



OFFICE OF THE COLLECTOR & DISTRICT MAGISTRATE: SUNDARGARH  
(Mining Section)

No. 198 /IV-17/2020, Dt. 08.07.2020

To

The District Information Officer,  
Sundargarh.

Sub: - Exploratory drilling of shot boreholes for seismic survey for coal in Tangarpali Coal Block, Sundargarh district, Odisha Uploading to online processing thereof.

Sir,

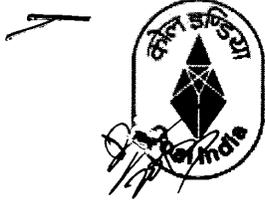
I am directed to enclose herewith the copy of letter No.5-85/3213 dtd.06.03.2020 of Regional Director, Central Mine Planning & Design Institute Limited and request you to please upload the same in the Website.

Yours faithfully,

  
Deputy Collector Mining  
Collectorate, Sundargarh.

Memo No. 199 / Dt. 08.07.2020  
Copy to the Regional Director, Central Mine Planning & Design Institute Limited, Bhubaneswar, Odisha for information.

  
Deputy Collector Mining  
Collectorate, Sundargarh  
08/07/20



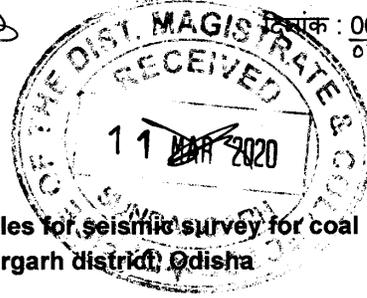
**cmpdi**

A Mini-Ratna Company

सेन्ट्रल माईन प्लानिंग एण्ड डिजाइन इन्स्टीच्यूट लिमिटेड  
(कोल इण्डिया लिमिटेड की अनुषंगी कम्पनी / भारत सरकार का एक लोक उपक्रम) 127  
क्षेत्रीय सस्थान - 7, प्लॉट नम्बर: ई-4, गांधी पार्क के निकट, सामन्तापुरी, पो: आर आर एल, भुवनेश्वर, (उड़िसा), 751013  
Central Mine Planning & Design Institute Limited  
(A Subsidiary of Coal India Limited / Govt. of India Public Sector Undertaking)  
Regional Institute VII, Plot No: E-4, Near Gandhi Park, Samantapuri, PO: RRL, Bhubaneswar 751013 (Orissa)  
CORPORATE IDENTITY NUMBER - U14292JH1975G01001223

पत्रांक: सी.एम.पी.डी.आई./क्षे.सं.-VIII/डीजी/ 5-85/3813

सेवा में,  
Collector & District Magistrate,  
At/PO-Sundargarh, Odisha



156  
10.06.20

**विषय: Exploratory drilling of shot boreholes for seismic survey for coal in Tangardihi coal block, Sundargarh district, Odisha**

महाशय,

With reference to our online proposal (No.-FP/OR/MRL/6/2020) seeking prior approval of Central Government under the Forest (Conservation) Act 1980, for exploratory drilling of shot boreholes for seismic survey in forest area, we are hereby submitting duly signed hard copy of the said proposal along with necessary enclosures. Details of the proposal is given below:

1. **Proposal No.** : FP/OR/MRL/6/2020
2. **Proposal Name** : TANGARDIHI
3. **Category of the Proposal** : Mining
4. **Date of Submission** : 26/02/2020
5. **Name of the Applicant with Contact Details**
  - Name : Ram Krishna
  - Mobile No. : 9438881016
  - State : Orissa
  - District : Khordha
  - Pincode : 751013
6. **Area Applied (ha.)** : 2411
7. **No. of Boreholes** : 1881

1494  
19/3/20

Same may kindly be acknowledged in attached format for uploading to online processing website.

Thanking you,

*Mining*

भवदीय

क्षेत्रीय निदेशक (क्षे.सं.-VII)

संलग्नक :-

1. Proposal (Form-C) submitted online
2. Necessary enclosure as submitted online



वेब साईट / Website Address : [www.cmpdi.co.in](http://www.cmpdi.co.in) E-mail: [ri7@cmpdi.co.in](mailto:ri7@cmpdi.co.in)

फोन नम्बर / Phone No : Phone: +91(0674) 2301271.

फैक्स नम्बर / Fax No. : +91(0674) 2301762.

