

State Level Expert Appraisal Committee, Uttarakhand
"Gauradevi Paryavaran Bhawan, 3rd Floor,
46-B, I.T. Park, Sahastradhara Road, Dehradun"

Letter No: 03./SEAC
Dated: 18th January, 2023

The Second day of the 1st meeting of the Uttarakhand State Level Expert Appraisal Committee (SEAC) was held on 17th January, 2023 at the SEIAA/SEAC office Dehradun. The following were present in the meeting –

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|-------------------------------|-----------|
| 1) Shri Shailendra Singh Bist | Chairman |
| 2) Dr. Ashwani Kumar Minocha | Member |
| 3) Dr. Ashutosh Gautam | Member |
| 4) Dr. Basudev Prasad Purohit | Member |
| 5) Shri Nitish Mani Tripathi | Secretary |

The meeting was presided by Shri S.S. Bist. The meeting proceeded as per the agenda with permission of the chair. It was noted that proposals, for the meeting, being considered for the appraisal includes Housing/Construction, Industrial, Mining (R.B.M/Soapstone) etc. The concerned recognized environment consultants of the proponents made the presentations.

Consideration/Reconsideration of Proposals For Environmental Clearance (E.C.)

Proposal – 1

Online proposal No.	SIA/UK/MIS/253709/2022
Name of the Project	Proposed Luxurious 5 star Hotel cum Commercial Space at Plot No-86/1 (Old), 265/614 (New), Rajpur Road, Dehradun.
Name & Address of Proponent	M/s Mahalaxmi Buildwell
Whether New/Expansion Project	New
Total Plot Area	6670.52 m ²
Total Covered Area	28472 m ²
Project Category	"B" & 8(a) enlisted in project /activity as per EIA Notification, 2006

The project was submitted vide proposal no SIA/UK/MIS/253709/2022 on dated 29th January, 2022 by the project proponent. The committee observed that the proponent is seeking Environmental Clearance for Proposed Luxurious 5 star Hotel cum Commercial Space. The above proponent has submitted detailed project related information in Form - 1, Form – 1A, Conceptual Plan, EMP, Sanction Letter from MDDA, Fire NoC & Land Documents. **Project was prepared by Accredited consultancy firm Cognizance Research India Pvt. Ltd. and project was presented by Shri Ankur Sharma, Managing Director & EIA Coordinator.** The details of the project are given below:-

S.No	Parameters	Description
1	Name of the Project	Proposed Luxurious 5 star Hotel cum Commercial at Plot No.86/1 (Old), 265/614 (New), Rajpur Road, Dehradun, Uttarakhand by M/s Mahalaxmi Buildwell
2	Production Capacity	Guest Rooms – 122 nos, Kitchen – 03 nos, Banquet Hall - 02 nos, Bar – 02 nos, Ball Room – 01 No, Gym – 01 No, Swimming Pool and Pool Bar – 01 No, Laundry -01 No, Restaurants – 03 Nos.
3	Total Plot Area	6670.52 sqm
4	Proposed Site Location	Plot No.86/1 (Old), 265/614 (New), Rajpur Road, Dehradun, Uttarakhand – 248001 (Uttarakhand)
5	Coordinates of Project site	30° 20' 44.77" N 78° 3' 44.82" E
6	Water Requirement (KLD)	During Construction: 200 KLD During operation: 110 KLD
7	Source of Water	The water supply will be sourced from private water tanker suppliers for the construction and from JalSansthan/ Bore Well for domestic purpose only.
8	Waste Water Management Waste water generation	Waste Water Generation: 74 KLD. About 74 KLD treated water will be available from both ETP

	Mode of Disposal	& STP for secondary purpose use in which 05 KLD can be used in road washing and 10 KLD for green belt development. 12 KLD of water will be reused in flushing and remaining 33 KLD may be sent to city STP through sewer line considering 20% evaporation losses
9	Solid waste Generation & Disposal	Approx. 75 kg/day. The solid waste is being segregated at source & collected & recycled
10	Hazardous Waste Generation & Disposal	Schedule – I -5.1 Used Oil: 50 Liter/Annum Per DG Set which is recyclable will be sold to authorized Recycler. Schedule – 35.3 ETP Sludge: 500 kg /annum which will be disposed through TSDF.
11	E-Waste	-
12	Green Area Development	For the Project Green belt will be maintained in 2202 Sq. m (33 % of the total land area), which will enhance the beauty of the site and help combat air and noise pollution.
13	Total Manpower	During operation 100 nos.
14	Electricity/Power requirement	2500KW
15	Alternate Power Source	02 DG sets of 1500 KVA each
16	Utilities	-
17	Land form, Land use and land ownership	Private land
18	Project cost	143.546 Cr
19	Corporate Environment Responsibility (CER)	Rs. 2.87 crore (2% of the total project cost)

The Committee examined the original proposal and presentation was made by the Project Proponent wherein he informed that they have made minor violation by doing some initial construction work.

