting held during 28th June and 1st July 2021 and after detailed deliberations made by the Project Proponent and the Consultant; the Committee deferred the proposal for want of additional information. PP submitted the information vide Lr Ref. No: SMPL/MIN/DAM/MoEF/2021/69 dated 18.08.2021 on 20.08.2021 in PARIVESH. Accordingly, the proposal was considered in the EAC meeting held during 31st August & 1st September, 2021 wherein the Committee recommended the proposal for grant of environmental clearance.

5. Lease Detail

S.no	Grant of Pl/mine lease/ Order	Date of the grant	Name of the Mineral	Period of Grant		Granted by	Mine lease area in Ha
				From	To		
1	Prospecting License vide Lr F-2-40/ 2013/ 12/1, Bhopal	01.03.2014	Limestone	26.05.2014	25.05.2016	Govt of Madhya Pradesh	499.641
2	Letter of Intent vide Lr F- 2-40/ 2013/ 12/ 1	09.12.2014	Limestone	Six Months		Govt of Madhya Pradesh	499.641

3	Mining lease vide Order No F- 2-40/ 2013/ 12/ 1	13.07.2015	Limestone	50 years	Govt of Madhya Pradesh	499.641
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6. Details of executed Mine leases.

S.no	Date of grant of Lease execution	Period of Grant		Details
		From	To	
1	Date of entering into original lease deed.	13.10.2015	12.10.2065	MP283052015A1122303

7. Mining plan

Mining Plan with approved by Indian Bureau of Mines	Letter No.	MP/ Panna/ Limestone/ MPLN/ G- 22/ 2014-15		
	Date	27.05.2015		
	Mineral	Limestone		
	ML area	499.641 ha		
	Validity	5 years		
Mining Parameters	Quantitative Description			
Method of Mining	Fully Mechanized Opencast method			
Bench Height	Variable (Maximum 8m)			
Bench Width	25 to 30 m (Width of working benches)			
Geological Reserves	160.10 Million Tonnes			
Mineable Reserves	121.7 million tonnes			
Life of mine	31.5 years			
Overall pit slope	51°			
Drilling/Blasting	Drilling Parameters			
	S. No.	Parameters	Details	
	1	Bench height (m)	8	
	2	Sub grade drilling	10% of bench height	
	3	Depth of hole (m)	8.80	
	4	Dia of holes (mm)	110	
	5	Burden (m)	3	
	6	Spacing (m)	5	
	7	Bulk Density in situ	2.5	
	8	Yield per metre of drilling	$\frac{8 \times 3 \times 5 \times 2.5}{8}$	$= \frac{300}{8} = 37.5$ t
Blasting Parameters				
S. No.	Parameters	Details		

	1	Bench Height	8.0 m
	2	Burden	3.0 m
	3	Spacing	5.0 m
	4	Sub-Grade drilling	10% of bench height
	5	Depth of hole	8 m + 0.8 m (sub-grade drilling)= 8.8 m
	6	Tonnage per hole	8 x 3 x 5 x 2.5= 300 ton
	7	Charge per hole	40.74 kg
	8	Stemming	2.67 m
	9	Powder Factor	7.36 tonnes per kg of explosive
ROM Output size	RoM Limestone of about 1000 mm size from the quarry faces will be fed to 1600 TPH Crusher located in the SE part of the mining lease and minus 75 mm size crushed limestone will be transported to Plant by covered belt conveyor.		
Transportation details	<ul style="list-style-type: none"> i. The rear dump truck of 55 Ton payload capacity is proposed to be deployed for handling of limestone, overburden & reject within the mine. ii. The crushed limestone from the crusher proposed to be located within the mining lease will be transported to the plant by 1.5 km long covered belt conveyor 		
Dumper's capacity	55 tonne capacity		
Topsoil	During plan period, 4.04 million tonnes of soil will be generated and up to life of mine 27.30 million tonnes of OB soil will be generated. Top soil is proposed to be stacked in the temporary OBS dump yard (OBS 1 & 2) located towards north of pit A and shall be used in plantation. The maximum height of the temporary dump for soil will be 20 m in the form of terraces of 10 m.		
Range of Water Table Pre-Monsoon Season	8- 13 m bgl		
Range of Water Table Post-Monsoon Season	5- 9 m bgl		
Depth of mining	258 m AMSL (58 m bgl)		
Ground water intersection	Yes		
NOC/Permission Letter	Application has been submitted to CGWA for taking permission for intersection of ground water table vide letter No 21-4/854//MP/MIN/2019 dated 27.05.2019		
Additional information	PP submitted that as per grant of mining lease, MLA 499.641 ha has been divided into 15 zones namely A, B, C, D, E, F, G, H, I, J, K, M, N, O and P. Reserves and resources have been		

