

Sub.: Proposal for diversion of 44.038 ha of forest land including 9.286 ha of forest land in Safety Zone within total ML area of 58.704 Ha in Bainibasa Graphite Mining lease of M/s Pradhan Industries located in Bainibasa village under Muniguda Tahasil of Rayagada district, Odisha for graphite Mining.

S.N.1® Page 1-393/corr.

1. The State Government of Odisha vide their letter No. letter No. 10F (Cons)289/2016/22319/F & E dated 31.10.2017 submitted the above mentioned proposal seeking prior approval of the Central Government under Sectin-2 of the Forest (Conservation) Act, 1980.
2. The facts related to the proposal as contained in the State Government's letter dated 31.10.2017 are given below in the form of fact sheet:

FACT SHEET

1.	Name of the Proposal	Diversion of 44.038 ha of forest land including 9.286 ha of forest land in Safety Zone within total ML area of 58.704 Ha in Bainibasa Graphite Mining lease of M/s Pradhan Industries located in Bainibasa village under Muniguda Tahasil of Rayagada district, Odisha for graphite Mining.
2.	Location (i) State (ii) District	Odisha Rayagada
3.	Particulars of Forests: (i) Name of Forest Division and Forest area involved. (ii) Legal status/Sy.No.	Rayagada Forest Division 44.038 ha. (including 9.286 ha in safety zone) Revenue Forest Land (Bada Jungle & Patra Jungle)
4.	Topography of the area	-
5.	(i) Geology (ii) Vulnerability to erosion	- The ML area represents a mild sloping topography as well as plain land bisected by the seasonal nallas flowing along West-East. General slop of the area is due East. Sakat nalla is flowing on the South to North –East direction. The slop is less than 10° and not volunerable to soil erosion.
6.	(i) Vegetation (ii) Density (iii) No. of trees enumerated/to be actually felled	Sal, Bandhan, Sahaj, Jamu, Kasi, Aamba, Ankula Koli, Bara, Bahada, Chara, Dhaura, Harida, Cashew, Kanchan, Karada, Kendu, Kurei, Mahula, Moi, Palasa, Pipal, Bana Tentuli, Tentuli, Bela, Kusuma, Neem, Pani Sahaj, Pijuli, Sahada, Satkaradia, Simili, Senha etc. (Pg-50-51/c) 0.02 272 trees (218 nos. of trees on proposed diverted forest land and 54 nos. of trees on safety zone).
7.	Whether forms part of National Park, Wildlife Sanctuary, Biosphere Reserve, Tiger Reserve, Elephant Corridor, etc. (if so, details of the area and	The proposed area does not form part of National Park, Wildlife Sanctuary, Biosphere Reserve or Tiger Reserve, Elephant corridor. It is also not coming within Eco Sensitive zone of any National park/Wildlife Sanctuary.

	comments of the Chief Wildlife Warden	
8.	Whether any RET species of flora and fauna are found in the area. If so details thereof	No
9.	Approximate distance of the proposed site for diversion from boundary of forest.	The proposed site for diversion is adjoining to Jamarguda R.F. and at 0.2 k.m. away.
10.	Whether any protected archaeological/ heritage site/defence establishment or any other important monuments is located in the area.	No
11.	Whether any work of in violation of the Forest (Conservation) Act, 1980 has been carried out (Yes/No). If yes details of the same including period of work done, action taken on erring officials. Whether work in violation is still in progress.	No
12.	Whether the requirement of forest land as proposed by the user agency in col. 2 of Part-I is unavoidable and barest minimum for the project, if no recommended area item-wise with details of alternatives examined.	Yes The lease deed has also been executed by the Government (Collector, Rayagada) on 11.01.2017.
13.	Whether clearance under the Environment (protection) Act, 1986 is required?	Yes, Copy of EC is not given.
14.	Compensatory Afforestation	
	(i) Details of non-forest area/degraded forest area identified for CA, its distance from adjoining forest, number of patches, size of each patches.	Govt. non-forest land measuring 34.76 ha has been identified at village Sana Bhdahada and Sikabandha under Bissamcuttack Tahasil of Rayagada district. It is in one compact patch and about 300 meters from the nearby Ghagurhi pahar PRF.
	(ii) Map showing non-forest/degraded forest area identified for CA and adjoining forest boundaries.	----
	(iii) Detailed CA scheme including species to be planted, implementing agency, time schedule, cost structure, etc.	(Pg-341-355/c)
	(iv) Total financial outlay for CA	Rs. 91,78,600.00 (Pg-356/c)
	(v) Certificate from the competent authority regarding suitability of the	DFO, Keonjhar Rayagada has given Land Suitability Certificates (Pg-30/c) .

