

निदेशक,
भूतत्व एवं खनिकर्मी इलाहाबाद,
उत्तम निदेशालय उत्तराखण्ड देहरादून।

सा. म.

प्रबन्ध निदेशक,
वन विकास निगम उत्तराखण्ड,
देहरादून।

संख्या: 1134 /उत्तरा/नाप्लान/कम्पा/2015-16

दिनांक 10 मार्च 2015

विषय पट्टाधारक उत्तराखण्ड वन विकास निगम के पक्ष में जनपद देहरादून के आरक्षित वन क्षेत्रान्तर्गत प्रवाहित होने वाली सौम नदी-1 कुल 112.50 हे० वन भूमि में उपखनिज बालू, बजरी, बोल्टर के खनन हेतु 10 वर्ष की अवधि हेतु खनन पट्टे पर स्वीकृत क्षेत्र की खनन योजना के अनुमोदन के सम्बन्ध में।

संदर्भ

आपके द्वारा जनपद देहरादून के आरक्षित वन क्षेत्रान्तर्गत प्रवाहित होने वाली सौम नदी-1 कुल 112.50 हे० वन भूमि जिसमें शासनादेश संख्या 2171/VII-1/ /123-ख/2011 दिनांक 14 नवम्बर 2012 के द्वारा आपके पक्ष में उपखनिज बालू/बजरी/बोल्टर का 05 वर्ष की अवधि हेतु खनन पट्टा स्वीकृत किया गया है, से सम्बन्धित प्रस्तुत खनन योजना खनन योजना श्री नुपन जोशी आर०एल०पी०/DBN/180/2009-A के द्वारा तैयार की गयी है जो वैज्ञानिक, तकनीकी एवं पर्यावरण सुरक्षा के दृष्टिकोण से खनन संश्लेषण के सुनिश्चित संवाहन हेतु उपयुक्त पाये जाने के दृष्टिकोण उत्तराखण्ड उपखनिज परिहार नियमावली-2001 के नियम-34 एवं उत्तराखण्ड उपखनिज नीति-2015 के विनियम सं०-6 (2) अन्तर्गत प्रदत्त अधिकार का प्रयोग करते हुए, प्रस्तुत खनन योजना का अनुमोदन विनियमित शर्तों के अधीन किया जाता है-

शर्तें

1. खनन योजना का अनुमोदन अनुमोदित खनन योजना की तिथि से आगामी पांच वर्षों की अवधि के लिए किया जा रहा है।
2. पट्टाधारक के द्वारा भारत सरकार, पर्यावरण एवं वन मंत्रालय, नई दिल्ली के आदेश संख्या J-11016/339/2009-IA.II(M) दिनांक 10-02-2011 की समस्त शर्तों का अनुपालन करेगा।
3. पट्टाधारक द्वारा शासनादेश संख्या 490/VII-1/2012/123-ख/2011 दिनांक 03 अप्रैल 2012 की समस्त शर्तों का अनुपालन करेगा।
4. प्रस्तावित खनन योजना के अनुसार, मैनुअल नाइमिंग से बिना ब्लास्टिंग के प्रथम वर्ष आर०एल० 549.5मी० से 563 मी० तक 8,25,000 टन, द्वितीय वर्ष में आर०एल० 563मी० से 579 मी० तक 8,25,000 टन, तृतीय वर्ष में आर०एल० 579 मी० से 591 मी० तक 8,25,000 टन, चतुर्थ वर्ष में आर०एल० 591.00 मी० से 601.5 मी० तक 8,25,000 टन एवं पंचम वर्ष में आर०एल० 601.5 मी० से 608 मी० तक और 549 से 563 तक 8,25,000 टन उपखनिज का खनन किया जायेगा।
5. यह खनन योजना अन्य किसी अधिनियम जो कि इस खान या क्षेत्र पर लागू होते हैं या समय-समय पर राज्य सरकार या केन्द्र सरकार या अन्य किसी राक्षस द्वारा प्रख्यापित किये जाते हैं, को छोड़ कर अनुमोदित की जाती है।

6. यह खनन योजना वन (संरक्षण) अधिनियम-1980, वन संरक्षण नियमावली 1981 और वन सम्बन्धित अधिनियम और नियमावली, आदेश और दिशा निर्देश जो कि इस खनन पट्टे पर समय-समय पर दिये जाये लागू होंगे।
7. अनुमोदित खनन योजना किसी भी प्रभावी क्षेत्रान्तर्गत माननीय न्यायालय के आदेश एवं दिशा निर्देश के लागू होने को बाधित नहीं करती है।
8. अनुमोदित अवधि में किये गये खनन कार्य के निरीक्षण के उपरान्त यदि खनन योजना में संशोधन हेतु आदेश दिये जाते हैं तब संशोधित खनन योजना प्रस्तुत करने का पूर्ण उत्तरदायित्व आवेदक का होगा।
9. आम्बुद्ध/नियोजित श्रमिकों को सुरक्षात्मक उपकरण प्रदान करने तथा सुरक्षित खनन कार्य करने हेतु सभी आवश्यक सावधानियाँ बरतने का दायित्व आवेदक का होगा।
10. अनुमोदित खनन योजना की एक-एक प्रमाणित प्रति सम्बन्धित जिलाधिकारी कार्यालय एवं निदेशालय के क्षेत्रीय कार्यालय में अभिलेखाध्यक्ष द्वारा प्रस्तुत करने का दायित्व भी आवेदक का होगा।
11. अनुमोदित खनन योजना के अनुसार, आवेदक द्वारा खनन कार्य न किये जाने के पाये जाने पर, आवेदक के विरुद्ध पट्टे की शर्त का उल्लंघन माना जायेगा और तदनुसार कार्यवाही की जायेगी।
12. खनन योजना इस शर्त के साथ अनुमोदित की जायेगी कि आप श्रमिकों की सुरक्षा एवं स्वास्थ्य की उचित व्यवस्था करेंगे।

संलग्नक- खनन योजना की अनुमोदित प्रति।

भवदीय

(श्रीधर वानू अदवाकी)
निदेशक

संख्या: /भा0प्लान/उ0खनि0/उ0य0/2015-16 तद्दिनांकित।

प्रतिलिपि- निम्नलिखित को सूचना एवं आवश्यक कार्यवाही हेतु प्रेषित।

1. जिलाधिकारी देहरादून।
2. खान अधिकारी भूतत्व एवं खनिकर्म इकाई देहरादून।

(श्रीधर वानू अदवाकी)
निदेशक

MINING PLAN
FOR
PICKING / EXTRACTION OF MINOR
MINERALS (SAND, BAJRI AND
BOULDERS) FROM A PART OF RIVER
SONG-I (AREA- 225.0 HA.), DEHRADUN
FOREST DIVISION, TEHSIL & DISTRICT-
DEHRADUN, UTTARAKHAND

APPLICANT

**Uttarakhand Forest
Development Corporation**

Aranya Vikash Bhawan, 73- Nehru Road
Dehradun, Dist. Dehradun, Phone: 0135-2657610

PREPARED BY

BHUWAN JOSHI

Empanelled Geologist, RQP, IBM
Forest & Rural Development Cell (FRDC)
Empanelment No. URRDA/2008-09/3190
Govt. of Uttarakhand
RQP, Registration No. RQP/DDN/180/2009/4
Indian Bureau of Mines
Govt. of India

Address-

**Progressive Geological & Geotechnical Services
(PG2S)**

REGD. OFFICE

House No. 6, Kamal Bhawan
Vijay Colony, Lane No.-1, Dehradun
Uttarakhand

E-mail: joshi@bhuvan@yahoo.co.in
Mob. No. 09412152105

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भुवन जोशी, ज्योतिषी, भू-विज्ञान
उत्तराखण्ड, भारत

दिनांक 11/04/2016
दिनांक 10/05/2016

11/04/2016
10/05/2016

Date 27-11-15

CERTIFICATE

I Bhawan Joshi hereby certify that the provisions of Uttarakhand Minor Mineral Rules/Policy- 2015 for extraction of RBM (Sand, Bajri, Boulders etc) have been observed in the preparation of Mining Plan for Picking /Extraction of minor minerals (sand, bajri and boulders) from a part of Song river zone i.e. Song-1, Tahseel & Dist. Dehradun, Uttarakhand, over an area of 225Hac. for Uttarakhand Forest Development Corporation (UKFDC), Aranya Vikash Bhawan, 73-Nehru Road, Dehradun.

The information provided and data furnished in this mining plan with Closure Plan is correct to the best of my knowledge.

Place Dehradun.

Date 27-11-15

BHUWAN JOSHI, ROP

Reg. No. - ROP/DEN/180/2009/1

BHUWAN JOSHI

E.O.P.-Senior Surveyor of Mines (BMA)

Reg. No. ROP/DEN/180/2009/1

Govt. of India



AUTHORIZATION LETTER BY THE APPLICANT

Uttarakhand Forest Development Corporation (UKFDC), Aranya Vikash Bhawan, 73-Nehru Road, Dehradun hereby authorizes Sri. Bhuvan Joshi, Geological Consultant & RQP, Registration No. RQP/DDN/180/2009/A, to prepare Mining Plan under New Mining Policy i.e. Uttarakhand Minor Mineral Policy-2015 (Sand, Bajri, Boulder and Bricks etc) over an area of 225 Hectares for extraction of RBM (sand, bajari and boulders) from a part of Song-1 river zone, Dist. Dehradun, Uttarakhand.

I request the Director, Geology & Mining Department, Uttarakhand, to make further correspondence regarding modification and to collect the approved copies of the aforesaid Mining plan to the said recognized person in his following address or communicate in other modes:-

Name of the RQP- BHUWAN JOSHI
RQP, Registration No. RQP/DDN/180/2009/A

Address:-

House No.-6, Kamal Bhawan
Vijay Colony, Lane No.-1, Dehradun
Uttarakhand
E-mail: joshibhuvan@yahoo.co.in
Mo. No. 09412152105

Place- Dehradun

Date 23-11-15


Divisional Logging Manager (Kharan)
Uttarakhand Van Vikas Nigam
Dehradun



MINING PLAN
FOR PICKING / EXTRACTION OF MINOR MINERALS (SAND,
BAJRI AND BOULDERS) FROM A PART OF RIVER SONG-I
(AREA- 225.0 HA.), DEHRADUN FOREST DIVISION, TEHSIL &
DISTRICT- DEHRADUN, UTTARAKHAND

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DEHRADUN
 District Forest Officer
 Dehradun Forest Division
 Dehradun, Uttarakhand

APPENDIX

APPENDIX-1	MohF APPROVAL/FOREST CLEARANCE LETTER (Forest Clearance Division, GOI vide letter No. F. No/8-62/99/FC dated 26th May 2009 & dated 2nd June 2009 for Ten years)
APPENDIX-2	STATE GOVERNMENT CONSENT FOR EIA LETTER
APPENDIX-3	ENVIRONMENTAL CLEARANCE LETTER (Environmental Clearance is granted by MohF (IA Division) vide letter no. J-11015/339/2009IA-II (M), dated 10 th February 2011)
APPENDIX-4	CONCERN LETTER ABOUT THIS PROPOSED MINING OVER SONG-I BY GEOLOGY & MINING DEPARTMENT, GOVT. OF UTTARAKHAND
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Uttarakhand State Government

MINE PLAN

CHAPTER-1

INTRODUCTION

Forest Clearance (FC), Environment Clearance (EC) & Letter of Intent (LoI), released in the favor of Uttarakhand Forest Development Corporation (UKFDC) for extraction of extraction of Minor minerals (RBM, i.e. sand, bajari & boulders) from a part area of Song River called as Song-1 (ANNE.1 to 5) Dehradun Forest Division, Dist. Dehradun, over an area of 225.00 Hec. for the period of 10 years (FC & EC) (Ann. 1 & 3), the demarcated topographic map (Ann. 6) is provided by UKFDC. The available area of Song-1 is 225 Hec, falls under Dehradun forest division, Dehradun, Uttarakhand. The said area belongs to reserved forest region. The collection/picking of minor minerals will be carried out from 50% of the total area i.e. 112.5 Hec. after leaving 25% area on each of the banks for better channelization of the water during the rainy season and to protect the nearby forest land and habitat from the floods. Mineral extraction target is about 3, 75000 cubic meter/year or 8, 25000 tons/year. The applied area been jointly visited & inspected by different state Govt. Authorities (Ann. 5)

The Song River originates from the Ladwakot forest in the Dehradun District of Uttarakhand. The river flow direction is from north to south and the region falls under the Dehradun Forest Division. The river carries with it huge quantity of sediment consisting of stones, gravel and sand during every monsoon. The sediment in the form of river bed material (RBM) deposited in the last 100 years had changed the shape of the river bed from a valley to a raised land. Because of this, every year during monsoon season, heavy and devastating floods damage large tracts of forest land as well as agricultural land lying on both the banks of the river. Hence, it was thought necessary to make a channel in the middle width of the river to create an area of cross section for the river water to flow unhindered during the monsoon season. The Ministry of Environment and Forest of India has agreed

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State Government to get and estimate of annual permissible extraction and rate of sedimentation along with the total approximate RBM available.

Uttarakhand Forest Development Corporation (UKFDC) is a statutory body constituted by the State Government. The Corporation was formed for the better preservation, supervision and development of forest also for better exploitation of forest produce within the State and for matters connected there with.

The Mining Plan of the proposed area is prepared by Himwan Joshi, RQP & Geological Consultant, Proprietor- Progressive Geological & Geotechnical Services, 6- Vijay Colony, Lane-1, New Cant Road, Dehradun, Registration No. RQP/DDN/180/2009/A, authorized by Uttarakhand Forest Development Corporation (UKFDC) for preparation of said Mining Plan.



CHAPTER-2

GENERAL

2.1	Name of the Applicant	Uttarakhand Forest Development Corporation (UFDC)
	Address	Aranya Vikash Bhawan, 73-Nehru Road, Dehradun
	District	Dehradun
	State	Uttarakhand
	Pin Code	248001
	Phone	0135-2657610, Fax: 0135-2655488, Email: uafdcmd@yahoo.com
2.2	Status of the Applicant	Uttarakhand Forest Development Corporation (UFDC) is a statutory body constituted by the Govt. of Uttarakhand
2.3	Mineral(s) which the applicant intends to mine	Sand, Bajri and Boulder. The mineral collected/extracted from the lease area shall be sold in the open market as per the demand.
2.4	Period for which the mining lease is required or granted / renewed	a) Approval in principle is granted by MoEF (FC Division), GOI vide letter No. F.No. R-62/99-FC dated 26th May 2009 as dated 2nd June 2009 for Ten years. b) State Government has granted HIA clearance vide letter no. B20/VH-1 dated 10/06/2009.

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DHIRWAN JAIN

S.O. In-charge, Planning & Development

Regd. No. 202/2009/202/2009

Ch. of India

		161 Klu/2009, dated 8 December 2009. c) Environmental Clearance is granted by MoEF (IA Division) vide letter no. J-11015/339/2009IA.II (M), dated 10th February 2011. d) Concern about this proposed mining over Song-1 taken by Geology & Mining Department, Govt. of Uttarakhand vide letter no. vivid/51/Ddn/Khanan/bhu.khanan/ekal/2008-9, dated 19 February 2009 (Docs. attached as Ann. 1 to 5)
2.5	Name of the RQP preparing the mining plan	Bhuvan Joshi
	Address	C/o B.S. Rawat Kamal Bhawan House No. 6 Vijay Colony Lane No. 1 New Cantt Road, Dehradun (Uttarakhand) 248001
	Phone	+91-9412152105
	EMAIL:	joshi.bhuvan@yahoo.co.in
	Registration No:	RQP/DDN/180/2009/1
	Valid upto	30/08/2019

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RQP, Dehradun

[Signature]
BHUVAN JOSHI

H.O. B-102/11, The ...
Reg. No. ...



2.6	Name of the prospecting agency	The baseline data is collected from UKFDC reports & detailed prospecting of the area carried by the RQP
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CHAPTER-3

PROJECT DESCRIPTION

3.1 NEED OF THE PROJECT

Sand, Bajri and Boulder are available everywhere and is being used from the time immemorial for wide applications in our daily life like infrastructure, building construction, highways, roads, townships, multiplexes, foundations of buildings and industrial units etc. and is an integral part of development. Over the millennia, the weathering effect, the flow of water at high velocities in rivers and the pressure of water from the high mountainous reservoirs converted and pushed the hard ground underneath into sand, gravel etc. which travelled as sediments with the flow. This sand gets deposited along the river course wherever conditions were favorable. In deep past this settled sand was not extracted in a quantity in which it is deposited since due to less population the requirement was not enough. As a result of continuous deposit of sand, bajri etc, the river course continued changing by widening itself, eroding the fields and expanding. This started resulting in floods, inundation and breaching their banks, causing devastation of property and loss of life. There has been adverse impact in every aspect of the environment. Thus there was a need for channelization of rivers for which extraction of sand through mining was expedient. The haphazard mining of river bed material




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 Director
 Progressive Geological & Geotechnical Services (PG25)
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being mined for now long through unregulated, uncontrolled and illegal manner added almost an irreversible damage to the environment, which became a cause of serious concern. Though and is very important mineral source for development, its mining through scientific methods have also become equally imperative. It is for this purpose that 'mining plan' is being drawn so that all its aspects are taken care of justifiably, according to law, protecting the environment, removing all adverse impacts and creating a direct and indirect employment opportunities, improving socio-economic conditions of the local inhabitants and all round status of life, achieving thereby a sustainable development. Besides above, the process of mining of minor minerals is a constant source of revenue generation to the State Government.

3.2 PROJECT BACKGROUND

Stages and Stages of regulatory clearances

- 1- Approval in principle is granted by MoEF (FC Division), GOI vide letter No. F.No. 8-62/99-FC dated 26th May 2009 & dated 2nd June 2009 for ten years.
- 2- State Government consent for EIA clearance is granted vide letter no. 1929/VII-1/63Xha/2009 dated 8 Dec. 2009.
- 3- Environmental Clearance is granted by MoEF (IA Division) vide letter no. J-11015/139/10091A-II (M), dated 10th February 2011.
- 4- Concern about this proposed mining over Sang-I taken by Geology & Mining Department, Govt. of Uttarakhand vide letter no. 516/31/Ddn/Khanan/bhu/khami/ekai/2008-9, dated 19 February 2009
- 5- Joint Inspection Report for suitability & area demarcation issued by various State Govt. Officers/Departments (ann.5).

This mine plan is being prepared to abide by change in Mining Policy as per Gazette of Uttarakhand State Government, Industrial Development Section No. 1033/II-1/2015/40-III/2010 dated 31st July 2015.



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BRUNAN J. C. S. J.
K.D.P. J. C. S. J.
Sgt. H. S. J. C. S. J.

3.3 LOCATION, GENERAL AND ACCESSIBILITY

3.3.1 LOCATION

(a)	Details of Area	Location Map is attached as Plate No. 1
(b)	District and State	Dehradun, Uttarakhand
(c)	Tahseel	Dehradun & Doiwala/Dehradun Forest Division
(d)	Village	There are many village falls near bank area of Song-I; Natturwala & Balawala falls on the west bank while Simbawala and Bhopalpuri are on the east bank of the river.
(e)	Khasra No./ Plot No./ Block Range /	Dehradun Forest Division
(f)	Felling Series etc.	None
(g)	Area (hectares)	225 ha.
(h)	Whether the area is in forest (please specify whether protected, reserved etc.)	Yes, Dehradun Forest Division, many reserved forests regions surround the project area. They are:- Lachhiwala Reserved Forest Dwara Reserved Forest Patali Reserved Forest Malkot Reserved Forest Kansara Reserved Forest Barin Reserved Forest

		Motichur Reserved Forest
(i)	Ownership/ Occupancy	Govt. Land, Forest Department (Map Attached as Appendix. 6)
(ii)	Latitude	30° 13' 23.02" to 30° 16' 35.06" North
	Longitude	78° 07' 40.43" to 78° 07' 28.63" East

3.3.2 GENERAL

(a)	Mineral being worked	Sand, Boulder and Bajri
(b)	Period of mining Lease/permission	Approval in principle is granted by MoEF (FC Division), GOI vide letter No. F-No. 8-62/99-FC dated 26th May 2009 & dated 2nd June 2009 for ten years. Mining Plan is prepared for Five years, attached as Annexure I.
(c)	Category of Landuse	Forest Land
(d)	General Ground Level	600 m above MSL
(e)	Elevation Range of River Bed	550 to 609 m

3.3.3 ACCESSIBILITY

The proposed site is having a total area of 225 Hectares. The location map of the site is attached as ANN. 6. The project area is located in the south east of Dehradun city. The



Mohalesh-Dehradun connecting NH-72 is the closest highway. The Dehradun Railway Station is about 10 km from the proposed site.