	estimated for 7 zones i.e., mineable and accordingly the mine development & production has been planned during the plan and conceptual period i.e., life of the mine. The mineable zones are O, M, N, P, J, H and G, these zones are referred as Pit-A, Pit-B, Pit-C, Pit-D, Pit-E, Pit-F and Pit-G in the approved mining plan respectively. All the mining blocks (7 pits, A to G) are divided into two groups, NE & SW groups by a village road connecting the village Kolkarhiya with SH-49. NE group i.e., group of mining block E, F & G and SW group i.e., group of mining block A, B, C and D. Mining and allied activity up to 15 th year of mine will be confined in block A, B and D of SW group.
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8. Land Area Breakup

Private land	488.088 ha
Government land	11.553 ha
Total Mining lease area (MLA)	499.641 ha

9. The Project Proponent submitted that purchasing land from land owners at the rate of INR 37.05 Lakh per hectare. Annual per hectare income on amount paid to individuals at prevailing interest rates of 6.5% will be INR 2.41 Lakh. Annual Income to Farmers from Crop will be Rs. 444.16 lakh and Annual Benefit to Individual Farmers (Land Seller/Loser) from interest on the amount of land sold Rs. 1176.27 lakh. Annual Income to Farmers from Crop will be Rs. 444.16 lakh and Total annual Benefit to National/State Govt., Project Area Specific and Individual Farmers (land loser) will be Rs. 50313.67 lakh. Thus, it is apparent and evident that diversion of crop land for mining purpose is economically beneficial to the Individual Farmer / Land Losers, Project Specific Area and National as well as State Government.

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

Particulars	Distance	Direction
KolKarhiya Village	Adjacent (Surrounded by Mining lease)	
HattaTown/ City	~25 km	SW
State Highway SH- 49	~2.2 km	S
Damoh Railway Station	~61 km	S
River Bearma	Flowing at Western & Northern periphery of M.L. Area	
River Sonar	~3.8 km	N

11. Water requirement

Total water requirement	100 KLD	Dust Suppression	60.0 KLD
		Drinking	10.0 KLD
		Green belt	20.0 KLD
		Others	10.0 KLD
Source	River Bearma & Mine sump		
Permission	Permission for withdrawal of water from river Bearma has been obtained from Water Resource Dept vide their letter dated 04.03.2015 & 17.06.2019		
River Protection Plan	River protection plan approved by Water Resource Department, GoMP vide letter no 741/Work/2020-21 dated 03.06.2021.		

12. Presence of Environmentally Sensitive areas in the study area

Forest Land/Protected Area/ Environmental Sensitivity Zone	Yes/No	Details of Certificate/ letter/ Remarks
Forest Land	No	PP - submitted the copy of letter issued from Chief Wild Life Warden, Bhopal vide no W.A/Maa. Chi/2016/Mine/22/8861 dated 01.12.2016 that mine lease area is located at a distance of 20.047kms from core zone of Panna Tiger Reserve, 7.610km from the buffer zone of Panna Tiger Reserve and the said area is not situated in Wildlife Corridor. PP also submitted letter issued from the Office of the Principal Chief Conservator of forest and wildlife vide dated 25.06.2021 wherein it has been mentioned that forest area of Panna Tiger Reserve does not falls in the 499.641 Ha mining lease area. The mine is not situated in the wildlife corridor hence there is no possibility of any adverse impact on forest and wildlife. The distance of mine lease area from Panna National Park, Panna Tiger
National Park	No	
Wildlife Sanctuary	No	
Biosphere Reserves/Tiger Reserves	No	
Wildlife Corridors	No	

