

**State Level Expert Appraisal Committee, Uttarakhand
653, Indiranagar Colony, Seemadwar Road, Dehradun**

**Letter No: @SEAC
Dated: January, 2020**

The 9th meeting of the 1st Day of Uttarakhand State Level Expert Appraisal Committee (SEAC) was held on 26th December, 2019 at the SEIAA/SEAC office Dehradun. The following were present at the meeting –

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|------------------------|------------------|
| 1) Dr. R.K. Srivastava | Chairman |
| 2) Dr. P.S. Bisht | Member |
| 3) Dr. B.P. Purohit | Member |
| 4) Shri Rajiv Dhiman | Member Secretary |

The meeting was presided by Dr. R.K. Srivastava. 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 Building/Construction, Industrial & Mining (R.B.M/Soapstone) etc. The concerned recognized environment consultants of the proponents made the presentations.

Proposal – 1

Site Details	Village-Sadhunagar, Sitarganj, Dist- U.S. Nagar.
Name & Address of Proponent	Mr. Puneet Kumar Goyal S/o Shri Govind Kumar, R/o- Ward-3, Sitarganj, Distt- Udham Singh Nagar
Coordinates	Latitude- 29°0'56.610"N to 29°1' 11.018"N Longitude- 79°42'25.487"E to 79°42' 30.936"E
Mining Lease Area	3.024 Ha.
Category	B1 & 1(a) enlisted in project /activity as per EIA Notification, 2006

The committee observed that proponents seek Environmental Clearance for extraction of sand/bajri/boulder (River Bed Material) in accordance with the provisions of EIA Notification, 2006 as enlisted in Schedule 1(a). As per the MoEF&CC No- 3181 dated- 14-08-2018 the project fall in B2. But according to latest O.M of MoEFF&CC Impact Assessment Division's O.M No- F.No.L- 11011/175/2018-IA-II(M) dated-12-12-2018 the following mining project is falling in B1 category because there are four another mine lease falls in the aerial distance of 500 meter in the periphery of the above mine site and the total of cumulative area of all mine lease area (**Shri Puneet Kumar Goyal 3.024 Ha. + Shri Fareed Khan 2.414 Ha. + Shri Suresh Chandra Joshi 0.549 Ha. + Shri Sharif Ahmad 0.790 Ha + Shri Sandeep Kumar Jindal 0.404 Ha**) is >5 Ha. The project was submitted vide proposal no SIA/UK/MIN/37126/2019 on dated 1st June, 2019 by project proponent. The details of the project are given below:-

S.No	Details	Reply
1	New or Ongoing Site	New Site
2	Letter of Intent (Valid upto)	Lease has been granted vide letter No. 1617/VII-1/2018/48kha /18 Dated: 29.08.2018 for 5 year.
3	Mine Plan (Valid upto)	The mining plan is approved vide letter no. IJ;k 591m0[k0@ek0 lyku@m/keflaguxj@20118&19 fnukad 15@06@2019 for 5 years.
4	No. Of Pits	One
5	Thickness of soil	-
6	Maximum explorable depth	1.5m
7	Balanced undisturbed agriculture land (in Ha.)	-
8	Total Mineable Reserve	99792MT
9	Estimated Quantity (Geological Reserve)	298900 MT
10	Green Belt area (Valid upto)	0.99ha (Outside from the lease area)

11	Method of Mining	Opencast Manual Mining
12	Mining Shall be carried out from	From 225mRL to 222mRL
13	Height and Width of Benches	1.5m each with 0.75m sub- benches, Width- >15m
14	Slopes and ultimate face slope	Slope- 45°
15	River/Nallah (Name)	Kailash River
16	Project Cost	Rs. 101.24 Lakhs
17	CER Cost	Rs. 2.02 Lakhs (2% of the total project cost)
18	EMP Cost	Rs. 10.30 Lakhs
19	Cluster Certificate	Submitted, there are four another mine lease falls in the aerial distance of 500 meter in the periphery of the above mine site and the total of cumulative area of all mine lease area (Shri Fareed Khan 2.414 Ha. + Shri Suresh Chandra Joshi 0.549 Ha. + Shri Sharif Ahmad 0.790 Ha + Shri Sandeep Kumar Jindal 0.404 Ha) is >5 Ha.
20	Ecological Sensitivity Map	Not Submitted

Hence, committee agreed to issue **ToR (Annexure-1)** to the proponent for preparation of EIA report subject to submission/clarification of the following documents-

- Original Copy of Cluster Certificate.
- Original Copy of Ecological Sensitivity Map of 10 KM radius.

Proposal – 2

Site Details	Khasra No- 42/3 Village – Ratanpuri, Tehsil – Bazpur, Distt:- Udham Singh Nagar.
Name & Address of Proponent	Smt. Tript Kaur W/o Late Shri Amarjeet Singh R/o village – Ratanpuri, Tehsil – Bazpur, Distt:- Udham Singh Nagar.
Coordinates	Latitude- 29°12'40.61"N to 29°12'44.14"N Longitude- 79°5'8.18"E to 79°5'13.00"E
Mining Lease Area	0.470 Ha.
Category	B2 & 1(a) enlisted in project /activity as per EIA Notification, 2006

The committee observed that proponents seek Environmental Clearance for extraction of sand/bajri/boulder (River Bed Material) in accordance with the provisions of EIA Notification, 2006 as enlisted in Schedule 1(a). The proponent has applied with detailed project related information in Form 1, Pre Feasibility Report and EMP. The project was submitted vide proposal no SIA/UK/MIN/39348/2019 on dated 16th July, 2019 by project proponent. The above mining/extraction site is located in the river bed. The details of the project are given below:-

S. No	Details	Reply
1	New or Ongoing Site	New Site
2	Coordinates	N 29°12'40.61" to N 29°12'44.14" & E 79°5'8.18" to E 79°5'13.00"
3	Letter of Intent (Valid upto)	Lease has been granted vide letter- 1497/VII-1/2019/02-[k/18 Dated 01.02.2019 for 6 months.
4	Mine Plan (Valid upto)	The mining plan is approved vide letter no. 334@m0[k0@ek0lyku0@m0fla0u0@2018&19 Dated 31.05.2019 for 1 year.
5	No. Of Pits	One
6	Thickness of soil	-
7	Maximum explorable depth	1.5m
8	Balanced undisturbed agriculture land (in Ha.)	-
9	Total Mineable Reserve	14734.5 Tonne
10	Estimated Quantity	14734.5 Tonne
11	Green Belt area (Valid upto)	0.470ha (Outside from the lease area i.e Village Panchayat land)
12	Method of Mining	Opencast Manual Mining
13	Mining Shall be carried out from	From RL235.50 to RL236.50 Lower Level to Higher Level

14	Height and Width of Benches	1.5m each with 0.75m sub- benches, Width- >15m
15	Slopes and ultimate face slope	Slope- 45°
16	River/Nallah (Name)	Kosi River
17	Project Cost	Rs 31.08 lac
18	CER Cost	Rs 5.00 lac
19	EMP Cost	Rs 6.60 lac
20	Cluster Certificate	Submitted, there are six another mine lease falls in the aerial distance of 500 meter in the periphery of the above mine site and the total of cumulative area of all six mine lease area is <5 Ha.
21	Ecological Sensitivity Map	Submitted & No National Park/Reserve Forest/Sanctuary exist within 10 Km radius of proposed mining Area is mentioned by DFO, Udham Singh Nagar.

The Committee after examining the original proposal and presentation by proponent made the following suggestions:

- The committee further directed that mining/extraction of mineral and progressive mine closure should be done as per the approved mine plan.
- The committee suggested that the proponent should provide Eco-friendly toilets for the workforce.
- The committee also suggested that mine site should have well demarcated safety zone i.e. mining operation will not be carried out in the vicinity of 100 m from nearby bridges, educational institution or structures of historical importance.
- The committee desired that proponent should undertake afforestation activities in the buffer zone as well as in the nearby project site. Minimum 2000 plants will be planted in first and second year and maintenance of the plantations will be carried out for the next three years.
- The mining operation would provide local employment and bring economic benefit to local population.
- Photography of the proposed mining site (preferably using Drone) should be done and submitted to SEIAA along with half-yearly compliance report.

Based on the proposal & presentation made by the project proponent, Committee screened the above project under B2 category as per the Notification of MoEF&CC No- 3181 dated- 14-08-2018 & O.M of MoEFF&CC Impact Assessment Division's O.M No- F.No.L-11011/175/2018-IA-II(M) dated-12-12-2018 the following mining project is falling in B2 category. Based on above observations and subject to conditions (**Annexure-2**), the committee recommended the above project for grant of Environmental Clearance.