Location of the Mining Site

The mining area is located in the Dehradun Forest Division limits in Dehradun District of Uttarakhand. The mining lease area falls in Survey of India Toposheet No.53 1/3 Bearing

Toposheet Details

Toposheet No. 531/3

Latitude: 30° 16' 35.06" North

Longitude: 78° 07' 28.63" East

Dehradun, the district head quarter is 10 km away from the area. The nearest railway station is at Dehradun which is at a distance of 10 km from the applied area. The nearest airport is the Jolly Grant Airport which is at a distance of 12 km from the project area. There are many villages lining the banks of the river. Nathuwala, Balawala fall on the west bank while Sandulwala, Bhupalpani are the villages on the east bank of the river.

There are no Ecologically Sensitive Areas present in the study area, but many reserved forests regions surround the project area. They are Lachhiwala Reserved Forest, Dwara Reserved Forest, Palod Reserved Forest, Malkot Reserved Forest, Kanarao Reserved Forest, Barka Reserved Forest, Molichur Reserved Forest.

CHAPTER-4

GEOLOGY & EXPLORATION

4.1 GEOLOGY

Geologically the project area belongs to Doon gravels i.e. the area falls in the Inter-mountain Doon Valley and is underlain by recent to sub recent Doon Gravels which lie over the Upper Swathic sediments. The Doon gravels have been broadly divided in older Doon Gravels and younger Doon Gravels. The older Doon Gravel consists of partly of crushed Upper Swathic

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BCP, Registration No. BCP/2006/1302/2006/14



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B.P. Jodhpur
B.P. Jodhpur

Cobbles, Angular Pebbles of Quartzites, Slates and Shales from the Nagbhat, Chaitpur and Tal formations and Limestone Pebbles from Krol limestone alternating with clay beds.

The younger Doon Gravels rest unconformably over the older Doon gravels in the northern part. The disconformable relationship gradually disappears in the southern part. The younger Doon gravels are characterized by very large boulders in the alluvial fans and debris flow deposits and consist of moderately sorted mixture of clay, sand, gravel and boulders. The sandy and gravelly units are separated from each other by clay beds. The thickness of these units varies from place to place and also may be traced laterally.

4.2 EXPLORATION

Adequate amount of sand, bajri and boulder in reserve is available for meeting consumer demand. Moreover mining will be carried out by batch rotation manner and the mined out area is fully replenishable.

4.3 ESTIMATION OF RESERVE

The method of cross section has been adopted for computing the reserve. The mining lease boundary, proven and mining limits are marked on the plan which is thereafter transferred to cross section for determining the different categories of reserve.

In order to calculate the mineable reserve the geological map on the 1:1000 scale was prepared and main litho units were marked on the plan to know the surface spread of each unit. The different constituents of the deposits such as sand, bajri, boulder and mixture of clay, soil, silt, based on sized classification were considered for the reserve calculation. Although it is not possible to mark these units separately on the geological map, as such five pits of 6x6x1 meters were got dug in the mineable area and material so excavated was separated into different size and their percentage was worked out. This percentage was taken into account during calculation of the reserve. The cumulative result of the test pit are given in the following Table no 1.

Table No. 1. Classification of Minerals available

Sr. No.	Mineral	Size	Percentage
1.	Sand	0.06-2 mm	65%
2.	Bajri	8-64 mm	8%
3.	Boulder	256 mm <	25%
4.	Silt/clay	1-62.5 μ m	2%

Bulk density is taken as 2.2 for calculation (as per GoUK, Industrial Development Section Notification 1033/VII-1/ 2015/ 146 -Kha/ 2010, dated 31st July 2015). Calculation of reserve has been done as following:

1. Cross sections have been prepared at intervals. Refer Plate No.3
2. Area of every cross section has been taken. For example, if the area of cross section A-A' is 'X' and area of B-B' is 'Y', then average of both calculating the reserve (i.e. $(X+Y)/2$).
3. Distance between the two sections has been multiplied with the average area of the two sections to get the total volume. Eg. $[(X+Y)/2] \times \text{Distance between A-A' \& B-B'}$.

The overall geological reserves have been estimated through geological cross section method. The area of each section line is calculated. The section area is multiplied by the strike influence to get the volume. The target geological reserve classified in to three categories i.e. Proved reserve, Probable reserve & Possible reserve. In this project the proved reserve assessed as 10m depth & further 5m as probable reserve whereas 3m considered as possible reserve. Out of total volume the 80% considered as the recoverable reserve & 2.2 bulk density.



Table No. 2. Reserve Estimation (Proved Reserve)

Cross-Section Line	Sectional Area, M ²	Strike influence (m)	Volume (m ³)	Quantity (MT)
A-A' to B-B'	48,050	150	52,66,000	1,26,85,200
B-B' to C-C'	48,640.5	128	49,80,782.2	1,09,57,731.84
Total	-	-	107,46,782.2	236,42,931.84

Table No. 3. Reserve Estimation (Probable Reserve)

Cross-Section Line	Sectional Area, M ²	Strike influence interval (m)	Volume (m ³)	Quantity (MT)
A-A' to B-B'	24,025	150	28,83,000	63,42,600
B-B' to C-C'	24,320	128	24,90,368	54,78,809.6
Total	-	-	53,73,368	1,18,21,409.6

Table No. 4. Reserve Estimation (Possible Reserve)

Cross-Section Line	Sectional Area, M ²	Strike influence interval (m)	Volume (m ³)	Quantity (MT)
A-A' to B-B'	14,414	150	17,29,680	38,63,296
B-B' to C-C'	14,592	128	14,94,220.8	32,73,85.76
Total	-	-	32,23,900.8	71,37,152

Geological Reserves:

The summarized category-wise geological reserve estimated by is:-

Proved Reserve- 23642931.84 Tons

Probable Reserve- 11821409.6 Tons

Possible Reserve- 7092581.76 Tons

Mineable reserves:-

The proved mineable reserve is calculated as referred in Uttarakhand Minor Mineral Policy 2015 for Category C, minor mineral area (Zone C). The mineable reserve within allowable are is 37, 12500 tonnes/year. This is fully replenished every year.

$$\text{Quantity of minerals (tonnes)} = \text{mining area} \times 1.5 \text{ m depth} \times 2.2 \text{ t/m}^3 \text{ density}$$

4.4 MINE REPLENISHMENT

It has been assessed that proposed mining area/ mineral picking area generally gets flooded during monsoon season and gets completely replenished. However, The Department of Geology & Mining may monitor the replenishment within the lease area and specific consultation or study may be conducted whenever required.




BHUVAN JHA
B.Q.E.-District Engineer, P.G.S.
P.O. No. 100/2019/148/2019/1

CHAPTER-5

MINING

5.1 METHOD OF WORKING

The mining process is conventionally opencast river bed mining of minor minerals with hand tools, shovels and pan without drilling & blasting. Proposed mining will be start from lowest level of river end to highest river end phase wise and block wise going to the maximum depth of 1.5m bgl or above ground water level whichever is less. Length/size of the blocks/pits may be decided on the spot convenience & available material but a ideal way of progression of mining pits as left to right or series wise lower to upper level i.e. downstream to upstream direction. Mining would be carried within 1st half of the course as demarcated & mapped. Each year the mining will be carried within about 250,000 sqm area as per yearly Target reserves i.e. 3,75,000m³ with area wise rotation method. Total 11,25,000m² area is workable and replenishable yearly. Retaining wall within both banks would be proposed of about 2.5 to 3m to check toe erosion & flooding during monsoon season. Mineral extraction will be done for a period of 225 days in a year.

Following guidelines will be followed while carrying out mining:

- 1- Conditions under which Forest Clearance has been granted by MoEF (FC Division), GOI vide letter no. F-No. 8-62/99-FC dated 26th May 2009 & dated 24th June 2009 for 4m years.
- 2- Conditions under which Environmental Clearance is granted by MoEF (EA Division) vide letter no. J-1 1015/339/2009(EA.II (N)), dated 10th February 2011.



- 7- Concern about this proposed mining over Sangli taken by Geology & Mining Department, Government of Uttarakhand vide letter no.vivid/51/Ddn/Khamar/bhu.khani.ekal/2006-9, dated 19 February 2009
- 2- Joint Inspection Report for suitability & area demarcation issued by various State Govt. Officers/Departments
- 3- The Uttarakhand Minor Mineral (Sand, Bajri, Boulder and Bricks etc.) Policy 2015
- 4- Uttarakhand Secondary Mineral Policy-2015
- 5- All other guidelines, Circulars, Gazettes of the Ministry of Environment & Forests and Government of Uttarakhand.

5.2 EXTENT OF MECHANIZATION

No mechanization is required as the operation will be manual method without drilling or blasting.

5.3 MODE OF WORKING

For the optimum utilization of the mineral available in the lease area, mine working has been planned and scientific layout has been designed considering the following parameters:

- Extraction of minor minerals shall be restricted to middle half of the width of the river bed after leaving intact the $1/4^{th}$ of width of the river bed along its each bank.
- The approach road will be repaired from time to time
- The quarry planning is done in simple rotational manner since deposits are very simple, shallow and beds are almost horizontal.
- Simultaneous plantation will also be done within the bank area to protect the toe erosion and landslide phenomena



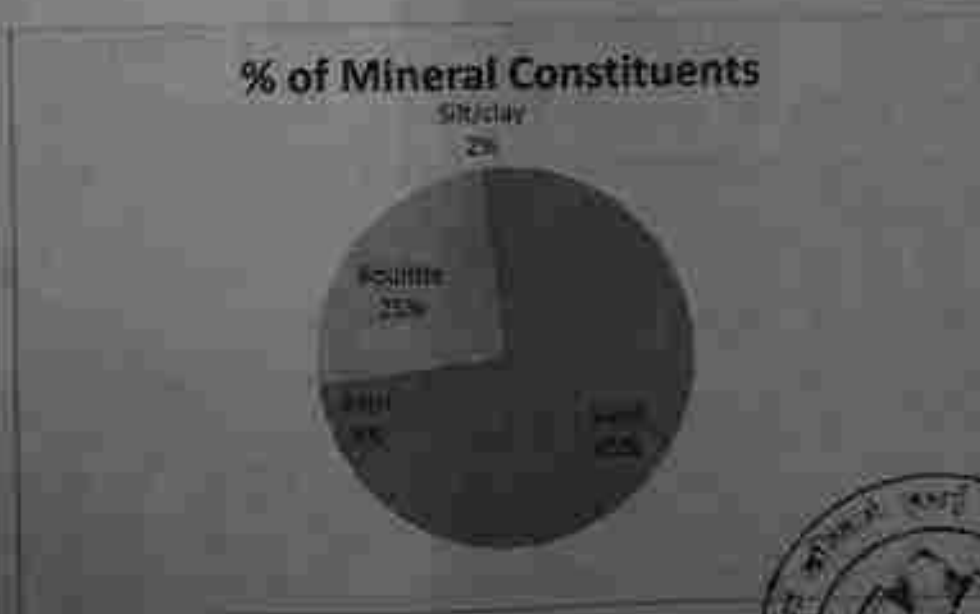
BHUWAN JISHI
R.G.P. Geotech Bureau of Uttarakhand
Reg. No. 429/2004/100/000000
Date of Issue

5.5 DEVELOPMENT & PRODUCTION FOR FIRST YEAR

For first year the Development & Production Programme; the mining is proposed in 2,50,000sqm area. The production of each mineral constituent would be on an average as under:-

Table No.6: First year

Sr. No.	Mineral Constituents	Production (±) in tons
1.	Sand	5,36,250.00
2.	Bajri	66,000.00
3.	Boulder	2,06,250.00
4.	Silt/clay	16,500.00
Total		8,25,000.00 Tons



Pie Graph of % of Mineral Constituents

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 Regd. Office: 10/1, Main Road, Bhubaneswar-751005



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 Regd. Office: 10/1, Main Road, Bhubaneswar-751005
 Regd. Office: 10/1, Main Road, Bhubaneswar-751005

5.6 DEVELOPMENT & PRODUCTION FOR SECOND YEAR

For Second year the Development & Production Programme, the mining is proposed in 2,50,000sqm area. The production of each mineral constituent would be on an average as under:-

Table No.7 Second year

Sr. No.	Mineral Constituents	Production ($\approx$) in tons
1.	Sand	5,36,250.00
2.	Bajri	66,000.00
3.	Boulder	2,06,250.00
4.	Silt/clay	16,500.00
Total		8,25,000.00 Tons

5.7 DEVELOPMENT & PRODUCTION FOR THIRD YEAR

For Third year the Development & Production Programme, the mining is proposed in 2,50,000sqm area. The production of each mineral constituent would be on an average as under:-

Table No.8 Third year

Sr. No.	Mineral Constituents	Production ($\approx$) in tons
1.	Sand	5,36,250.00
2.	Bajri	66,000.00
3.	Boulder	2,06,250.00
4.	Silt/clay	16,500.00



Signature
SHUWAN JOSHI
Director
P.G.S.

Total	8,25,000.00 Tons
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5.8 DEVELOPMENT & PRODUCTION FOR FOURTH YEAR

For fourth year the Development & Production Programme, the mining is proposed in 2,50,000sqm area. The production of each mineral constituent would be on an average as under:-

Table No.9: Fourth year

Sr. No.	Mineral Constituents	Production ($\approx$) in tons
1.	Sand	5,36,250.00
2.	Bajri	66,000.00
3.	Boulder	2,06,250.00
4.	Silt/clay	16,500.00
Total		8,25,000.00 Tons

5.9 DEVELOPMENT & PRODUCTION FOR FIFTH YEAR

For fifth year the Development & Production Programme, the mining is proposed in 2,50,000sqm area. The production of each mineral constituent would be on an average as under:-

Table No.10: Fifth year

Sr. No.	Mineral Constituents	Production ($\approx$) in tons
1.	Sand	5,36,250.00
2.	Bajri	66,000.00
3.	Boulder	2,06,250.00



4.	Silt/clay	16,500.00
Total		8,25,000.00 Tons

5.10 MINERAL PRODUCTION

The riverbed mining will consist of sand and their production may vary to a great extent depending upon availability. Therefore quantity of sand cannot be estimated on logical parameters, the figures given here above only tentative. The production target is as above.

5.11 DEVELOPMENT AND PRODUCTION PROGRAMME FOR FIVE YEARS.

Prior to start production from the area, some development work has to be completed as under Plate No.5

- Haul road preparation
- Erection of a site office and Stay/rest shelter for workers
- Barbed wire fencing/trenching all around the mining area may be provided to avoid accident and inadvertent entry.
- Construction of Retaining wall towards bank area (river bank) to abstain from toe erosion & flooding

CHAPTER-6

DRILLING & BLASTING

No drilling and blasting is required to undertake mining of riverbed minerals.



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SHRIWAN JODHA

10/20, Bhabha Road, New Delhi-110028

Phone No. 011-26101111



CHAPTER-7

WATER AND DRAINAGE SYSTEM

As per the proposed mining the working shall be confined upto 1.5m bgl or above the ground water table, whichever is less. Hence no water clogging is likely to be encountered. Therefore, there is no need of any such arrangements.

CHAPTER-8

DISPOSAL OF WASTE MATERIAL

2% i.e. about 16500 Tons per year waste will be generated in the form of silt/clay etc. This will be dumped back into the mined area.

Sewerage System:

Portable Toilets will be provided.

Solid Waste Management:

It would be in fitness of things to repeat that there will be no solid waste generated in the proposed activity.

CHAPTER-9

USE OF MINERALS

Sand, baji and boulders are used in construction activities like building, road etc. The requirement for the mineral is always high in the nearby cities and towns.



OTHERS**1- SITE SERVICES**

The site services like stay/rest shelters, portable toilets, first aid facility and drinking water will be provided.

2- WATER REQUIREMENT

Total water requirement for the project is 1 KLD, it breaks up as under:

Table No. 11. Water Requirement

S. No.	Purpose	Water Requirement (KLD)
1.	Dust Suppression	0.5
2.	Drinking	0.2
3.	Miscellaneous (Plantation etc)	0.3
Total		1.0

3- EMPLOYMENT

Depending upon the General shifts working, following will be the proposed manpower.

Table No. 12. Employment Break-up

S.No.	Category	Numbers
1.	Mining Competent Person	1
2.	Administrative	
3.	Supervisor	
4.	Unskilled/workers	
	Total	



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Sd/-, Bhuvan Joshi

BHUVAN JOSHI

7/12/2023

Reg. No. 302021/2023

Besides above Geological, Mining & Environmental Consultancy Services may be hired as per requirement on part-time basis or per day basis.

4- SAFETY PROVISION

All provision in safety rules & regulation will be maintained by providing required materials to the employees. The Applicant will provide safety shoes, First Aid facility, drinking water etc. to all the employees. There will be no violation of safety provision.

CHAPTER-11

MINERAL PROCESSING & TRANSPORT

MINERAL BENEFICIATION

Mineral Sand doesn't require processing or beneficiation. The excavated mineral will be directly loaded into the bucket.

HAULAGE AND SURFACE TRANSPORT

Mode of transportation of material is by trucks/tractors, of size of 3-10 tonnes capacity have been planned. Mining area is connected with an unmetalled road upto the NH-22. The mine road is adequate to permit easy maneuverability of trucks allowing easy loading and unloading points. Water will be sprayed two times a day by tractor mounted sprayer mounted at regular intervals to avoid dust.



MINE MACHINERY

Mining will be done using hand tools like shovel, spades, pick-axes. Other machineries on the mining site will be water sprinkler.

CHAPTER-12

ENVIRONMENT MANAGEMENT PLAN

12.1 SOLID WASTE MANAGEMENT

2% waste will be generated in the form of silt/clay etc. This will be dumped back into the mined area.

Sewerage System:

Portable Toilets will be provided.

Solid Waste Management:

It would be in fitness of things to repeat that there will be no solid waste generated in the proposed activity.

12.2 PLANTATION

Plantation in the mining area is not possible. Instead, Plantation will be done along both banks of the river with consultation of local authorities. Every year 25 to 30 trees will be planted.

12.3 BASELINE INFORMATION

12.3.1 Land Use Pattern

Entire area is a wasteland & barren, scattered seasonal bushes & herbs are seen. There is no agricultural land most of the land is barren.



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12.3.2 Flora & Fauna

Dehradun has a rich vegetation cover. Although the major portion of Doon is occupied by the Sal (*Shorea robusta*) but miscellaneous forests are also found here. The hydro-geological and meteorological conditions of the valley are responsible for the condition for the different types of forest cover. Sal and its associates can be classified in Northern tropical moist and dry deciduous communities. They are found throughout the Sivaliks across large tracts of the valley and also along the lower foothills of the Himalayas. A presence of large proportion of clay soil and better drainage act as favorable conditions for the growth of Sal trees.

Faunal Community: as per data provided by UKFDC, in general following categories of faunal classification given in the EIA report.

(i) Core Zone: There was no unique faunal community within the core zone of the project area, except most common ones like toad, frog, crow, Sparrow and mouse etc.

(ii) Buffer Zone: In 10 km radius around the project area:

Amphibians: Among amphibians toad (*Bufo* sp.) and frog (*Rana tigrina*)

English Name -Scientific Name

Common Toad- *Bufo melanostictus*

India bull frog-*Rana tigrina*

India tree frog- *Polypedates maculatus*

Marbled mad- *Bufo atomaticus*

Skipping frog- *Rana Cyanophlysis*

a. Reptiles: Among reptiles Indian garden lizards (*Calotes versicolor*), house lizard (*Hemidactylus* sp.).

b. Mammals: Among mammals Indian palm squirrel (*Funambulus pennanti*), cat, dog (*Canis* sp.), cow, Buffalo, rat (*Rattus rattus*) etc.

c. Aves: Among aves common birds like crow (*Corvus splendens*), parrot (*Psittacula krameri*), baya (*Ploceus philippinus*), pigeon (*Columba livia*), Egretta sp. etc.