	area identified for CA and from management point of view.	
15.	Catchment Area Treatment	NA
16.	Site Inspection Report by DFO	Site inspection by DFO, Rayagada Division (Pg-56/c).
17.	Total period for which the forest is proposed to be diverted (In years)	50 years
18.	Rehabilitation of Oustees a) No of families involved b) Category of families c) Details of rehabilitation plan	Nil NA NA
19.	Employment likely to be generated i. Whether the project is likely to generate employment ii. Permanent/Regular Employment (Number of Person) iii. Temporary Employment (Number of person-days)	Yes 58 12000
20.	Compliance of Scheduled Tribe and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006	Compliance of Scheduled Tribe and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 has been submitted by the State Government for the entire forest area of 44.038 ha. (Pg 289-334/c).
21.	Cost Benefit Ratio	Cost benefit ratio of the project is 1:45.71 (Pg-131/c)
22.	Total Cost of the Project	Rs 797.858 (Rupees in lacs) (Pg-31/c)
23.	Recommendation i. DFO ii. RCCF iii. PCCF/Nodal Officer iv State Government	Recommended (Pg-55/c) Recommended (Pg-58/c) Recommended (Pg-61/c) Recommended (Pg-62/c)
24.	District Profile (i) Total Geographical area of the district (ii) Total Forest area/ Divisional Forest area (iii) Total area diverted since 1980 (iv) Total CA stipulated since 1980 (Forest land) a. Forest land including penal CA b. Non Forest Land (v) Progress of Compensatory Afforestation a. Forest land b. Non Forest land	7073.00 sq. km. 3,19,691.01 sq. km. 1837.031 ha (15 Nos. cases) 25.00 ha & 2250 nos. plants 1823.471 ha

3. The State Government of Odisha in their letter dated 31.10.2017 informed this Ministry as below:

1. **Brief Description:** An application was filed on 8.5.1992 by M/s Pradhan Industries for graphite mining over an area of 101.50 ha in village Bainibasa in the district of Rayagada. However, the Director of Mines, Odisha vide his letter No. 12099 dt 30.4.1996 had recommended for grant of mining lease over 58.704 ha. Accordingly, terms and conditions were issued by Steel & Mines Department vide their letter No. 6325 dt. 21.6.2005 and the same terms and conditions were accepted by the ML applicant vide its letter dtd. 22.6.2005. While the ML application was pending for disposal by the State Government MMDR (Amendment) Act, 2015 was enforced, w.e.f. 12.1.2015 and subsequently the Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession rules, 2016 (MC Rules 2016) have also been notified by Central Government. As per provision of Section 10A(2)(C) of MMDR (Amendment) Act, 2015 and Rules 8 of the MC Rules, 2016, the ML application of Bainibasa Graphite Mines over 58.704 ha was eligible for grant of mining lease subject to forest clearance under Section 2(iii) of FC Act, 1980 and such mining lease was required to be granted / executed on or before 11.1.2017. **On the application of the firm, the MoEF & CC, GoI vide their letter F. No. 8-60/2016-FC dt. 6.1.2017 accorded permission under Section 2(iii) of FC Act, 1980 pertaining to 44.038 ha of Forest kism land in the ML area applied for subject to fulfillment of conditions stipulated therein.** The firm in the meanwhile deposited NPV for the entire applied forest area amounting to Rs. 2,75,67,788/-. As regards FRA Compliance to be made as per MoEF & CC's order, the Ministry of Mines, GoI vide their letter dt. 5.12.2017, had circulated the clarification to MoTA, GoI for non-insistence of the same at the time of execution of lease deed. This condition was however to mentioned in the lease deed to be executed. Accordingly, the Government of Odisha in Department of Steel & Mines granted Mining Lease vide their proceedings No. II (GR) SM-01/2017/379/SM dated 10.01.2017 in respect of Bainibasa Graphite Mine over 58.704 ha in village Bainibasa for a period of 50 years in favour of M/s Pradhan Industries. **The Mining Lease deed has been executed on dated 11.01.2017.** FRA Compliance pertaining to entire forest land in this Mining lease has also been furnished by the Collector, Rayagada in the meantime. The Bainibasa Graphite mining lease is located in village Bainibasa under Muniguda Tahasil of Rayagada district, Odisha coming under the jurisdiction of Muniguda Forest Range of Rayagada Forest Division and is delineated within latitude of 19°38' 08.761" N to 19°38' 47.059"N and longitude of 83°29'38.198"E to 83°30'14.78"E. The ML area is delineated in Survey of India Topo Sheet No. E44F6 (65M/6) and E44F10(65M/10) in 1:50,000 scale. The executed mining lease over 58.704 ha involves 44.038 ha of Revenue forest Land and 14.666 ha of Non-Forest Land. Out of 14.666 ha of non-forest land 0.081 ha is Govt. land and 14.585 ha is private land. The land schedule of total ML area duly authenticated by the Tahasildar, Muniguda and status of land of the ML area as on 25.10.1980 are enclosed at **(Page 115/c)**. The instant diversion proposal is for seeking prior approval of Central Govt. for diversion of 44.038 ha of forest land under Section – 2(ii) of FC Act, 1980 for its non-forest use.