Proposal – 3

Name of the Project	Environmental Clearance for enhancing the existing manpower strength & Installation of DG sets (125 KVA & 200 KVA) by M/s Goodwill Plastic Industries at Plot no. 3967, Opp Birla Power, Lal Tappar, Industrial Area, P.O. Resham Majri, Haridwar Road, Dehradun.
Name & Address of Proponent	M/s Goodwill Plastic Industries 10103/3, Azad market, Pulbangash, Delhi-06
Whether New/Expansion Project	New
Total Plot Area	2100 m ²
Project Category	B2, Orange Category as per Doon Valley Notification

The committee observed that above is a proposal seeking Environmental Clearance for enhancing the existing manpower strength & Installation of DG sets (125 KVA & 200 KVA). The committee observed that this project activity is covered under Orange Category as per Doon Valley Notification 1989. The project was submitted vide proposal no SIA/UK/MIS/127832/2019 on dated 27th November, 2019 by project proponent.

The above proponent has submitted detailed project related information in Form - 1, Pre-Feasibility Report and Environment Management Plan. The proponent has also submitted related land documents; lay out plan, EMP, Process Flow Chart.

The committee after examining original proposal and presentation made by the proponent and observed following points:-

S. No	Parameters	Description
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1	Identification of project	Project falls under "Orange" Category as per Doon Valley Notification of 1 st February 1989 B2 Category
2	Project Proponent	Mr. Sanjeev Dhawan, Director Goodwill Plastic Industries
3	Brief description of nature of the project	Environmental Clearance for enhancing the production, existing manpower strength & Installation of DG sets
4	Salient features	
4.1	Existing/Proposed capacity	Existing production: Sleepers (50000 nos/month), and Sandals (8000 nos/month & Manpower resource from 95 To Proposed production: Sleepers (60000 nos/month), and Sandals (16000 nos/month), Shoes (30000 nos/month) & Manpower resource To 345
4.2	Total Plot Area	2100 SQ Mts
4.3	Location	Khasra No. 3967 Lal Tappad Industrial Area Dehradun
4.4	Water requirement	Total water requirement will be 16.00 KLD during operation of the project & will be supplied through the existing borewell for drinking purpose, flushing & horticulture, and will be met from existing Bore well.
4.5	Source of water	Existing Bore well.
4.6	<ul style="list-style-type: none"> ▪ Waste Water Management ▪ Waste water generation ▪ Mode of Disposal 	<ul style="list-style-type: none"> ▪ Approx. 7 KLD Domestic sewage will be generated and the same will be treated through proposed skid mounted STP (15 KLD). ▪ Treated water will be reused & recycled in flushing, and green belt . ▪ Zero liquid discharge will be maintained.
4.7	Man Power	345 Proposed from existing 95
4.8	Electricity/Power requirement	235 KVA Sourced: UPCL DG set Proposed- 125 KVA & 200 KVA (02 No.) for power back up
4.9	Alternative site	This project site has been appropriately selected. Hence, no alternative site examined
4.10	Land form, Land use and land ownership	Industrial land taken on Rent by the project proponent
5.0	Project cost	The estimated cost of the Project is approximately Rs. 1.35 crores.

The committee observed that the demand for 125 KVA & 200 KVA (02 No.) set is on higher side and recommended for 200 KVA x 1 only for which P.P has given his consent in writing.

Based on above observations and subject to conditions (**Annexure-3**), the committee recommended the above project for grant of Environmental Clearance.

Proposal –4

Name of the Project	M/s Pearl Grand at 19/1 Raj Vihar P.O. New Forest Dehradun.
Name & Address of Proponent	Environmental Clearance for proposed Hotel construction at Khasra No. 773Ha, Saharanpur road, Niranjanpur Opp. Sabjimandi, Distt. Dehra Dun.
Whether New/Expansion Project	Violation
Total Plot area	2257.50 m ²
Total Built up area	3181m ²
Project Category	B2, Orange Category as per Doon Valley Notification

The committee observed that above is a proposal seeking Environmental Clearance for proposed Hotel construction Guest Rooms 45 Nos. with basic amenities facilities. The total land area for project is 2257.50 m² in which 770 m² (33%) of the net land area is being used for green belt. The committee observed that the project falls under Orange Category as per Doon Valley Notification 1989. The project was submitted vide proposal no SIA/UK/MIS/32870/2019 on dated 18th March, 2019 by project proponent.

The above proponent has submitted detailed project related information in Form - 1, Form-1A, Pre-Feasibility Report and Environment Management Plan.

The committee after examining original proposal and presentation made by the proponent and observed following points:-

Sr. No.	Parameters	Description
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1.	Name of the Project	Expansion of "HOTEL THE PEARL GRAND" Project by Existing Hotel facilities at Khasra No 773, NiranjanpurMandi, Saharanpur Road District Dehradun.
2.	Category of Project as per EIA Notification & Amendments	"Orange" as per Doon Valley Notification S.O. 102 (E) Dated 1 st February 1989.
3.	Total Rooms	45 (rooms), 01 Restaurant, 01 Hall, 01 Bar, 02 D.G. Sets (62.5 + 250 KVA) and 01 Laundry.
4.	Total area of the Plant	2257.50 m ² with Built-up Area (G+3)3181 square meter
5.	Location	Khasra No 773, Niranjanpur Mandi, Saharanpur Road District Dehradun.
6.	Coordinates of the Site	Latitude: 30°30'25.43" N, Longitude: 78°01'05.34" E
7.	Water Requirement/Source	
	Water Requirement (KLD)	Total – 22.8 KLD Fresh – 15.96 KLD
	Source of water	Borewell.
8.	Water Break-up	Domestic : 13.70 KLD Green-belt : 3.00 KLD Flushing : 6.10 KLD Total : 22.80 KLD
9.	Waste Water Management Waste water generation Mode of Disposal	Existing STP (Capacity – 20.0 KLD) ETP : 20 KLD (Proposed) Domestic Activities: 22.8 KLD Waste water generated (80% Fresh + 100% Flushing): 18.24 KLD & Horticulture (3.00 KLD) for irrigation purpose. Remaining 1.56 KLD will be discharge into Municipal drain.
10.	Employment generation	60 Nos.
11.	Power Supply/ Start up Power	250 KVA (Sources from UPCL).
12.	DG set	62.5 KVA (01 No.) + 250 KVA (01 No.)
13.	Total Project Cost	10.87Crore.

SUMMARY FOR ECOLOGICAL DAMAGE AND REMEDIATION/ EMP SUGGESTED

S. No.	Parameter	Issue	Related Damage	Remediation/EMP Suggested	Estimated Cost of Damage/Remediation
1.0	Raw Water	Use of raw water for domestic use by in house employees and guests and for visitors as well	Ground water resources used	Rain water to be harvested as per CGWA guidelines in the existing premises.	Two Rainwater harvesting pits of size 4 m diameter × 5.0 m effective depth have been provided. Therefore no remediation plan is required
2.0	Waste Water	Domestic wastewater generation	Hotel has installed STP of 20 KLD and the treated water (12 KLD) is being used in flushing and green belt development. Thus no ecological damage occurred	Setup of Sewage Treatment Plant and the treated water from STP was used for greenery development	The Sewage Treatment Plant Facility of adequate capacity (20KLD) is already provided. Rs. 50,000/- Towards the analysis of Drinking as well as Inlet and outlet STP water quality. The Effluent Treatment Plant Facility of adequate capacity (20KLD) shall be proposed for the laundry and the cost is estimated to Rs.

					10,00,000/-
3.0	Air Pollution	Degradation of the ambient air quality due to the operation of DG set and Transportation activity involving movement of vehicles	Negligible Impact as Operation of DG set was rare due to the maximum uses of UPS in lighting and lift facility of incase of power failure.	Free health check-up camp will be organized. Measuring Ambient air Quality on a regular basis. This will enable knowing incremental pollution. Plantation of trees on the boundary of project site	Rs. 50,000/- towards one-time health checkup Rs. 1, 00,000/- towards regular monitoring of Stack emission for DG set, Ambient Air Quality and work zone at project site. Planting of trees in 770 sqm inside the premises have already been done which is 34% of the total plot area.
4.0	Noise & Vibration	Noise generation due to use of DG set, Vehicle Movement and machine etc.	Negligible impact due to proper acoustic enclosure on DG set	Regular monitoring of noise will be carried out to ensure the incremental noise level due to DG set.	Rs. 25,000/- towards Analysis Reports.
5.0	Soil / Land	The top soil that is excavated should be saved not only for refilling but also with a view not to lose the stated productive soil by just dumping it outside the premises.	Excavation and filling is carried out at the time of foundation work for the Hotel construction and DG set. The excavated soil was reused within the premises so the topography of the site is retained.	Storage of excavated soil in a designated place and consumed it for the site leveling and greenery development.	-Nil- The topography of the site is retained. Therefore, there is no remediation plan required.
6.0	Solid Waste	Ensuring segregation of municipal waste.	Odour issue, soil/water contamination and health issue may arise at some extent but temporary impact.	Providing a separate storage bin for municipal waste collection and treat through a small onsite composting machine for municipal waste and compost to be used as a soil conditioner	The composting set-up would cost approximately Rs. 1,25,000/- .
7.0	Hazardous Waste	Un-managed dumping, nuisance creation, toxicity generation, health effect	Health effect on workers handling waste and Contamination of soil / water ,	Storage at separate place return of containers to the authorized vendors /recyclers, Health check-up of workers handling toxic and hazardous materials	All hazardous waste material generated from DG set will be handed to the authorized recyclers. Therefore no remediation plan is required.
8.0	Ecological Environment	Disturbing the Flora and fauna in the vicinity of the area.	The hotel is constructed on own commercial vacant plot and there is no Loss of native flora and aesthetic view	Plantation of trees in and around the project site.	The budget of Rs. 50,000/- shall be for the plantation of trees to enhance the aesthetic beauty and for maintaining green belt and the same has been covered in point No. 3.