The SEAC has raised following observations-

- SEAC asked the Project Proponent for submitting actual amount of money incurred so far by the project to estimate the penalty @ 0.5% as project proponent himself declared that violation has been done.
- SEAC asked the Project Proponent to submit detailed revised project proposal along with remediation plan before 30th January, 2023.
- The committee decided to defer the proposal for next meeting subject to the receiving of the above mentioned documents.

Proposal – 2

Online proposal No.	SIA/UK/MIS/272985/2022
Name of the Project	Proposed establishment of 200 TPH Stone Crusher Plant along with 500 KVA Green Insulated DG set at Khata No. 1283 (Khasra No. 356 Kha, 357 Kha, 358, 359, 360, 361 & 362), Khata No. 1529 (Khasra No. 363 Mi), Khata No. 1061 (Khasra No. 363 Mi), Khata No. 126 (Khasra No. 363 Mi) Village - Dhakrani, Tehsil - Vikasnagar, District - Dehradun.
Name & Address of Proponent	M/s Sai Chetha Enterprises (LLP) by Shri Jitender Kumar Dhingra (Partner)
Whether New/Expansion/Modernization Project	New
Total Plot Area	1.6505 Ha.
Project Category	B2, (Orange Category as per Doon Valley Notification 1989 & 2020)

The project was submitted vide proposal no SIA/UK/MIS/272985/2022 on dated 15th May, 2022 by the project proponent. The committee observed that the proponent is seeking Environmental Clearance for Proposed establishment of 200 TPH Stone Crusher Plant along with 500 KVA Green Insulated DG set. The committee observed that this project activity is covered under Orange Category as per the Doon Valley Notification 1989 (as amended). The proponent has submitted detailed project related information in Form 1, Pre Feasibility Report and EMP. **Project was prepared by Accredited consultancy firm M/s Rian Enviro Pvt. Ltd. and project was presented by Shri Muzaffar Ahmad, EIA Coordinator.** The details of the project are as follows:-

S.No	Parameters	Description
1	Name of the Project	Environmental Clearance for proposed establishment of

		200 TPH Stone Crusher Plant along with 500 KVA DG set by M/s Sai Chestha Enterprises (LLP).
2	Production Capacity	200 TPH
3	Total Plot Area	1.6505 Hectare.
4	Proposed Site Location	Khata No. 1283 (Khasra No. 356 Kha, 357 Kha, 358, 359, 360, 361 & 362), Khata No. 1529 (Khasra No. 363 Mi), Khata No. 1061 (Khasra No. 363 Mi), Khata No. 126 (Khasra No. 363 Mi) Village Dhakrani, Tehsil Vikasnagar,, District Dehradun.
5	Coordinates of Project site	Latitude 30°27'30.47"N, Longitude 77°43'44.10"E(Centre)
6	Water Requirement (KLD)	Fresh water - 7.74 KLD
7	Source of Water	Borewell
8	Waste Water Management Waste water generation Mode of Disposal	Domestic sewage of 0.20 KLD will be generated which shall be disposed through Septic tank/soak pit
9	Solid waste Generation & Disposal	1.60 Kg/day. It will be segregated at source, collected in bins and disposed off as per UKPCB Norms
10	Hazardous Waste Generation & Disposal	Spent oil - 0.5 MTPA Discarded Drums/Barrels - 10 Nos./Annum. Will be handed over to authorized recyclers/re-processors.
11	E-Waste	Nil.
12	Green Area Development	33.0 % of total plot area.
13	Total Manpower	08 Nos.
14	Electricity/Power requirement	400 KVA
15	Alternate Power Source	DG Set- 500 KVA (01 No.)
16	Utilities	-
17	Land form, Land use and land ownership	Non Agricultural land
18	Project cost	1.23Crores
19	Corporate Environment Responsibility (CER)	2% of Project cost.