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12.3.3 Climatic Condition

Dehradun valley has moderate climate because of nearness of Himalaya and due to average elevation of 700 meters above sea level. The climate of the study area exhibits the character of sub-temperate climate of mountain areas because of the combined effect of plain-like warm climate and cool lesser Himalayan climate. The mean minimum and maximum annual temperature varies from 2.70C in December and January to about 26.90C in May and June. Only the months of May and June are hot though they are seldom oppressive. Like all other parts of India, Dehradun is also greatly affected by the Monsoons that generally break in the middle of June and remains active till the middle of the September. The months of July and August have heaviest rainfall. From October to December, the climate remains dry. In the end of December, January and early February the valley receives winter rains. The months of March and April receive very less rainfall. Normally the rainfall in Dehradun is sufficient and averages around 2000mm.

12.3.4 Social Infrastructure

The nearest health & education facilities are available in all nearby villages of the proposed mining area. Other major facilities are available in Doiwala and Dehradun (about 15 to 16 km range).

12.4 EFFECT OF MINING ON ENVIRONMENT

Due to the mining activity following things are going to be affected

- > Degradation of land
- > Destruction of Flora & Fauna
- > Air Pollution
- > Water Pollution
- > Noise Pollution

These effects will be either minimized or nullified by adopting following measures



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P.O. India, Electrical Engineering
Reg. No. RGP/01/2000/100/2000
City of India

- o The mining activity will take place in barren/own land which is of the type to be rehabilitated by ambient environment.
- o Due to manual mining there will be estimation of dust which in turn affects the ambient air. This may be mitigated by the permeable layer by using water spraying on the haul road.
- o Mining will be done above the ground water table and thus it is not going to be affected/contaminated the ground water. There will be no discharge of mine water to the nearby water source, except mine water during rainy season, but there there will be no contamination of water of the nearby water source. If at all possible.
- o Diesel is minimal mining there may be no generation of noise.
- o Chemicals/vibrations & Noise pollution it is not possible because manual mining.
- o The appropriate time plan for plantation along the roads roads with provision of local subsidy.

CHAPTER-13

MINE CLOSURE PLAN

13.1 Introduction:-

Already discussed in previous paragraphs

13.2 Name of the Lessee:-

Already discussed in previous paragraphs

13.3 Location of Mine:-

Already discussed in previous paragraphs

13.4 Detail Description of the Area:-

277 PINKISHANVA PINKISHANVA STREET CAMP. AT. SAKHAR P. DISTRICT. N. C.



For Signature & Stamp of the Officer

11/11/2021, 10:21:11

Office of the District Officer, Sakhar P. District, N. C.



The mining area belongs to river borne deposits (RBM) which are deposited by Sonu River, mostly during rainy season. The mining process is conventionally open cast river bed mining of minor minerals with hand tools, shovels and pan without drilling & blasting. Proposed mining will be start from lowest level of river end to highest river end phase wise and block wise going to the maximum depth of 1.5m bgl or above ground water level whichever is less. Length/size of the blocks/pits may be decided on the spot convenience & available material but an ideal way of progression of mining pits as left to right or series wise lower to upper level i.e. downstream to upstream direction. Mining would be carried within 1st half of the monsoon as demarcated & mapped. Each year the mining will be carried within about 2,50,000 sqm area as per yearly Target reserves i.e. 3,75,000m³ with area wise rotation method. Total 11,25,000m² area is workable and replenishable yearly. Retaining wall within both banks would be proposed of about 2.5 to 3m to check toe erosion & flooding during monsoon season. Mineral extraction will be done for a period of 225 days in a year.

During the monsoon rainy season 1.5 to 2m average stocking of sand, bajari & boulder assessed. So it is clear that the deposit would be annually replenishing as such no need to develop or plan for closure scheme but towards bank side temporary construction of retaining wall is suggested to reduce the impacts of toe erosion & flooding.

13.12 Air Quality Management

Details already discussed in previous paragraphs

13.13 Waste Management

Already discussed in previous paragraphs

13.14 Safety and Security

The picking and extractions of minor minerals shall be carried on daily within 1.5meter; no blasting is involved. Hence there is no danger and no special provision.



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RAJKOT

required. However standard precautions are always to be kept in mind for the safety of workers and general public.

13.15 Disaster Management and Risk Management

No blasting is involved, picking and extractions of minor minerals (sand, bajri & boulders) shall be carried on only up to a depth of 1.5 meter therefore negligible scope of landslides & subsidence.

CHAPTER-14

CONCLUSION

The project involves collection of sand, bajri and boulder. The river bed material extracted is in high demand in the local market which is used in making bridges, road & building material etc. The project operation will provide livelihood to the poorest section of the society. It provides employment to the people residing in the vicinity directly or indirectly by the project. The applicant will undertake mining activity as per the plan indicated in the Mine Plan with proper taking care of environment aspects (i.e. without disturbing the environment condition).



Ministry of Environment
CCO Complex, Lodhi Road,
New Delhi-110 003
Date: 24.07.2009

To:
The Principal Secretary (Forest),
Forest and Revenue Department,
Government of Uttarakhand,
Dehradun.

Subject: Renewal of permission over 1325.00 ha of forest land for collection of sand, baji and boulders from river beds in district Dehradun, Uttarakhand.

Sir,

I am directed to refer to the Government of Uttarakhand's letter No. 56/99/1-3, 98-100(64)/1998 dated 07th May, 1999 and Nodal Officer's letter No. 628/116-277 (Dehradun) dated 29th August, 2008 on the subject mentioned above. In principle approval of the Central Government under the Forest (Conservation) Act, 1980. After careful consideration of the proposal by the Forest Advisory Committee constituted under Section 3 of the said Act, in principle approval for the said proposal was granted vide this Ministry's letter of even number dated 22nd September, 2008 subject to fulfilment of certain conditions. The State Government has furnished compliance report in respect of the conditions stipulated in the in principle approval and has requested the Central Government to grant final approval.

In this connection, I am directed to say that on the basis of the compliance report furnished by the PCCF vide letter 3253/116-977 (Dehradun) dated 1st September, 2008, approval of the Central Government is hereby granted under Section-2 of the Forest (Conservation) Act, 1980 for renewal of permission over 1325.00 ha of forest land for collection of sand, baji and boulders from river beds in district Dehradun, Uttarakhand, subject to fulfilment of the following conditions:-

- (i) The legal status of forest land shall remain unchanged.
- (ii) 25% of revenue realized from disposal of material from river bed shall be spent on river training and treatment of catchment area.
- (iii) Compensatory Afforestation will be raised over 1325.00 ha of degraded forest land over approved period of 10 years @ 132.50 ha of plantation/treatment each year, from the funds so collected/realized from sale of the materials.



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- (iv) The User Agency will undertake to pay 10% as per the orders of Hon'ble Supreme Court of India in T.A. No. 10000 of 1997.
- (v) Adequate number of temporary check posts will be established at entry and exit points before start of work and proper record of material collected and removed will be maintained.
- (vi) Extraction of material should be from the middle of the river bed after leaving one-fourth of the river bed on each bank untouched.
- (vii) There shall be no labour camp in the forest area for the labour involved in the extraction work.
- (viii) No explosive shall be used while extracting the material and only hand-tools will be used for the collection of boulders, sap, etc.
- (ix) Collection time shall be from sun-rise to sun-set.
- (x) Breaking of boulders will be done outside the forest boundaries.
- (xi) The labourers engaged in collection work will be provided free fuelwood/alternate source of energy to avoid any pressure on adjoining forest areas.
- (xii) There shall be no extraction of material from the river beds during monsoon period, i.e., from June to October each year.
- (xiii) The forest area shall not be used for any other purpose other than that specified in the proposal.
- (xiv) Any other conditions that the CCRC, Regional Office, Lucknow may impose from time to time in the interest of Afforestation and protection of flora and fauna in that area shall also be valid.

Yours faithfully

(B. K. Singh)

Sr. Assistant Inspector General of Forests

Copy to:

- 1. The Principal Chief Conservator of Forests, Government of Uttarakhand, Dehradun.
- 2. The Nodal Officer, Forest Department, Government of Uttarakhand, Dehradun.
- 3. The Chief Conservator of Forest, Regional Office, Lucknow.
- 4. User Agency.
- 5. Monitoring Cell, Ministry of Environment and Forests.
- 6. Guard File.

(B. K. Singh)

Sr. Assistant Inspector General of Forests



प्रेषक-

श्री पीसीएमसी,
प्रमुख सचिव
उत्तराखण्ड शासन।

Annexure - 1

सेवा में,

प्रबन्ध निदेशक,
उत्तराखण्ड वन विकास निगम
देहरादून।

औद्योगिक विकास अनुभाग-1

देहरादून दिनांक 08 दिसम्बर 2009

विषय:- राज्य के नदी तलों से ई0आई0ए0 नोटिफिकेशन, 2006 के अधीन वन खनिजों के सुगम हेतु पर्यावरण स्वीकृति प्राप्त किये जाने के सम्बन्ध में।

महोदय,

उपरोक्त विषयक भूतत्व एवं खनिकी इकाई, उद्योग निदेशालय देहरादून के पत्र संख्या 1364/विषय/देहरादून/खनन/भू0खनि0ई0/2008-09 दिनांक 18 नवम्बर 2009 एवं आगक पत्र संख्या 3987/उपखनिज दिनांक 03 नवम्बर 2009 एवं 3988/उप खनिज दिनांक 03 नवम्बर 2009 में उल्लिखित नदी तलों से वन खनिज (साधारण बालू, बजरी, कोल्डर आदि) को सुगम करने के अखिजनों की प्रदान करने हेतु वन एवं खनिज (विकास एवं विनियमन) अधिनियम 1957 की चारा-15 के अधीन प्रस्थापित उत्तराखण्ड उप खनिज परिहार नियमावली 2001 के अनुसार वर्तमान में राज्य में प्रचलित खनिज नीति 2001 के सुगम प्राधिकारों के अन्तर्गत प्राधिकृत उत्तराखण्ड वन विकास निगम को जम्माद नदीखाल के भेला (1837 हेक्टेअर) दाबक (223 हेक्टेअर) कासी (254 हेक्टेअर) व नखौर (468 हेक्टेअर) जम्माद नदी (533 हेक्टेअर) निगल (100 हेक्टेअर) जम्माद चम्पावत की शारदा नदी (364.69 हेक्टेअर) किरीझनाला (12 हेक्टेअर) जम्माद पाटी मंडवाल के मालत नदी में (35.36 हेक्टेअर) कोल्हूगौड (4.763 हेक्टेअर) मुलरौ (22.04 हेक्टेअर) जम्माद देहरादून के गुलाटा (30 हेक्टेअर) दरेड (20 हेक्टेअर) चन्द्रभागा-2 (29 हेक्टेअर) नकटाणा (गंगा नदी) (15 हेक्टेअर) जाखन-1 (195 हेक्टेअर) जाखन-2 (100 हेक्टेअर) सोन-1 (205 हेक्टेअर) सोन-2 (273 हेक्टेअर) सोन-3 (270 हेक्टेअर) चन्द्रभागा-1 (168 हेक्टेअर) वन क्षेत्र में सुगम का कार्य प्रारम्भ किये जाने हेतु पर्यावरण संरक्षण अधिनियम 1986 के अधीन पर्यावरण एवं वन मंत्रालय, भारत सरकार द्वारा एम्पायरसैट एक्सप्रेट नोटिफिकेशन दिनांक 14 सितम्बर 2006 के परिप्रेक्ष्य में मुझे यह कहने का निदेश हुआ है कि पर्यावरण एवं वन मंत्रालय भारत सरकार की पर्यावरणीय स्वीकृति प्राप्त करने की सहमति प्रदान की जाती है।

भवदीय

(पीसीएमसी)
प्रमुख सचिव।

[Handwritten Signature]

पुष्ठांकन संख्या 1929/VII-1/153स/2009 तदुद्दिष्टित।

प्रतिलिपि निम्नलिखित को सूचना एवं जागरूक कार्यवाही हेतु प्रेषित:-

- 1- सुगम हेतु प्राधिकृत समस्त प्रबन्ध निदेशक उत्तराखण्ड।
- 2- उद्देश्य वन अधिकारी भूतत्व एवं खनिकी इकाई, उद्योग निदेशालय देहरादून।

(पीसीएमसी)
प्रमुख सचिव।



No. J-11015/339/2009-IA-II(M)
Government of India
Ministry of Environment and Forests
IA Division

Paryavaran Bhawan
CGO Complex, Lodhi Road,
New Delhi-110 003

Dated the 10th February, 2011

To

M/s Uttaranchal Forest Development Corporation
Aranya Vikas Bhawan,
73, Nehru Road,
Dehradun-248 001
E-mail: uafdemd@yahoo.com
Vanvikas12@gmail.com

Subject: Collection of Minor Mineral from Song-1 River by M/s Uttaranchal Forest Development Corporation, Tehsil and District Dehradun, Uttarakhand - environmental clearance regarding.

Sir,

This has reference to letter No. U-2630/Environmental clearance dated 18.08.2010 on the subject mentioned above. The project was earlier prescribed Terms of Reference (TORs) by the Ministry of Environment and Forests on 18.01.2010 for undertaking detailed EIA study for the purpose of obtaining environmental clearance. The proposal is for collection of 6,75,000 tonnes per annum (TPA) of minor minerals (Kata and Bajri) from the bed of Song-1 river.

2. The total mine lease area of the project is 225ha, which is a forestland. The mining area in the Song-1 River has a stretch of 5.65km, lying in the Ganga River basin. Out of the total allotted area of 225ha, the minor mineral collection will be carried out from 50% of the total area i.e., 112.5ha leaving 25% area on each side of the river banks for better channelization of the water during the rainy season and to protect the nearby forestland and habitant from floods. The area available for mining would therefore be 112.5ha along the centre of the river flow which is devoid of any flora.

3. No national park and wildlife sanctuary are reported to be situated in the core and buffer zone of the mine. The project area is situated in the Saundhar Elephant Reserve. The Rajaji National Park is reported to be situated at a distance of 21km from the project boundary. The Chief Wildlife Warden, Government of Uttarakhand vide letter No. SHI-131/2011 dated 10.02.2011 has accorded clearance for collection of minor mineral from the Song-1 River an area of 225ha. Seven Reserve Forests namely the Saundhar National Park, etc.



Dwara RF(1km), the Thano RF (1km), the Lachhiwala RF (2km), the Paied RF (3km), the Raipur RF(7km), and the Malkot RF(10km) are reported to be located in the buffer-zone of the mine.

4. The mine working will be opencast by manual method without involving drilling and blasting. The mining is confined to extraction of sand, reta and bed material using hand tools like shovel, pan, sieve etc. Mining will be carried out only during the day time. The targetted production capacity of the mine is 6.75lakh TPA (3.75lakh m³ per annum). The mined out material will be transported to their respective uses locations via private agencies using their own transport. Computerized weigh bridges have been installed in order to check and monitor moment of material. The proposed mining area is reported to lie between 30°13'23.02" to 30°16'35.05" N Latitude and 76°07'40.43" and 76°07'28.63" E Longitude in topo sheet No. 531/3. The elevation from the sea level of the proposed area is reported as 995m. The river flow is bleak most of the year except during the monsoon season. Mining will be carried out upto a depth of 1.5m. No pumping of water from the river or from groundwater is envisaged.

5. The public hearing of the project was held on 07.07.2010 for collection of minor minerals from Song -1 River over mine lease area of 225ha. The Principal Secretary, Government of Uttarakhand vide letter No.2536/VII-I/163-KHA/2009/10 dated 23.10.2010 informed that collection of minor mineral from the river bed does not require mine plan approval under Uttarakhand Minor Mineral Concession Rules 2001. The Ministry of Environment and Forests has accorded combined in-principle approval under Forest (Conservation) Act on 26.05.2009 and 02.06.2009 for an area of 1325ha. The proponent has stated that there is no court case to the project or related activity.

6. The Ministry of Environment and Forests has examined the application in accordance with the EIA Notification, 2006 and the Doon Valley Notification, 1989 as amended on 13.12.2007 and hereby accords environmental clearance under the provisions thereof to the above mentioned Minor Mineral Mining Project of M/s Uttarakhand Forest Development Corporation for an annual collection of 6,75,000 tonnes of sand, reta and bajri (minor mineral) from the Song-1 River bed by the opencast manual method involving total mining-lease area of 225ha, subject to implementation of the following conditions and environmental safeguards.

A. Specific conditions

- (i) The project proponent shall obtain Consent to Establish and Consent to Operate from the Uttarakhand Environment Protection & Conservation Control Board and effectively implement all the conditions stipulated therein.



Q. 13/31-

(ii) Requisite prior clearance from the Standing Committee of the National Board for Wildlife shall be obtained due to location of the project area within Shivalik Elephant Reserve, before starting any activity relating to the project at site. All the conditions stipulated by the Standing Committee shall be effectively implemented in the project. It shall be noted that this clearance does not necessarily implies that wildlife clearance shall be granted to the project and that your proposal for merit and decision taken. The investment made in the project, if any based on environmental clearance granted to the project, in anticipation of the clearance from wildlife clearance shall be entirely at the cost and risk of the project proponent and Ministry of Environment and Forests shall not be responsible in this regard in any manner.

(iii) Environmental clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No. 460 of 2004, as may be applicable to this project.

(iv) Environmental clearance is subject to obtaining clearance under the Wildlife (Protection) Act, 1972 from the competent authority, as may be applicable to this project.

(v) Environmental clearance is subject to grant of forestry clearance.

(vi) The project proponent shall prepare the plan of mining in conformity with the mine lease conditions and the Rules prescribed in this regard clearly showing the no work zone in the mine lease i.e. the distance from the bank of river to be left unworked, distance from the bridges etc. It shall be ensured that no mining shall be carried out during the monsoon season.

(vii) The project proponent shall identify the degraded forest area within the mine lease in consultation with the State Forest Department and undertake plantation/afforestation work by planting the native species.

(viii) 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 should be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.

(ix) The project proponent shall undertake adequate safety measures during extraction of river bed material and ensure that due to this



activity the hydro-geological regime of the surrounding area shall not be affected. Regular monitoring of ground water level and quality shall be carried out around the mine lease area by establishing a network of existing wells and installing new piezometers during the mining operation. The periodic monitoring [(at least four times in a year- pre-monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January); once in each season)] shall be carried out in consultation with the State Ground Water Board/Central Ground Water Authority and the data thus collected may be sent regularly to the Ministry of Environment and Forests and its Regional Office Lucknow, the Central Ground Water Authority and the Regional Director, Central Ground Water Board. If at any stage, it is observed that the groundwater table is getting depleted due to the mining activity, necessary corrective measures shall be carried out.

The project proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of water (surface water and groundwater), if any, required for the project.

Appropriate mitigative measures shall be taken to prevent pollution of the river in consultation with the State Pollution Control Board. It shall be ensured that there is no leakage of oil and grease in the river from the vehicles used for transportation.

Mineral emissions shall be kept under control and regularly monitored. Mineral transportation shall be carried out through the covered trucks only and the vehicles carrying the mineral shall not be overloaded.

Loading and blasting operation shall be carried out.

Mineral handling area shall be provided with the adequate number of high efficiency dust extraction system. Loading and unloading areas and all the transfer points should also have efficient dust control arrangements. These should be properly maintained and operated.

(xv) Periodical medical examination of the workers engaged in the project shall be carried out and records maintained. For the purpose, schedule of health examination of the workers should be drawn and followed accordingly.

(xvi) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.



(xvii) Digital processing of the entire lease area using remote sensing technique should be done regularly once in three years for monitoring the change of river course, if any and report submitted to the Ministry of Environment and Forests and its Regional Office located at Lucknow.

(xviii) The critical parameters such as RSPM (Particulate matter with size less than 10micron i.e., PM_{10}) and NO_x in the ambient air within the impact zone shall be monitored periodically. Further, quality of discharged water shall also be monitored. [(TDS, DO, PH, Fecal Coliform and Total Suspended Solids (TSS)]. The monitored data shall be uploaded on the website of the company as well as displayed on a display board at the project site at a suitable location near the main gate of the Company in public domain. The Circular No. J-20012/1/2006-IA.III(M) dated 27.05.2009 issued by Ministry of Environment and Forests, which is available on the website of the Ministry www.envfor.nic.in shall also be referred in this regard for its compliance.

(xix) The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna namely elephant etc. found in the study area. Action plan for conservation of flora and fauna shall be prepared in consultation with the State Forest and Wildlife Department. All the safeguard measures brought out in the Wildlife Conservation Plan so prepared specific to this project site shall be effectively implemented. Necessary allocation of funds for implementation of the conservation plan shall be made and the funds so allocated shall be included in the project cost. A copy of action plan shall be submitted to the Regional Office of the Ministry of Environment and Forests, Lucknow.