### Acknowledgement Slip

This is to certify that hard copy of the proposal seeking prior approval of Central Government under the Forest (Conservation) Act 1980, as per details given below, along with all necessary enclosures has been received in the Office of the Orissa on 26/02/2020.

**1. Proposal No.** : FP/OR/MRL/6/2020

**2. Proposal Name** : TANGARDIHI

**3. Category of the Proposal** : Mining

**4. Date of Submission** : 26/02/2020

**5. Name of the User Agency with Contact Details**

**Name** : Ram Krishna

**Mobile No.** : 9438881016

**State** : Orissa

**District** : Khordha

**Pincode** : 751013

**6. Area Applied (ha.)** : 2411

**FORM - C**

Form for seeking prior approval under section 2 of the proposals by the State Governments and other authorities for Prospecting of Minerals in Forest Land

**PART - I**

**A. General Details**

**A-1. Project Details**

- (i). Proposal No. : FP/OR/MRL/6/2020  
 (ii). Name of Block in which prospecting is proposed to be undertaken : TANGARDIHI  
 (iv). State : Orissa  
 (v). Category of the Project : Mining  
 (vi). Estimated cost of the Project (Rupees in lacs) : 462  
 (vii). Total area of block required for prospecting (in ha.): 2685  
 (ix). Total period for which the forest land is proposed to be utilized for prospecting (in years): 1

Proposal No: FP/OR/MRL/6/2020  
 State Serial No: OR-034/2020  
 Date: 06.03.2020

*[Signature]*  
 1/c ANO, Nodal Wing  
 O/o-PCCF, Odisha

**A-1.1 Mineral commodity**

Mineral commodity		
S.No.	Mineral	Mineral commodity to be explored
1	Coal and Lignite	Coal

**A-2. Details of User Agency**

- (i). Name : CENTRAL MINE PLANNING AND DESIGN INSTITUTE LIMITED  
 (ii). Address : Central Mine Planning & Design Institute Ltd., RI-VII, Odisha State Housing Board Building, Sachhalaya Marg, Bhubaneswar  
 (iii). State: Orissa  
 (iv). District: Khordha  
 (v). Pin: 751001  
 (vi). Landmark: OSHB Building  
 (vii). Email Address: cmpdi.bhubaneswar@gmail.com  
 (viii). Landline Telephone No: 2394760  
 (ix). Fax No.: 674  
 (x). Mobile No.: 9438881044  
 (xi). Website: www.cmpdi.co.in  
 (xii) Details of Proposals seeking prior approval of Central Government under the Act for diversion of forest land submitted by the User Agency in the past

Proposal Submitted in Past							
S.No	Proposal Status	Proposal No.	Moef File No.	Area Proposed for Diversion(ha.)	Area Diverted(ha.)	Date of In-Principle Approval	Date of Final Approval
1	Under Processing at State Government	CMPDI/RI-7/DG/S.85.1736 dt.09.07.2014		0	0		
2	Under Processing at State Government	CMPDI/RI-7/DG/S.85.1735 dt.09.07.2014		0	0		
3	Under Processing at State Government	CMPDI/RI-7/DG/S.85.1734 dt.09.07.2014		0	0		
4	Under Processing at State Government	CMPDI/RI-7/DG/S.85.1733 dt.09.07.2014		0	0		
5	Under Processing at State Government	CMPDI/RI-7/DG/S.85.1732 dt.09.07.2014		0	0		
6	Under Processing at State Government	CMPDI/RI-7/DG/S.85.1731 dt.09.07.2014		0	0		
7	Under Processing at State Government	CMPDI/RI-7/DG/S.85.1730 dt.09.07.2014		0	0		
8	Under Processing at State Government	CMPDI/RI-7/DG/S.85.738 dt.25.07.2014		0	0		
9	Under Processing at State Government	CMPDI/RI-7/DG/S.85.799 dt.25.07.2014		0	0		
10	Under Processing at State Government	FP/OR/MRL/19/2019		0	0		
11	Under Processing at State Government	FP/OR/MRL/19/2019		0	0		
12	Under Processing at State Government	FP/OR/MRL/19/2019		0	0		

*[Handwritten]*  
 29.03.2020

*[Handwritten Signature]*  
 विभागाध्यक्ष (गन्तव्य)  
 HOD (Exploration)  
 सी. एम. पी. डी. आई, ब्ले. सं.-७  
 C.M.P.D.I., R.I-VII  
 भुवनेश्वर (ओडिशा)  
 Bhubaneswar (Odisha)