The Committee after examining the original proposal and after going through the presentation made by the proponent, has raised the following observations-

- The Project proponent shall install Solar lights in the adjoining villages in consultation with local Authorities/Forest officials.
- Project Proponent shall install solar lights on the periphery of its premises.
- Regular health checkup of workers by recognized medical practitioners shall be ensured by the Project proponent and submit report to SEIAA along with six monthly compliance report.
- The project proponent will submit fortnightly reports pertaining to ambient air quality, and quarterly report pertaining to ground water quality and noise. These reports should be monitored and generated by a NABL approved laboratory having scope of it. The reports pertaining to ambient air quality shall be submitted before 10th day of every month and the reports pertaining to ground water quality and noise shall be submitted before 10th day of every fourth month to SEIAA.
- The Project proponent will install advanced dust suppression system and advanced dust collecting devices at the project site.
- The Project Proponent shall develop multi layered green belt around the periphery of the plant. The green belt thus developed should be on more than 10 percent of the project area. The project proponent will develop additional green belt in the surrounding areas to complete the requirement of 33% green belt of the project area. The project proponent shall plant fast growing species such as bamboo in the premises.
- The Project proponent shall plant fast growing species on both the sides of road connecting from the project premises to main road.
- The project proponent shall submit the NoC from CGWB for utilization of ground water.
- The project proponent shall undertake rain water harvesting activities in the surrounding villages preferably in the schools, primary health centers in consultation with local authorities.
- Barricading (boundary) of at least 20 feet height around the project site shall be constructed by the project proponent.
- The Proponent shall ensure installation of water sprinklers within the premises to prevent dust hazards.

- Adequate drinking water and sanitation facility shall be provided on site for the workforce. Provision shall be made for supply of domestic fuel to the workforce so that they do not remain dependent on adjoining forest areas for fuel wood.
- All the vehicles being used for transportation from the stone crushing plant should have a valid pollution under control certificate.
- The Project proponent shall submit dust emission dispersion modeling to SEIAA on yearly basis from Government recognized institution/NABET approved consultant.
- The project proponent shall ensure maintenance of the approach road.
- The project proponent is allowed to run the plant only during day time. The plant running hour shall not be more than 10 hours in a day.
- The Project Proponent shall obtain CTE/CTO from UKPCB prior to operation of the plant.
- The Project Proponent shall follow guidelines issued for stone crushing plant by MoEF&CC, CPCB and UKPCB as amended from time to time.
- The Project Proponent shall follow directions/orders issued by Hon'ble High Court/NGT/ Supreme Court with respect to establishment of stone crushing plant or on issues pertaining to pollution by stone crushing plant.
- The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated E.C conditions including results of monitored data to this Authority and Integrated regional office of MoEF&CC, Govt of India at Dehradun.

Based on above observations and subject to conditions (**Annexure-1**), the committee recommended the above project for grant of Environmental Clearance.

Proposal – 3

Online proposal No.	SIA/UK/MIS/273002/2022
Name of the Project	Proposed establishment of 200 TPH Stone Crusher Plant along with 500 KVA Green Insulated DG set at Khata No. 1283 (Khasra No. 356 Kha, 357 Kha, 358, 359, 360, 361 & 362) and Khata No. 1284 (Khasra No. 283, 284, 285, 286, 287, 292, 293, 355, 556 Ka & 29 Ka) Village - Dhakrani, Tehsil - Vikasnagar, District - Dehradun.
Name & Address of Proponent	M/s Shri Ganpati Stone Crusher by Shri Kamal Singh (Partner)
Whether New/Expansion/Modernization Project	New
Total Plot Area	1.3130 Ha.
Project Category	B2, (Orange Category as per Doon Valley Notification 1989 & 2020)

The project was submitted vide proposal no SIA/UK/MIS/273002/2022 on dated 15th May, 2022 by the project proponent. The committee observed that the proponent is seeking Environmental Clearance for proposed establishment of 200 TPH Stone Crusher Plant along with 500 KVA DG Set. The committee observed that this project activity is covered under Orange Category as per the Doon Valley Notification 1989 (as amended). The proponent has submitted detailed project related information in Form 1, Pre Feasibility Report and EMP. **Project was prepared by Accredited consultancy firm M/s Rian Enviro Pvt. Ltd. and project was presented by Shri Muzaffar Ahmad, EIA Coordinator.** The details of the project are as follows:-