B. General conditions

(i) No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment & Forests.

(ii) No change in the calendar plan including excavation, quantum of mineral rate, bafri and sand (minor mineral) and waste should be made.

(iii) Four ambient air quality monitoring stations should be established in the core zone as well as in the buffer zone for RSPM (Particulate matter with size less than 10micron i.e., PM_{10}) and NO_x monitoring. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with the State Pollution Control Board.

(iv) Data on ambient air quality RSPM (Particulate matter with size less than 10micron i.e., PM_{10}) & NO_x should be regularly submitted to the Ministry of Environment and Forests including its Regional Office located at Lucknow and the State Pollution Control Board / Central Pollution Control Board once in six months.

(v) Fugitive dust emissions from all the sources should be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points should be provided and properly maintained.

(vi) Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects.

Occupational health surveillance program of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.

(vii) A separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.

(viii) The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the Ministry of Environment and Forests and its Regional Office located at Lucknow.

(ix) The project authorities should inform to the Regional Office located at Lucknow regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.

(x) The Regional Office of this Ministry located at Lucknow shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information / monitoring reports.

(xi) The project proponent shall submit six monthly reports on the status of compliance of the stipulated environmental clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the Ministry of Environment and Forests, its Regional Office Lucknow, the respective Zonal Office of Central Pollution Control Board, the State Pollution Control Board. The proponent shall update the status of compliance of the environmental clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the Ministry of Environment and Forests, Lucknow, the respective Zonal Office of Central Pollution Control Board and the State Pollution Control Board.



- (xii) A copy of the Clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad/ Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.
- (xiii) The State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre and the Collector's office/ Tehsildar's Office for 30 days.
- (xiv) The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the Regional Office of the Ministry of Environment and Forests, Lucknow by e-mail.
- (xv) The project authorities should advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter, informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and also at web site of the Ministry of Environment and Forests at <http://envfor.nic.in> and a copy of the same should be forwarded to the Regional Office of this Ministry located at Lucknow.

7. The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.

8. Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.

9. The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules made thereunder and also any other orders passed by the Hon'ble Supreme Court of India/High Court of Uttaranchal and any other Court of law relating to the subject matter.



पुनर्निर्माण एवं पर्यावरण विकास
संयोजन निदेशिका, उत्तराखण्ड
25 गान्धीय रोड, देहरादून।

प्रमुख सचिव,
औद्योगिक विकास विभाग,
उत्तराखण्ड शासन, देहरादून।

विधि/51/देहरादून/खनन/पर्यावरण/2008-09, दिनांक 17 अक्टूबर, 2009

विषय: जनपद देहरादून में देहरादून वन प्रभाग देहरादून के अन्तर्गत 1325 हे० आरक्षित वन क्षेत्रफल की स्वीकृति के संबंध में।

संदर्भ: कृपया उपर्युक्त विषयक के कार्यों में अग्रगत करना है कि पर्यावरण एवं वन मंत्रालय भारत सरकार के पत्र सं० F.N. 8-62/89-FCI दिनांक 24 सितम्बर, 2008 के द्वारा देहरादून वन प्रभाग के अन्तर्गत आरक्षित होने वाले निम्नलिखित नदी तटों से उपखनिज के भुगतान/खनन की अनुमति प्रदान की गई है:-

1. गुलाटी नदी 30.00 हे०
2. देरु नदी 20.00 हे०
3. सौंग नदी प्रथम (थाने) 215.00 हे०
4. सौंग नदी द्वितीय (थाने) 273.00 हे०
5. सौंग नदी तृतीय (लघुअवगात्रा) 278.00 हे०
6. जाखन नदी प्रथम (थाने) 145.00 हे०
7. जाखन नदी द्वितीय (बहकोट) 100.00 हे०
8. चन्द्र गागा नदी प्रथम 100.00 हे०
9. चन्द्र गागा नदी द्वितीय 29.00 हे०
10. लकड़ घाट नदी प्राधिकृत 10.00 हे०

वर्तमान में प्रचलित अधिनियम नीति में संशोधन विषयक शासननदेश दिनांक 17-10-2002 के द्वारा आरक्षित वन क्षेत्र में नदी तटों से उपखनिज के भुगतान खनन हेतु उत्तराखण्ड वन विकास नियम से राज्य सरकार द्वारा अधिकृत किया गया है।

पर्यावरण एवं वन मंत्रालय के पत्र दिनांक 24-9-2008 के बिन्दु सं० 3 में यह उल्लेख किया गया है कि प्रस्तावित संस्था की N.P.C. इत्यादि समितियों का अनुपालन करने के उपरान्त ही वन संरक्षण अधिनियम, 1980 के अधीन अनुमति प्रदान की जावेगी।

अतः वर्तमान नीति के अनुसार उत्तराखण्ड वन विकास नियम से शर्तों को परिपूर्ण करने एवं आदेश जारी किया जाना प्रस्तावित किया जाता है।

भवदीय,



Received No. 6853
Date 03/03/09

भूतत्व एवं सैनिकीय इकाई, उद्योग निदेशालय
उत्तराखण्ड, देहरादून।

जिलाधिकारी
देहरादून।

उपखनिज / 01 / उ0वन0वि0नि0 / मू0खनि0ई0 / 2010-11 दिनांक 04/12/2011

आरक्षित वन क्षेत्र की नदियाँ सींग-1 एवं सींग-2 के सीमावर्धन को सम्बन्धित है।

कृपया उपरोक्त विषयक आपके कार्यादेश सं01671/खनिज-खनन-पुनर्गठन-2011 दिनांक 19/12/2011 व प्रभागीय वन विकास प्रबन्धक (खनन) देहरादून के पत्र सं0 443/सीमावर्धन दिनांक 12-12-2011 के क्रम में जनपद देहरादून के आरक्षित वन क्षेत्र की नदियों सींग-1 एवं सींग-2 का सीमावर्धन इन कार्यालय के सर्वेक्षक के द्वारा वन विभाग के प्रतिनिधि व उत्तराखण्ड वन विभाग विभाग के जॉइंट सहायक की उपस्थिति में दिनांक 03-01-2012 से 05-01-2012 को सम्पन्न किया गया। उक्त क्षेत्र की सीमावर्धन आख्या एवं मानचित्र इस पत्र के साथ संलग्न कर आवश्यक कार्यवाही हेतु प्रेषित किया जा रहा है।

संलग्नक: गद्योपरी।

कार्यालय प्र. व. वि. प्र. (खनन)
जनपद देहरादून, उत्तराखण्ड
संख्या: 719
दिनांक: 18/12/2012

भवदीय

(एस0 एस0 वैदिक)
ज्येष्ठ खान अधिकारी

उपखनिज / 01 / उ0वन0वि0नि0 / मू0खनि0ई0 / 2010-11 दिनांक 04/12/2011
प्रभागीय वन विकास प्रबन्धक (खनन) उत्तराखण्ड वन विकास विभाग देहरादून को उक्त पत्र सं0 443/सीमावर्धन दिनांक 12-12-2011 के क्रम में उक्त नदियों की सीमावर्धन आख्या एवं मानचित्र की प्रतिलिपि सूपनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित।

4/12/12
(एस0 एस0 वैदिक)
ज्येष्ठ खान अधिकारी



सोपान चढाई-१

संयुक्त सीमा नन्वण शासकः

217/811-1/123-2/2011

दिनांक 14 नवम्बर 2011

उत्तराखण्ड शासन।

शेरा में

विस्थापिका, देहरादून।

आर्थिक विकास अनुभाग-1

विषय

जंगल देहरादून में देहरादून वन प्रभाग के अन्तर्गत रहने वाली नदी सींग नदी-1 से उपखनिज के भुगतान की अनुमति के सम्बन्ध में।

संदर्भ

देहरादून - विताका। 14 नवम्बर, 2011

उपरोक्त विषयक प्रबन्ध निदेशक, उत्तराखण्ड वन विकास निगम, अखण्ड विकास मंडल 78-नेहरू रोड, देहरादून के पत्र संख्या 30-3533/32-29, दिनांक 21 अक्टूबर, 2011 से जंगल में समस्त विधासंपन्न भूखंड कहने का निदेश हुआ है कि जंगल देहरादून में देहरादून वन प्रभाग के अन्तर्गत रहने वाली सींग नदी-1 से 112.50 हेक्टेयर एवं सींग नदी-2 से 156.50 हेक्टेयर अक्षयजल न. 2 दिनांक 10.02.2011 की अधिष्टेनु उपखनिज सेवा, बाजरी, बालू का भुगतान शिव चामे की अनुमति उत्तराखण्ड वन विकास निगम को निम्नलिखित शर्तों पर अधीन प्रदान की जाती है :-

- 1- वन भूमि की अधिनियम स्थिति में कोई परिवर्तन नहीं होगा।
- 2- उत्तराखण्ड वन विकास निगम द्वारा जंगल भूखंडों से उपखनिजों के भुगतान से पूर्व भारत सरकार, पर्यावरण एवं वन मंत्रालय, नई दिल्ली आदेश संख्या 11015/329/2009-LA-II(M) दिनांक 10.02.2011 एवं संख्या 11015/340/2009-LA-II(M) दिनांक 10.02.2011 से पर्यावरण एवं वन मंत्रालय, भारत सरकार के समस्त जीव विविधता के अधिनियम संख्या 6-43 1987 (XIII), दिनांक 10.05.2011 में उल्लिखित सक्ता शर्तों का अमल करने के लिए किया जाएगा।
- 3- उत्तराखण्ड वन विकास निगम द्वारा जंगल भूखंडों से उपखनिजों के भुगतान से पूर्व उत्तराखण्ड पर्यावरण संरक्षण एवं प्रदूषण नियंत्रण बोर्ड, नई दिल्ली/आस्थादी/एनओसी-देहरादून-3188/11/01 एवं नई दिल्ली/आस्थादी/एनओसी-देहरादून-3188/11/01 दिनांक 10.02.2011 से पर्यावरण एवं वन मंत्रालय भारत सरकार द्वारा वन संरक्षण अधिनियम, 1938 के अधिनियम संख्या 6-43 1987 (XIII) दिनांक 10.05.2011 में उल्लिखित सक्ता शर्तों का अमल करने के लिए किया जाएगा।



- 5- निगम धुमान कार्य से किसी भी वन सम्पदा को क्षति नहीं पहुंचेगा। यदि वन सम्पदा को कोई क्षति पहुंचती है या पहुंचायी जाती है तो उसका लिए सम्यचित्त उपायों द्वारा निम्नलिखित प्रतिफल उत्तराखण्ड वन विकास निगम द्वारा देना होगा।
- 6- कि उत्तराखण्ड वन विकास निगम को उसको उक्त प्रयोजन हेतु आवश्यकता होगी, यदि उत्तराखण्ड वन विकास निगम को उक्त वन भूमि अथवा दस्तावेज किसी भूगर्भ की आवश्यकता न रहेगी तो उक्त भूमि अथवा उसका ऐसा भाग जो उत्तराखण्ड वन विकास निगम के लिए आवश्यक न रहे, वन विभाग को पिता किसी प्रतिफल को धुमान निगम यथा स्थिति वापस हो जायेगी।
- 7- वन विभाग के कर्मचारी/अधिकारी या उनके अधिकारियों को किसी भी प्रकार उक्त वन आवश्यकता से जो, प्रसन्नगत वन भूमि का निरीक्षण करने का पूर्ण अधिकार होगा।
- 8- कथित वन क्षेत्र में कार्य करने वाले मजदूर तथा कर्मचारी आगो ईंधन की आवश्यकता के लिए वनों को क्षति न पहुंचाये, इसके लिए उत्तराखण्ड वन विकास निगम द्वारा उन्हें ईंधन की लकड़ी अथवा उन्हें ईंधन की सामग्री की आपूर्ति की जायेगी।
- 9- उत्तराखण्ड वन विकास निगम द्वारा वृक्षों का पावन नहीं किया जायेगा।
- 10- उत्तराखण्ड वन विकास निगम द्वारा नू-क्षेत्रों में वन प्रसन्नगत भेदिक उत्तराखण्ड वन सुदृढीकरण हेतु आवश्यक धनराशि का धुमान वन विभाग को किया जायेगा। वन विभाग द्वारा वन विकास निगम द्वारा उपलब्ध करायी गई धनराशि से सार्वजनिक वन क्षेत्रों में अभियांत्रिकी कार्य सम्पादित किये जायेंगे। नदी तट से निकाले जाने वाले वन क्षेत्रों में विभिन्न प्रकार के प्रकृत संरक्षण का 25 प्रतिशत भाग सेवा हेतु एवं वन क्षेत्रों में वन कार्य हेतु वास किया जायेगा। नदी तटों का उच्चतम वन विभाग द्वारा वन क्षेत्रों में वन कार्य के अन्तर्गत कराया जायेगा व यदि आवश्यक हो तो कन्दोरे नदी तटों में वन संस्थान, देहादुन का तकनीकी परामर्श भी प्राप्त किया जायेगा।
- 11- प्रसन्नगत क्षेत्र में कार्य करने वाले समितियों के लिए वन क्षेत्र के अन्दर किसी प्रकार के भवनिक इष्ट स्थापित नहीं किये जायेंगे।
- 12- उपखनिजों के धुमान नदी के मध्य में किया जायेगा तथा भेदों के धन क्षेत्रों में वन ताल का 1/4 भाग छोड़ा जायेगा।
- 13- प्रसन्नगत क्षेत्र में उपखनिजों के धुमान हेतु किसी भी विस्फोटक प्रयोग को किया जायेगा व धुमान कार्य केवल हथकड़ों द्वारा ही किया जायेगा।
- 14- प्रसन्नगत क्षेत्र में उपखनिजों के धुमान का कार्य तुरन्त से शुरू तथा सुदृढीकरण का कार्य किया जायेगा।
- 15- वेस्टर लाइन का कार्य वन सीमा से बाहर किया जायेगा।
- 16- प्रसन्नगत क्षेत्र में उपखनिजों के धुमान का कार्य वन सीमा के अन्दर नहीं किया जायेगा।
- 17- धुमान सुदृढीकरण की स्वीकृति के पश्चात् उत्तराखण्ड वन विभाग को आवश्यकता अनुसार धनराशि का धुमान निगम को दिया जायेगा।



- 14- किसी सार्वजनिक विद्यालय, समकाल अथवा कनिष्ठालय को स्थानों के किसी एक-दो अधिक माने जाने वाले स्थान, भूदान अथवा सामाजिक, सांस्कृतिक संस्थान को कृषि क्षेत्र स्थान जो विद्यालयों द्वारा सार्वजनिक स्थान घोषित किया गया है, ऐसे स्थान पर न हो कोई चीज खरीद कर जायेगा न ही स्थापित की जायेगी और न ही कोई सार्वजनिक अधिकारियों को ली जायेगी।
- 15- पट्टे में अस्मिता निर्माण कार्य को अन्य प्रयोजनों के निर्माण पर रूख नहीं रखे जायेंगे। संविधानों के लिए प्रयुक्त नहीं की जायेगी जो राज्य सरकार से मिले स्थानों के स्थान में पहले से ही हैं।
- 16- किसी भी भूदान या उपकरण करने के अधिकार पर हस्तक्षेप न किया जायेगा।
- 17- उत्तराखण्ड वन विकास निगम द्वारा उप-खनिजों के विकास से प्राप्त धनराशि में अवकाश भूदान पर 10 वर्षों की अवधि में प्रतिवर्ष कुलधन का कार्य किया जायेगा। वन विकास द्वारा उपसप्तानुसार किये गये धनराशि का अंशगत दोष वर्षों तक रख-रखाव किया जायेगा।
- 18- प्रस्तावित क्षेत्र में खनन कार्य शुरू करने से पूर्व प्रवेश व निवास भूमि पर पर्याप्त जमीन में अस्वास्थ्य-पोस्ट स्थापित किये जायेंगे। निवासी किये जाने वाले उपकरणों के वस्तु अभिलेखों का रख रखाव उत्तराखण्ड वन विकास निगम द्वारा किया जायेगा।
- 19- वन विकास निगम द्वारा उप-खनिज की निवासी की मात्रा पर निर्धारित सार्वजनिक अधिकारानुसार देना किया जायेगा।
- 20- उपखनिज परिसर नियमावली 2001 के नियम-73 के अनुसार एन्ड एक्जाम्पल-10 का वैधानिक विवरण विभागीय, देखभाल एवं निर्देशक, भूदान एवं खनिज विकास को धारित की जायेगी।
- 21- इससे अधिकतर, इस हेतु जो भी बातें स्थानीय जिला प्रशासन तथा भूदान एवं अधिकारों केन्द्रों द्वारा निर्धारित की जायेगी, का अनुपालन उत्तराखण्ड वन विकास निगम द्वारा किया जायेगा।
- 22- उत्तराखण्ड वन विकास निगम द्वारा वन अधिकारों के उपकरणों के धनराशि को वन विकास निगम/अन्य अधिकारियों को प्रदत्त समस्त वनसम्पदाओं का अनुपालन पूर्णतया किया जायेगा।
- 23- निगम द्वारा उपखनिजों के धनराशि हेतु मुख्य रूप से अधिकतर, उत्तराखण्ड का क्षेत्रीय व राज्य द्वारा समय-समय पर जारी निर्देशों का अनुपालन पूर्णतया किया जायेगा।



- १- सविध, पालतु सज्जन
 २- लोको मोह भई मिली।
 ३- प्रभुस सविध भाग्यवत् न
 ४- प्रभुस सविध वन पर्व प
 ५- आमुक्त, गदगाल मण्डल, मोह
 ६- स्वयं आकाश, मुख्य सविध
 ७- निदेशक, भूतल, वे खनिज
 ८- प्रभुस वन संदेश, यत्ना
 ९- प्रभुस विदेशक, उत्तरायण
 १०- अपर प्रभुस वन संदेश, पर्व
 ११- यत्नासंदेश, देह उद्गम।
 १२- गार्ह पायल।