		Reserve is 20.047 km from the core zone and 45.55 km from Gangau Sanctuary and 64.74 km from Ken Sancturay.
Reserve Forest/Protected Forest	Distance	Direction
Pagra Protected Forest	~3.5 km	NE
Bardha Reserve Forest	~8.0 km	NW
Protected Forest	~8.0 km	NW

Schedule-1 species	Yes/No	Details of Certificate/letter/Remarks
Schedule-I species	No	Authenticated list of flora & fauna has been obtained from DFO vide letter dated 04.11.2015 and Addl Principal Chief Conservator of Forest vide letter dated 25.05.2019 and from PCCF & Chief Wildlife Warden vide letter no WL/Maa.chi/2016/Mine/22/4356 dated 25.06.2021.

13. Green belt/plantation details

Particulars for Green belt/plantation	Area covered
Proposed area for green belt/plantation	211.032 ha
Development for plantation in the 300 m blasting safety zone from village boundary (within mineable blocks)	50.157 ha
Plantation on non-mineable blocks	27.082 ha
Non-mineralized area of mineable blocks	26.452 ha
Plantation on back filled areas & bench slopes for Rehabilitation in all the blocks	74.95 ha
Green belt in 7.5 m lease periphery / boundary including the area of 2.516 ha covered in the 50m safety barrier of the village road	32.392 ha
Revised Budget for green plant & plantation till the end of life of mine	Rs. 633.1 Lakhs (Capital) Rs 158.3 Lakhs/annum (Recurring)

14. Baseline detail

The primary baseline data for specific micro-meteorology data, ambient air quality, waste quality, noise level, soil and flora & fauna has been collected during Summer Season. The Monitoring results of ambient air, surface water, soil, ambient noise and ground water for the month of 1st March-29th May, 2018 have been reported and no major divergence was observed with respect to concentration values of various parameters of collected samples.

Period	
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AAQ parameters at 8 locations	Pollutant	Min, $\mu\text{g}/\text{m}^3$	Max, $\mu\text{g}/\text{m}^3$	98 %ile, $\mu\text{g}/\text{m}^3$	Standard, $\mu\text{g}/\text{m}^3$
	PM2.5	57.2	79.7	79.3	60
	PM10	21.0	39.6	39.2	100
	SO2	5.3	10.8	10.6	80
	NOx	15.4	27.6	27.5	80
AAQ modelling (Incremental GLC)	Pollutant	Baseline Concentration, $\mu\text{g}/\text{m}^3$	Incremental Concentration, $\mu\text{g}/\text{m}^3$	Total GLC, $\mu\text{g}/\text{m}^3$	Standard
	PM2.5	78.5	4.3	82.9	60
	PM10	39.6	0.7	40.3	100
	SO2	10.0	1.0	11.0	80
	NOx	27.6	1.8	29.4	80
Noise level at 8 locations	Day Time: 50.0 to 54.3 Leq dB (A) Night Time: 39.8 to 43.5 Leq dB (A)				
Ground water quality at 7 locations	pH found to be 7.3, TDS ranged from 175-190 mg/l, BOD ranged between 4.8-6.0 mg/l, COD ranged between 14.3-18.8 mg/l and DO ranged between 6.8-7.2 mg/l.,				
Surface water quality at 2 locations	pH varied from 7.24 to 7.41. o Total hardness varied from 316.0 mg/l to 548.0 mg/l o Total dissolved solids varied from 510.0 mg/l to 920.0 mg/l. PP submitted that chemical analysis of ground water samples reveals that there is not much variation in chemical composition of water samples from hand pumps & bore wells from nearby villages.				
Soil quality at 8 locations	pH value ranging from 7.06 to 7.59, which shows that the soil is slightly alkaline in nature. Organic matter ranges from 0.75% to 1.14% in the soil samples. Nitrogen is found to be in better amount as it ranges from 246.32 to 341.46 kg/ha and Phosphorous in less amount i.e. from 15.76 to 18.25 kg/ha, whereas the Potassium is found to be ranging from 389.37 to 537.60 kg/ha.				