S.No	Parameters	Description
1	Name of the Project	Environmental Clearance for proposed establishment of 200 TPH Stone Crusher Plant along with 500 KVA DG set by M/s Shri Ganpati Stone Crusher.
2	Production Capacity	200 TPH
3	Total Plot Area	1.3130 Hectare.
4	Proposed Site Location	Khata No. 1283 (Khasra No. 356 Kha, 357 Kha, 358, 359, 360, 361 & 362) and Khata No. 1284 (Khasra No. 283, 284, 285, 286, 287, 292, 293, 355, 556 Ka & 29 Ka), Village Dhakrani, Tehsil – Vikasnagar, District – Dehradun, Uttarakhand.
5	Coordinates of Project site	Latitude 30°27'34.32"N, Longitude 77°43'41.13"E (Centre)
6	Water Requirement (KLD)	Fresh water - 7.74 KLD
7	Source of Water	Borewell
8	Waste Water Management Waste water generation Mode of Disposal	Domestic sewage of 0.20 KLD will be generated which shall be disposed through Septic tank/soak pit
9	Solid waste Generation &	1.60 Kg/day. It will be segregated at source, collected in

	Disposal	bins and disposed off as per UKPCB Norms
10	Hazardous Waste Generation & Disposal	Spent oil - 0.5 MTPA Discarded Drums/Barrels - 10 Nos./Annum. Will be handed over to authorized recyclers/re-processors.
11	E-Waste	Nil.
12	Green Area Development	33.0 % of total plot area.
13	Total Manpower	08 Nos.
14	Electricity/Power requirement	400 KVA
15	Alternate Power Source	DG Set- 500 KVA (01 No.)
16	Utilities	—
17	Land form, Land use and land ownership	Non Agricultural land
18	Project cost	1.00Crores
19	Corporate Environment Responsibility (CER)	2% of Project cost.

The Committee after examining the original proposal and after going through the presentation made by the proponent as well as after visiting the project site on 16th January, 2023, has raised the following observations-

- The Project proponent shall install Solar lights in the adjoining villages in consultation with local Authorities/Forest officials.
- Project Proponent shall install solar lights on the periphery of its premises.
- Regular health checkup of workers by recognized medical practitioners shall be ensured by the Project proponent and submit report to SEIAA along with six monthly compliance report.
- The project proponent will submit fortnightly reports pertaining to ambient air quality, and quarterly report pertaining to ground water quality and noise. These reports should be monitored and generated by a NABL approved laboratory having scope of it. The reports pertaining to ambient air quality shall be submitted before 10th day of every month and the reports pertaining to ground water quality and noise shall be submitted before 10th day of every fourth month to SEIAA.
- The Project proponent will install advanced dust suppression system and advanced dust collecting devices at the project site.
- The Project Proponent shall develop multi layered green belt around the periphery of the plant. The green belt thus developed should be on more than 10 percent of the project area. The project proponent will develop additional green belt in the surrounding areas to complete the requirement of 33% green belt of the project area. The project proponent shall plant fast growing species such as bamboo in the premises.
- The Project proponent shall plant fast growing species on both the sides of road connecting from the project premises to main road.
- The project proponent shall submit the NoC from CGWB for utilization of ground water.
- The project proponent shall undertake rain water harvesting activities in the surrounding villages preferably in the schools, primary health centers in consultation with local authorities.
- Barricading (boundary) of at least 20 feet height around the project site shall be constructed by the project proponent.
- The Proponent shall ensure installation of water sprinklers within the premises to prevent dust hazards.
- Adequate drinking water and sanitation facility shall be provided on site for the workforce. Provision shall be made for supply of domestic fuel to the workforce so that they do not remain dependent on adjoining forest areas for fuel wood.
- All the vehicles being used for transportation from the stone crushing plant should have a valid pollution under control certificate.
- The Project proponent shall submit dust emission dispersion modeling to SEIAA on yearly basis from Government recognized institution/NABET approved consultant.
- The project proponent shall ensure maintenance of the approach road.
- The project proponent is allowed to run the plant only during day time. The plant running hour shall not be more than 10 hours in a day.
- The Project Proponent shall obtain CTE/CTO from UKPCB prior to operation of the plant.
- The Project Proponent shall follow guidelines issued for stone crushing plant by MoEF&CC, CPCB and UKPCB as amended from time to time.

- The Project Proponent shall follow directions/orders issued by Hon'ble High Court/NGT/ Supreme Court with respect to establishment of stone crushing plant or on issues pertaining to pollution by stone crushing plant.
- The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated E.C conditions including results of monitored data to this Authority and Integrated regional office of MoEF&CC, Govt of India at Dehradun.

Based on above observations and subject to conditions (**Annexure-1**), the committee recommended the above project for grant of Environmental Clearance.