निष्कर्ष : पर्यावरण भण्डार, सीधे सीधे, आभारपूर्ण

100

410

511

पु. लि. जल. जलसंधार. रेंडादिन।

4400 JOURNAL OF CLIMATE

तत्तु, कः जलस्थ, इन्द्रियगणैः पृथक्स्थ आत्मनो

2788

WILLIAM TUCKER

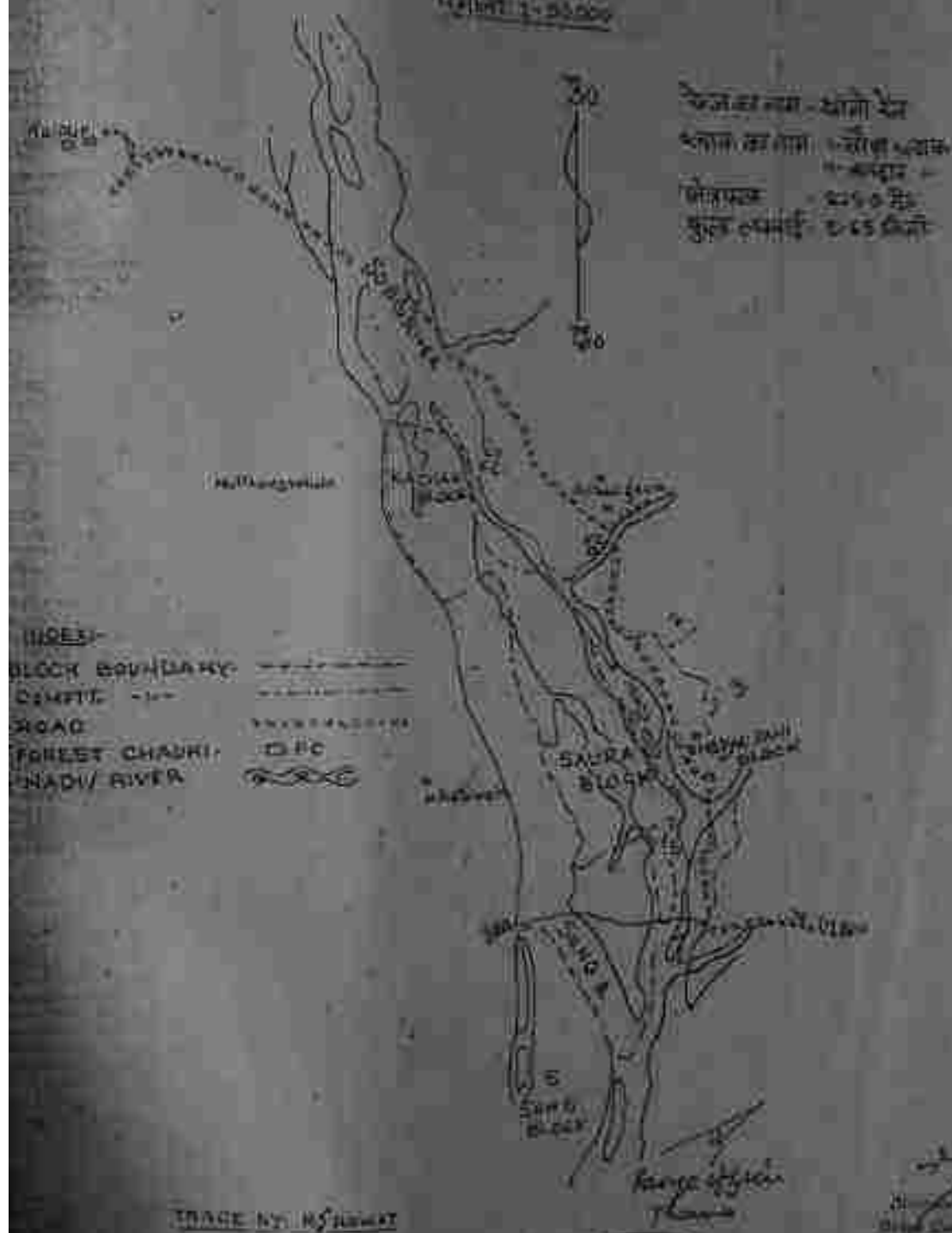
25. 11



1915

सौता भाग्य का मानचित्र

Signature: _____

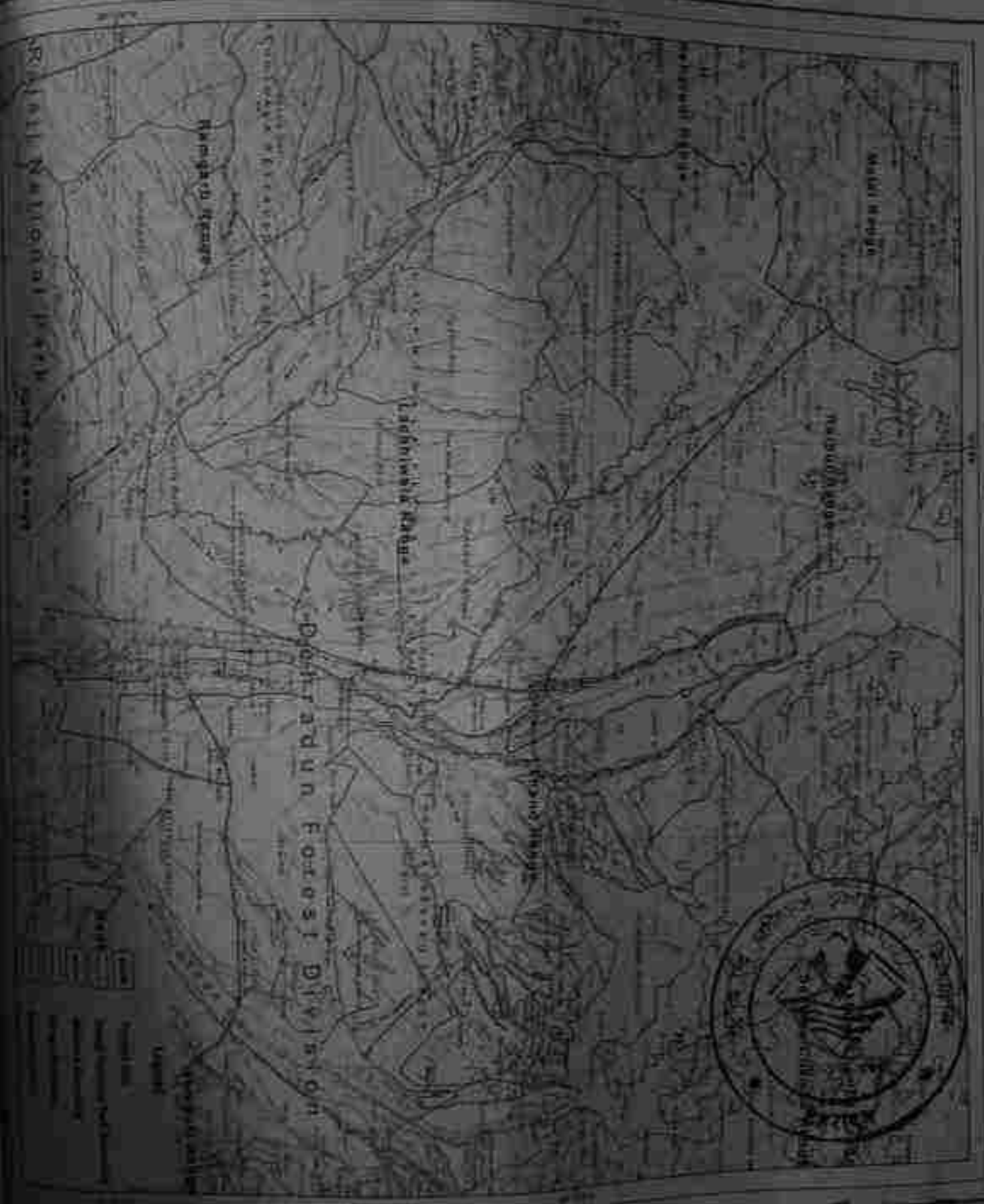


राजेश कुमार - योगी देव
 श्यामल देव - योगी देव
 योगी देव - योगी देव
 योगी देव - योगी देव
 योगी देव - योगी देव

INDEX:-
 BLOCK BOUNDARY _____
 CHAUKI - 10- _____
 ROAD _____
 FOREST CHAUKI _____
 NADI/ RIVER _____

THEY ARE NOT IN THE SAME CATEGORY

~~Morgan~~ ~~Parker~~
~~Douglass~~ ~~Parker~~
Duffell



DEHRADUN FOREST DIVISION

अनुसूचित जाति

સત્તારાશ્વખટ સપ્તઋણિજ (બાસુ, મજરી, મોહર, ઇટ આદિ) નીતિ, ૨૦૧૬

(2) આ સુચના મળતા બાદ

(16) भारतीय क्षेत्र (क्षेत्र-16) के अंतर्गत निम्न क्षेत्रों को सम्मिलित किया गया है-

(अ) भारत-नेपाल क्षेत्र (क्षेत्र-17) के अंतर्गत निम्न क्षेत्रों को सम्मिलित किया गया है-

(क) भारतीय क्षेत्र (क्षेत्र-18) के अंतर्गत निम्न क्षेत्रों को सम्मिलित किया गया है-

(ख) भारत और पड़ोसी क्षेत्रों को सम्मिलित करने के लिए निम्न क्षेत्रों को सम्मिलित किया गया है-

खनिज की मात्रा का 3 अंकित

राज्य के अंतर्गत क्षेत्रों या भूगोलीय स्थिति एवं अर्थव्यवस्था के कारण भारत के अंतर्गत क्षेत्रों के अंतर्गत क्षेत्रों को निम्न तीन क्षेत्रों (Zones) में विभाजित किया गया है-

(1) भारतीय अर्थव्यवस्था क्षेत्र (क्षेत्र-19) के अंतर्गत निम्न क्षेत्रों को सम्मिलित किया गया है-

उत्तर भारतीय क्षेत्रों में खनिजों के अर्थव्यवस्था के कारण भारत के अंतर्गत क्षेत्रों को निम्न तीन क्षेत्रों (Zones) में विभाजित किया गया है-

उत्तर भारतीय क्षेत्रों में खनिजों के अर्थव्यवस्था के कारण भारत के अंतर्गत क्षेत्रों को निम्न तीन क्षेत्रों (Zones) में विभाजित किया गया है-

(2) भारतीय अर्थव्यवस्था क्षेत्र (क्षेत्र-20) के अंतर्गत निम्न क्षेत्रों को सम्मिलित किया गया है-





SITE PICTURES OF SON...



छनन योजना तैयार करने के लिए अर्हता प्राप्त व्यक्ति के रूप में मान्यता प्रमाण पत्र

CERTIFICATE OF RECOGNITION AS QUALIFIED PERSON TO PREPARE MINING PLANS

(छनिज रियायत नियमावली, 1960 के नियम 22 (सी) के अंतर्गत)
(Under Rule 22(C) of Mineral Concession Rules, 1960)

माननीय श्री/ कि
M/s/Shri. Bhawan Joshi

पंजीकृत कार्यालय
registered office at C/O B.S. Rawat, Kamal Bhawan, House No.-6, Vijay Colony, Lane No.-1, New Cantt Road, Dehradun (Uttarakhand)

तथा जिन्होंने अपने प्रमुख व्यक्तियों की योग्यताओं एवं अनुभवों का तालेखद्वारा
and having given satisfactory evidence of the qualification and experience of
प्रमाण दिया है उन्हें एतद्वारा छनिज रियायत नियमावली, 1960 के नियम 22 (सी) के अंतर्गत
their key persons is hereby granted recognition under rule 22 (C) of the Mineral
छनन योजनाओं को तैयार करने के लिए अर्हता प्राप्त व्यक्ति के रूप में मान्यता प्रदान की जाती है।
Concession Rules, 1960 as a qualified person to prepare Mining Plans.

पंजीकरण क्रमांक -

The registration No. is

BQP/DDX/180700/A

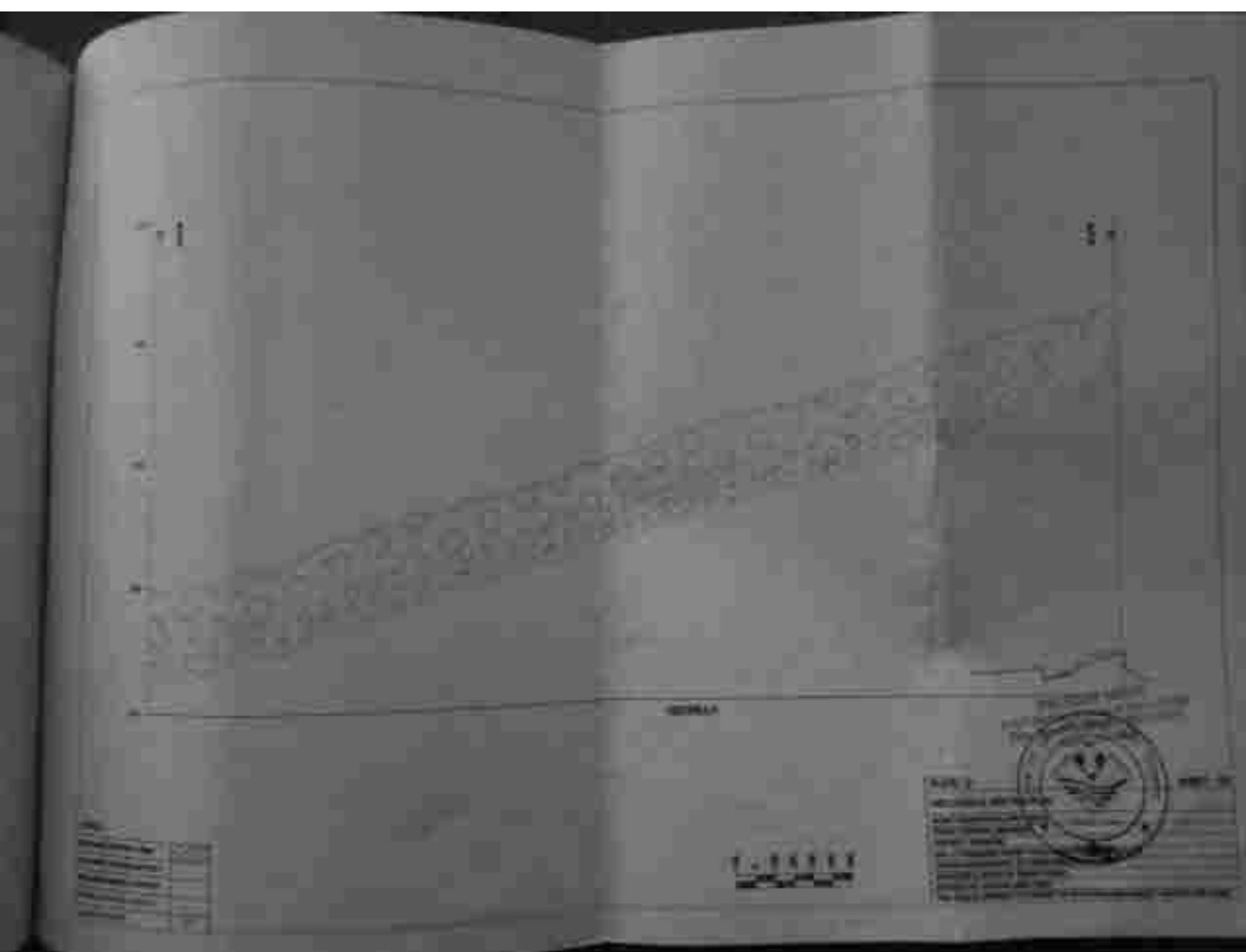
यह मान्यता दस वर्ष की अवधि के लिए वैध है जो कि दिनांक को समाप्त हो।
This Recognition is valid for a period of ten years ending 31/08/2019.

स्थान / Place: AJMER
दिनांक / Date: 31/08/2019





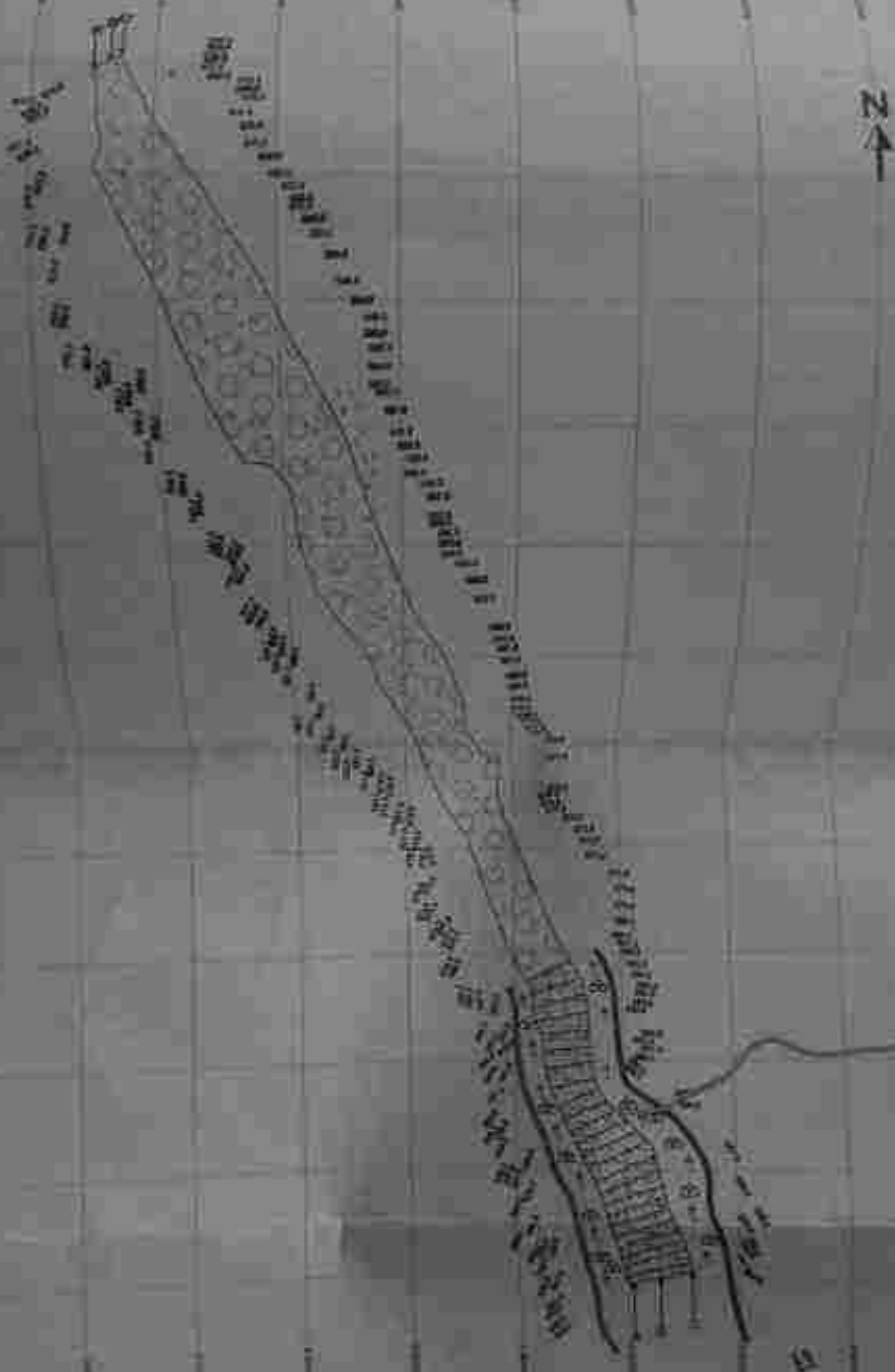
LOCATION MAP OF SONGT. DIST. - DIBRUGARH, ASSAM



SECTION

1. 2. 3. 4. 5. 6. 7. 8. 9. 10.

NO.	NAME	DATE	TIME	PLACE	REMARKS
1					
2					
3					
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ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED EXCEPT WHERE SHOWN OTHERWISE

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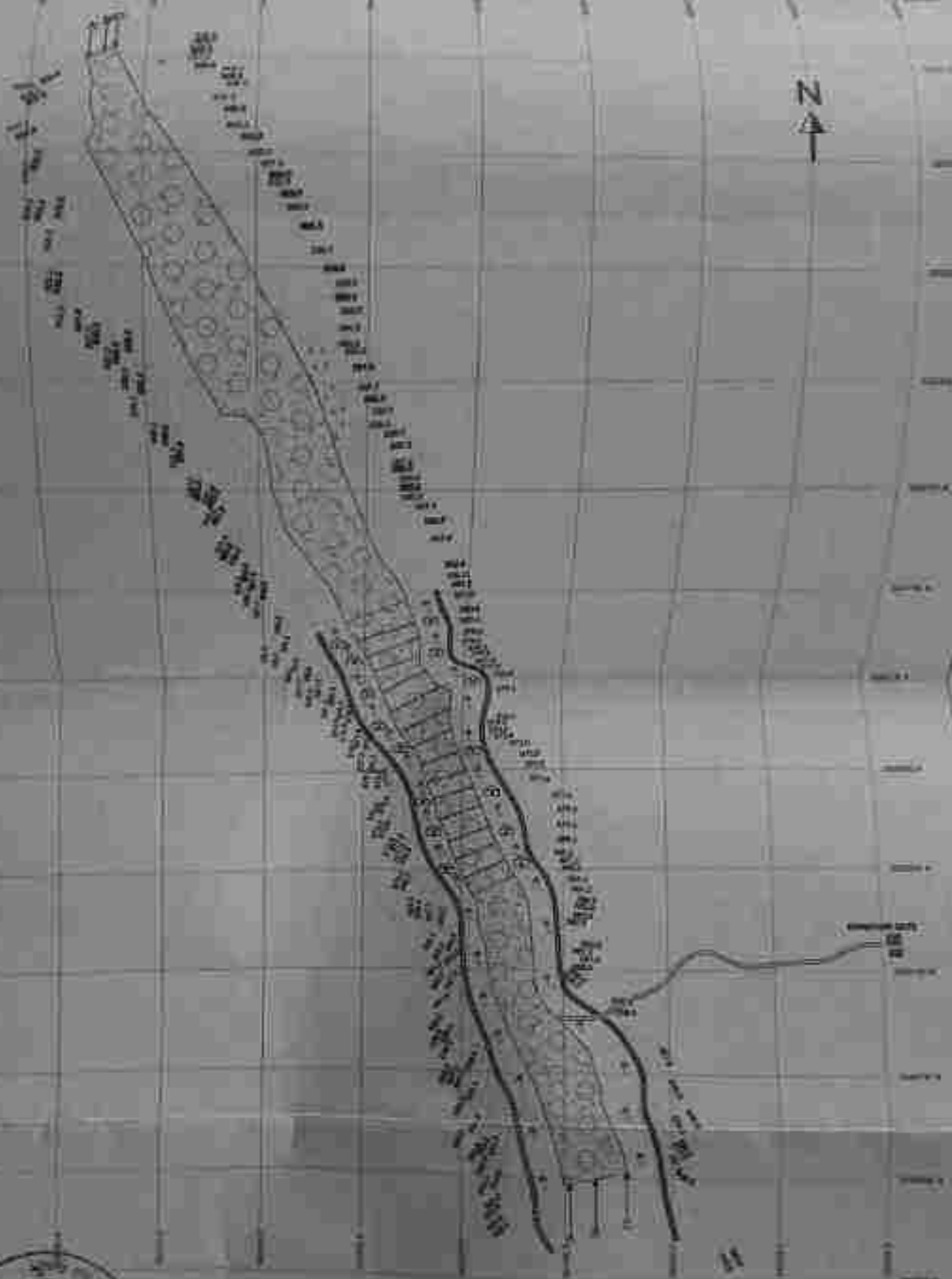
INTERNATIONAL
BANK FOR RECONSTRUCTION AND DEVELOPMENT
1, rue de la Loi, 200 - 1049 Brussels, Belgium
Telex: 320393 - Cable: 330606

HARRIS-60

WORLDWIDE PLAN / THE WORLDWIDE PLAN FOR THREE YEARS

1. NAME : [REDACTED]
 2. DATE : [REDACTED]
 3. TIME : [REDACTED]
 4. LOCATION : [REDACTED]
 5. REASON : [REDACTED]
 6. WITNESSES : [REDACTED]
 7. REMARKS : [REDACTED]
 8. SIGNATURE : [REDACTED]
 9. OFFICE : [REDACTED]
 10. REMARKS : [REDACTED]

N



44031	
DATE	1944
PROJECT	PORT ROYAL BEACH
ENGINEER	JOHN A. HARRIS
DESIGNER	JOHN A. HARRIS
CONTRACTOR	JOHN A. HARRIS
REVISIONS	
1	REVISION
2	REVISION
3	REVISION
4	REVISION
5	REVISION
6	REVISION
7	REVISION
8	REVISION
9	REVISION
10	REVISION



NOTES

ALL DIMENSIONS IN METERS & CONTOUR INTERVAL 0.3 M.