As mentioned in Part–A of application, Bainibasa mining lease area for graphite ore forms a part of Eastern Ghat Super Group of Archean rocks. The ML area represents a mild sloping topography as well as plain land bisected by the seasonal nalas flowing along west – east. General slope of the area is due east. The highest and lowest altitudes are at 361 m RL and 334 m RL respectively. There is no perennial nala in the applied ML area. The natural drainage system is distinct and dendritic in nature. Seasonal nala starts from the western side and passes through the ML area along West–East direction. **A perennial nala namely “Sakata Nala” starting from Nimagiri hill range flows outside the applied ML area along the Southern boundary from**

west to east and joins with River Banshadhara in the east. The confluence point of Sakata nala and River Banshadhara is at a linear distance of 4 km due east.

The Deputy Director of Mines, Koraput in his certificate dt. 21.11.2016 (**Page 126/c**) has indicated that specified ore cannot be mined out completely without diversion of forest land. The Mining Plan with progressive Mines Closure Plan over an area of 58.704 ha has been approved by Indian Bureau of Mines vide its letter No. MP/OTFM/20-ORI/BHU/2016/17/7097 dt.17.11.2016. The Mining Lease contains total mineable reserve of 134736 tonnes of Graphite ore. The copy of approved Mining Plan with Progressive Mines Closures Plan duly approved by IBM is at **Page 104-195/DP**. The life of the mine as on date is estimated to be 11 years considering production of 13272 Tonnes per year.

2. **Forest Land:** The ML area over 58.704 ha involves 44.038 ha of Revenue Forest land, 0.081 ha of govt. non – forest land and 14.585 ha of private non-forest land. Out of 44.038 ha of forest land, 43.257 ha is of kissam ‘Patra Jungle’ and 0.781 ha is of kissam ‘Bada Jungle’. **It has been indicated by PCCF, Odisha that out of 14.585 ha of private non-forest land 2.167 ha is included in the safety zone where as the balance 12.418 ha of private land shall not be utilized in any manner for the purpose of mining and related ancillary activities and shall remain untouched.** The requisite certificate of the Tahasildar. Muniguda on status of the both forest and non-forest land involved in this mining lease as on 25.10.1980, is enclosed (**Page 116/c**). **The purpose wise break up of total land is indicated below:**