Consideration/Reconsideration of Proposals For Terms of Reference (ToR)

Proposal – 4

Online proposal No.	SIA/UK/IND3/76160/2021
Name of the Project	Proposed Chemical Unit for Manufacturing of Formaldehyde 100 MT per day at Plot No. 10 B, Sector 09, IIE Pantnagar, Rudrapur, District-Udham Singh Nagar.
Name & Address of Proponent	M/s GMR Industries by Shri Vijay Bhushan Garg (Partner)
Whether New/Expansion/Modernization Project	New
Total Plot Area	2466.31 m ²
Project Category	B1 & 5(f) Synthetic Organic Chemical enlisted in project/activity as per EIA Notification, 2006

The project was submitted vide proposal no SIA/UK/IND3/76160/2021 on dated 26th April, 2022 by the project proponent. The committee observed that the proponent is seeking Environmental Clearance for Proposed Chemical Unit for Manufacturing of Formaldehyde 100 MT per day. The proponent has submitted detailed project related information in Form 1, Pre Feasibility Report and EMP. **Project was prepared by Accredited consultancy firm Cognizance Research India Pvt. Ltd. and project was presented by Shri Ankur Sharma, Managing Director & EIA Coordinator.**

The Committee after examining the original proposal and after going through the presentation made by the proponent, has raised the following observations-

- As per the letter no- CPCB/IPC-VII-CEPI/NGT/2019 dated 25-10-2019 issued by CPCB (page-2 last paragraph) "B. Consideration of proposal for grant of Environmental Clearance for new and expansion activities listed in "Red" & "Orange" categories located in critically polluted areas and severely polluted areas.
 - (i) Any project or activity specified as category 'B1' will be appraised at the central level, if located in whole or in part within 5 KM from the boundary of critically polluted areas. However, category 'B2' projects shall be considered at state level stipulating Environmental Clearance conditions as applicable for the category 'B1' project/activities."
- Since the proposed project probably falls within 5 KM of critically polluted area viz. Industrial area Udham Singh Nagar (Rudrapur) hence, to further clarify this issue the committee decided to defer the proposal for the next meeting of SEAC.


Based on the presentation made by the project proponent, Committee screened the above project under B1 category as per the EIA Notification, 2006.

Proposal – 5

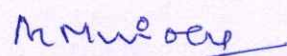
Online proposal No.	SIA/UK/MIN/73878/2022
Site Details	Proposed Extraction of Soapstone at Village - Khatigaon & Rangdev, Tehsil & District - Bageshwar.
Name & Address of Proponent	Shri Deewan Singh Papola S/o Shri Trilok Singh Papola, Village - Papoli, Post - Kafli, Tehsil & District - Bageshwar.
Coordinates	Latitude- 29°53'11.58"N to 29°53'39.77"N Longitude- 79°56'47.70"E to 79°56'32.05"E
Mining Lease Area	8.529 Ha.
Category	B1 & 1(a) enlisted in project /activity as per EIA Notification, 2006

The project was submitted vide proposal no SIA/UK/MIN/73878/2022 on dated 20th March, 2022 by the project proponent. The committee observed that the proponent is seeking Environmental Clearance for extraction of Soapstone in accordance with the provisions of EIA Notification, 2006 as enlisted in Schedule 1(a). The proponent has submitted detailed project related information in Form 1, Pre Feasibility Report and EMP. **Project was prepared by Accredited consultancy firm Cognizance Research India Pvt. Ltd. and project was presented by Shri Ankur Sharma, Managing Director & EIA Coordinator.**

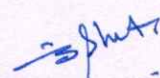
Hence, committee agreed to issue ToR (**Annexure-2**) to the proponent for preparation of EIA report subject to the submission of ecological sensitive certificate of 10 Km. radial distance from concern DFO/Competent Authority. Any other ToR issued by the competent authority previously should be treated as amended as per the new ToR




