SITE INSPECTION REPORT

1.	Name of the Project.	Laserda-Pacheri Manganese & Iron Ore Block of M/s Thriveni Earthmovers Pvt. Ltd.
2.	Name of District/ Division.	Keonjhar/ Keonjhar Forest Division.
3.	Date of Inspection.	17.02.2022
4.	Name and designation of Inspecting Officer.	Sri Dhanraj H. D., I.F.S. Divisional Forest Officer, Keonjhar Division.
5.	Name and designation of the Officers who attended the Inspection including representative of user agency.	Sri Sanjeeb Kumar Rout, Dy. Range Officer, Champua Range. Representative of the User Agency. Sri Pralayananda Behera, Sr. General Manager Sri B.N. Samal, DGM Survey Sri N.K.Tripathy, Sr. Manager M/s Thriveni Earth Movers Ltd.
6.	Legal Status of the Forest land with area Proposed for diversion	Revenue Forest – 53.467 ha Non-Forest land recorded as forest as on 25.10.1980 – 40.884 ha
7.	If area required for diversion has been demarcated on the ground.	Yes

^{8.} Item wise break up of forest land proposed for diversion.

Item wise Proposed Break up of Land Use Pattern in Forest and Non-Forest land of Total Granted LoI for Mining Lease Hold Area

Sl. No.	Particulars	Category wise Forest Land (in ha)		Total Forest	Non- Forest	Grant Total in
SI. 140.		Revenue Forest	Sabik Forest	in ha	Land in ha	ha ha
1	Mining along with Mines Road	34.413	29.955	64.368	12.580	76.948
2	Waste Dump with environmental Safeguard like Retaining wall, Garland Drain & Settling Pond	8.05	3.562	11.612	7.06	18.672
3	Screening & Crushing Plant with premises	1.066	0	1.066	1.204	2.27
4	Sorting & Sizing of Mn ore	6.189	2.585	8.774	10.968	19.742
5	Mineral Stacking Yard	1.021	0.663	1.684	0.076	1.76
6	Office, Site service & Admin. Building, Camp, Work shop	0	0.612	0.612	1.339	1.951
7	Parking area	0.649	0.321	0.97	0.971	1.941
8	Internal Road for Transporting	0.187	0.362	0.549	1.366	1.915

	Grant Total (X + Y)	53.467	40.884	94.351	37.449	131.800
Y	Sub Total	1.843	2.418	4.261	1.853	6.114
13	Safety Zone along the PWD Road	0	0.403	0.403	0.163	0.566
12	Safety Zone along the Lease boundary	1.843	2.015	3.858	1.69	5.548
X	Sub Total	51.624	38.466	90.090	35.596	125.686
11	Road for In & Out in SZ along the River	0.001	0.253	0.254	0.025	0.279
10	Road for In & Out in SZ along the PWD road	0.044	0.118	0.162	0	0.162
9	Road for In & Out in SZ along the ML boundary	0.004	0.035	0.039	0.007	0.046

9. Condition of Vegetation and type of forest in the applied area.

The prevailing vegetation in the forest land located within the granted LoI block includes Sal and its associates. The geological formation of this area is quite suitable for growth of sal. Sal constitutes around 70 to 75% of the top canopy. The middle storey is unconspicuous. The quality of sal varies from all India Quality II to IV. Quality II sal is mainly confined to the valleys while QIII occurs on the hill slopes of moderate gradients. Q IV sal mainly confined in the ridges. QI sal is completely absent.

The principal associates of sal includes Terminalia alata, latifolia, Anogeissus Lagerstroemia perviflora, Terminalia belerica. Syzygium cumini. Mangifera indica, Schleichera oleosa. Adina cordifolia. Pterocarpus marsupium, Bombax ceiba, Bridelia retusa, Madhuca indica. The middle story is represented by Syzygium cumini, Ougeinia ougenensis. Careya arborea, Treama orientalis, Emblica officinalis, Cassia fistula etc. The shrubs and undergrowth are characterized by Indigofera pulchella, Ardisia solenacea, Flemingia chhapar, Helicteres ixora and Clerodendron viscosum etc. The prevailing climbers include Bauhinia vahlii, Combretum decandrum and Beutia parviflora. The grasses over the forest floor include Chrysopogon aciculatus, Imperata eylindrica, Dicanthium carricosum, Cynodon daetylon etc.

The canopy forest growth of the prevailing forest growth varies from 0.2 to 0.8 in Karo RF, which is very near to block. The best sal forest in this division are seen on the plateau around Joda and Barbil, which is an extension of the best sal forest of Sarenda of Jharkhand. The prevalence of pole crop to middle aged sal crop in this area indicates the shifting cultivations in the past and the crop can therefore be considered to be secondary origin. But the secondary moist deciduous forest replacing primary forest of the same type is not differentiated as almost all the primary forests have been practically influenced by human interference.

The said Mining Block is involved Revenue and sabik forest predominantly characterised with scattered growth of Sal, Mahua. Kendu with canopy density of 0.3. Eco Value Class- I. The prevailing vegetation comes under the forest type 3C/C2e Moist Peninsular Valley Sal.