Component wise breakup of total land				
Sl. No.	Component	Forest Land (Ha.)	Non – Forest Land (Ha)	Total in Ha
1	Area under Excavation	3.885	0	3.885
2	Storage of Top Soil	0.927	0	0.927
3	Overburden Dump	2.338.	0	2.338.
4	Mineral Storage	2.945	0	2.945
5	Infrastructure	2.000	0	2.000
6	Road	2.500	0	2.500
7	Tailing Pond	2.848	0	2.848
8	Effluent Treatment Plant	0.064	0	0.064
9	Mineral Separation Plant (Beneficiation Plant)	2.136	0	2.136
10	Others		0	
	a. Water storage / Reservoir	0.650	0	0.650
	b. Rain Water harvesting Pond	0.900	0	0.900
	c. Settling Pond (4 No)	0.950	0	0.950
11	Safety Zone	9.286	2.167	11.453
	Sub Total	31.429	2.167	33.596
12	Area for future Exploration & Utilization	12.609	0.081	12.69
	Sub Total	44.038	2.248	46.286
13	Private Plot (to remain untouched)	0	12.418	12.418
14	Total	44.038	14.666	58.704

3. Flora & fauna

As reported by the DFO, Rayagada and the RCCF, Koraput Circle in their Site Inspection Reports, the vegetation of the applied forest area belongs to Tropical Dry Deciduous Mixed Forest type having density less than 0.1. The tree species as reported by DFO in his site inspection report includes Sal (*Shorea robusta*), Jamun (*Syzgiumeumin*), Mango (*Mangifera indica*), Bahada (*Terminalia belerica*), Chara (*Buchanania Lanzan*), harida (*Terminalia Chebula*), Kendu (*Diospyros melanoxylon*), Mahula (*Madhuca indica*), Tamarind (*Tamarindus indica*), Bel (*Aegle marmelos*), Kusum (*Schleichera oleosa*), Neem (*Azadirachta indica*), Simla (*Bombax ceiba*) etc.

As reported, no such rare and endangered faunal species are found in this area. The common wild animals noticed are Fox, Mongoose, Rabbit, Chameleon, Monitor Lizard, Black Drango, Rat Snake etc. Occasional movement of elephant is also reportedly noticed this area. Nearby wildlife sanctuary to this project is at Kotgarh which is about 21.6 km away. Similarly nearest proposed elephant corridor (Kotgarh sanctuary – Lakhari valley) is about 23.8 km from the project site.

4. Tree enumeration

As reported by the DFO, Rayagada, 218 nos of trees about 30 cm girth have been enumerated in the applied forest land of 34.752 ha proposed for diversion excluding safety zone. The abstract of tree enumeration in the forest area of ML excluding the safety zone signed by the DFO, Rayagada is enclosed (**Page 358-371/c**). Further, 54 Nos of trees above 30 cm girth have been enumerated in 9.286 ha of forest land coming within safety zone area. The abstract of tree enumeration in safety zone duly signed by DFO, Rayagada is enclosed (**Page 364/c**). In all, 272 nos. of trees have been enumerated from the entire forest land of 44.038 ha involved in this proposal. Details of tree enumeration is enclosed (**Page 256-371/c**). As regards 12.69 ha of land including 12.609 ha of forest land being proposed to be kept for future exploration 86 no. of trees have been enumerated which are to be kept intact at project cost.

5. Wildlife Management

As reported by the DFO, Rayagada and the RCCF, Koraput Circle in their site inspection reports, the area does not form a part of National Park or Wildlife Sanctuary, Biosphere Reserve, Tiger Reserve. It is also not coming within any Eco Sensitive Zone of any protected area. No such rare and endangered faunal species are found in this area. Occasional movement, of elephants have been reported. Besides wild faunas like Fox, Mongoose, Rabbit, Chameleon, Monitor lizard, Black Drango, Rat Snake etc are also available in the area. **Therefore, a site-specific wildlife Conservation plan is required to be prepared as per guidelines of CWLW, Odisha for its approval by PCCF(WL)&CWLW, Odisha, which needs to be implemented at project cost inside the ML area as well as in the project impact area.** Besides, proportionate cost of Regional Wildlife Management Plan as per revised rate on ML area basis is also to be deposited by the lessee its implementation.