(Shri S.S. Bist)
Chairman, SEAC




(Dr. A.K. Minocha)
Member, SEAC



(Dr. Ashutosh Gautam)
Member, SEAC



(Dr. B.P. Purohit)
Member, SEAC



(Shri Nitish Mani Tripathi)
Secretary, SEAC

Annexure-1

- 1) Consent to Establish/Consent to Operate shall be obtained from Uttarakhand Environment Protection and Pollution Control Board under relevant provisions of Central Air Act and Central Water Act before starting up of any construction activity at the site.
- 2) The building plan and structural design of the unit shall comply with requirements of Seismic Zone – IV as outlined in National Building Code.
- 3) No further expansion or modifications in the plan shall be carried out without the prior approval of competent authority.
- 4) The Project Authority shall strictly comply with provisions of Doon Valley Notification, 1989 & 2020
- 5) During any type of construction in the existing land area, the topsoil excavated shall be used for backfilling/ landscape development/ green belt development. The same shall not be disposed off outside the boundaries of project site without approval of Competent Authority.
- 6) The groundwater samples shall be tested from accredited labs and it shall be ensured that test results comply with CPCB standards so as to ensure that there is no threat to groundwater quality by leaching of heavy metals and toxic contaminants.
- 7) All stacking and loading areas should be provided with proper garland drains equipped with baffles to prevent runoff from the site to enter any adjoining water body. Construction spoils including bituminous materials must not be allowed to contaminate watercourse and dumpsites as these may leach into ground water
- 8) The manufacturing process shall be carried out in closed atmosphere without having any air emissions. However air emissions from DG set should comply with CPCB norms by designing stack of adequate height
- 9) No waste water shall be discharged outside the plant boundary and 'Zero Discharge' shall be strictly adhered to permissible standards.
- 10) All the hazardous residue and wastes arising from units shall be either sent to TSDF for land filling or for incineration. Hazardous chemicals shall be stored in tanks in tank farms, drums, carboys etc.
- 11) The gaseous emissions (SO_x , NO_x , CO, VOC and HC) and particulate matter along with RSPM levels from various process units shall conform to the standards prescribed by the concerned authorities from time to time. At no time, the emission levels shall go beyond the stipulated standards. In the event of failure of pollution control system adopted by the unit, the respective unit shall not be restarted until the control measures are rectified to achieve the desired efficiency.
- 12) Fugitive emissions in the work zone environment, product, raw materials and storage areas shall be regularly monitored. The emissions shall conform to the limits imposed by the UKPCB/Central Pollution Control Board. Dust / Powder from the formulation process shall be collected by dust extractor.
- 13) The project authorities shall strictly comply with the rules and guidelines under Manufacture, Storages and Import of Hazardous Chemicals Rules, 1989, as amended from time to time. Authorization from the UKPCB shall be obtained for collection, treatment, storage, and disposal of hazardous wastes.
- 14) The DG sets shall use Low Sulphur Diesel type fuel and should have stack height complying with CPCB norms. DG set should be operated only during power failure in emergency situation.
- 15) The ambient air quality and noise levels as per CPCB norms shall be ensured through a monitoring system. Dust Suppression during construction activity shall be ensured. Acoustic enclosures shall be provided with all machineries and DG sets on site complying with Noise Levels as per CPCB standards.
- 16) All liquid raw materials shall be stored in storage tanks and drums. Closed handling systems for chemicals and solvents shall be provided. Magnetic seals shall be provided for pumps/agitators for reactors for reductions of fugitive emissions.
- 17) The vehicles used at the factory site should comply with emission norms and noise level standards of CPCB and State Transport Department. They should be operated only during non peak hours.

- 18) All necessary efforts shall be made to ensure safety and hygiene of workforce. First Aid facility shall be established and trained manpower to deal with emergency cases shall be engaged. The labour force engaged on site shall be screened for health from time to time
- 19) Adequate drinking water and sanitation facility shall be provided on site for the workforce. Provision shall be made for supply of domestic fuel to the workforce so that they do not remain dependent on adjoining forest areas for fuel wood.
- 20) Training shall be imparted to all employees on safety and health aspects of handling of chemicals. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis.
- 21) A separate Environmental Management Cell equipped with full fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions.
- 22) The fire safety arrangements and emergency exit plan should be as per the norms of the concerned regulatory authority/agency.
- 23) Rainwater harvesting for surface run off shall be ensured. Before recharging the surface run off, pre treatment must be done to remove suspended matter, oil and other particles.
- 24) Energy consumption measures like installation of LED/TFL for the external lighting area shall be ensured. The used LED/TFL shall be properly collected and disposed off as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination.
- 25) One third of the total project site area shall be converted into green belt. The green belt shall not include kitchen garden, flower pots and grasses/herbs in the area. It shall comprise of tree stand of aesthetic/fruit/timber value. Quality planting material shall be used during plantation in consultation with State Forest Department. The species should include criterion of fruit bearing and fast growth.
- 26) Solar panel/energy should be encouraged/installed in the premises.
- 27) The project proponent shall undertake in eco-developmental measures including community welfare measures in the project area for the overall improvement of the environment.
- 28) The project proponent shall ensure compliance to provisions of the all Acts, Rules, Regulations and Guidelines, for the time being in force, as applicable to the project.
- 29) The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated E.C conditions including results of monitored data to this Authority and Integrated regional office of MoEF&CC, Govt of India at Dehradun.