9.0	Socio-Economic Environment	Occupational Health and amenities	Negligible Health aspects of the employee and facilities related to hygiene and sanitation.	Providing safety equipments (PPE), change rooms including drinking water facility as well as bathrooms for the workers	Being the hotel facility all the facilities have already provided so remediation plan is not required.
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THUS, TOTAL COST ASSESSMENT RELATED TO ENVIRONMENTAL DEGRADATION AND ITS REMEDIATION AS STATED ABOVE WOULD BE: RS. 14, 00,000/-

1. PART-B–NATURAL & COMMUNITY RESOURCES AUGMENTATION PLAN

The remediation plan concentrated on site activity and presented measures related to mitigation / control of pollution at project site. The impacts of the project activity related to operation of DG sets, transport of materials, employment and resource consumption have a bearing on the surroundings areas. Hence it is proposed to prepare a natural and community services augmentation plan to compensate the impacts.

It may be noted that the project proponent implemented various measures as mentioned in the remediation plan. **The augmentation plan will be multifold in nature and will be in conjunction with the damage assessment as stated earlier.**

Activities for the augmentation plan can be classified in major categories as under:

- A. Natural Resource Augmentation Plan
- B. Community Augmentation Plan will consist of
 - Infrastructure Development Work
 - Soft Skill Development Work.

Natural resource augmentation plan with budgetary Estimation

S. No.	Activity	Budgetary Allocation(Rs.)
A.	NATURAL RESOURCE AUGMENTATION PLAN	
a.	Provision of solar panel lighting in slum areas	1,50,000
Sub Total (A)		1,50,000

Community resource augmentation plan with budgetary Estimation

S. No.	Activity	Budgetary Allocation(Rs.)
B.	COMMUNITY RESOURCE AUGMENTATION PLAN	
B1	Infrastructure development work	
a.	Furniture (Table and Chair) at Anganwadi Kendra @1500/Unit= 80 Units approx.	1,25,000
Sub Total (B1)		1,25,000
B2	Soft Skill Development Work	
b.	E Learning Smart ClassesWith Projector @ 30,000 (Approx.) and one year subscription of online learning Classes @ 45,000 (Approx.)	1,25,000
Sub Total (B2)		1,25,000

Total fund allocated towards natural and community resource augmentation plan

= Sub Total (A) + Sub Total (B1)+ Sub Total (B2)
 = Rs. (1,50,000+1,25,000+ 1,25,000)
 = Rs. 4, 00,000/-

6.0 CONCLUSION AND RECOMMENDATION

From the above analysis it can be concluded that is some impact on ecological damage was done by Pearl Grand Hotel due the construction of 13 more rooms, 1 bar, 1 hall and installation of one additional DG Set (250 KVA x 1 nos).

The summary of budgetary allocation with respect to violation activity and remediation/ EMP measures suggested/recommended as well as natural and community resource augmentation plan is stated under:

Summary of total budgetary allocation with respect to violation activity and remediation

S. No.	Description	Amount(Rs.)
1.	Estimated cost of damage / remediation with respect to ecological aspects	14,00,000/-
2.	Cost estimate for natural resources augmentation plan and Community resources augmentation plan	4,00,000/-
Total (Rs.)		18,00,000/-

7.0 IMPLEMENTATION SCHEDULE OF PLANNED ACTIVITIES AND RELATED BANK GUARANTEE:

The proposed activities under the remediation/ EMP measures suggested/recommended, natural and community resource augmentation will be implemented in a span of 3 years in phased manner.

It may be noted that the project proponent will also give a bank guarantee equivalent to the amount of remediation plan natural and community resource augmentation plan i.e **Rs. 18,00,000/- (Eighteen lakh Only)** to Uttarakhand Environment Protection and Pollution Control Board (UEPPCB) which could be returned on compliance of the above state plan.

Based on above observations and subject to conditions (**Annexure-4**), the committee recommended the above project for grant of Environmental Clearance.

Proposal – 5

Name of the Project	Proposed of Guest Rooms. Conference Room. Dining Hall, Kitchen & Restaurant. Municipal No- 16-A, Situated at E.C. Road (Rajiv Gandhi Marg.-I), Dehradun
Name & Address of Proponent	M/s Katyani Associates, 40-D, Race Course, Dehradun.
Whether New/Expansion Project	New Project
Total Built up Area	2311.44 m ²
Project Category	B, Orange Category as per Doon Valley Notification

The committee observed that above is a proposal seeking Environmental Clearance for proposed of construction including 35 Nos Rooms with basic amenities facilities having plot area 1086.95 sqm and built up area of 2311.44 Sq.Mt. The proponent has submitted detailed project related information in designated Form 1, Form1A, Conceptual Plan, EMP and cover letter. The project was submitted vide proposal no SIA/UK/MIS/84966/2018 on dated 8th November, 2018 by project proponent. The details of project are given below:-

Sr. No.	Parameters	Description
1.	Name of the Project	Environmental Clearance of Proposed Hotel Facility Including DG Set Located At 16 –A E.C. Road (New No. 33) Rajiv Gandhi Marg, Dehradun.
2.	Category of Project as per EIA Notification & Amendments	“Orange” as per Doon Valley Notification S.O. 102 (E) Dated 1 st February 1989.
3.	Total Rooms	35 (Except Office, Restaurant and Dining area)
4.	Total area of the Plant	1086.95 m ² with Built-up Area 2311.44 square meter
5.	Location	16–A E.C. Road (New no. 33) Rajiv Gandhi Marg, Dehradun.
6.	Coordinates of the Site	Latitude: 30° 19' 40.74" N , Longitude: 78° 03' 07.38" E
7.	Water Requirement/Source	
	Water Requirement (KLD)	Total – 16.0 KLD Fresh – 9.50 KLD
	Source of water	Borewell.
8.	Water Break-up	Domestic : 9.50 KLD Green-belt : 1.00 KLD Flushing : 5.10 KLD Total : 15.60 KLD (Say 16.0 KLD)
9.	Waste Water Management Waste water generation	Existing STP (Capacity – 20.0 KLD) Domestic Activities: 13.0 KLD Treated water from STP will be reuse in Flushing (5.10 KLD) &

	Mode of Disposal	Horticulture (1.00 KLD) for irrigation purpose. Remaining 4.70 KLD will be discharge into Municipal drain.
10.	Employment generation	44 Nos.
11.	Power Supply/ Start up Power	100 KVA (Sources from UPCL).
12.	DG set	125.0 KVA (01 No.)
13.	Total Project Cost	5.99 Crore.