SECTION - 61

WORKING FROM 1/4" SCALE PLAN FOR SECOND YEAR

WORKING FROM 1/4" SCALE PLAN FOR SECOND YEAR

WORKING FROM 1/4" SCALE PLAN FOR SECOND YEAR

WORKING FROM 1/4" SCALE PLAN FOR SECOND YEAR

WORKING FROM 1/4" SCALE PLAN FOR SECOND YEAR

WORKING FROM 1/4" SCALE PLAN FOR SECOND YEAR

WORKING FROM 1/4" SCALE PLAN FOR SECOND YEAR

THIS PLAN IS SUBJECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

N



NAME	
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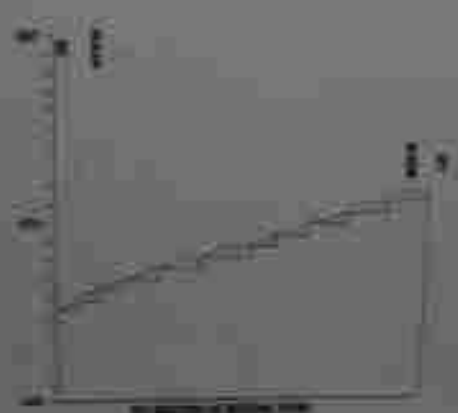
NOTES

ALL DIMENSIONS SHOWN ARE CORRECTED TO THE 1/2 IN.

PLATE 8

EXHIBIT PLANS FOR LATENT PLANS FOR THE YEAR

DATE	1/1/1911
BY	J. H. H. H.
FOR	J. H. H. H.
REMARKS	
DATE	1/1/1911
BY	J. H. H. H.
FOR	J. H. H. H.
REMARKS	



1 2 3 4 5

NO.	NAME	DATE
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3		
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5		



MINISTRY OF EDUCATION
GOVERNMENT OF INDIA
NEW DELHI

N



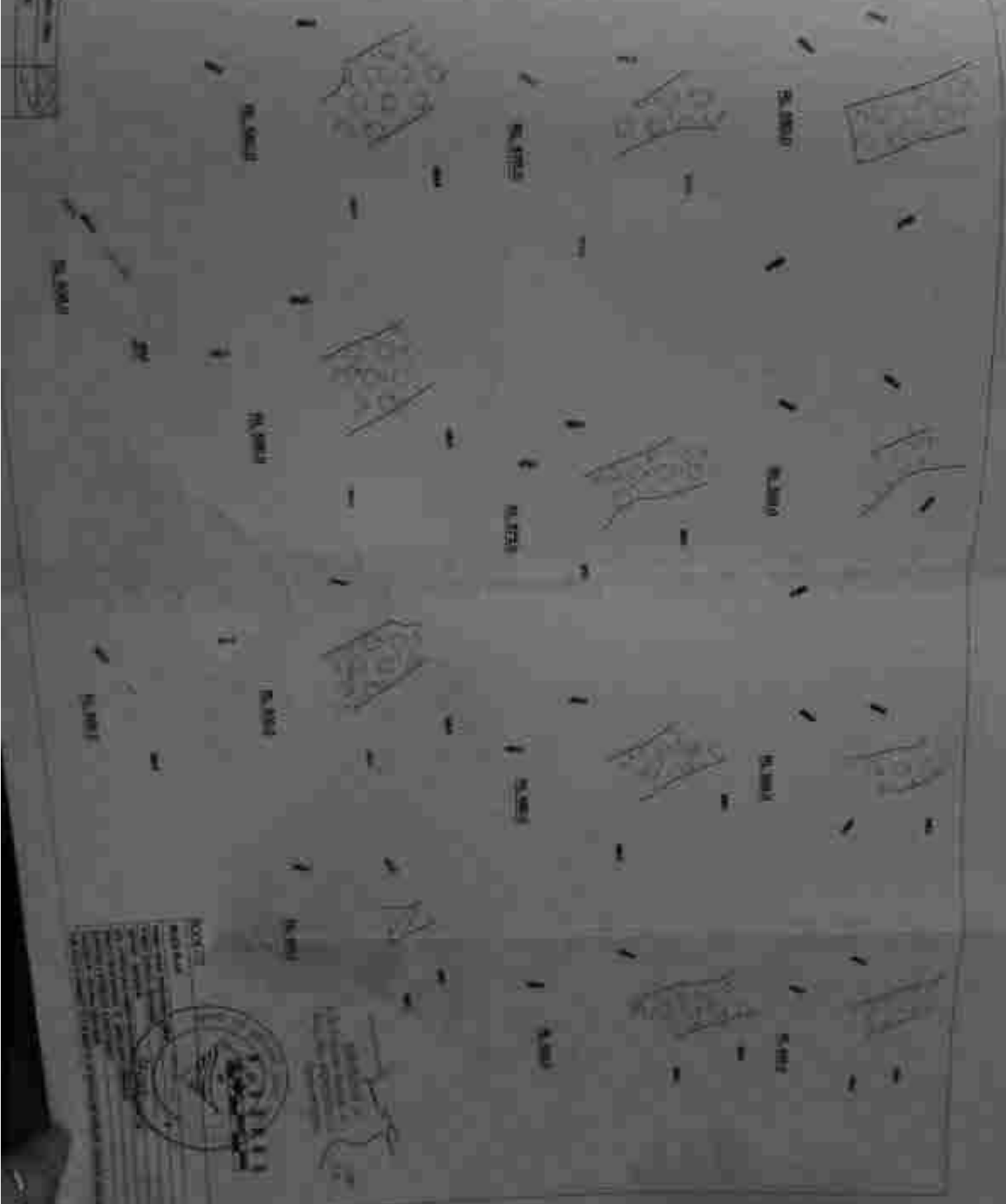
INDEX

1. Main River	2. Valley Floor
3. Contour Lines	4. Elevation Markers
5. Hill Shading	6. Road Network
7. Settlements	8. Water Features
9. Vegetation	10. Other Features



NOTE: ALL ELEVATIONS IN FEET & CONTOUR INTERVAL 100 FT.

1. Main River	2. Valley Floor
3. Contour Lines	4. Elevation Markers
5. Hill Shading	6. Road Network
7. Settlements	8. Water Features
9. Vegetation	10. Other Features



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सुखं न भवति न भवति
सुखं न भवति न भवति
सुखं न भवति न भवति

मम विदुषः
स विदुषः मम सुखदाम्नि
सुखदाम्नि।

1125 / 01/2016 / number / 2016 / 2015-16

15-07-2018

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2. www.dhammadownload.com - This is the main website for downloading Dhamma books in various formats (PDF, MP3, etc.).
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- यह खनन योजना वन (संरक्षण) अधिनियम-1980, वन संरक्षण नियमावली 1981 और अन्य सम्बन्धित अधिनियम और नियमावली, आदेश और दिशा निर्देश जो कि इस खनन पट्टे पर समय-समय पर दिये जाये लागू होंगे।
7. अनुमोदित खनन योजना किसी भी प्रभावी क्षेत्रान्तर्गत मातृतीय न्यायालय के आदेश एवं दिशा निर्देश के लागू होने को बाधित नहीं करती है।
8. अनुमोदित अवधि में किये गये खनन कार्य के निरीक्षण के उपरान्त यदि खनन योजना में संशोधन हेतु आदेश दिये जायें हैं तब संशोधित खनन योजना प्रस्तुत करने का पूर्ण उत्तरदायित्व आवेदक का होगा।
9. आबद्ध/नियोजित श्रमिकों को सुखान्तरिक उपकरण प्रदान करने तथा सुरक्षित खनन कार्य करने हेतु सभी आवश्यक साधनानिर्वाह करने का दायित्व आवेदक का होगा।
10. अनुमोदित खनन योजना की एक-एक प्रमाणित प्रति सम्बन्धित जिलाधिकारी कार्यालय एवं निदेशालय के क्षेत्रीय कार्यालय में अभिलेखार्थ सहाशीघ्र प्रस्तुत करने का दायित्व भी आवेदक का होगा।
11. अनुमोदित खनन योजना के अनुसार आवेदक द्वारा खनन कार्य न किये जाने के, पाये जाने पर आवेदक को विच्छेद पट्टे की शर्त का उल्लंघन माना जायेगा और तदनुसार कार्यवाही की जायेगी।
12. खनन योजना इस शर्त के साथ अनुमोदित की जायेगी कि आप श्रमिकों की सुरक्षा एवं स्वास्थ्य की उचित व्यवस्था करेंगे।

संलग्नक- खनन योजना की अनुमोदित प्रति।

भवदीय

 (श्रीधर बाबू अर्द्धांकी)
 निदेशक

संख्या: /मा0प्लान/उ0खनि0/दे0दू0/2015-16 तददिनांकित।

प्रतिनिधि- निम्नलिखित को सूचनाार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित।

1. जिलाधिकारी देहरादून।
2. खान अधिकारी भूतत्व एवं खनिकम् इमाई देहरादून।

(श्रीधर बाबू अर्द्धांकी)
 निदेशक

MINING PLAN
FOR
PICKING/EXTRACTION OF MINOR
MINERALS (SAND, BAJRI AND
BOULDERS) FROM A PART OF RIVER
SONG-2 (AREA- 273.0 HA.), DEHRADUN
FOREST DIVISION, TEHSIL & DISTRICT-
DEHRADUN, UTTARAKHAND

APPLICANT

**Uttarakhand Forest
Development Corporation**

Aranya Vikash Bhawan, 73- Nehru Road
Dehradun, Dist. Dehradun, Phone: 0135-2657610

PREPARED BY

BHUWAN JOSHI

Empanelled Geologist, RQP, IBM
Forest & Rural Development Cell (FRDC)
Empanelment No. *URED/2008-09/3190*
Govt. of Uttarakhand
RQP, Registration No. *RQP/DDN/180/2009/A*
Indian Bureau of Mines
Govt. of India

Address-

**Progressive Geological & Geotechnical Services
(PG2S)**

REGD. OFFICE

House No.-6, Kamal Bhawan
Vijay Colony, Lane No.-1, Dehradun
Uttarakhand

E-mail: *joshi.bhuvan@yahoo.co.in*

Mo. No: 09412152105

मुख्यालय एवं कार्यालय भुवनेश्वर
उद्योग विभाग, उत्तराखण्ड
देहरादून

मार्ग के आसपास भुवनेश्वर
पिनकोड, 1135146
दिनांक, 11/3/2016

**USE GEOLOGICAL KNOWLEDGE FOR MAKING
BETTER RESILIENT COMMUNITY**

11/3/16
अक्ष

AUTHORIZATION LETTER BY THE APPLICANT

Uttarakhand Forest Development Corporation (UKFDC), Aranya Vikash Bhawan, 71-Nehru Road, Dehradun hereby authorizes Sri. Bhuwan Joshi, Geological Consultant & RQP, Registration No. RQP/DDN/180/2009/A, to prepare Mining Plan under New Mining Policy i.e. Uttarakhand Minor Mineral Policy-2015 (Sand, Bajri, Boulder and Bricks etc) over an area of 273 Hectares for extraction of RBM (sand, bajari and boulders) from a part of Song-2 river zone, Dist. Dehradun, Uttarakhand.

I request the Director, Geology & Mining Department, Uttarakhand, to make further correspondence regarding modification and to collect the approved copies of the aforesaid Mining plan to the said recognized person in his following address or communicate in other modes:-

Name of the RQP- BHUWAN JOSHI

RQP, Registration No. RQP/DDN/180/2009/A

Address-

House No.-6, Kamal Bhawan
Vijay Colony, Lane No.-1, Dehradun
Uttarakhand
E-mail: joshibhuvan@yahoo.co.in
Mo. No. 99412152105

Place- Dehradun

Date- 23-11-15

Divisional Logging Manager (Uttarakhand)
Uttarakhand Forest Development Corporation
Dehradun



CERTIFICATE

I Bhawan Joshi hereby certify that the provisions of Uttarakhand Minor Mineral Rules/Policy- 2015 for extraction of RBM (Sand, Bajri, Boulders etc) have been observed in the preparation of Mining Plan for Picking/Extraction of minor minerals (sand, bajri and boulders) from a part of Song river zone i.e. Song-2, Tabseel & Dist. Dehradun, Uttarakhand, over an area of 273Hac. for Uttarakhand Forest Development Corporation (UKFDC), Aranya Vikash Bhawan, 73-Nehru Road, Dehradun.

The information provided and data furnished in this mining plan with Closure Plan is correct to the best of my knowledge.

Place- Dehradun.

Date- 28-11-15


BHUWAN JOSHI, RQP
Reg. No. - RQP/DDN/180/2009/A

BHUWAN JOSHI
R.Q.P.-Indian Bureau of Mines (IBM)
Reg. No.-RQWDDN/180/2009/A
Govt. of India



MINING PLAN
FOR PICKING / EXTRACTION OF MINOR MINERALS (SAND,
BAJRI AND BOULDERS) FROM A PART OF RIVER SONG-2
(AREA- 273.0 HA.), DEHRADUN FOREST DIVISION, TEHSIL &
DISTRICT- DEHRADUN, UTTARAKHAND

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6	Mining	14-20
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APPENDIX-2	STATE GOVERNMENT CONSENT FOR EIA LETTER
APPENDIX-3	ENVIRONMENTAL CLEARANCE LETTER (Environmental Clearance is granted by MoEF (IA Division) vide letter no. J-11015/339/2009IA II (M), dated 10 th February 2011)
APPENDIX-4	CONCERN LETTER ABOUT THIS PROPOSED MINING OVER SONG-1 BY GEOLOGY & MINING DEPARTMENT, GOVT. OF UTTARAKHAND
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PLATE-5	WORKING PLAN/ PIT PLAN FOR SECOND YEAR
PLATE-6	WORKING PLAN/ PIT PLAN FOR THIRD YEAR
PLATE-7	WORKING PLAN/ PIT PLAN FOR FOURTH YEAR
PLATE-8	WORKING PLAN/ PIT PLAN FOR FIFTH YEAR
PLATE-9	YEARWISE SECTION PLAN/ PIT PLAN
PLATE-10	ULTIMATE PIT PLAN/CLOUSER PLAN
PLATE-11	SLICE PLAN



RAJIV KUMAR

MINE PLAN

CHAPTER-1

INTRODUCTION

Forest Clearance (FC), Environment Clearance (EC) & Letter of Intent (LoI) released in the favor of Uttarakhand Forest Development Corporation (UKFDC) for extraction of extraction of Minor minerals (RBM i.e. sand, bajari & boulders) from a part area of Song River called as Song-2 (ANNE. 1 to 5) Dehradun Forest Division, Dist. Dehradun, over an area of 273.00 Hae. for the period of 10 years (FC & EC) (Ann. 1&3), the demarcated topographic map (Ann. 6) is provided by UKFDC. The available area of Song-2 is 273hae, falls under Dehradun forest division, Dehradun, Uttarakhand. The said area belongs to reserved forest region. The collection/picking of minor minerals will be carried out from 50% of the total area i.e. 136.5 Hae. after leaving 25% area on each of the banks for better channelization of the water during the rainy season and to protect the nearby forest land and habitant from the floods. Mineral extraction target is about 4, 25000 cubic meter/year or 9, 35000 tons/year. The applied area been jointly visited & inspected by different state Govt. Authorities (Annx.5)

The Song River originates from the Ladwakot forest in the Dehradun District of Uttarakhand. The river flow direction is form north to south and the region falls under the Dehradun Forest Division. The river carries with it huge quantity of sediment consisting of stones, gravel and sand during every monsoon. The sediment in the form of river bed material (RBM) deposited in the last 100 years had changed the shape of the river bed from a valley to a raised land. Because of this, every year during monsoon season, heavy and devastating floods damage large tracts of forest land as well as agricultural land lying on both the banks of the river. Hence, it was thought necessary to make a channel in the middle 50% width of the river to create an area of cross section for the river water to flow unhindered during the monsoon season. The Ministry of Environment and Forest of India has agreed in principle to the

State Government to get and estimate of annual permissible extraction and rate of accumulation along with the total approximate RRM available.

Uttarakhand Forest Development Corporation (UKFDC) is a statutory body constituted by the State Government. The Corporation was formed for the better preservation, supervision and development of forest also for better exploitation of forest produce within the State and for matters connected therewith.

The Mining Plan of the proposed area is prepared by Bhurvan Joshi, RQP & Geological Consultant, Proprietor- Progressive Geological & Geotechnical Services, 6- Vijay Colony, Lane-L, New Cant Road, Dehradun, Registration No. RQP/DDN/180/2009/A, authorized by Uttarakhand Forest Development Corporation (UKFDC) for preparation of said Mining Plan.



CHAPTER-2

GENERAL

2.1	Name of the Applicant	Uttarakhand Forest Development Corporation (UFDC)
	Address	Aranya Vikash Bhawan, 73-Nehru Road, Dehradun
	District	Dehradun
	State	Uttarakhand
	Pin Code	248001
	Phone:	0135-2657610, Fax: 0135-2653488, Email: uafdcmd@yahoo.com
2.2	Status of the Applicant	Uttarakhand Forest Development Corporation (UFDC) is a statutory body constituted by the Govt. of Uttarakhand
2.3	Mineral(s) which the applicant intends to mine	Sand, Bajri and Boulder. The mineral collected/extracted from the lease area shall be sold in the open market as per the demand.
2.4	Period for which the mining lease is required or granted (renewed)	a) Approval in principle is granted by MoEF (FC Division), GOI vide letter No. F.No. 8-62/99-FC dated 26th May 2009 & dated 2nd June 2009 for Ten years. b) State Government consent for EIA clearance is granted vide letter No. 1054/VI-E

PROGRESSIVE GEOLOGICAL & GEOTECHNICAL SERVICES PVT. LTD.

MDP, Manager, Dehradun, Uttarakhand

2009

2009

2009

2009

2009

		163 Kha/2009, dated 8 December 2009, c) Environmental Clearance is granted by MoEF (IA Division) vide letter no. J-11013/340/2009-IA-II (M), dated 10th February 2011. d) Concern about this proposed mining over Song-41 taken by Geology & Mining Department, Govt. of Uttarakhand vide letter no. xviii/51/Ddn/Khaman/Chakdhara/ekai/2008-9, dated 19 February (Docs. attached as Annexure 1 to 4)
2.5	Name of the RQP preparing the mining plan	Bhuvan Joshi
	Address	C/o B.S. Rawat Kamal Bhawan House No. 6 Vijay Colony Lane No. 1 New Canal Road, Dehradun (Uttarakhand) 248001
	Phone	+91-9412152105
	EMAIL:	joshibhuvan@yahoo.co.in
	Registration No.	RQP/DDN/180/2009/A
	Valid upto	30/08/2019

PROGRESSIVE GEOLOGICAL & GEOTECHNICAL SERVICES (P.G.S.)