*[Handwritten Signature]*  
 02.03.2020

क्षेत्रीय निदेशक  
 Regional Director  
 सी. एम. पी. डी. आई, ब्ले. सं.-७  
 C.M.P.D.I., R.I-VII  
 भुवनेश्वर (ओडिशा)  
 Bhubaneswar (Odisha)

(xi). Legal status of User Agency : Central PSU

A-3. Details of Person Making Application

- (i). First Name: Ram Krishna  
(ii). Last Name: Mahapatro  
(iii). Gender: Male  
(iv). Designation: Regional Director  
(v). Address 1: CMPDI Ltd, R.I-VII, Samantapuri, Near Gandhi Park, PO-RRL, Bhubaneswar -751013  
(vi). Address 2: NIL  
(vii). State: Orissa  
(viii). District: Khordha  
(ix). Tehsil: NIL  
(x). Pin: 751013  
(xi). Landmark: Gandhi Park  
(xii). Email Address: cmpdi.bhubaneswar@gmail.com  
(xiii). Landline Telephone No.: 2301270  
(xiv). Fax No.: 06742301762  
(xv). Mobile No.: 9438881016

A-4. Details of Mineral Concessions

- (i). Whether the forest land is acquired under Coal Bearing Areas Act: No  
(ii). Reference number of Letter of Intent for grant of prospecting lease (approval letter of the State Mines and Geology Department): DG/FC/714(A)/2019  
(iii). Date of issue of the Letter of Intent (LOI) for grant of prospecting lease: 11 Sep 2019  
(iv). Copy the Letter of Intent (LOI):   
(v). Total area of the prospecting lease (in ha.): 2685  
(vi). Area of forest land located in the prospecting lease (in ha.): 2411  
(vii). Copy of Survey of India Topo-sheet (s):   
(viii). Copy of map of the outer boundary of prospecting lease area:  [View File](#)

B. Details of Land required for the Project

B-1. Details of proposal seeking prior approval of Central Government under the Act for diversion of forest land for the Project already submitted in the past

- (i). Whether any proposal seeking prior approval of Central Government under the Act for diversion of forest land required for the project has been submitted in the past? : No

B-2. Details of forest land proposed to be diverted

B-2.1 Details of Divisions involved

Details of Divisions involved.			
S.No	Division Name	Forest Land(ha.)	Non-Forest Land(ha.)
1.	Sundargarh	2411	274

B-2.2 Details of Districts involved

District wise breakup			
S.No	District Name	Forest Land(ha.)	Non-Forest Land(ha.)
1.	Sundargarh	2411	274

C-1. Justification for undertaking prospecting in forest land

- (i). Justification for undertaking prospecting in forest land: 

- (ii). Copy of map indicating location of alternatives examined: 

Whether the forest land identified for prospecting is located in Scheduled Area

Whether the forest land identified for prospecting is located in Scheduled Areas (Yes/No): Yes

C-3. Details of activities proposed to be undertaken in forest land

- (i). Details of surface sampling

Details of surface sampling		
S.No	Surface sampling	Area (in ha.)
1	Grab sampling	0

RWF  
24.03.2020

  
24/03/2020

विभागाध्यक्ष (अन्वेषण)  
HOD (Exploration)  
सी.एम.पी.डी.आई.के.सी.-७  
C.M.P.D.I., R.I-VII  
भुवनेश्वर (ओडिशा)  
Bhubaneswar (Odisha)

AA  
30/03/20  
02.03.2020

क्षेत्रीय निदेशक  
Regional Director  
सी.एम.पी.डी.आई.के.सी.-७  
C.M.P.D.I., R.I-VII  
भुवनेश्वर (ओडिशा)  
Bhubaneswar (Odisha)

(i).Details of Pitting or trenching

Details of Pitting or trenching						
S.no	Number of Pits	Width of Pits (in km.)	Depth of Pits (in km.)	Length of Pits (in km.)	Total volume of excavation	Surface area (in ha.)
1	0	0	0	0	0	0

(ii).Details of Drilling of Boreholes

Details of Drilling of Borehole		
S.no	Number of Drills	Diameter (in Inch)
1	1881	5