SUMMARY FOR ECOLOGICAL DAMAGE AND REMEDIATION/ EMP SUGGESTED

S. No.	Parameter	Issue	Related Damage	Remediation/EMP Suggested	Estimated Cost of Damage/Remediation
1.0	Raw Water	Use of raw water for domestic use by in house and visiting persons	Ground water resources used	Rain water to be Harvested as per CGWA guidelines in the existing premises.	Rain water Harvesting Structure has already been constructed. Therefore no remediation plan is required.
2.0	Waste Water	Domestic wastewater generation	Hotel has installed STP of 20.0 KLD and the treated water (07 KLD) is being reused in Flushing and green belt development. The rest (07KLD) treated water is being discharged into sewage line provided by state government. Thus no ecological damage occurred.	Setup of Sewage Treatment Plant and the treated water from STP was used for Flushing and greenery development	The Sewage Treatment Plant Facility of adequate capacity (20.0KLPD) is already provided. Rs. 25000/- Towards the analysis of Drinking as well as Inlet and outlet STP water quality.
3.0	Air Pollution	Degradation of the ambient air quality due to the operation of DG set and Transportation activity involving movement of vehicles	Negligible Impact as Operation of DG set was rare due to maximum usage of UPS in lighting and lift facility in case of power failure.	Free health check-up camp will be organized. Measuring Ambient air Quality on regular basis. This will enable knowing incremental pollution. Plantation of trees on the boundary of project site	Rs. 50,000/- towards one-time health check up and Rs. 50,000/- towards monitoring of Stack Emission, Ambient Air Quality and work zone at project site. Planting of trees inside the premises has already been done on 14% area of total land.
4.0	Noise & Vibration	Noise generation due to use of DG set, Vehicle Movement etc.	Negligible impact due to proper acoustic enclosure on DG set.	Regular Monitoring of Noise will be carried out to ensure the incremental noise level due to DG set.	Rs. 5,000/- towards Analysis Reports.
5.0	Soil Land /	The top soil that is excavated should be saved not only for refilling but also with a view not to loose the	Excavation and filling is carried out at the time of foundation work for Hotel Construction the DG set. The excavated soil was reused within the premises so the	Storage of excavated soil in a designated place and consumed it for the site leveling and greenery development.	-Nil- The topography of the site is retained. Therefore, there is no remediation plan required.

		stated productive soil by just dumping it outside the premises.	topography of the site is retained.		
6.0	Solid Waste	Ensuring segregation of municipal waste.	Odor issue, soil/water contamination and health issue may arise at some extent but temporary impact.	Providing a separate storage bin for municipal waste collection and treat through a small onsite composting machine for municipal waste and compost to be used as a soil conditioner	The composting set-up would cost approximately Rs. 70,000/- .
7.0	Hazardous Waste	Un-managed dumping, nuisance creation, toxicity generation, health effect	Health effect on workers handling waste and Contamination of soil / water ,	Storage at separate place return of containers to the authorized vendors /recyclers, Health check-up of workers handling toxic and hazardous materials	All hazardous waste material generated from DG set will be handed over to authorized recyclers. Therefore, no remediation plan is required.
8.0	Ecological Environment	Disturbing the Flora and fauna In the vicinity of the area.	The hotel is constructed on own commercial vacant plot and there is no Loss of native flora and aesthetic view	Plantation of trees in and around the project site.	-Nil- Covered in point no. 3.0
9.0	Socio-Economic Environment	Occupational Health and amenities	Negligible Health aspects of the employee and facilities related to hygiene and sanitation.	Providing safety equipment's (PPE), Change rooms including drinking water facility as well as bathrooms for the workers	Being a hotel facility all the facilities have already provided so remediation plan is not required.

THUS, TOTAL COST ASSESSMENT RELATED TO ENVIRONMENTAL DEGRADATION AND ITS REMEDIATION AS STATED ABOVE WOULD BE: RS. 2, 00,000/-

PART-B-NATURAL & COMMUNITY RESOURCES AUGMENTATION PLAN

The remediation plan concentrated on site activity and presented measures related to mitigation / control of pollution at project site. The impacts of the project activity related to operation of DG sets, transport of materials, employment and resource consumption have a bearing on the surroundings areas. Hence it is proposed to prepare a natural and community services augmentation plan to compensate the impacts.

It may be noted that the project proponent implemented various measures as mentioned in the remediation plan.

The augmentation plan will be multi fold in nature and will be in conjunction with the damage assessment as stated earlier.

Activities for the augmentation plan can be classified in major categories as under:

A. Natural Resource Augmentation Plan

B. Community Augmentation Plan will consist of

- Infrastructure Development Work
- Soft Skill Development Work.

Table 5.1 The natural resource augmentation plan with budgetary Estimation

S. No.	Activity	Budgetary Allocation (Rs.)
A.	NATURAL RESOURCE AUGMENTATION PLAN	
i.	Provision of solar panel lighting in slum areas	1,00,000

Sub Total (A)	1,00,000
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Table 5.2 The community resource augmentation plan with budgetary Estimation

S. No.	Activity	Budgetary Allocation (Rs.)
B.	COMMUNITY RESOURCE AUGMENTATION PLAN	
B1	Infrastructure development work	
i.	Furniture (Table and Chair) at Anganwadi Kendra @1500/Unit = 67 Units approx.	100,000
Sub Total (B1)		1,00,000
B2	Soft Skill Development Work	
i.	E Learning Smart Classes With Projector @ 30000 (Approx.) and one year subscription of online learning Classes @ 45000 (Approx.)	75,000
Sub Total (B2)		1,75,000

Total fund allocated towards natural and community resource augmentation plan
= Sub Total (A) + Sub Total (B1)+ Sub Total (B2)
= Rs. (100000+100000+75000)
= Rs. 2, 75,000/-

6.0 CONCLUSION AND RECOMMENDATION

From the above analysis it can be concluded that almost negligible ecological damage was done by M/s Katyani Associates due installation of DG set (125KVA x 01 no.).

The summary of budgetary allocation with respect to violation activity and remediation/ EMP measures suggested/recommended as well as natural and community resource augmentation plan is stated under:

Summary of total budgetary allocation with respect to violation activity and remediation

S. No.	Description	Amount (Rs.)
1.	Estimated cost of damage / remediation with respect to ecological aspects	2,00,000/-
2.	Cost estimate for natural resources augmentation plan and Community resources augmentation plan	2,75,000/-
Total (Rs.)		4, 75,000/-

7.0 IMPLEMENTATION SCHEDULE OF PLANNED ACTIVITIES AND RELATED BANK

GUARANTEE:

The proposed activities under the remediation/ EMP measures suggested/recommended, natural and community resource augmentation will be implemented in a span of 3 years in phased manner.

It may be noted that the project proponent will also give a bank guarantee equivalent to the amount of remediation plan, natural and community resource augmentation plan i.e. **Rs. 4,75,000/- (Rupees Four Lac Seventy Five Thousand only)** to Uttarakhand Environment Protection and Pollution Control Board (UEPPCB) which could be returned on completion of the above stated plan.

Observations of SEAC are as under:-

- As per the Minutes of 9th Meeting of SEIAA, Uttarakhand dated- 8.7.2019 *"It is clear that as per MoEF Notification S.O- 2125 (E) dated- 13.12.2007, inter alia, all those projects which are not covered under the EIA Notification but which fall under the orange category as per Doon Valley notification dated 1st February, 1989 shall be considered by the SEIAA."*
However in the similar cases SEIAA has granted E.Cs in two cases whose builtup area is less than 20000 Sqmt (M/s Gokul Residency & M/s Himalayan Retreat).
- SEIAA found that in meeting the builtup area of the above project is less than 20000 Sqmt. However installation of DG set without prior E.C is considered as a case of Violation.
- As per the instruction given by the SEIAA, the committee proceeds the above proposal as a violation as per the MoEFCC Notification dated- 8.3.2018

Based on above observations and subject to conditions (**Annexure-5**), the committee recommended the above project after considering as a violation for grant of Environmental Clearance only for installation of D.G Sets.

Proposals For Terms of Reference (TOR)

Proposal – 1

Name of the Project	ITBP Phase- II Road from Tripani to Rangmunch Gad Road, Joshimath, Chamoli
Name & Address of Proponent	M/s Indian Tibbet Border Police, Seemadwar, Dehradun.
Whether New/Expansion Project	New Project
Project Category	7 (f) & activity 'B'

The committee observed that above is a proposal seeking environmental clearance (as per the provision of EIA Notification, 2006) for ITBP Phase- II Road from Tripani to Rangmunch Gad Road, Joshimath, Chamoli as per EIA Notification, 2006 above proposal is placed in schedule 7(f) of Environmental Impact Assessment Notification-2006 of Ministry of Environment, Forest and Climate Change, Government of India. The project was submitted vide proposal no SIA/UK/MIS/47457/2019 on dated 28th November, 2019 by project proponent.

During presentation the accredited consultant was not present with the project proponent hence, the committee did not entertained the project. Committee also suggested project proponent to clarify for requirement of E.C.

Proposal – 2

Name of the Project	ITBP Phase- II Road from Sumla to Thangla-1 Road, Joshimath, Chamoli
Name & Address of Proponent	M/s Indian Tibbet Border Police, Seemadwar, Dehradun.
Whether New/Expansion Project	New Project
Project Category	7 (f) & activity 'B'

The committee observed that above is a proposal seeking environmental clearance (as per the provision of EIA Notification, 2006) for ITBP Phase- II Road from Sumla to Thangla-1 Road, Joshimath, Chamoli as per EIA Notification, 2006 above proposal is placed in schedule 7(f) of Environmental Impact Assessment Notification-2006 of Ministry of Environment, Forest and Climate Change, Government of India. The project was submitted vide proposal no SIA/UK/MIS/47456/2019 on dated 28th November, 2019 by project proponent.

During presentation the accredited consultant was not present with the project proponent hence, the committee did not entertained the project. Committee also suggested project proponent to clarify for requirement of E.C.