RQP, Ag. No. 180/2009/A, Dehradun, Uttarakhand

30/08/2019

H. Q. B. Joshi, Geologist & Mining Engineer
Reg. No. J-11013/340/2009-IA-II
Govt. of India

2.6	Name of the prospecting agency	The baseline data is collected from UKFDC reports & detailed prospecting of the area carried by the ROP.
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CHAPTER-3

PROJECT DESCRIPTION

3.1 NEED OF THE PROJECT

Sand, Bajri and Boulder are available everywhere and is being used from the time immemorial for wide applications in our daily life like infrastructure, building construction, highways, roads, townships, multiplexes, foundations of buildings and industrial units etc. and is an integral part of development. Over the millennia, the weathering effect, the flow of water at high velocities in rivers and the pressure of water from the high mountainous reservoirs converted and pushed the hard ground underneath into sand, gravel etc. which travelled as sediments with the flow. This sand gets deposited along the river course wherever conditions were favorable. In deep past this settled sand was not extracted in a quantity in which it is deposited, since due to less population the requirement was not enough. As a result of continuous deposit of sand, hajri etc, the river course continued changing by widening itself, eroding the fields and expanding. This started resulting in floods, inundation and breaking their banks, causing devastation of property and loss of life. There has been a severe impact on every aspect of the environment. Thus there was a need for channelization of rivers for which extraction of sand through mining was expedient. The haphazard mining of river bed material

being practiced for now long through unregulated, uncontrolled and illegal manner added almost an irreversible damage to the environment, which became a cause of serious concern. Though sand is very important mineral source for development, its mining through scientific methods have also become equally imperative. It is for this purpose that 'mining plan' is being drawn so that all its aspects are taken care of justifiably, according to law, protecting the environment, removing all adverse impacts and creating a direct and indirect employment opportunities, improving socio-economic conditions of the local inhabitants and all round status of life, achieving thereby a sustainable development. Besides above, the process of mining of minor minerals is a constant source of revenue generation to the State Government.

3.2 PROJECT BACKGROUND

Status and Stages of regulatory clearances

- 1- Approval in principle is granted by MoEF (FC Division), GOI vide letter No: F.No. 8-62/99-FC dated 26th May 2009 & dated 2nd June 2009 for ten years.
- 2- State Government consent for EIA clearance is granted vide letter no. 1929/VII-I/163Kha/2009 dated 8 Dec, 2009.
- 3- Environmental Clearance is granted by MoEF (LA Division) vide letter no J-11015/340/2009-1A, II(M), dated 10th February 2011.
- 4- Concern about this proposed mining over Song-2 taken by Geology & Mining Department, Govt. of Uttarakhand vide letter no.vivid/51/Ddn/Khanan/bhu khani chai/2008-9, dated 19 February
- 5- Joint Inspection Report for suitability & area demarcation issued by various State Govt. Officers/Departments (annexure 5).

This mine plan is being prepared to abide by change in Mining Policy as per Gazette of Uttarakhand State Government, Industrial Development Section No. 102 dated 21st July, 2015.



3.3 LOCATION, GENERAL AND ACCESSIBILITY

3.3.1 LOCATION

(a)	Details of Area	Location Map is attached as Plate No. 1
(b)	District and State	Dehradun, Uttarakhand
(c)	Tehsil	Dehradun & Doiwala/Dehradun Forest Division
(d)	Village	There are many village-falls near bank area of Song-2, Nehrugram, Thano, Joli Grant, Tehriwala, Majnigrant, Nagal Jawalpur etc
(e)	Khasra No./ Plot No./ Block Range /	Dehradun Forest Division
(f)	Felling Series etc.	None
(g)	Area (hectares)	275 hac.
(h)	Whether the area is in forest (please specify whether protected, reserved etc.)	Yes, Dehradun Forest Division, many reserved forests regions surround the project area. They are:- Ladhiwala Reserved Forest Dwara Reserved Forest Palet Reserved Forest Malkot Reserved Forest Karnao Reserved Forest Barko Reserved Forest Motichur Reserved Forest



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The mining area is located in the Dehradun Forest Division limits in Dehradun District of Uttarakhand. The mining lease area falls in Survey of India Toposheet No.53/23 bearing Toposheet Details

Toposheet No. 53/24

Latitude: 30° 13' 46.45" North to 30° 11' 12.94" North

Longitude: 78° 08' 56.92" East to 78° 07' 53.74" East

Dehradun, the district head quarter is 16 km away from the area. The nearest railway station is at Dehradun which is at a distance of 15 km from the applied area. The nearest airport is the Jolly Grant Airport which is at a distance of 5 km from the project area. There are many villages lining the banks of the river, Naksarinda Lower, Lachhiwala fall on the west bank while Kahuwala, Baksarwala are the villages on the east bank of the river.

There are no Ecologically Sensitive Areas present in the study area, but many reserved forests regions surround the project area. They are- Lachhiwala Reserved Forest, Dwara Reserved Forest, Paled Reserved Forest, Mallot Reserved Forest, Kamaria Reserved Forest, Barko Reserved Forest, Motichur Reserved Forest.

CHAPTER-4

GEOLOGY & EXPLORATION

4.1 GEOLOGY

Geologically the project area belongs to Doon gravels i.e. the area falls in the Intermountain Doon Valley and is underlain by recent to sub recent Doon Gravels, which lie over the Upper Siwalik sediments. The Doon gravels have been broadly divided in older Doon Gravels and younger Doon Gravels. The older Doon Gravel consists of partly of unsorted Upper Siwalik

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Cobbles, Angular Pebbles of Quartzites, Slates and Shales from the Nughur, Chandpur and Tal formations and Limestone Pebbles from Krol limestone alternating with clay beds.

The younger Doon Gravels rest unconformably over the older Doon gravels in the northern part. The disconformable relationship gradually disappears in the southern part. The younger Doon gravels are characterized by very large boulders in the alluvial fans and debris flow deposits and consist of moderately sorted mixture of clay, sand, gravels and boulders. The sandy and gravelly units are separated from each other by clay beds. The thickness of these units varies from place to place and also may be traced laterally.

4.2 EXPLORATION

Adequate amount of sand, bajri and boulder in reserve is available for meeting consumer demand. Moreover mining will be carried out by batch rotation manner and the mined out area is fully replenishable.

4.3 ESTIMATION OF RESERVE

The method of cross section has been adopted for computing the reserve. The mining lease boundary, proven and mining limits are marked on the plan which is thereafter transferred to cross section for determining the different categories of reserve.

In order to calculate the mineable reserve the geological map on the 1:1000 scale was prepared and main litho units were marked on the plan to know the surface spread of each unit. The different constituents of the deposits such as sand, bajri, boulder and mixture of clay, soil, silt, based on sized classification were considered for the reserve calculation. Although it is not possible to mark these units separately on the geological map, as such five pits of 1x1x1 meters were put dug in the mineable area and material so excavated was separated into different size and their percentage was worked out. This percentage was taken into account during calculation of the reserve. The cumulative result of the test pits are given in the following Table no 1.



Table No. 1. Classification of Minerals available

Sl. No.	Mineral	Size	Percentage
1.	Sand	0.06-2 mm	65%
2.	Bajri	8-64 mm	8%
3.	Boulder	256 mm+	25%
4.	Silt/clay	1-62.5 μ m	2%

Bulk density is taken as 2.2 for calculation (as per Govt. Industrial Development Section Notification 1033/VII-I/ 2013/ 146 -Kha/ 2010, dated 31st July 2015). Calculation of reserve has been done as following:

1. Cross sections have been prepared at intervals. Refer Plate No.3
2. Area of every cross section has been taken. For example, if the area of cross section A-A' is 'X' and area of B-B' is 'Y', then average of both calculating the reserve (i.e. $(X+Y)/2$).
3. Distance between the two sections has been multiplied with the average area of the two sections to get the total volume. Eg. $[(X+Y)/2] \times \text{Distance between A-A' \& B-B'}$.

The overall geological reserves have been estimated through geological cross section method. The area of each section line is calculated. The section area is multiplied by the strike influence to get the volume. The target geological reserve classified in to three categories i.e. Proved reserve, Probable reserve & Possible reserve. In this project the proved reserve assessed as 10m depth & further 5m as probable reserve whereas 3m considered as possible reserve. Out of total volume the 80% considered as the recoverable reserve & 2.2 bulk density.



Table No. 2. Reserve Estimation (Proved Reserve)

Cross-Section Line	Sectional Area, M^2	Strike influence (m)	Volume (m^3)	Quantity (MT)
A-A' to B-B'	54300	78	3388320	7454304
B-B' to C-C'	53912.5	73	3148490	6926678
Total	-	-	6536810	14380982

Table No. 3. Reserve Estimation (Probable Reserve)

Cross-Section Line	Sectional Area, M^2	Strike influence interval (m)	Volume (m^3)	Quantity (MT)
A-A' to B-B'	27150.5	78	1694191.2	3727220.64
B-B' to C-C'	26956.5	73	1574259.6	3463371.12
Total	-	-	3268450.8	7190591.76

Table No. 4. Reserve Estimation (Possible Reserve)

Cross-Section Line	Sectional Area, M^2	Strike influence interval (m)	Volume (m^3)	Quantity (MT)
A-A' to B-B'	16290.5	78	1016527.2	2236359.84
B-B' to C-C'	16174	73	944561.6	2078005.52
Total	-	-	1961088.8	4314365.36



Geological Reserves:

The mineralized category-wise geological reserve estimated by us:-

Proved Reserve- 14380982 Tons

Probably Reserve- 7190391.76 Tons

Possible Reserve- 4314395.36 Tons

Mineable reserve:-

The proved mineable reserve is calculated as referred in Uttarakhand Minor Mineral Policy 2015 for Category C, minor mineral area (Zone C). The mineable reserve within allowable area is 45,04500 tonnes/year. This is fully replenished every year.

$$\text{Quantity of mineral (tonnes)} = \text{mining area} \times 1.5 \text{ m depth} \times 2.2 \text{ t/m}^3 \text{ density}$$

4.4 MINE REPLENISHMENT

It has been assessed that proposed mining area/mineral picking area generally gets flooded during monsoon season and gets completely replenished. However, The Department of Geology & Mining may monitor the replenishment within the lease area and specific consultation or study may be conducted whenever required.



CHAPTER-5

MINING

5.1 METHOD OF WORKING

The mining process is conventionally opencast river bed mining of minor minerals with hand tools, shovels and pan without drilling & blasting. Proposed mining will be start from lowest level of river end to highest river end phase wise and block wise going to the maximum depth of 1.5m bgl or above ground water level whichever is less. Length/size of the blocks/pits may be decided on the spot convenience & available material but a ideal way of progression of mining pits as left to right or series wise lower to upper level i.e. downstream to upstream direction. Mining would be carried within 1st half of the course as demarcated & mapped. Each year the mining will be carried within about 2,83,333.4 sqm area as per yearly Target reserves i.e. 4,25,000m³ with area wise rotation method. Total 13,65,000m² area is workable and replenishable yearly. Retaining wall within both banks would be proposed of about 2.5 to 3m to check the erosion & flooding during monsoon season. Mineral extraction will be done for a period of 225 days in a year.

Following guidelimes will be followed while carrying out mining:

- 1- Conditions under which Forest Clearance has been granted by MoEF (FC Division), GOI vide letter No. F-No. 8-62/99-FC dated 26th May 2009 & dated 2nd June 2009 for ten years.
- 6- Conditions under which Environmental Clearance is granted by MoEF (IA Division) vide letter no.J-11015/340/2009-IA, II (M), dated 10th February 2011.
- 7- Concern about this proposed mining over Song-II taken by Geology & Mining Department, Government of Uttarakhand vide letter no.vivid/51/Ddn/Khumm/bhu khani elai/2008-9, dated 19 February 2009.



- 2- Joint Inspection Report for suitability & area demarcation issued by various State Govt. Officers/Departments
- 3- The Uttarakhand Minor Mineral (Sand, Gravel, Boulder and Bricks etc.) Policy 2015
- 4- Uttarakhand Secondary Mineral Policy-2015
- 5- All other guidelines, Circulars, Orders of the Ministry of Environment & Forests and Government of Uttarakhand

5.2 EXTENT OF MECHANIZATION

No mechanization is required as the operation will be manual method without drilling or blasting.

5.3 MODE OF WORKING

For the optimum utilization of the mineral available in the lease area, mine working has been planned and scientific layout has been designed considering the following parameters:

- Extraction of minor minerals shall be restricted to middle half of the width of the river bed after leaving intact the 1/4th of width of the river bed along its each bank.
- The approach road will be repaired from time to time
- The quarry planning is done in simple rotational manner since deposit is very simple, shallow and beds are almost horizontal.
- Simultaneous plantation will also be done within the left bank area & boundary to protect the toe erosion and landslide phenomena

5.4 YEARWISE DEVELOPMENT & PRODUCTION PROGRAM



Table No. 5. YEARWISE PRODUCTION FOR FIVE YEARS

Year	Mineable area (total lease area- non workable area)	Depth (m)	Production (tonnes)	Balance (tonnes)
1 st Year	2,83,333.4 m ²	1.5	9,35000.22	23,79,666.52
2 nd Year	2,83,333.4 m ²	1.5	9,35000.22	23,79,666.52
3 rd Year	2,83,333.4 m ²	1.5	9,35000.22	23,79,666.52
4 th Year	2,83,333.4 m ²	1.5	9,35000.22	23,79,666.52
5 th Year	2,83,333.4 m ²	1.5	9,35000.22	23,79,666.52
Total	-	-	46,75001.10 Tons	1,18,98,332.60 Tons



COLUMN GRAPH SHOWING PRODUCTION IN FIVE YEARS

5.5 DEVELOPMENT & PRODUCTION FOR THE FIRST YEAR

For first year the Development & Production Programme; the mining is proposed to 2,83,333.4 sqm area. The production of each mineral constituent would be on an average 9,35,000.22 tonnes.



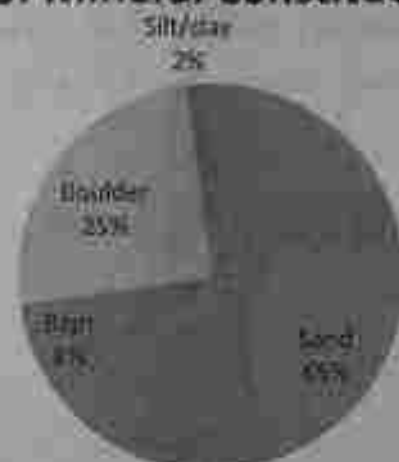
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Reg. No. 100/100/100/100/100
State of India



Table No.6. FIRST YEAR

Sr. No.	Mineral Constituents	Production ($\pm$) in tons
1.	Sand	6,07,750.143
2.	Bajri	74,800.00
3.	Boulder	2,33,750.00
4.	Silt/clay	18,700.00
Total		9,35,000.22
		Tons

% of Mineral Constituents



Pie Graph of % of Mineral Constituents

5.6 DEVELOPMENT & PRODUCTION FOR THE SECOND YEAR

For Second year the Development & Production Programme, the mining is proposed in 2, 83,333.4 sqm area. The production of each mineral constituent would be on an average as under:-



Table No.7. SECOND YEAR

Sr. No.	Mineral Constituents	Production (±) in tons
1.	Sand	6,07,750.143
2.	Bajri	74,800.00
3.	Boulder	2,33,750.00
4.	Silt/clay	18,700.00
Total		9,35,000.22
		Tons

5.7 DEVELOPMENT & PRODUCTION FOR THIRD YEAR

For Third year the Development & Production Programme; the mining is proposed in 2,83,533.4 sqm area. The production of each mineral constituent would be on an average as under:-

Table No.8. THIRD YEAR

Sr. No.	Mineral Constituents	Production (±) in tons
1.	Sand	6,07,750.143
2.	Bajri	74,800.00
3.	Boulder	2,33,750.00
4.	Silt/clay	18,700.00
Total		9,35,000.22
		Tons

5.8 DEVELOPMENT & PRODUCTION FOR FOURTH YEAR



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R.O.P. - ...
REG. NO. ...
GATE NO. ...

For fourth year the Development & Production Programme; the mining is proposed in 2,83,333.4 sqm area. The production of each mineral constituent would be on an average as under:-

Table No.9. FOURTH YEAR

Sr. No.	Mineral Constituents	Production ($\approx$) in tons
1.	Sand	6,07,750.143
2.	Bajri	74,800.00
3.	Boulder	2,33,750.00
4.	Silt/clay	18,700.00
Total		9,35,000.22 Tons

5.9 DEVELOPMENT & PRODUCTION FOR FIFTH YEAR

For fifth year the Development & Production Programme; the mining is proposed in 285,333.4 sqm area. The production of each mineral constituent would be on an average as under:-

Table No.10. FIFTH YEAR

Sr. No.	Mineral Constituents	Production ($\approx$) in tons
1.	Sand	6,07,750.143
2.	Bajri	74,800.00
3.	Boulder	2,33,750.00
4.	Silt/clay	18,700.00
Total		9,35,000.22 Tons



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 Dep. of Geology & Geotechnical Engineering
 Govt. of India

5.10 MINERAL PRODUCTION

The riverbed mining will consist of sand and their production may vary to a great extent depending upon availability. Therefore quantity of sand cannot be estimated on logical parameters, the figures given here above only tentative. The production target is as above.

5.11 DEVELOPMENT AND PRODUCTION PROGRAMME FOR FIVE YEARS.

Prior to start production from the area, some development work has to be completed as under Plate No.4 to 8

- Haul road preparation
- Erection of a site office and Stay/rest shelter for workers
- Barbed wire fencing/tranching all around the mining area may be provided to avoid accident and inadvertent entry.
- Construction of Retaining wall towards bank area (river bank) to abstain from toe erosion & flooding

CHAPTER-6

DRILLING & BLASTING

No drilling and blasting is required to undertake mining of riverbed minerals.

CHAPTER-7

WATER AND DRAINAGE SYSTEM

As per the proposed mining the working shall be confined upto 1.5m bgl or above the ground water table, whichever is less. Hence no water clogging is likely to be encountered. Therefore, there is no need of any such arrangements.



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Tel. 2610 1111, 2610 1112, 2610 1113
Fax 2610 1114

CHAPTER-8

DISPOSAL OF WASTE MATERIAL

2% i.e. about 18700 tons waste will be generated in the form of silt/clay etc. This will be dumped back into the mined area.

Sewerage System:

Portable Toilets will be provided.

Solid Waste Management:

It would be in fitness of things to repeat that there will be no solid waste generated in the proposed activity.

CHAPTER-9

USE OF MINERALS

Sand, baji and boulders are used in construction activities like building, roads, bridges etc. The requirement for the mineral is always high in the nearby cities and towns.

CHAPTER-10

OTHERS

1- SITE SERVICES

The site services like stay/rest shelters, portable toilets, first aid facility and drinking water will be provided.

2- WATER REQUIREMENT

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100/100/100/100/100

Total water requirement for the project is 1 KLD, it breaks up as under:

Table No. 11. Water Requirement

S.No.	Purpose	Water Requirement (KLD)
1.	Frost Suppression	0.5
2.	Drinking	0.2
3.	Miscellaneous (Platination etc)	0.3
Total		1.0

3- EMPLOYMENT

Depending upon the General shifts working, following will be the proposed manpower.

Table No. 12 Employment Break-up

S.No.	Category	Numbers
1.	Mining Competent Person	1
2.	Administrative	1
3.	Supervisor	1
4.	Unskilled/workers	350
Total		353

Besides above Geological, Mining & Environmental Consultancy Services may be hired as per requirement on part-time basis or per day basis.

4- SAFETY PROVISION

All provision in safety rules & regulation will be maintained by providing required materials to the employees. The Applicant will provide safety shoes, First Aid facility, drinking water etc to all the employees. There will be no violation of safety provision.



CHAPTER-11

MINERAL PROCESSING & TRANSPORT

MINERAL BENEFICIATION

Mineral Sand doesn't require processing or beneficiation. The excavated mineral will be directly loaded into the bucket.