6. Compensatory afforestation

Total forest land applied for diversion in the instant proposal is 44.038 ha including 9.286 ha of forest land in safety zone. No Compensatory Afforestation is required pertaining forest land coming under safety zone. Hence compensatory afforestation is required to be taken up over 34.752 ha. of non-forest land in respect of this mining project. Therefore 34.76 ha of Government non-forest land in Sanaburahara and Sikabandha Mouza under Tahasil Bissam-Cuttack in Rayagada district has been identified for raising Compensatory Afforestation in lieu of 34.752ha. of forest land required for mining activities in this project. The land schedule of identified non-forest land of Pahada KISSAM duly countersigned by Tahasildar, Bissam-Cuttack is enclosed . The Tahasildar has reported that the non-forest land identified for CA is free from encroachment and encumbrance. The identified non-forest land is also not included in DLC report of the district. The joint verification report involving Revenue and Forest Department field functionaries duly signed by all concerned is enclosed (**Page No. 338/c**). **A site specific Compensatory Afforestation scheme has been prepared by the DFO,**

Rayagada to raise block plantation 1600 seedlings per ha over 17.38 ha and bald hill plantation @ 1600 seedlings per ha over 17.38 ha at current wage rate of Rs.200/- per manday- including cost of maintenance for 10 years. The Compensatory Afforestation scheme has been technically approved by the Addl. PCCF (Forest Diversion and Nodal Officer, FC Act) with a total financial outlay of Rs.91,78,600 /- only. Indigenous species such as Neem, Simili, Sunari, Bamoo, Gamhar, Mango, Amla, Jamun etc. have been selected for plantation. The User Agency has furnished an undertaking to bear the cost of the Compensatory Afforestation as per prevailing wage rate at the time of plantation (**Page No.26/c**). The DGPS map of the non-forest land identified for Compensatory Afforestation is enclosed in the DP along with its shape file in CD form. The CA land has been delineated on Survey of India Toposheet No. 65M/10. The approved CA scheme along with financial outlay is enclosed.

7. Cost Benefit Analysis

Cost benefit analysis has been assessed as per MoEF&CC guidelines No. 7-69/2011-FC(Pt) clt. 1.8.2017. The total loss per annum due to loss of timber, fire wood & minor forest produce and environmental loss has been estimated at Rs.12.28 lakh whereas the total benefit to the economy due to this mining project per annum has been estimated at Rs.561.384 lakh. Hence, the cost benefit ratio comes to 1: 45.71.

8. Safety Zone

As mentioned in the Safety Zone map provided by User Agency, the safety zone involves 11.453 ha comprising of 9.286 ha of forest land and 2.167 ha of non-forest private land. Details of forest and Non-forest land coming within the safety zone in respect of the Proposal is indicated below.

Sl. No.	Item	Forest land (in ha)	Non-Forest land (in Ha)	Total Area (in Ha)
1	7.5 m wide all along the Mining lease Boundary	0.737	1.516	2.253
2	50m width along nala course (excluding safety zone along ML boundary)	8.549	0.651	9.200
	Total Area in Ha.	9.286	2.167	11.453

The lessee is therefore required to maintain the safety zone at its own cost. Besides, the lessee is also required to bear the cost of afforestation over 1.5 times of the forest area in the safety zone in the degraded forest land to be identified by State Government elsewhere.

9. Environmental Clearance

The lessee has applied for environmental clearance from Gol, MoEF&CC. Government of India, MoEF & CC vide their letter F.No.-IA-J-11015/16/2017-IA-II(M) dt. 10.3.2017 have accepted the proposal for issuing TOR. The project is therefore subject to Environmental clearance of MoEF&CC and CTE/CTO of SPCB, Odisha.

10. Resettlement & Rehabilitation Plan

The project does not involve displacement of any human habitation. Hence, Resettlement & Rehabilitation plan is not required.

11. Mining Plan and Progressive Mines Closure Plan

The Mining Plan including the Progressive Mine Closure Plan of Bainibasa Graphite Mine over an area of 58.704 ha of M/s Pradhan Industries has been approved vide letter no. MP/OTFM/20-ORI/BHU/2016-17/7097 dated 17.11.2016 of Gol, Ministry of Mines, Indian Bureau of Mines, Regional Controller of Mines. Copy of the approval letter is enclosed (**Page-141-142/c**). The copy of the approved Mining Plan and Progressive Mine Closure Plan is enclosed. As indicated in the approved Mining Plan, Mining Lease area contains total mineable reserve of 134736 tonnes of Graphite ore. The life of the mine as on date is estimated to be 11 years considering production of 13272Tonnes per year.