Proposal – 3

Name of the Project	ITBP Phase- II Road from Niti to Bamlas Road, Joshimath, Chamoli
Name & Address of Proponent	M/s Indian Tibbet Border Police, Seemadwar, Dehradun.
Whether New/Expansion Project	New Project
Project Category	7 (f) & activity 'B'

The committee observed that above is a proposal seeking environmental clearance (as per the provision of EIA Notification, 2006) for ITBP Phase- II Road from Niti to Bamlas Road, Joshimath, Chamoli as per EIA Notification, 2006 above proposal is placed in schedule 7(f) of Environmental Impact Assessment Notification-2006 of Ministry of Environment, Forest and Climate Change, Government of India. The project was submitted vide proposal no SIA/UK/MIS/47452/2019 on dated 28th November, 2019 by project proponent.

During presentation the accredited consultant was not present with the project proponent hence, the committee did not entertained the project. Committee also suggested project proponent to clarify for requirement of E.C.

Proposal – 4

Name of the Project	ITBP Phase- II Road from Mendi to Tsangchakla Road, Joshimath, Chamoli
Name & Address of Proponent	M/s Indian Tibbet Border Police, Seemadwar, Dehradun.
Whether New/Expansion Project	New Project
Project Category	7 (f) & activity 'B'

The committee observed that above is a proposal seeking environmental clearance (as per the provision of EIA Notification, 2006) for ITBP Phase- II Road from Mendi to Tsangchakla Road, Joshimath, Chamoli as per EIA Notification, 2006 above proposal is placed in schedule 7(f) of Environmental Impact Assessment Notification-2006 of Ministry of Environment, Forest and Climate

Change, Government of India. The project was submitted vide proposal no SIA/UK/MIS/47447/2019 on dated 28th November, 2019 by project proponent.

During presentation the accredited consultant was not present with the project proponent hence, the committee did not entertained the project. Committee also suggested project proponent to clarify for requirement of E.C.

Proposal – 5

Name of the Project	ITBP Phase- II Road from Sumna to Topudunga Road, Joshimath, Chamoli
Name & Address of Proponent	M/s Indian Tibbet Border Police, Seemadwar, Dehradun.
Whether New/Expansion Project	New Project
Project Category	7 (f) & activity 'B'

The committee observed that above is a proposal seeking environmental clearance (as per the provision of EIA Notification, 2006) for ITBP Phase- II Road from Sumna to Topudunga Road, Joshimath, Chamoli as per EIA Notification, 2006 above proposal is placed in schedule 7(f) of Environmental Impact Assessment Notification-2006 of Ministry of Environment, Forest and Climate Change, Government of India. The project was submitted vide proposal no SIA/UK/MIS/47435/2019 on dated 28th November, 2019 by project proponent.

During presentation the accredited consultant was not present with the project proponent hence, the committee did not entertained the project. Committee also suggested project proponent to clarify for requirement of E.C.

Proposal – 6

Name of the Project	Proposed 10 KLPD Malt Spirit Plant along with 0.75 MW Co-generation Power Plant at Plot No. S2-09, Escort Farm, SIIDCUL Integrated Industrial Estate, Kashipur, District U.S. Nagar.
Name & Address of Proponent	M/s Himalaya Wine Company Pvt. Ltd at SIDCUL, Kashipur, U.S.Nagar
Whether New/Expansion Project	New Project
Land area: Hectare	8533 Sq. meter
Project Category	5(g) of Schedule of Environment Impact Assessment (EIA) Notification, 2006

The committee observed that above is a proposal seeking For Environmental Clearance for Establishment of new Molasses based distillery of 10 KLPD Malt Spirit Plant along with 0.75 MW Co-generation Power Plant at Plot No. S2-09, Escort Farm, SIIDCUL Integrated Industrial Estate, Kashipur, District U.S. Nagar. The committee observed that the project falls under 5(g) of Schedule of Environment Impact Assessment (EIA) Notification. The project was submitted vide proposal no SIA/UK/IND2/44902/2019 on dated 16th December, 2019 by project proponent. The project proponent did not turn up for the meeting. Hence committee decided to defer the project for next meeting of SEAC.

Proposal – 7

Name of the Project	Establishing Municipal Solid Waste Management Facility consisting of a sanitary fill with compost plant in Kaksh Sankhya 1-B, Village- Bal Dhoti, Dist- Almora.
Name & Address of Proponent	Mukhya Nagar Adhikari, Nagar Palika Parishad Almora.
Whether New/Expansion Project	New Project
Total Plot Area	Currently 0.91 ha which will be later expanded to 5 Ha
Project Category	7 (i) & activity 'B'

The committee observed that above is a proposal seeking environmental clearance (as per the provision of EIA Notification, 2006) for Establishing Municipal Solid Waste Management Facility consisting of a sanitary fill with compost plant in Kaksh Sankhya 1-B, Village- Bal Dhoti, Dist- Almora. As per EIA Notification, 2006 above proposal is placed in schedule 7(i) of Environmental Impact Assessment Notification-2006 of Ministry of Environment, Forest and Climate Change, Government of India. The project was submitted vide proposal no SIA/UK/MIS/29993/2018 on dated 27th November, 2018 by project proponent. The project proponent did not turn up for the meeting. Hence committee decided to defer the project for next meeting of SEAC.

Proposal – 8

Name of the Project	Environmental Clearance for proposed expansion of Acrylic Polymers Emulsion, Polymers of Vinyl Acetate, Vinyl Copolymers, Constructions Chemical & Solvent based at Plot No. 29 A & B, KIE Industrial Estate, Mundiyaiki, Paragana - Manglore, Tehsil Roorkee, District Haridwar.
Name & Address of Proponent	M/s Jesons Industries Ltd. (Unit V) at Plot No. 29 A & B, KIE Industrial Estate, Mundiyaiki, Paragana - Manglore, Tehsil Roorkee, District Haridwar.
Whether New/Expansion Project	Expansion
Land area: Hectare	0.60 Ha.
Project Category	5(f) of Schedule of Environment Impact Assessment (EIA) Notification, 2006

The committee observed that above is a proposal seeking environmental clearance (as per the provision of EIA Notification, 2006) for I proposed expansion of Acrylic Polymers Emulsion, Polymers of Vinyl Acetate, Vinyl Copolymers, Constructions Chemical & Solvent based as per EIA Notification, 2006 above proposal is placed in schedule 5(f) of Environmental Impact Assessment Notification-2006 of Ministry of Environment, Forest and Climate Change, Government of India. The project was submitted vide proposal no SIA/UK/IND2/45847/2019 on dated 4th November, 2019 by project proponent. The committee after examining original proposal and presentation made by the proponent and observed following points:-

Brief Summary of the Project: Application for issue of Terms of Reference (ToR) for EIA/EMP studies for Environmental Clearance for proposed expansion of Acrylic Polymers Emulsion, Polymers of Vinyl Acetate, Vinyl Copolymers, Constructions Chemical & Solvent based Adhesive by M/s Jesons Industries Ltd. at Plot No. 29 A & B, KIE Industrial Estate, Village Mundiyaiki, Tehsil Roorkee, District Haridwar.

Salient Features of the project

Salient Features of the Project					
Sr. No.	Parameters	Description			
1.	Plant Capacity	Product Name	Existing Quantities	Proposed Quantities	Total Quantities
		Acrylic Polymers Emulsion	2400 MT/ Month	2355.0 MT/ Month	4755.0 MT/ Month
		Polymers of Vinyl Acetate			
		Vinyl Copolymer s			
		Constructi on chemicals	450 MT/ Month	-	450
		Glue & Adhesive	450 MT/ Month	-	-
		Synthetic Adhesive	450 MT/ Month	-	-
		Solvent based	-	1350 MT/ Month	1350 MT/ Month
		Total	3750.0 MT/ Month	3705.0 MT/ Month	6555.0 MT/ Month
2.	Category of Project as per EIA Notification & Amendments	5 “f” as per EIA Notification, 2006			
3.	Category of the Project	“B”			
4.	Proposed Project	Proposed expansion of production capacity & Addition of Synthetic Chemicals by M/s Jesons Industries Ltd. (Unit V)			
5.	Total area of the Plant	Total Plot Area is 6500.0 Sq.mtr. Plant Site lay out plan is attached as Annexure – 2.			
6.	Capital Cost	Rs. 23.00 Crore			
7.	Location	Plot No. 29 A &B, KIE Industrial Estate, Village-Mundiyaki,			