15. Public Hearing (PH) Details

Advertisement for PH with date	"DainikBhaskar", "Patrika" and "Sunday Times" on 24.03.2019
Date of PH	26.04.2019
Venue	Premises of Government Panchayat Bhavan, Village KolKarhiya
Chaired by	Shri J. P. Dhruve, Addl Collector, Panna Shri V. S. Rai, Regional Officer Sagar from Madhya

	Pradesh Pollution Control Board
Issues raised during PH	Land compensation, Employment, Health, Environment Management, Impact on river, Road and water facility etc
Budget proposed for addressing issues raised during PH	Rs 4.5 Crore

16. Public hearing action plan as per MoEF&CC O.M. dated 30/09/2020

S. No	Physical Targets	EMP (PH concerns) Budget & 3 Year Plan of Activity (in Rs. Lakhs)				Detailed description with cost
		I Year	II Year	III Year	Total	
1	Construction of boundary wall of garden and development of Garden in Village KolKarahiya near Govt. Middle School	20.0	10.0	10.0	40.0	i. I year - Garden area (about 1 Acre i.e. 43,560 Sq.ft.) - Land Cost with Registration - Rs. 16 Lakhs, Boundary Wall 830 ft. length of 5 ft. height @ Rs. 90 per Sq.ft. with Gate, etc. - 4 Lakhs, ii. II + III year - Garden development (Plants, Saplings, grass, Rides, walk ways, Open gym, etc.) - 20 Lakhs
2	Construction of Skill Development Center (SDC) in Village KolKarahiya near School	34.0	15.0	15.0	64.0	i. I year - Land for SDC (about 4 Ares i.e.4300 Sq ft. Cost - Rs. 1.6 Lakhs), Rooms (4 nos.x150 sq.ft.) & hall (2 no.x 600 sq.ft.) with fittings, fixture, furniture, etc. @ Rs.1800 per sq. ft.) - Rs. 32.4 Lakhs, Total 1.6+32.4 = Rs. 34 Lakhs ii. II + III year - Workshop Shed, Sewing m/c - 10 nos. and Tools & Tackles for repair of Sewing m/c, TV & Mobile, Two wheelers, Electric gadgets, Cutting & welding, etc.- 30 Lakhs
3	Four hand pumps	1.0	1.0	2.0	4.0	All the four hand pumps will be

	in village KolKarahiya (2), Devri (1), Raikra (1) will be established for water source.					installed in the scattered & isolated areas of villages where piped water is not available. Approximate cost of Hand pump including drilling, casing, pipes & instruments is about Rs. 1 lakh per hand pump.
4	Overhead Water Tank Construction for drinking water supply at Kolkarhiya Village	-	30.0	25.0	55.0	Village population - 1324 nos., considering 10% growth after the past census, Population considered is about 1500, water consumption per person per day as per JalJivan Mission in rural area @ 135 Ltrs. per person, total daily requirement - 202 KL, O/H water tank Size - 300 KL, Cost of O/H tank with pipe lines, valves, etc, -55 Lakhs. Pipeline for water supply in the village is already there and water is being supplied from a bore well with pump but power supply in village is very irregular, so villagers insisted for O/H tank in the PH.
5	Digital Classroom Development by facilitating the online education system by providing Wi-Fi connectivity and desktop/tablets at Village KolKarahiya, Devri and Raikra	19.0	14.5	3.5	37.0	Screen for Digital Classroom, computer & other accessories, etc. Rs. 1.5 Lakhs per classroom, Kolkarhiya (Middle & Primary schools)- 4 sets, Devri (Middle school) - 1 sets, Raikra (Middle school)- 1 sets, Simariya (Sr. Secondary School) - 7 sets = 13 rooms/set ups, Desktop computers 50 nos. @ Rs. 0.35 lakhs each
	Providing furniture (Table and chair) for 300 students in the schools of Village KolKarahiya,	2.0	2.0	2.0	6.0	Table & chairs for about 300 students @ Rs. 2000/set = 6 Lakhs (schools of Village KolKarahiya - 150, Devri -75 and Raikra - 75)