Details of Drilling of Borehole				
S.no	Depth of boreholes (in meter)	Area of forest land likely to be experience temporary change in land used at each borehole site(in ha.)	Area of forest land likely to be experience permanent change of land used due to drilling or boreholes(in ha.)	Total meterage of boreholes (in meter)
1	20	0.0004	0	37620

(iv).Construction of roads or paths involving temporary change in land use

Details of construction of roads or paths involving temporary change in land			
S.no	Length (in km.)	width (in km.)	Area of forest land(in ha.)
1	0	0	0

(v).Construction of roads or paths involving permanent change in land use

Details of Construction of roads or paths involving permanent change in land use			
S.no	Length (in km.)	width (in km.)	Area of forest land(in ha.)
1	0	0	0

(vi).Any other activity involving temporary change in land use

Details of Any other activity involving temporary change in land use			
S.no	Whether any other activity involving temporary change in land use in proposed to be undertaken ?	Area involved(in ha.)	Please specify
1	No	0	

(vii).Any other activity involving permanent change in land use

Details of Any other activity involving permanent change in land use			
S.no	Whether any other activity involving permanent change in land use in proposed to be undertaken ?	Area involved(in ha.)	Please specify
1	No	No	

C- Area of forest land likely to experience temporary change in land use

- (i). Surface sampling: NIL
- (ii). Pitting or trenching: NIL
- (iii). Drilling of bore holes (in ha.): .7524
- (iv). Construction of roads or paths: NIL
- (v). Other activity (pl. Specify): NIL
- (vi). Total : 0.7524

C- Area of forest land likely to experience Permanent change in land use

- (i). Drilling of bore holes (in ha.): NIL
- (ii). Construction of roads/paths: NIL
- (iii). Other activity (pl. Specify): NIL
- (iv). Total : NIL

C- Details of machinery or equipments to be deployed for prospecting

6.

*Handwritten:* 23/03/2020

*Handwritten:* 29/02/2020

विभाग प्रमुख (निवेदन)  
HOD (Exploration)  
सी. एम. पी. डी. आर. व्ही. से. - 6  
C.M.P.D.I., R.I-VII  
भुवनेश्वर (ओडिशा)  
Bhubaneswar (Odisha)

*Handwritten:* 02.03.2020

क्षेत्रीय निदेशक  
Regional Director  
सी. एम. पी. डी. आर. व्ही. से. - 6  
C.M.P.D.I., R.I-VII  
भुवनेश्वर (ओडिशा)  
Bhubaneswar (Odisha)

Details of machinery or equipments to be deployed for prospecting					
S.no	Name of equipment or machinery	Mode of traction	Size	Estimated deployment(machine hours)	Maximum noise level(decibel)
1	Portable rigs	Manual/Tractor mounted	3	8	60

D- 1. Details of existing paths/roads in the proposed to be utilized for transport of the equipment or machines in the forest land.

(iv). Details of existing paths/roads in the proposed to be utilized for transport of the equipment or machines in the forest land :

D- 2. Number and duration of stay in the forest land of the persons proposed to be deployed for prospecting

Details of Number and duration of stay in the forest land of the persons proposed to be deployed for prospecting		
S.no	Number of person	Duration
1	5	8

D- 3. Summary of the estimated quantity of ore and other samples proposed to be collected during the prospecting

Details of Summary of the estimated quantity of ore and other samples proposed to be collected during the prospecting		
S.no	Details of sample	Qty. proposed to be collected
1	Non-coring drilling	922.8

D- 4. Estimated accuracy and confidence level for mineral reserve assessment

(i). Estimated accuracy level for mineral reserve assessment : 90

(ii). Estimated confidence level for mineral reserve assessment : 90

D- 5. Estimated accuracy and confidence level in case number of bore holes proposed to be drilled are reduced by

Details of Estimated accuracy and confidence level in case number of bore holes proposed to be drilled are reduced by										
S.no	Accuracy(10%)	Confidence level(10%)	Accuracy(20%)	Confidence level(20%)	Accuracy(30%)	Confidence level(30%)	Accuracy(40%)	Confidence level(40%)	Accuracy(50%)	Confidence level(50%)
1	81	81	72	72	63	63	54	54	45	45

D- 6. In case the proposal is for extension of the period of the permission granted for prospecting, or for drilling of additional boreholes, please provide following additional information

(i). Details of approval accorded under the Forest(Conservation) Act, 1980 in the past