		Paragana – Manglore, Tehsil Roorkee, District Haridwar.
8.	Coordinates of the Site	Latitude: 29°44'22.97"N Longitude: 77°50'49.30"E
9.	Water Requirement/Source	
	Water Requirement (KLD)	Total – 115.0 KLD Fresh – 95.0 KLD Recycled – 20.0 KLD
	Source of water	Ground Water i.e. Bore well
10.	Water Break-up	Industrial activity : 95.0 KLD Industrial Cooling : 3.0 KLD Domestic : 6.0 Green-belt : 11.0 Total : 115.0 KLD
11.	Waste Water Management Waste water generation Mode of Disposal	No Additional waste water generation from expansion of production capacity & Addition of Synthetic Chemicals. Total waste water from the industrial process and domestic purpose is being generated in tune of 4.0 KLD, which is being treated in existing E.T.P. which is augmented upto 5.0 KLD & proposed S.T.P. Industrial Activity: 95.0 KLD Domestic Activities: 6.0 KLD Reused/Recycled in Miscellaneous activities & Green belt for irrigation purpose. Zero discharge is being achieved.
12.	Employment generation	Existing : 85 Nos Proposed : 65 Nos. Total : 150 Nos.
13.	Power Supply/ Start up Power	Existing power demand for Synthetic Chemical Plant is 300.0 KVA and after expansion it will 400.0 KVA.
14.	DG Set	Green insulated DG Set of 125.0 KVA & 250.0 KVA (02 Nos.) is already installed which is being operated during emergency in case of power failure only). One DG 125.0 KVA will be replaced with 380.0 KVA. Fuel consumption: HSD – 100.0 liter per day
15.	Boiler	Existing Boiler (02 Nos) (Non IBR) is based on FO fuel based with a capacity of 850.0 Kg/Hr, which is being used as heating source during process.
16.	Cooling Tower	02 Nos (capacity 250 TR replacing with 397 TR) and 01 No. is proposed (Capacity – 397 TR).
17.	Land form, Land use and land ownership	Private land

Table 02: Detail of the existing and Proposed Production capacities

A). Products (Production Capacity in MT/Month)				
S. No.	Products	Existing	Proposed	Total
1.	Acrylic Polymers Emulsion	2400.0 MT/Month	2355.0 MT/Month	4755.0 MT/Month
	Polymers of Vinyl Acetate			
	Vinyl Copolymers			
2.	Construction chemicals	450.0 MT/Month	-	450
3.	Glue & Adhesive	450.0 MT/Month	-	-
4.	Synthetic Adhesive	450.0 MT/Month	-	-
5.	Solvent based Adhesive	-	1350.0 MT/Month	1350 MT/Month
	Total	3750.0 MT/Month	3705.0 MT/Month	6555.0 MT/Month

B). Utilities				
1	Reactors	06 Nos./	03 Nos.	09 Nos
2	Boiler	02 Nos	-	02 Nos.
3	Cooling Tower	02 Nos.	01 Nos.	03 Nos.
C) DG sets				
1.	DG sets	250 KVA & 125 KVA (02 Nos.)	380 KVA & 250 KVA (02 Nos.)	380 KVA & 250 KVA
D) Manpower				
1.	Manpower	85 Nos.	65 Nos.	150 Nos.

Hence, committee agreed to issued **ToR (Annexure-6)** to the proponent for preparation of EIA report.

Proposal – 9

Site Details	Village- Pagana, Tahsil- Bageswar, District- Bageswar.
Name & Address of Proponent	Shri Jitendra Aithani S/o Amar Singh Aithani, Village- Bijorijhal, Tehsil & District- Bageswar
Coordinates	29°47'20.80"N to 79°48'12.80"E
Mining Lease Area	3.909 Ha.
Category	B2 & 1(a) enlisted in project /activity as per EIA Notification, 2006

The committee observed that proponents seek Environmental Clearance for extraction of sand/bajri/boulder (River Bed Material) in accordance with the provisions of EIA Notification, 2006 as enlisted in Schedule 1(a). The proponent has applied with detailed project related information in Form 1, Pre Feasibility Report and EMP. The project was submitted vide proposal no SIA/UK/MIN/45820/2019 on dated 4th November, 2019 by project proponent. The above mining/extraction site is located in the river bed. The project proponent did not turn up for the meeting. Hence committee decided to defer the project for next meeting of SEAC.

Proposal – 10

Name of the Project	Proposed Municipal Solid Waste Management Facility at 169, 170, 187, 188, 189, 190 Village- Girgaon, Tehsil- Srinagar, Dist Pauri Garhwal.
Name & Address of Proponent	Nagar Palika Parishad, Srinagar.
Whether New/Expansion Project	New Project
Total Plot Area	2.66 acres.
Project Category	7 (i) & activity 'B'

The committee observed that above is a proposal seeking environmental clearance (as per the provision of EIA Notification, 2006) for Proposed Municipal Solid Waste Management Facility. As per EIA Notification, 2006 above proposal is placed in schedule 7(i) of Environmental Impact Assessment Notification-2006 of Ministry of Environment, Forest and Climate Change, Government of India. The project was submitted vide proposal no SIA/UK/MIS/47701/2019 on dated 2nd December, 2019 by project proponent.

During the presentation, it was observed by the committee that the letter of A.A.E., P.W.D, Srinagar (**as enclosed**) clearly states that the road from Bilkedar to Gorikot road is a village linked road instead of National Highway/State Highway.

Hence, committee agreed to issue **ToR (Annexure-7)** to the proponent for preparation of EIA report.

(Dr. R.K. Srivastava)
Chairman, SEAC

(Dr. P.S. Bisht)
Member, SEAC

(Dr. B.P Purohit)
Member, SEAC

(Rajiv Dhiman)
Member Secretary, SEAC

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 no- 2827 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
- 8) 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.

- 9) 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.
- 10) 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.
- 11) 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.
- 12) 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.
- 13) 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.
- 14) 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.
- 15) 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. 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 no- 2827 dated- 25-7-2018

Annexure - 2

- 1) Legal status of the mining lease area shall remain unchanged and the Environmental Clearance shall remain coterminous with the lease period. The mined lease area shall not be used for any purpose other than that specified in the proposal
- 2) In case of flash flood and river changing its meandering course, then fresh proposal has to be submitted for grant of Environmental Clearance
- 3) The project proponent shall formulate a transparent and unbiased procedure for engagement of labourers for sustainable extraction of the minor minerals from the mining lease area
- 4) The boundary of the mined lease area shall be demarcated on ground by erecting pillars, each inscribed with its serial number, DGPS coordinates, forward and back bearing, and distance from adjoin pillars etc. This demarcation will be ensured by the Revenue Department. A bench mark will be established to monitor depth of the mining
- 5) Extraction of minor minerals shall be restricted to middle half of the width of river bed/mining site after leaving intact the one-fourth of width of the river bed/mining site along its each bank. Breaking of boulders shall not be permitted in the mining lease area
- 6) The collection of minor minerals during a working season shall start from centre of the river/mining site width and shall gradually extend to the boundary of the permissible area so as to ensure maintenance of river geometry. The maximum permissible depth for collection of minor minerals at centre of the river/mining site width shall be fixed at 1.5 meter or up to ground water level whichever is less
- 7) Extraction of minor mineral shall be permissible from 1st October of every year to 30th June of the subsequent year. It shall be ensured that no mining activity is carried out during the monsoon season. Workers should be advised and protected against flash flood during 1st June to 30th June and 1st Oct to 31st Oct during which there may be rains in the hills
- 8) The project proponent has to regulate and maintain record of the quantity of minor minerals extracted during a season. The monitoring shall be ensured by Mines Department/District Administration from time to time
- 9) The mining work will be open-cast and exclusively manual. No mechanical work or drilling/blasting should be involved at any stage. Minor minerals shall be collected manually by using hand tools and use of explosives and heavy machineries for breaking/collection of minor minerals shall be strictly prohibited. The use of J.C.B. shall not be permitted for mining
- 10) The collection time of RBM shall be from sun-rise to sun-set
- 11) The project proponent shall strictly adhere to the norms of Transport Department in refraining from use of polluting and less fuel efficient vehicles for transporting extracted minor minerals. There shall be no over loading of vehicles as against standard norms fixed by Central Government/State Government/Hon'ble Courts from time to time
- 12) There shall be no labour camp in the mining lease area for the labour engaged in collection of the minor minerals. The labour engaged in collection/extraction work shall be provided free fuel wood/alternate source of energy to avoid any pressure on adjoining forest land.
- 13) The proponent shall erect eco friendly mobile toilets for the workforce at site and shall ensure disposal of solid waste as per the existing provisions/rules/guidelines
- 14) The Geology and Mining department shall ensure site specific river training works at the work site to ensure bank protection. A Corpus fund for this purpose will be set up and kept at the disposal of District Magistrate
- 15) The Geology and Mining department should identify an agency for regular/periodical monitoring of quality of ground water of existing hand pumps and tube wells in the vicinity of the mining site
- 16) The project proponent shall ensure that maximum local labour be engaged and hence employment opportunity provided. The project proponent shall follow all safety measures for labour force engaged in accordance with respected Acts/Rules
- 17) The project proponent shall prepare the plan of mining in conformity with the mine lease conditions and the Rules prescribed in this regard thereby clearly delineating the **No Work Zone** in the mine lease area i.e. the distance from the bank of river/mine site to be left un-worked (Non mining area), distance from the bridges etc. Effective safeguard measures, such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of particulate matter such as loading and unloading point and all transfer points. Extensive water sprinkling shall be carried out on haul roads. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard