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Terms of Reference (ToR)

Terms of Reference (TOR) for preparation of Environmental Impact Assessment (EIA) and Environmental Management Plan (EMP) for "Mining of Minerals" as per the EIA Notification, 2006 has been devised to improve the quality of the reports and facilitate decision-making transparent and easy. TOR will help the project proponents to prepare report with relevant project specific data and easily interpretable information. TOR for mining of minerals is expected to cover all environmental related features.

Mining of minerals plays a positive role in the process of country's economic development. In addition to the contribution towards economic growth, mining can also be a major source of degradation of physical as well as social environment, unless it is properly managed. Environmental impacts can arise during all activities of the mining process. Minimizing the damage due to mining operations depends on sound environmental practices in a framework of balanced environmental legislation. The potential adverse effects of mining activities include air pollution, surface and groundwater pollution, noise and vibration, damage to local ecology, natural topography and drainage, depletion of water resources etc. All these environmental components are required to be considered while selecting a proper methodology of mining, mitigation measures to reduce pollution load, conservation of natural resources etc.

The projects of mining of minerals as stated in the schedule require prior environment clearance under the EIA notification, 2006. Category 'A' Projects are handled in the MoEF&CC and Category 'B' projects are being handled by the respective State Environment Impact Assessment Authorities (SEIAAs) notified by MoEF&CC and following the procedure prescribed under the EIA Notification, 2006. As per this Notification, as amended, the projects of mining of minerals with mining lease area equal to or greater than 50 hectare are to be handled at the level of the MoEF&CC for grant of EC. Such projects with mining lease area less than 50 hectare are to be handled by the respective State Environment Impact Assessment Authority (SEIAA).

1(a): STANDARD TERMS OF REFERENCE FOR CONDUCTING ENVIRONMENT IMPACT ASSESSMENT STUDY FOR NON-COAL MINING PROJECTS AND INFORMATION TO BE INCLUDED IN EIA/EMP REPORT

- 1) Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one year prior to 1994. It may also be categorically informed whether there had been any increase in production after the EIA Notification 1994 came into force, w.r.t. the highest production achieved prior to 1994.
- 2) A copy of the document in support of the fact that the Proponent is the rightful lessee of the mine should be given.
- 3) All documents including approved mine plan, EIA and Public Hearing should be compatible with one another in terms of the mine lease area, production levels, waste generation and its management, mining technology etc. and should be in the name of the lessee. The above reports should also match with the latest District Survey Report (DSR) notification dated 25th July, 2018. **Data obtained from this DSR should be incorporated in the EIA Report for Impact Identification, Interpretation, Prediction, Carrying Capacity and Mitigation.**
- 4) All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/toposheet, topographic sheet, geomorphology and geology of the area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).
- 5) Information should be provided in Survey of India Toposheet in 1:50,000 scale indicating geological map of the area, geomorphology of land forms of the area, existing minerals and mining history of the area, important water bodies, streams and rivers and soil characteristics.
- 6) Details about the land proposed for mining activities should be given with information as to whether mining conforms to the land use policy of the State; land diversion for mining should have approval from State land use board or the concerned authority.
- 7) It should be clearly stated whether the proponent Company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/violation of the environmental or forest norms/ conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large, may also be detailed in the EIA Report.

- 8) Issues relating to Mine Safety, including subsidence study in case of underground mining and slope study in case of open cast mining, blasting study etc. should be detailed. The proposed safeguard measures in each case should also be provided.
- 9) The study area will comprise of 10 km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc. should be for the life of the mine / lease period.
- 10) Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
- 11) Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be given.
- 12) A Certificate from the Competent Authority in the State Forest Department should be provided, confirming the involvement of forest land, if any, in the project area. In the event of any contrary claim by the Project Proponent regarding the status of forests, the site may be inspected by the State Forest Department along with the Regional Office of the Ministry to ascertain the status of forests, based on which, the Certificate in this regard as mentioned above be issued. In all such cases, it would be desirable for representative of the State Forest Department to assist the Expert Appraisal Committees.
- 13) Status of forestry clearance for the broken up area and virgin forestland involved in the Project including deposition of net present value (NPV) and compensatory afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.
- 14) Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.
- 15) The vegetation in the RF / PF areas in the study area, with necessary details, should be given.
- 16) A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly, detailed mitigative measures required, should be worked out with cost implications and submitted.
- 17) Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Ramsar site Tiger/Elephant Reserves/(existing as well as proposed), if any, within 10 km of the mine lease should be clearly indicated, supported by a location map duly authenticated by Chief Wildlife Warden. Necessary clearance, as may be applicable to such projects due to proximity of the ecologically sensitive areas as mentioned above, should be obtained from the Standing Committee of National Board of Wildlife and copy furnished.
- 18) A detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of the mine lease)] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. In case of any scheduled-I fauna found in the study area, the necessary plan alongwith budgetary provisions for their conservation should be prepared in consultation with State Forest and Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost.
- 19) Proximity to Areas declared as 'Critically Polluted' or the Project areas likely to come under the 'Aravali Range', (attracting court restrictions for mining operations), should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB or State Mining Department should be secured and furnished to the effect that the proposed mining activities could be considered.
- 20) Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarcating LTL, HTL, CRZ area, location of the mine lease w.r.t CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Mining Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).
- 21) R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village(s) located in the mine lease area will be shifted or not. The issues relating to