	Devri and Raikra					
	Creation of Playground, sports & games facility in schools of Village KolKarhiya&Devri	-	3.0	4.0	7.0	KolKarhiya - 4.5 Lakhs & Devri - 2.5 Lakhs
6	Complete renovation of internal Roads & Cross drains in KolKariya, Devri and Raikra Villages	35.0	42.0	49.0	126.0	Length of Road in Kolkarhiya - 2400 m, Devri - 660 m, Raikra - 540 m, Avg. Width - 3 m, Cost of CC road with cross drains in village ineranl area is @ Rs. 35 Lakhs per Km for 3 m Width,
7	Ambulance Van and Development of subhealth center at Village KolKarhiya	15.0	15.0	16.0	46.0	Ambulance Van - 15 Lakhs, Defabrilator (AED) - 1.5 Lakh, Rooms (3 nos.) etc. - 27 Lakhs; Beds, Medicines, Instruments, Hospital materials, etc. - 2.5 Lakhs
8	To support for basic infrastructure & equipment's to health center as per need of community in Village Devri - renovation	3.0	5.0	12.0	20.0	Rooms (2 nos.) etc. - 18 Lakhs; Beds, Medicines, Instruments, Hospital materials, etc. - 2 Lakhs
9	Establishment of a COVID center at Village Panchayat of project villages with necessary medical equipment providing Oxygen concentrators, beds, PPE Kits, support in vaccination, one Ambulance, Awareness for COVID. Vaccination	36.0	-	-	36.0	i. Oxygen Concentrator - 20 nos. @ Rs. 0.5 Lakhs each, Beds - 50 nos. @ Rs. 0.1 Lakhs each, PPE Kits - 200 @ Rs. 500 each, Ambulance - Rs. 15 Lakhs for establishment of Covidcentre at Simariya which lateron will be used for other serious diseases ii. Motivating, Campaigning & Arranging for Vaccination in Kolkarahiya, Devri&Raikra villages - 5 Lakhs,

	Program, etc					
10	Providing Solar Lighting in Kolkarhiya, Devri&Raikra Villages	1.8	3.6	3.6	9.0	80 watt solar light with panel - Rs. 9000, Pole 8 m - Rs. 7000, Foundation & flooring etc. Rs. 2000, total - Rs. 18,000 per solar light, Total 50 nos. in villages Kolkarhiya -30, Devri-10 & Raikra-10
Total		166.8	141.1	142.1	450.0	

17. The Project Proponent submitted that out of 488.088 ha Pvt Agriculture land, 125.02 ha land is under possession and 363.068 ha land need to be acquired. The baseline data collection and Need Assessment survey were carried out in a combination of primary source and secondary source in the study area. No. of PAFs (Project Affected Families) is 294. Land is being/will be purchased through mutual agreement and negotiation. These lands are being acquired as per the provisions of the MP Land Revenue Code' 1959. The compensation rate proposed by SMPL for purchasing /acquisition will be as per the LARR Act, 2013, the rates notified by Registration and Stamps Department, Government of Madhya Pradesh along with other incentives / benefits to affected persons according to LARR, 2013. SMPL will provide employment to PAPs according to their education and skills. Vulnerable groups like women headed/Orphans/physically handicap/ disable families under Section 3 (C) (i& ii) of LARR, 2013 shall be considered for additional need-based benefits. Budget allocated for R & R is Rs 149.711 Crore.

18. Court case details

Affidavit in a non-judicial stamp paper of Rs 100 bearing BC 497166 dated 02.06.2021	There is no litigation pending against the project and/or any direction/order passed by any court of law against the project and/or land in which the project is proposed and that for any such litigation whatsoever, the sole responsibility will be borne by the company
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19. Affidavit/Undertaking details

Project Proponent submitted an Undertaking vide Letter dated 22.05.2019	The conditions laid down in Terms of Reference prescribed by MoEF&CC, vide letter no. J-11015/114/2015-IA.II (M) dated 08.06.2015 and validity extension on 08.05.2018 have been complied with and the data submitted and the information presented in this report are factually correct
Consultant submitted an	The conditions laid down in Terms of Reference

Undertaking vide Letter dated 18.05.2019	prescribed by MoEF&CC, New Delhi vide letter no. J-11015/114/2015-IA.II (M) dated 08.06.2015 and validity extension on 08.05.2018 have been complied as per data/details provided by Project Proponent & as per Approved Mining Plan along with Progressive Mine Closure Plan approved by IBM and the data submitted are factually correct
Affidavit in a non-judicial stamp paper of Rs 100 bearing AS 637666 dated 14.06.2019 as per Ministry's OM dated 30.05.2018	The Company will comply with all the statutory requirement & judgment of Hon'ble Supreme Court dated 2 nd August 2017 in writ Petition (civil) No. 114 of 2014 in the matter of common cause versus Union of India &Ors.