12. Phased Reclamation Plan

The lessee has to carry out reclamation of the ML area as per the provision of the approved reclamation plan. Therefore the lessee has to submit Phased reclamation Plan (as per provision of para 5.2(i)(a) of FC Act guidelines) for its implementation at project cost.

13. Lease Profile:

The lease profile as given by the user agency is placed in file at (**Page-340/c**).

14. Violation

No violation has been reported by both the DR), Rayagada Forest Division and the RCCF, Koraput Circle in their Site Inspection Reports.

15. Compliance of MoEF&CC guidelines dt. 3.8.2009/5.7.2013 on processing of the Forest diversion proposal as per provisions of the ST & Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006

The Collector, Rayagada has furnished certificate as per prescribed format Over 44.038 ha. of forest land proposed for diversion in this project (**page 289/c**). The proceedings of Forest Rights Committee of Bhairabgada GP held on 19.12.2016 (**Page 290/c**) and its English version at **page 295/c**, Proceedings of Gram Sabha of Bainabasa held on 20.12.2016 in Odia language (**Page 299/c**) and its English version at **page 309/c**, Proceedings of SDLC, Gunupur held on 11.7.2017 (**page 316/c**) and Proceedings of DLC, Rayagada held on 20.7.2017 (**page 325/c**) pertaining to this project area also furnished. This complies with the FRA guidelines of MoEF&CC pertaining to forest land proposed for diversion in this project.

16. Others

In compliance to MoEF&CC's order dt: 6.1.2017 according permission under Section 2(iii) of FC Act, 1980, the lessee has already deposited the Net Present Value (NPV) for entire forest land of 44.308 ha involved in this mining lease amounting to Rs. 2,75,67,788/- through web portal vide RTGS No. UTR No BKIDH 17010512274 dated 10.01.2017. Further the User Agency has furnished an undertaking to pay the additional NPV if so decided at a later date as per the decision-of the Supreme Court. The said undertaking is enclosed (**Page-27/c**). The Site Inspection of the DFO, Rayagada Forest Division is enclosed at **Page- 56/c** Site Inspection of the Regional Chief Conservator of Forests, Koraput Circle is enclosed at **Page- 59/c**. The basic information of Rayagada Forest Division, District Profile of Rayagada District and 'State Profile have been furnished.

The Principal Chief Conservator of Forests, Odisha has recommended the proposal.

All parts of the statutory proforma have been duly filled in and all relevant maps and undertakings have been enclosed.

17. State Government of Odisha further requested to examine the proposal and approved subject to the following stipulation:

- A)** 9.286ha. of forest land is to be maintained as safety zone and in no circumstances, it shall be used for mining and other allied activities.
- B)** The user agency shall undertake demarcation of the lease area on the ground posting four feet high cement concrete pillars embedded two feet inside the soil with serial number, forward and backward bearings, and distance from pillar to pillar. The user agency shall also submit the map of lease area showing different kinds of forest land using DGPS survey datas and latitude and longitude of each pillar to the Divisional Forest Officer, Rayagada for his reference before commencement of work on final forest clearance.
- C)** The user agency shall also furnish the valid EC of GoI, MoEF&CC and CTE/CTO of SPCB, Odisha for undertaking mining operation.
- D)** 86 no. of trees enumerated over the 12.69ha. of forest land being kept for future exploration are to be kept intact at project cost.
- E)** A site specific wildlife Conservation plan is required to be prepared as per guidelines of CWLW, Odisha for its approval by PCCF(WL)&CWLW, Odisha, which needs to be implemented at project cost inside the ML area as well as. in the project impact area. Besides, proportionate cost of Regional Wildlife Management Plan as per revised rate on ML area basis is also to be deposited by the lessee its implementation.
- F)** There shall be no breaking of 12.418ha. of private land in the ML area as indicated in the proposed land use plan.
- G)** The lessee has to submit Phased reclamation Plan(as per provision of para 5.2(i)(a) of FC Act guidelines) for its implementation at project cost.

The facts related to the above proposal may be placed before FAC in its meeting to be held on 16.11.2017 for their examination and appropriate recommendation.