- shifting of village(s) including their R&R and socio-economic aspects should be discussed in the Report.
- 22) One season (non-monsoon) [i.e. March-May (Summer Season); October-December (post monsoon season) ; December-February (winter season)] primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. The mineralogical composition of PM₁₀, particularly for free silica, should be given.
 - 23) Air quality modeling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of vehicles for transportation of mineral. The details of the model used and input parameters used for modeling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The wind roses showing pre-dominant wind direction may also be indicated on the map.
 - 24) The water requirement for the Project, its availability and source should be furnished. A detailed water balance should also be provided. Fresh water requirement for the Project should be indicated.
 - 25) Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.
 - 26) Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.
 - 27) Impact of the Project on the water quality, both surface and groundwater, should be assessed and necessary safeguard measures, if any required, should be provided.
 - 28) Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. In case the working will intersect groundwater table, a detailed Hydro Geological Study should be undertaken and Report furnished. The Report inter-alia, shall include details of the aquifers present and impact of mining activities on these aquifers. Necessary permission from Central Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished.
 - 29) Details of any stream, seasonal or otherwise, passing through the lease area and modification/diversion proposed, if any, and the impact of the same on the hydrology should be brought out.
 - 30) Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and bgl. A schematic diagram may also be provided for the same.
 - 31) A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the Project. Phase-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under plantation and the species to be planted. The details of plantation already done should be given. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to pollution.
 - 32) Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered. Project Proponent shall conduct Impact of Transportation study as per Indian Road Congress Guidelines.
 - 33) Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report.
 - 34) Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and with adequate number of sections) should be given in the EIA report.
 - 35) Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.

- 36) Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.
- 37) Measures of socio economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.
- 38) Detailed environmental management plan (EMP) to mitigate the environmental impacts which, should inter-alia include the impacts of change of land use, loss of agricultural and grazing land, if any, occupational health impacts besides other impacts specific to the proposed Project.
- 39) Public Hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.
- 40) Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- 41) The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.
- 42) A Disaster management Plan shall be prepared and included in the EIA/EMP Report.
- 43) Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.
- 44) Besides the above, the below mentioned general points are also to be followed:-
 - a) Executive Summary of the EIA/EMP Report
 - b) All documents to be properly referenced with index and continuous page numbering.
 - c) Where data are presented in the Report especially in Tables, the period in which the data were collected and the sources should be indicated.
 - d) Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using the MoEF&CC/NABL accredited laboratories. All the original analysis/testing reports should be available during appraisal of the Project.
 - e) Where the documents provided are in a language other than English, an English translation should be provided.
 - f) The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted.
 - g) While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants issued by MoEF&CC vide O.M. No. J-11013/41/2006-IA.II(I) dated 4th August, 2009, which are available on the website of this Ministry, should be followed.
 - h) Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the PFR for securing the TOR) should be brought to the attention of MoEF&CC with reasons for such changes and permission should be sought, as the TOR may also have to be altered. Post Public Hearing changes in structure and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) will entail conducting the PH again with the revised documentation.
 - i) As per the circular no. J-11011/618/2010-IA.II(I) dated 30.5.2012, certified report of the status of compliance of the conditions stipulated in the environment clearance for the existing operations of the project, should be obtained from the Regional Office of Ministry of Environment, Forest and Climate Change, as may be applicable.
 - j) The EIA report should also include (i) surface plan of the area indicating contours of main topographic features, drainage and mining area, (ii) geological maps and sections and (iii) sections of the mine pit and external dumps, if any, clearly showing the land features of the adjoining area.

Note: 1) The study area shall comprise of radial distance of 10 KM from the project site and the study period is three months. The impact on each of the above parameter as a result of mining shall be assessed through appropriate modeling and prediction methods considering base line data.

2) District Survey Report should be submitted as per the latest notification issued by MoEF&CC.