20. Details of the EMP

Activities	Capital Cost (Rs. In Lakhs)	Recurring (Rs. In Lakhs)
Air Quality monitoring and Protection	865.2	206.3
Water Quality monitoring and Preservation	407.17	14.5
Noise and Vibration monitoring and Preservation	6.0	0.5
Miscellaneous	1.0	-
Total	1279.26	140.72
Action plan for addressing the issues raised during the public hearing with budgetary provision	450	-
Grand Total	1729.6	140.72

21. Details of project cost and employment:

Particulars	Revised Budget (Rs. In Crore)
Capital Cost for Environment Protection	12.79
Budget for addressing the Public Hearing issues	4.5
Total Cost for EMP	17.29
Recurring Cost for EMP	1.41
Project Cost	276.2
Employment	86 Persons

22. Observation and Recommendation of the Committee:

The proposal for Environmental Clearance was considered in the 35th EAC (Non-Coal) meeting held during 31st August & 1st September, 2021. The Committee observed that, as per letter issued by Chief Wild Life Warden, Bhopal vide no W.A/Maa. Chi/2016/Mine/22/8861 dated 01.12.2016 that mine lease area is located at a distance of

20.047kms from core zone of Panna Tiger Reserve, 7.610km from the buffer zone of Panna Tiger Reserve and the said area is not situated in Wildlife Corridor. PP also submitted letter issued from the Office of the Principal Chief Conservator of forest and wildlife vide dated 25.06.2021, wherein it has been mentioned that forest area of Panna Tiger Reserve does not falls in the 499.641 Ha mining lease area. The mine is not situated in the wildlife corridor hence there is no possibility of any adverse impact on forest and wildlife. The distance of mine lease area from Panna National Park, Panna Tiger Reserve is 20.047 km from the core zone and 45.55 km from Gangau Sanctuary and 64.74 km from Ken Sanctuary.

After detailed deliberations made by the Project Proponent and the Consultant, the Committee **recommended** the proposal for grant of Environmental Clearance of M/s. Springway Mining Private Limited for Proposed Limestone Mine with Total excavation of 14.11 million TPA [Limestone - 4.0 million TPA (ROM), Topsoil - 1.57 million TPA, OB - 6.51 million TPA, Mineral Rejects – 2.03 million TPA] in the mine lease area of 499.641 ha at Village- KolKarhiya, Tehsil Pawai, District- Panna, Madhya Pradesh along with the specific conditions in addition to the standard EC conditions applicable for non-coal mining projects.

23. The Ministry of Environment, Forest and Climate Change has examined the proposal in accordance with the Environmental Impact Assessment Notification, 2006 and further amendments thereto and hereby accords the above mentioned Environmental Clearance after accepting the recommendations of EAC during its 36th EAC meeting held on 31st August and 1st September, 2021 for grant of Environmental Clearance to M/s. Springway Mining Private Limited for Proposed Limestone Mine with Total excavation of 14.11 million TPA [Limestone - 4.0 million TPA (ROM), Topsoil - 1.57 million TPA, OB - 6.51 million TPA, Mineral Rejects – 2.03 million TPA] in the mine lease area of 499.641 ha at Village- KolKarhiya, Tehsil Pawai, District- Panna, Madhya Pradesh subject to compliance of the terms & conditions and the environmental safeguards mentioned below:-

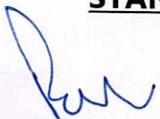
SPECIFIC CONDITIONS

- i. The budget of Rs 4.5 Crores to address the concerns raised by the public during the public hearing to be completed within 3 years from the date of start of mining operations.
- ii. The Project Proponent shall implement the Rehabilitation of project affected families (PAFs) and payment of compensation to PAFs as per the policy and guidelines of the Central/State Government, as provided under the law.