Details of approval accorded under the Forest(Conservation) Act, 1980 in the past				
S.no	Number of the approval accorded	Area of forest land permitted for prospecting(in ha.)	Validity (From) period of approval	Validity (To) period of approval
NIL				

(ii). Report on status of compliance to the conditions stipulated in the approval accorded in the past

Report on status of compliance to the conditions stipulated in the approval accorded in the past		
S.no	Condition stipulated	Status of compliance
1	0	0

(iii). Details of violation(s), if any committed: NIL

(iv). Justification for extension of permission accorded for prospecting:

(v). Copy of note containing details of prospecting activities undertaken and sample collected, so far:

Additional Information (if any)

Documents		
S.No	Documents	Remarks
1		

27/02/2020  
29.02.2020

27/02/2020  
HOD(Exploration)  
सी.एम.पी.डी. आई.के.सं.-७  
C.M.P.D.I., R.I-VII  
भुवनेश्वर (ओडिशा)  
Bhubaneswar (Odisha)

02.03.2020

क्षेत्रीय निदेशक  
Regional Director  
सी.एम.पी.डी. आई.के.सं.-७  
C.M.P.D.I., R.I-VII  
भुवनेश्वर (ओडिशा)  
Bhubaneswar (Odisha)



**cmpdi**  
A Miniratna Company



सेन्ट्रल माईन प्लानिंग एण्ड डिजाइन इंस्टीट्यूट लिमिटेड  
(कोल इण्डिया लिमिटेड की अनुषंगी कम्पनी / भारत सरकार का एक लोक उद्योग)  
गोन्दवाना प्लेस, कान्के रोड, राँची - 834 031, झारखंड (भारत)  
Central Mine Planning & Design Institute Limited  
(A Subsidiary of Coal India Limited / Govt. of India Public Sector Undertaking)  
Gondwana Place, Kanke Road, Ranchi - 834 031, Jharkhand (INDIA)  
CORPORATE IDENTITY NUMBER - U54292JH1975801801223

पत्रांक: डी.जी/FC/714(A)/2019/

दिनांक: 11 September 2019

सेवा में,

The Principal Chief Conservator of Forests  
Odisha Forest Department,  
Govt. of Odisha  
Bhubaneswar, Odisha

**विषय: Approval of the project and authorization of the applicant.**

महोदय,

The Central Mine Planning and Design Institute limited, a subsidiary of Coal India Limited (A Public Sector undertaking under Ministry of Coal) has approved exploratory drilling for coal in forest area falling in **Tangardihi coal block** in Sundargarh district, Odisha. The coal block is bounded by Longitude 83°44'13.5"E to 83°47'41.9"E and Latitude 21°52'45.9"N to 21°56'22.3"N and having total area of 1941 ha. and forest land area of about 1167 ha.

On behalf of CMPDI, Sri Ram Krishna Mahapatro, Regional Director is hereby authorized to apply for seeking prior approval under section (ii) of Forest (Conservation) Amendment Rules 2014 for prospecting of minerals in the above said forest land.

भवदीय,

*[Handwritten Signature]*  
11.9.19

निदेशक (टी / सीआरडी)



फोन नम्बर/Phone No. : 0651-2230010

फैक्स नम्बर/Fax No. : 0651-2233066

ई-मेल/E-mail: dtcrd.cmpdi@coalindia.in

वेब साइट/Website: www.cmpdi.co.in

**Details of prospecting activities undertaken and sample collected, so far:**

No prospecting activities has been undertaken in the past in forest land of the Tangardihi coal block.

*B. S. S.*  
03.03.2020

*B. S. S.*  
03.03.2020  
विभागाध्यक्ष (गवेषण)  
HOD (Exploration)  
सी. एम. पी. डी. आई. क्षेत्र. सं.-७  
C.M.P.D.I., R.I-VII  
भुवनेश्वर (ओडिशा)  
Bhubaneswar (Odisha)

*B. S. S.*  
03/03/20  
क्षेत्रीय निदेशक  
Regional Director  
सी. एम. पी. डी. आई. क्षेत्र. सं.-७  
C.M.P.D.I., R.I-VII  
भुवनेश्वर (ओडिशा)  
Bhubaneswar (Odisha)

**Justification for extension of permission accorded for prospecting:**

No application has been submitted in the past and no permission has been obtained for Tangardihi coal block for 2D seismic survey.