10.	Position of Wildlife	The area does not form part of any National Park / Sanctuary / Biosphere reserve. It does not come under any wild life corridor, but is situated at an approximate distance of 2.31 Km. from Karoo-Karampada Elephant Corridor. The area falls under Elephant habitat zone-2 as per report of ORSAC. The wildlife present in and around the forest land proposed to be utilized for prospecting are Sambar, Spotted deer, Barking deer, Jackal, Hyena, Elephant, Sloth Bear, Leopard, Mongoose, Peacock, Cuckoo, Grey Jungle Fowl, Blue jay, Owl, Bluelegged bustard, Golden-backed Woodpecker, Python, Krait, Cobra, Russell's Viper, Blind snake, Monitor, Chamelion, Catla catla, Labio rohita, Cirrhinus mrigala, Wallago atttu, Notopturus chitala and Chana striatus. Movement of wild elephants is often noticed.
11.	Whether the applied area involves any Eco-Sensitive Zone / National Park / Sanctuary.	The applied area does not involve any Eco-Sensitive Zone / National Park / Sanctuary.
12.	No. of trees to be felled and its impact on the eco-system.	There are 1698 nos. of sound, 998 Nos. of unsound trees and 4399 Nos. of poles below 30 cm girth enumerated in 23 nos sample plots (each 1 ha) forest area located within the granted LoI area proposed for Mining and ancillaries activities. The species wise and diameter class wise abstract of enumerated trees in respect of the applied forest land in separate sheets is enclosed as Annexure – XX.
		The species wise and diameter class wise abstract of enumerated trees in respect of the applied forest land in separate sheets is enclosed as Annexure . The probability of soil erosion is likely to increase following felling on the undulating topography of the applied area.
13.	Details of broken up land and reclamation done if any.	This is a fresh LoI grant for mining and ancillary activities. The LoI holder has prepared phase reclamation and afforestation plan is attached as Annexure XIV.
14.	Position of displacement of people and adequacy of rehabilitation, if any.	Total 25 numbers of families will be displaced within the granted LoI area for Mining Lease; out of that 23 families are Schedule Tribe. LoI holder has been applied rehabilitation application to Department of Steel & Mines. The same will be displaced as per the Right to Fair Compensation & Transparency of Land Acquisition, Rehabilitation and Resettlement Act, 2013 and the Odisha Right to Fair Compensation & Transparency of Land Acquisition, Rehabilitation and Resettlement Act, 2016.
15.	Position of rare and endangered species available and importance of the applied area from archeological point of view.	No rare or endangered species is available in the applied area for diversion, but seasonal elephant movement is seen at 3 Km distance from the project site. There is no archaeologically important monument situated in the area.
16.	Non-forest land selected for Compensatory afforestation has been included in the D.L.C. report or not.	Non-forest land selected for Compensatory Afforestation has not been included in the D.L.C. report.
17.	Suitability of the identified non-forest land/ degraded Forestland for Compensatory afforestation.	The Non-Forest Govt. land identified in village Uperbirkala under BJP Forest Range of Banspal Tahasil is suitable for Compensatory Afforestation under AR

		plantation model @ 1000 per ha. over 39.00 ha can be planted 39000 of trees and for balance 52000 of trees degraded forest land in Jyotipur RF under Champua Range has been identified is suitable for Compensatory Afforestation under ANR with gap model @ 500 per ha. over 104.00 ha.
18.	Violation of Forest (Conservation) Act, 1980 if any and action taken thereon.	This is a fresh lease granted through e-auction to M/s Thriveni Earthmovers Pvt. Ltd by the department of Steel & Mines, Govt. of Odisha vide No.IV (B)SM- 100/2007-433/SM, dated 19.01.2019 as a Composite Licence. Lol holder was carried out exploration through putting bore holes and 1 nos of trial pit of size 17m x 10 m for which Lol holders was obtained Stage II forest clearance vide F. No. 8-62/2017-FC dt. 08.10.2018 of MoEF&CC, Govt. of India. However, 3.666 ha (Forest 3.312 ha and Non-Forest - 0.354 ha) of land was disturbed by old pits over 2.491 ha and 1.175 ha for road prior to grant of Composite Licence. Hence the Lol holder has not violated under FC Act, 1980. Observations of the undersigned during Site Inspection on 17.02.2022. 1. There are 48 nos. existing small illegal mining pits covering 2.5 ha land at least more than 10 year old. 2. There are 25 nos houses exists within sabik forest land inside lease area, needs to be rehabilitated, for which RR work is going on. 3. Plenty of old Bara trees exists inside lease area not to be felled as a keystone species. 4. Dry seasonal first order stream in Pacheri block(Dhanurjaypur-Kanarda village) draining into Karo river 5. Seasonal Elephant movement is seen at 3 km distance from the project site 6. Complete retaining wall and catch drain should be erected along Karo river side boundary of lease area including two dump site along river. 7. All snag trees are to be kept as such for conservation of wildlife. 8. Lease area and safety zone pillars are at place as per norm including demarcation of Revenue and sabik forest land. 9. Tree felling as per approved mining plan must be gradual and must satisfy the criteria of Bare minimum requirement.

Divisional Forest Officer, Keonjhar Division