- iii. The Project Proponent must ensure that the Garland drains created to protect entry of water from river into the mine and from the mine to river to be dealt with the proper protection measures proposed and should be designed and constructed in such a way that at no time solids and pollutants from the mine area from all the pits will not flow into the river and it should be ensured that the water in the drain as surface runoff from mine collected in the pit be monitored for quality and treated accordingly.
- iv. The Committee noted that the PP presented that initially Pit-A will be operated for a period of 10 years and hence the protection measures proposed should be demonstrated in Pit -A first. Based on the performance of adopted measures the design and the construction shall be taken up in further pits.
- v. Since the major river is garlanding the entire mine area on northern, western and southern side, all the protection measures shall be taken up so that neither the river hydrology nor the quality of the river will have any impact till the entire mining operation.
- vi. The Sub-Committee of the EAC (Non Coal Sector) shall visit the mine after the mine commences operation to assess the performance of the above measures mentioned in condition no.iii, iv& v.
- vii. PP shall stay in touch with Forest and Wildlife Department for any intervention required in future for protecting the wildlife.
- viii. The topsoil shall temporarily be stored at earmarked site(s) only and it should not be kept unutilized for long. The topsoil shall be used for land reclamation and plantation.
- ix. Regular surveillance on Silicosis shall be carried through regular occupational health checkup of 1/3 of the persons every year.
- x. The Project Proponent shall obtain the NOC from CGWA for intersection of ground water table.

STANDARD CONDITIONS



EC - M/s. Springway Mining Private Limited –Madhya Pradesh

Page 15 of 25

I. Statutory compliance

- 1) This Environmental Clearance (EC) is subject to orders/ judgment of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT and any other Court of Law, Common Cause Conditions as may be applicable.
- 2) The Project proponent complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Ors before commencing the mining operations.
- 3) The State Government concerned shall ensure that mining operation shall not be commenced till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining & Geology in strict compliance of Judgment of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Ors.
- 4) The Project Proponent shall follow the mitigation measures provided in MoEFCC's Office Memorandum No. Z-11013/57/2014-IA.II (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".
- 5) A copy of EC letter will be marked to concerned Panchayat / local NGO etc. if any, from whom suggestion / representation has been received while processing the proposal.
- 6) State Pollution Control Board/Committee shall be responsible for display of this EC letter at its Regional office, District Industries Centre and Collector's office/ Tehsildar's Office for 30 days.
- 7) The Project Authorities should widely advertise about the grant of this EC letter by printing the same in at least two local newspapers, one of which shall be in vernacular language of the concerned area. The advertisement shall be done within 7 days of the issue of the clearance letter mentioning that the instant project has been accorded EC and copy of the EC letter is available with the State Pollution Control Board/Committee and web site of the Ministry of Environment, Forest and Climate Change (www.parivesh.nic.in). A copy of the advertisement may be forwarded to the concerned MoEFCC Regional Office for compliance and record.



8) The Project Proponent shall inform the MoEF&CC for any change in ownership of the mining lease. In case there is any change in ownership or mining lease is transferred. PP needs to apply for transfer of EC as per provisions of the para 11 of EIA Notification, 2006 as amended from time to time.

II. Air quality monitoring and preservation

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

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

III. Water quality monitoring and preservation

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

 EC - M/s. Springway Mining Private Limited –Madhya Pradesh

Page 17 of 25

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

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

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

15) Project Proponent shall plan, develop and implement rainwater harvesting measures on long term basis to augment ground water resources in the area in consultation with

Central Ground Water Board/ State Groundwater Department. A report on amount of water recharged needs to be submitted to Regional Office MoEFCC annually.

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

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

IV. Noise and vibration monitoring and prevention

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

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

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

V. Mining plan

21) The Project Proponent shall adhere to approved mining plan, inter alia, including, total excavation (quantum of mineral, waste, over burden, inter burden and top soil etc.);

mining technology; lease area; scope of working (method of mining, overburden & dump management, O.B& dump mining, mineral transportation mode, ultimate depth of mining, concurrent reclamation and reclamation at mine closure; land-use of the mine lease area at various stages of mining scheme as well as at the end-of-life; etc.).