*Be*  
03-03-2020

*30/3/20*  
03-03-2020  
विभागाध्यक्ष (गवेषण)  
HOD (Exploration)  
सी. एम. पी. डी. आई. डी. सं.-७  
C.M.P.D.I., R.L-VII  
भुवनेश्वर (ओडिशा)  
Bhubaneswar (Odisha)

*3/3/20*  
क्षेत्रीय निदेशक  
Regional Director  
सी. एम. पी. डी. आई. डी. सं.-७  
C.M.P.D.I., R.L-VII  
भुवनेश्वर (ओडिशा)  
Bhubaneswar (Odisha)

**Copy of Map indicating location of alternative examined:**

Existence of potential coal resources has been established in the block area through exploration undertaken by GSI. The resources are to be brought to 'Proved' category through detailed exploration. The seismic profile lines are very site specific and has been planned for generation of optimum subsurface data for carrying out detailed exploration for proving coal resources. Hence, the examination of alternative is not possible for Tangardihi coal block, Ib Valley coalfield, Odisha.

*Handwritten signature*  
03.05.2020

*Handwritten signature*  
30/05/2020  
विभागाध्यक्ष (अन्वेषण)  
HOD (Exploration)  
सी. एम. पी. डी. आई, क्षेत्र-७  
C.M.P.D.I., R.I.-VII  
भुवनेश्वर (ओडिशा)  
Bhubaneswar (Odisha)

*Handwritten signature*  
31/05/20  
क्षेत्रीय निदेशक  
Regional Director  
सी. एम. पी. डी. आई, क्षेत्र-७  
C.M.P.D.I., R.I.-VII  
भुवनेश्वर (ओडिशा)  
Bhubaneswar (Odisha)

**Justification for prospecting in Forest land:**

The area has been found to have good potential for coal resources as established by regional exploration undertaken by GSI. The block area (i.e. Tangardihi) has to be proved in totality including area covered by forest to have a viable project for opening mine in future. Moreover, for the energy security of the country and long term planning, all the coal resources available in the country need to be brought to the 'Proved' category through detailed exploration along with 2-D seismic survey.

*Ant*  
03.03.2020

*Ant*  
03.03.2020  
विभागाध्यक्ष (मंत्रालय)  
HOD (Exploration)  
सी. एम. पी. डी. आई. के. सी. - VII  
C.M.P.D.I., R.I-VII  
भुवनेश्वर (ओडिशा)  
Bhubaneswar (Odisha)

*Ant*  
03.03.20  
क्षेत्रीय निदेशक  
Regional Director  
सी. एम. पी. डी. आई. के. सी. - VII  
C.M.P.D.I., R.I-VII  
भुवनेश्वर (ओडिशा)  
Bhubaneswar (Odisha)

**Methodology/Technique of prospecting:**

Down-hole drilling of about 15-20m. depth with borehole size of 4-5 inch. diameter. Drilling of shot holes (at a distance of every 40m along seismic profile lines) shall be carried out by small portable drills without cutting or felling of trees and without making any permanent road within the forest land. Shooting of 1.5-2.0kg of explosive at the bottom of shot holes shall be carried out for generating seismic waves and recording of the same through geophones connected along cables for analysis and interpretation.

*Prat*  
03-03-2020

*30 m/20*  
03-03-2020

विभागाध्यक्ष (गवेषण)  
HOD (Exploration)  
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Bhubaneswar (Odisha)

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क्षेत्रीय निदेशक  
Regional Director  
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## ADDITIONAL INFORMATION

Detailed Exploration in Tangardihi Block involves Exploratory Drilling along with 2D Seismic Survey. 2D seismic study involves drilling of shot holes for generation of seismic waves through mild explosive shots and study of propagation of generated seismic waves. For the complete study right from the block boundary, data acquisition has to start from about 600 m beyond block boundary. Hence Forest area outside the block boundary is also required as detailed below:

1. Area of the Tangardihi Block	:	1941 ha.
2. Additional area required for 2D seismic survey	:	744 ha.
3. Total area applied for	:	2685 ha.
3. Area forest within the block area (approx.)	:	1667 ha.
4. Additional forest area required (approx.)	:	744 ha.
5. Total forest area required (approx.)	:	2411 ha.

*[Signature]*  
03.03.2020

*[Signature]*  
03.03.2020  
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