- 18)** The project proponent shall undertake adequate safeguard measures during extraction of river bed material and ensure that due to this activity the hydro-geological regime of the surrounding area are not affected.
- 19)** The project proponent shall ensure refraining from leaving behind clothes, personal belongings of labour engaged, polythene, plastic bottles, carton etc or any other solid waste in work site at the end of working season
- 20)** The project proponent will provide protective respiratory devices to workers working in dusty areas and they shall also be provided with adequate training and information on safety and health aspects. Periodical medical examination of the workers engaged in the project shall be carried out and records maintained.
- 21)** Photography of the proposed mining site as well as the plantation sites undertaken by the project proponent showing GPS coordinates should be done (preferably using Drone) and submitted to SEIAA and regional office of MoEF&CC, Govt of India at Dehradun along with half-yearly compliance report.
- 22)** The project proponent should plant 2000 trees in first 2 years and followed by maintainance in the last 3 years. The plants should be planted in the buffer zone of the mining site and in the blank area near by van panchayats/gram sabha land.
- 23)** The above environmental safeguards shall be implemented in letter and spirit. The project proponent shall establish Environment Monitoring Cell and also submit six monthly compliance reports to this Authority and regional office of MoEF&CC, Govt of India at Dehradun
- 24)** 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

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- 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
- 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 UEPPCB/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 UEPPCB 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.
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5(f):STANDARD TERMS OF REFERENCE FOR CONDUCTING ENVIRONMENT IMPACT ASSESSMENT STUDY FOR SYNTHETIC ORGANIC CHEMICALS INDUSTRY (DYES & DYE INTERMEDIATES; BULK DRUGS AND INTERMEDIATES EXCLUDING DRUG FORMULATIONS; SYNTHETIC RUBBERS; BASIC ORGANIC CHEMICALS, OTHER SYNTHETIC ORGANIC CHEMICALS AND CHEMICAL INTERMEDIATES) AND INFORMATION TO BE INCLUDED IN EIA/EMP REPORT

A. STANDARD TERMS OF REFERENCE

1) Executive Summary

2) Introduction

i. Details of the EIA Consultant including NABET accreditation

ii. Information about the project proponent

iii. Importance and benefits of the project

3) Project Description

i. Cost of project and time of completion.

ii. Products with capacities for the proposed project.

iii. If expansion project, details of existing products with capacities and whether adequate land is available for expansion, reference of earlier EC if any.

iv. List of raw materials required and their source along with mode of transportation.

v. Other chemicals and materials required with quantities and storage capacities

vi. Details of Emission, effluents, hazardous waste generation and their management.

vii. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract) viii. Process description along with major equipments and machineries, process flow sheet (quantative) from raw material to products to be provided

ix. Hazard identification and details of proposed safety systems.

x. Expansion/modernization proposals:

c. Copy of all the Environmental Clearance(s) including Amendments thereto obtained for the project from MOEF/SEIAA shall be attached as an Annexure. A certified copy of the latest Monitoring Report of the Regional Office of the Ministry of Environment and Forests as per circular dated 30th May, 2012 on the status of compliance of conditions stipulated in all the existing environmental clearances including Amendments shall be provided. In addition, status of compliance of Consent to Operate for the ongoing lexisiting operation of the project from SPCB shall be attached with the EIA-EMP report.

d. In case the existing project has not obtained environmental clearance, reasons for not taking EC under the provisions of the EIA Notification 1994 and/or EIA Notification 2006 shall be provided. Copies of Consent to Establish/No Objection Certificate and Consent to Operate (in case of units operating prior to EIA Notification 2006, CTE and CTO of FY 2005-2006) obtained from the SPCB shall be submitted. Further, compliance report to the conditions of consents from the SPCB shall be submitted.

4) Site Details

i. Location of the project site covering village, Taluka/Tehsil, District and State, Justification for selecting the site, whether other sites were considered.

ii. A toposheet of the study area of radius of 10km and site location on 1:50,000/1:25,000 scale on an A3/A2 sheet. (including all eco-sensitive areas and environmentally sensitive places)

iii. Details w.r.t. option analysis for selection of site

iv. Co-ordinates (lat-long) of all four corners of the site.

v. Google map-Earth downloaded of the project site.

vi. Layout maps indicating existing unit as well as proposed unit indicating storage area, plant area, greenbelt area, utilities etc. If located within an Industrial area/Estate/Complex, layout of Industrial Area indicating location of unit within the Industrial area/Estate.

vii. Photographs of the proposed and existing (if applicable) plant site. If existing, show photographs of plantation/greenbelt, in particular.

viii. Landuse break-up of total land of the project site (identified and acquired), government/private - agricultural, forest, wasteland, water bodies, settlements, etc shall be included. (not required for industrial area)

ix. A list of major industries with name and type within study area (10km radius) shall be incorporated. Land use details of the study area

x. Geological features and Geo-hydrological status of the study area shall be included.

xi. Details of Drainage of the project upto 5km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based

on peak rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided. (mega green field projects)

xii. Status of acquisition of land. If acquisition is not complete, stage of the acquisition process and expected time of complete possession of the land.

xiii. R&R details in respect of land in line with state Government policy.

5) Forest and wildlife related issues (if applicable):

i. Permission and approval for the use of forest land (forestry clearance), if any, and recommendations of the State Forest Department. (if applicable)

ii. Landuse map based on High resolution satellite imagery (GPS) of the proposed site delineating the forestland (in case of projects involving forest land more than 40 ha)

iii. Status of Application submitted for obtaining the stage I forestry clearance along with latest status shall be submitted.

iv. The projects to be located within 10 km of the National Parks, Sanctuaries, Biosphere Reserves, Migratory Corridors of Wild Animals, the project proponent shall submit the map duly authenticated by Chief Wildlife Warden showing these features vis-à-vis the project location and the recommendations or comments of the Chief Wildlife Warden-thereon.

v. Wildlife Conservation Plan duly authenticated by the Chief Wildlife Warden of the State Government for conservation of Schedule I fauna, if any exists in the study area.

vi. Copy of application submitted for clearance under the Wildlife (Protection) Act, 1972, to the Standing Committee of the National Board for Wildlife.

6) Environmental Status

i. Determination of atmospheric inversion level at the project site and site-specific micrometeorological data using temperature, relative humidity, hourly wind speed and direction and rainfall.

ii. AAQ data (except monsoon) at 8 locations for PM₁₀, PM_{2.5}, SO₂, NO_x, CO and other parameters relevant to the project shall be collected. The monitoring stations shall be based CPCB guidelines and take into account the pre-dominant wind direction, population zone and sensitive receptors including reserved forests.

iii. Raw data of all AAQ measurement for 12 weeks of all stations as per frequency given in the NAQPM Notification of Nov. 2009 along with - min., max., average and 98% values for each of the AAQ parameters from data of all AAQ stations should be provided as an annexure to the EIA Report.

iv. Surface water quality of nearby River (100m upstream and downstream of discharge point) and other surface drains at eight locations as per CPCB/MoEF&CC guidelines.

v. Whether the site falls near to polluted stretch of river identified by the CPCB/MoEF&CC, if yes give details.

vi. Ground water monitoring at minimum at 8 locations shall be included.

vii. Noise levels monitoring at 8 locations within the study area.

viii. Soil Characteristic as per CPCB guidelines.

ix. Traffic study of the area, type of vehicles, frequency of vehicles for transportation of materials, additional traffic due to proposed project, parking arrangement etc.

x. Detailed description of flora and fauna (terrestrial and aquatic) existing in the study area shall be given with special reference to rare, endemic and endangered species. If Schedule-I fauna are found within the study area, a Wildlife Conservation Plan shall be prepared and furnished.

xi. Socio-economic status of the study area.