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

VI. Land reclamation

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

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

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

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

VII. Transportation

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

28) The Main haulage road within the mine lease should be provided with a permanent water sprinkling arrangement for dust suppression. Other roads within the mine lease should be wetted regularly with tanker-mounted water sprinkling system. The other areas of dust generation like crushing zone, material transfer points, material yards etc. should invariably be provided with dust suppression arrangements. The air pollution control equipments like bag filters, vacuum suction hoods, dry fogging system etc. shall be installed at Crushers, belt-conveyors and other areas prone to air pollution. The belt conveyor should be fully covered to avoid generation of dust while transportation. PP shall take necessary measures to avoid generation of fugitive dust emissions.

VIII. Green Belt



EC - M/s. Springway Mining Private Limited –Madhya Pradesh

Page 21 of 25

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

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

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

IX. Public hearing and human health issues

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

X. Corporate Environment Responsibility (CER)



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

XI. Miscellaneous

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

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

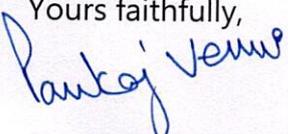
36) The Project Proponent shall submit six monthly compliance reports on the status of the implementation of the stipulated environmental safeguards to the MOEFCC & its concerned Regional Office, Central Pollution Control Board and State Pollution Control Board.

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

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

39) In pursuant to Ministry's O.M No 22-34/2018-IA.III dated 16.01.2020 to comply with the direction made by Hon'ble Supreme Court on 8.01.2020 in W.P. (Civil) No 114/2014 in the matter Common Cause vs Union of India, the mining lease holder shall after ceasing mining operations, undertake regrassing the mining area and any other area which may have been disturbed due to other mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.

- 40) The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
- 41) Concealing factual data failure to comply with any or submission of false/ fabricated data and of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.
24. The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules made there under and also any other orders passed by the Hon'ble Supreme Court of India/High Court and any other Court of Law relating to the subject matter.
25. Any appeal against this environmental clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
26. This issues with the approval of Competent Authority.

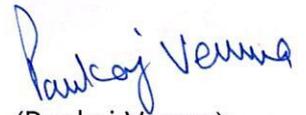
Yours faithfully,


(Pankaj Verma)
Scientist 'E'

Copy to:

- 1). **The Secretary**, Ministry of Mines, Government of India, Shastri Bhavan, New Delhi.
- 2). **The Secretary**, Department of Mines & Geology, Government of Madhya Pradesh, Secretariat, Bhopal.
- 3). **The Secretary**, Department of Environment, Government of Madhya Pradesh, Secretariat, Bhopal.
- 4). **The Secretary**, Department of Forests, Government of Madhya Pradesh, Secretariat, Bhopal.
- 5). **The Chief Wildlife Warden**, Government of Madhya Pradesh, Van Bhavan, 1st Floor, Tulsi Nagar, Bhopal - 462 003.

- 6). **The Addl. Principal Chief Conservator of Forests**, Regional Office (WZ), Regional Office (WZ), E-5, KendriyaParyavaranBhawan, E-5 Arera Colony, Link Road No.3, Ravishankar Nagar, Bhopal –462 016.
- 7). **The Chairman**, Central Pollution Control Board, PariveshBhavan, CBD-cum-Office complex, East Arjun Nagar, New Delhi-1100032.
- 8). **The Member Secretary**, Central Ground Water Authority, 18/11, Jam Nagar House, Man Singh Road, New Delhi-110011.
- 9). **The Chairman**, Madhya Pradesh State Pollution Control Board, ParyavaranParisar, E-5, Arera Colony, Bhopal – 462016.
- 10). **The Controller General**, Indian Bureau of Mines, Indira Bhavan, Civil Lines, Nagpur-440 001.
- 11). **The District Collector**, District Panna, Madhya Pradesh.
- 12). **Guard File.**
- 13). **PARIVESH PORTAL.**


(Pankaj Verma)
Scientist 'E'