7) Impact and Environment Management Plan

i. Assessment of ground level concentration of pollutants from the stack emission based on site-specific meteorological features. In case the project is located on a hilly terrain, the AQIP Modelling shall be done using inputs of the specific terrain characteristics for determining the potential impacts of the project on the AAQ. Cumulative impact of all sources of emissions (including transportation) on the AAQ of the area shall be assessed. Details of the model used and the input data used for modelling shall also be provided. The air quality contours shall be plotted on a location map showing the location of project site, habitation nearby, sensitive receptors, if any.

ii. Water Quality modelling - in case of discharge in water body

iii. Impact of the transport of the raw materials and end products on the surrounding environment shall be assessed and provided. In this regard, options for transport of raw materials and finished products and wastes (large quantities) by rail or rail-cum road transport or conveyor-cum- rail transport shall be examined.

iv. A note on treatment of wastewater from different plant operations, extent recycled and reused for different purposes shall be included. Complete scheme of effluent treatment. Characteristics of untreated and treated effluent to meet the prescribed standards of discharge under E(P) Rules.

v. Details of stack emission and action plan for control of emissions to meet standards.

vi. Measures for fugitive emission control

vii. Details of hazardous waste generation and their storage, utilization and management. Copies of MOU regarding utilization of solid and hazardous waste in cement plant shall also be included. EMP shall include the concept of waste-minimization, recycle/reuse/recover techniques, Energy conservation, and natural resource conservation.

viii. Proper utilization of fly ash shall be ensured as per Fly Ash Notification, 2009. A detailed plan of action shall be provided.

ix. Action plan for the green belt development plan in 33 % area i.e. land with not less than 1,500 trees per ha. Giving details of species, width of plantation, planning schedule etc. shall be included. The green belt shall be around the project boundary and a scheme for greening of the roads used for the project shall also be incorporated.

x. Action plan for rainwater harvesting measures at plant site shall be submitted to harvest rainwater from the roof tops and storm water drains to recharge the ground water and also to use for the various activities at the project site to conserve fresh water and reduce the water requirement from other sources.

xi. Total capital cost and recurring cost/annum for environmental pollution control measures shall be included.

xii. Action plan for post-project environmental monitoring shall be submitted.

xiii. Onsite and Offsite Disaster (natural and Man-made) Preparedness and Emergency Management Plan including Risk Assessment and damage control. Disaster management plan should be linked with District Disaster Management Plan.

8) Occupational health

i. Plan and fund allocation to ensure the occupational health & safety of all contract and casual workers

ii. Details of exposure specific health status evaluation of worker. If the workers' health is being evaluated by pre designed format, chest x rays, Audiometry, Spirometry, Vision testing (Far & Near vision, colour vision and any other ocular defect) ECG, during pre placement and periodical examinations give the details of the same. Details regarding last month analyzed data of above mentioned parameters as per age, sex, duration of exposure and department wise.

iii. Details of existing Occupational & Safety Hazards. What are the exposure levels of hazards and whether they are within Permissible Exposure level (PEL). If these are not within PEL, what measures the company has adopted to keep them within PEL so that health of the workers can be preserved,

iv. Annual report of health status of workers with special reference to Occupational Health and Safety.

9) Corporate Environment Policy

i. Does the company have a well laid down Environment Policy approved by its Board of Directors? If so, it may be detailed in the EIA report.

ii. Does the Environment Policy prescribe for standard operating process / procedures to bring into focus any infringement / deviation / violation of the environmental or forest norms / conditions? If so, it may be detailed in the EIA.

iii. What is the hierarchical system or Administrative order of the company to deal with the environmental issues and for ensuring compliance with the environmental clearance conditions? Details of this system may be given.

iv. Does the company have 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? This reporting mechanism shall be detailed in the EIA report

10) Details regarding infrastructure facilities such as sanitation, fuel, restroom etc. to be provided to the labour force during construction as well as to the casual workers including truck drivers during operation phase.

11) Enterprise Social Commitment (ESC)

i. Adequate funds (at least 2.5 % of the project cost) shall be earmarked towards the Enterprise Social Commitment based on Public Hearing issues and item-wise details along with time bound action plan shall be included. Socio-economic development activities need to be elaborated upon.

12) Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case.

13) A tabular chart with index for point wise compliance of above TOR.

B. SPECIFIC TERMS OF REFERENCE FOR EIA STUDIES FOR SYNTHETIC ORGANIC CHEMICALS INDUSTRY (DYES & DYE INTERMEDIATES; BULK DRUGS AND INTERMEDIATES EXCLUDING DRUG FORMULATIONS; SYNTHETIC RUBBERS; BASIC ORGANIC CHEMICALS, OTHER SYNTHETIC ORGANIC CHEMICALS AND CHEMICAL INTERMEDIATES)

1. Details on solvents to be used, measures for solvent recovery and for emissions control.
2. Details of process emissions from the proposed unit and its arrangement to control.
3. Ambient air quality data should include VOC, other process-specific pollutants* like NH₃*, chlorine*, HCl*, HBr*, H₂S*, HF*, etc., (*-as applicable)
4. Work zone monitoring arrangements for hazardous chemicals.
5. Detailed effluent treatment scheme including segregation of effluent streams for units adopting 'Zero' liquid discharge.
6. Action plan for odour control to be submitted.
7. A copy of the Memorandum of Understanding signed with cement manufacturers indicating clearly that they co-process organic solid/hazardous waste generated.
8. Authorization/Membership for the disposal of liquid effluent in CETP and solid/hazardous waste in TSDF, if any.
9. Action plan for utilization of MEE/dryers salts.
10. Material Safety Data Sheet for all the Chemicals are being used/will be used.
11. Authorization/Membership for the disposal of solid/hazardous waste in TSDF.
12. Details of incinerator if to be installed.
13. Risk assessment for storage and handling of hazardous chemicals/solvents. Action plan for handling & safety system to be incorporated.
14. Arrangements for ensuring health and safety of workers engaged in handling of toxic materials.

7(i):STANDARD TERMS OF REFERENCE FOR CONDUCTING ENVIRONMENT IMPACT ASSESSMENT STUDY FOR COMMON MUNICIPAL SOLID WASTE MANAGEMENT FACILITY (CMSWMF) AND INFORMATION TO BE INCLUDED IN EIA/EMP REPORT

- 1) The project should be designed based on the population projections as by Master Plan.
- 2) Submit a 10 km. radius map (on survey of India toposheet) showing co-ordinates of project site, national highway, state highway, district road/approach road, river, canal, natural drainage; protected areas, under Wild Life (Protection) Act, archaeological site, natural lake, flood area, human settlements (with population), industries, high tension electric line, prominent wind direction (summer and winter), effluent drain, if any and ponds etc. should be presented and impacts assessed on the same.
- 3) Examine and submit details of alternative technologies viz. RDF shall also be evolved.
- 4) Examine and submit details of storm water/ leachate collection from the composted area.
- 5) Examine and submit details of monitoring of water quality around the landfill site. Water analysis shall also include for nitrate and phosphate.
- 6) Examine and submit details of the odour control measures.
- 7) Examine and submit details of impact on water bodies/rivers/ ponds and mitigative measures during rainy season.
- 8) Submit the criteria for assessing waste generation. Any segregation of hazardous and bio-medical wastes.
- 9) Submit a copy of the layout plan of project site showing solid waste storage, green belt (width & length, 33% of the project area), all roads, prominent wind direction, processing plant & buildings etc. should be provided.
- 10) Submit a copy of the land use certificate from the competent authority.
- 11) NOC from local or nearest airport within 20 km and any flight funnel restrictions.
- 12) Submit a copy of the status of ambient air quality and surface and ground water quality, soil type, cropping pattern, land use pattern, population, socio-economic status, anticipated air and water pollution.
- 13) Submit a copy of the topography of the area indicating whether the site requires any filling, if so, the details of filling, quantity of fill material required, its source and transportation, etc.
- 14) Examine and submit the details of impact on the drainage and nearby habitats/settlements (surroundings).
- 15) Examine and submit the details of surface hydrology and water regime and impact on the same.
- 16) Examine and submit the details of one complete season AAQ data (except monsoon) with the dates of monitoring, impact of the project on the AAQ of the area (including H₂S, CH₄).
- 17) Submit a copy of detailed plan of waste management.
- 18) Submit the details of sanitary land fill site impermeability and whether it would be lined, if so details thereof.
- 19) Examine and submit the details of impact on environmental sensitive areas.
- 20) Examine and submit the details of rehabilitation/compensation package for the project effected people, if any.
- 21) Submit Environmental Management Plan and Environmental Monitoring Plan with costs and parameters.
- 22) Public hearing to be conducted for the project in accordance with provisions of Environmental Impact Assessment Notification, 2006 and the issues raised by the public should be addressed in the Environmental Management Plan. The Public Hearing should be conducted based on the ToR letter issued by the Ministry and not on the basis of Minutes of the Meeting available on the web-site.
- 23) A detailed draft EIA/EMP report should be prepared in accordance with the above additional TOR and should be submitted to the Ministry in accordance with the Notification.
- 24) Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- 25) The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.

26) Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure, project proponent can refer to the model ToR available on Ministry website "<http://moef.nic.in/Manual/Common Municipal Solid Wastes>".