HAULAGE AND SURFACE TRANSPORT

Mode of transportation of material is by trucks/tractors, of size of 8-10 tonnes capacity have been planned. Mining area is connected with an unmetalled road upto the NH 72. The mine road is adequate to permit easy maneuverability of trucks allowing cross overs and changing points. Water will be sprayed two times a day by tractor mounted sprinklers until dust remains airborne.

MINE MACHINERY

Mining will be done using hand tools like shovel, spades, pick-axes. Other machineries on the mining site will be water sprinkler.

CHAPTER-12

ENVIRONMENT MANAGEMENT PLAN

12.1 SOLID WASTE MANAGEMENT

2% waste will be generated in the form of silt/clay etc. This will be dumped back into the mined area.

Recovery System:



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(GATEWAY TO KNOWLEDGE)

Portable Toilets will be provided.

Solid Waste Management:

It would be in fitness of things to repeat that there will be no solid waste generated in the proposed activity.

12.2 PLANTATION

Plantation in the mining area is not possible. Instead, Plantation will be done along both banks of the river with consultation of local authorities. Every year 25 to 30 trees will be planted.

12.3 BASELINE INFORMATION

12.3.1 Land Use Pattern

Entire area is a wasteland & barren, scattered seasonal bushes & shrubs cover area. There is no agricultural land most of the land is barren.

12.3.2 Flora & Fauna

Dehradun has a rich vegetation cover. Although the major portion of Doon is occupied by the Sal (*Shorea robusta*) but miscellaneous forests are also found here. The hydro-geological and geomorphological conditions of the valley are responsible for the condition for the different types of forest cover. Sal and its associates can be classified in Northern tropical moist and dry deciduous communities. They are found throughout the Sivaliks across large tracts of the valley and also along the lower foothills of the Himalayas. A presence of large proportion of clay soil and better drainage act as favorable conditions for the growth of Sal trees.

Faunal Community: as per data provided by UKFDC, in general following categories of faunal classification given in the EIA report.

- (i) Core Zone: There was no unique faunal community within the core zone of the project area, except most common ones like toad, frog, crow, Sparrow and mouse etc.
- (ii) Buffer Zone: in 10 km radius around the project area:



Amphibians: Among amphibians toad (*Bufo* sp.) and frog (*Rana tigrina*).

English Name - Scientific Name

Common Toad- *Bufo melanostictus*

India bull frog- *Rana tigrina*

India tree frog- *Polypedates maculatus*

Marbled toad- *Boyo stomaticus*

Skipping frog- *Rana Cyanophlysis*

a. Reptiles: Among reptiles Indian garden lizards (*Culotes versicolor*), house lizard (*Hemidactylus* sp.).

b. Mammals: Among mammals Indian palm squirrel (*Fumambulus pennanti*), cat, dog (*Cuon* sp.), cow, Buffalo, rat (*Rattus rattus*) etc.

c. Aves: Among aves common birds like crow (*Corves splendens*), sparrow (*Passer domesticus*), parrot (*Psittacula krameri*), baya (*Ploceus philippinus*), peafowl (*Pavo cristatus*), pigeon (*columba livia*), *Egretta* sp. etc.

12.3.3 Climatic Condition

Dehradun valley has moderate climate because of nearness of Himalaya and due to average elevation of 700 meters above sea level. The climate of the study area exhibits the character of sub-temperate climate of mountain areas because of the combined effect of plain-like warm climate and cool lesser Himalayan climate. The mean minimum and maximum annual temperature varies from 2.70C in December and January to about 26.90c in May and June. Only the months of May and June are hot though they are seldom oppressive. Like all other parts of India, Dehradun is also greatly affected by the Monsoons that generally break in the middle of June and remains active till the middle of the September. The months of July and August have heaviest rainfall. From October to December, the climate remains dry. In the end of December, January and early February the valley receives winter rains. The months of

March and April receive very less rainfall. Normally the rainfall in Dehradun is sufficient and averages around 2000mm.

12.3.4 Social Infrastructure

The nearest health & education facilities are available in all nearby villages of the proposed mining area. Other major facilities are available in Dehwa and Dehradun (about 10 to 15 km range).

12.4 EFFECT OF MINING ON ENVIRONMENT

Due to the mining activity following things are going to be affected

- Degradation of land
- Destruction of Flora & Fauna
- Air Pollution
- Water Pollution
- Noise Pollution

These effects will be either minimized or nullified by adopting following measures:

- The mining activity will take place in barren/waste land which is of no use to the inhabitants or ambient environment.
- Due to manual mining there may be generation of dust which in turn affects the ambient air. This may be maintained to the permissible limit by doing water spraying on the haul road.
- Mining will be done above the ground water table and thus it is not going to be effected/contaminate the ground water. There will be no discharge of mine water to the nearby water source, except rainwater during rainy season, and thus there will be no contamination of water of the nearby water course, if at all present.
- Due to manual mining there may be no generation of noise.
- Ground vibration & Noise pollution it is not possible because manual mining.



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Bharatpur
GATE NO. 10

3. With the replenishment of the pits and trenches during the high floods, the process of the controlled mining can continue year after year.
4. Though the major mining activities will be under taken during the dry seasons but restrained mining can be under taken during the dry days of rainy season.

13.7 Name & Address of the Recognized Person:-

Already discussed in previous paragraphs

13.8 Mine Description:-

Picking/ extractions of minor minerals (sand, baji & boulders); detail already discussed in previous paragraphs

13.9 Geology:-

Already discussed in previous paragraphs

13.10 Reserves:-

Already discussed in previous paragraphs

13.11 Progressive Closure Plan

The mining area belongs to river borne deposits (RBD) which are deposited by Song River, mostly during rainy season. The mining process is conventionally opencast river bed mining of minor minerals with hand tools, shovels and pan without drilling & blasting. Proposed mining will be start from lowest level of river and to higher river end phase wise and block wise going to the maximum depth of 1.5m (b) or above ground water level whichever is less. Length/size of the blocks/pits may be decided on the spot convenience & available material but a ideal way of progression of mining pits as left to right or series wise lower to upper level i.e. downstream to upstream direction. Mining would be carried within 1st half of the project as demarcated & mapped. Each year the mining will be carried within about 25% of the area on per yearly Target reserves i.e. 4,25,000m³ with area wise restriction notified. Total



HEWAN JOHI
W.D. Section, West Bengal
Reg. No. 100/2011/100/100
GATEWAY

1,05,000m² area is workable and replenishable yearly. Retaining wall within both banks would be proposed of about 2.5 to 3m to check the erosion & flooding during monsoon season. Mineral extraction will be done for a period of 225 days in a year.

During the monsoon rainy season, 2 to 3m average sticking of sand, boulders & boulders occurred. So it is clear that the deposit would be annually replenishing as such no need to develop or plan for closure scheme but towards bank side temporary construction of retaining wall is suggested to reduce the impacts of the erosion & flooding.

13.12 Air Quality Management

Details already discussed in previous paragraphs

13.13 Waste Management

Already discussed in previous paragraphs

13.14 Safety and Security

The picking and extractions of minor minerals shall be carried on only up to a depth of 1.5meter, no blasting is involved. Hence there is no danger and no special precaution is required. However standard precautions are always to be kept in mind for the safety of workers and general public.

13.15 Disaster Management and Risk Management

No blasting is involved, picking and extractions of minor minerals (sand, boulders & boulders) shall be carried on only up to a depth of 1.5meter therefore negligible scope of landslides & subsidence.



Environ 55200-36
Government of India
Ministry of Environment and Forests
(PC enclosed)

With reference to
(55) Env. No. L-111/1111
New Delhi-110 002
Dated 26th May, 2000

To:
The Principal Secretary (Forest)
Forest and Revenue Department
Government of Uttarakhand,
Dehradun.

Removal of permission over 23250 ha of forest land for collection of sand, logs and boulders from river beds in district Pithoragarh, Uttarakhand.

I am directed to refer to the Government of Uttarakhand's letter No. 5059/4-2 dated 07th May, 1999 and Forest Officer's letter No. 2251/PC-777 dated 25th August, 2000 on the subject mentioned above seeking prior approval of the Central Government under the Forest (Conservation) Act, 1980 for removal of the permission by the Joint Advisory Committee constituted under Section 3 of the said Act, in principle approval for the said proposal was granted with this Ministry's letter of even number dated 23rd September, 2000 subject to fulfillment of certain conditions. The State Government has furnished compliance report in respect of the conditions stipulated in the in principle approval and has requested the Central Government to grant final approval.

In this connection, I am directed to say that on the basis of the compliance report furnished by the PCCP vide letter 1253/112-77/Dehradun dated 17th September, 2000, approval of the Central Government is hereby granted under Section 3 of the Forest (Conservation) Act, 1980 for removal of permission over 23250 ha of forest land for collection of sand, logs and boulders from river beds in district Pithoragarh, Uttarakhand, subject to fulfillment of the following conditions:-

1. The legal status of forest land shall remain unchanged.
2. 25% of revenues realized from disposal of sand, logs and boulders shall be spent on river training and measures of sedimentation.
3. Contingency Allocation will be around Rs. 125.00 ha of degraded forest land over approval period of 10 years @ Rs.10 ha of plantation/ha/annum each year, from the funds so collected/collected towards the restoration.



DL,

- (vi) The User Agency will undertake to pay Rs 100/- per the orders of Hon'ble Supreme Court of India in S.A. 226/00 (V) (C) 200, 302/1992.
- (vii) Adequate number of temporary check posts will be established at entry and exit points before start of work, and proper record of material collected and removed will be maintained.
- (viii) Extraction of material should be from the middle of the river bed after leaving one-fourth of the river bed on each bank untouched.
- (ix) There shall be no labour camp in the forest area for the labour involved in the extraction work.
- (x) No explosive shall be used while extracting the material and only hand tools will be used for the collection of boulders, boulders.
- (xi) Collection time shall be from sun rise to sun set.
- (xii) Breaking of boulders will be done outside the forest boundaries.
- (xiii) The labourers engaged in collection work will be provided free fuelwood/alternate source of energy to avoid any pressure on adjoining forest areas.
- (xiv) There shall be no extraction of material from the river beds during monsoon period, i.e., from June to October each year.
- (xv) The forest area shall not be used for any other purpose other than that specified in the proposal.
- (xvi) Any other conditions that the CCF, Regional Office, Lucknow may impose from time to time in the interest of Afforestation and protection of flora and fauna in this area shall also be valid.

Yours faithfully,

(M. K. Singh)

Sr. Assistant Inspector General of Forests

Copy to:

- 1. The Principal Chief Conservator of Forests, Government of Uttarakhand, Dehradun.
- 2. The District Officer, Forest Department, Government of Uttarakhand, Dehradun.
- 3. The Chief Conservator of Forest, Regional Office, Lucknow.
- 4. User Agency
- 5. Monitoring Cell, Ministry of Environment and Forests
- 6. Guard File.

(M. K. Singh)

Sr. Assistant Inspector General of Forests



पृष्ठ

श्री पीपीएम
प्रमुख सचिव
उत्तराखण्ड सरकार

Annexure - 1

विषय

उत्तराखण्ड
उत्तराखण्ड वन विकास निगम
देहरादून

वैधानिक विकास अनुभाग-1

देहरादून दिनांक 08 दिसम्बर 2009

विषय- राज्य के नदी तटों से ई0आई0ए0 पीपिडिफेंडर 2006 के अधीन उप खनिजों के मुक्त
हेतु पर्यावरण स्वीकृति प्राप्त किये जाने के सम्बन्ध में।

महोदय,

उपरोक्त विषयक भूतल एवं खनिजों इकाई उत्तराखण्ड निदेशावली देहरादून के पत्र संख्या 1364/विधि/देहरादून/खनिज/भूप्रतिष्ठ/2008-09 दिनांक 18 नवम्बर 2009 एवं आदेश संख्या 1364/उपखनिज दिनांक 03 नवम्बर 2009 एवं आदेश/उप खनिज दिनांक 03 नवम्बर 2009 में उल्लिखित नदी तटों से उप खनिज (साधारण सतु, रजरी, मोलर आदि) के मुक्त करने के अधिकारों को प्रदान करने हेतु खान एवं खनिज (विकास एवं विनियमन) अधिनियम 1987 की धारा-15 के अधीन प्रस्तावित उत्तराखण्ड उप खनिज परिहार नियमावली 2001 के अनुसार वर्तमान में राज्य में प्रस्तावित खनिज सीमा 2001 के सुरक्षा प्राधिकारी के अन्तर्गत प्रस्तावित उत्तराखण्ड वन विकास निगम को जनपद मेरगुप्त के नीचा (1850 हेक्टेयर) रामगढ़ (223 हेक्टेयर) मोररी (254 हेक्टेयर) व मरौर (388 हेक्टेयर) जगर मरौर (5384 हेक्टेयर) मोरगढ़ (100 हेक्टेयर) जनपद चम्पावत की धारवा नदी (3848 हेक्टेयर) किरीटानाला (72 हेक्टेयर) जगद धर, मण्डल के मास्न नदी में (3538 हेक्टेयर) धौलधौल (4162 हेक्टेयर) सुन्दरी (2994 हेक्टेयर) जगद धारवा के मुताब (30 हेक्टेयर) रोड (20 हेक्टेयर) चन्दनगढ़-2 (29 हेक्टेयर) नकटगढ़ (मरा नदी) (15 हेक्टेयर) जालम-1 (105 हेक्टेयर) जालम-2 (100 हेक्टेयर) सींग-1 (205 हेक्टेयर) सींग-2 (243 हेक्टेयर) सींग-3 (240 हेक्टेयर) गन्धमाग-1 (100 हेक्टेयर) वन क्षेत्र में मुक्त का कार्य प्रारम्भ किये जाते हेतु पर्यावरण सचिव, अधिनियम 1986 के अधीन पर्यावरण एवं वन मन्त्रालय भारत सरकार द्वारा एनवायरनमेंट एक्ट1986-नॉटीफिकेशन दिनांक 14 दिसम्बर 2006 के अधिनियम में मुक्त का करने का निर्देश द्वारा है कि पर्यावरण एवं वन मन्त्रालय भारत सरकार की पर्यावरणीय स्वीकृति प्राप्त करने की सहमति प्रदान की जाती है।

प्रार्थना

श्री पीपीएम
प्रमुख सचिव

भूतल वन संख्या 1929/VII-1/1638/2009 उद्दिनांकित।

वैधानिक विनियमन को सुगम एवं आसक्त कार्यवाही हेतु पत्रों-

- 1- मुक्त हेतु अधिकृत राज्य प्रदा निदेशक उत्तराखण्ड
- 2- वीर वन अधिकारी, मुक्त एवं खनिजों इकाई उत्तराखण्ड निदेशावली देहरादून

अर्थात्

श्री पीपीएम
प्रमुख सचिव



No. J-11015/346/2009-IA.II(M)
Government of India
Ministry of Environment and Forests
IA Division

Paryavaran Bhawan
CGO Complex, Lodhi Road,
New Delhi-110 003

Dated the 10th February, 2011

To

M/s Uttarakhand Forest Development Corporation,
Aranya Vikas Bhawan,
73, Nehru Road,
Dehradun-248 001
E-mail: safdemd@yahoo.com
Vanvikas12@gmail.com

Subject: Collection of Minor Mineral from River Song-2 by M/s Uttarakhand Forest Development Corporation, Tehsil and District Dehradun, Uttarakhand -environmental clearance regarding.

Sir,

This has reference to letter No. U-2629/Environmental clearance dated 16.08.2010 on the subject mentioned above. The project was earlier prescribed Terms of Reference (TORs) by the Ministry of Environment and Forests on 18.01.2010 for undertaking detailed EIA study for the purpose of obtaining environmental clearance. The proposal is for collection of 7,65,000 tonnes per annum (TPA) of minor minerals (Reta and Bajri) from the bed of Song river.

2. The total mine lease area of the project is 273ha, which is a forestland. The mining area in the Song-2 river has a stretch of 6.25km lying in the Ganga River basin. Out of the total allotted area of 273ha, the minor mineral collection will be carried out from 50% of the total area i.e., 136.5ha. The area available for mining would therefore be 136.5ha along the centre of the river flow which is devoid of any flora.

3. No national park and wildlife sanctuary are reported to be located in the core and buffer zone of the mine. The project area falls under Shivalik Elephant Reserve. The Rajaji National Park is reported to be located at a distance of 18km from the project boundary. The Chief Wildlife Warden, Government of Uttarakhand vide letter No. SHL-1317/12-1 dated 28.12.2010 has accorded clearance for collection of minor mineral from the Song-2 river in an area of 273ha. Seven RFs namely the Lachhwal RF (2km), the Karam RF (2km), the Dwara RF (3km), the Paled RF (3km), the Berto RF (3km), the Rotichur RF (4km) and the Mukot RF (9km) are reported to be located in the buffer zone of the mine.



4. The mine working will be opencast by manual method without involving drilling and blasting. The mining is confined to extraction of sand, rets and bajri from the river bed. The rets and bajri will be collected by sieving of river bed material using hand tools like shovel, pan, sieve etc. Mining will be carried out only during the day time. Extraction of river bed material will be completely stopped during the monsoon season. The targetted production capacity of the mine is 7.65 lakh TPA (4.25 lakh m³/annum). The mined out material will be transported to their respective uses locations via private agencies using their own transport. Computerized weigh bridges have been installed in order to check and monitor movement of material. The proposed mining area is reported to lie between 30°13'46.45" to 30°11'18.94" N Latitude and 78°08'56.92" and 78°07'53.34"E Longitude in topo sheet No 531/4. The elevation from the sea level of the proposed area is reported as 595m. The river flow is bleak most of the year except during the monsoon season. Mining will be carried out upto a depth of 1.5m. No pumping of water from the river or from groundwater is envisaged.

5. The public hearing of the project was held on 10.07.2010 for collection of minor minerals from Song River-2 over mine lease area of 273ha. The Principal Secretary, Government of Uttarakhand vide letter No. 2536/VII-1/2009/81A/2009/10 dated 23.10.2010 informed that collection of minor minerals from the river bed does not require mine plan approval under Uttarakhand minor mineral concession rules 2001. The Ministry of Environment and Forests has accorded combined in-principle approval under Forest (Conservation) Act on 26.05.2009 and 02.06.2009 for an area of 1325ha. The proponent has stated that there is no court case to the project or related activity.

6. The Ministry of Environment and Forests has examined the application in accordance with the EIA Notification, 2006 and the Doon Valley Notification, 1989 as amended on 13.12.2007 and hereby accords environmental clearance under the provisions thereof to the above mentioned Minor Mineral Mining project of M/s Uttaranchal Forest Development Corporation for an annual collection of 7,65,000 tonnes (7.65 lakh tonnes) of sand, rets and bajri (minor mineral) from the river bed of the Song-2 River by the opencast method involving total mining lease area of 273ha, subject to implementation of the following conditions and environmental safeguards.

A. Specific conditions

- (i) The project proponent shall obtain Consent to Establish and Consent to Operate from the Uttarakhand Environmental Protection and Control Board and effectively implement all the conditions therein.
- (ii) requisite prior clearance from the Standing Committee of the National Board for Wildlife shall be obtained due to location of the project area within Nainital Elephant Reserve, before starting any activity relating to the project at site. All the conditions stipulated by the Standing



Committee shall be ~~graciously~~ implemented in the project. It shall be noted that this clearance does not necessarily implies that wildlife clearance shall be granted to the project and that your proposal for wildlife clearance shall be considered by the competent authorities on its merit and decision taken. The investment made in the project, if any based on environmental clearance granted to the project, in anticipation of the clearance from wildlife clearance shall be entirely at the cost and risk of the project proponent and Ministry of Environment and Forests shall not be responsible in this regard in any manner.

- (iii) Environmental clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No. 460 of 2004, as may be applicable to this project.
- (iv) Environmental clearance is subject to obtaining clearance under the Wildlife (Protection) Act, 1972 from the competent authority, as may be applicable to this project.
- (v) Environmental clearance is subject to grant of forestry clearance.
- (vi) The project proponent shall prepare the plan of mining in conformity with the mine lease conditions and the Rules prescribed in this regard clearly showing the no work zone in the mine lease i.e. the distance from the bank of river to be left unworked, distance from the bridges etc. It shall be ensured that no mining shall be carried out during the monsoon season.
- (vii) The project proponent shall identify the degraded forest area within the mine lease in consultation with the State Forest Department and undertake plantation/afforestation work by planting the native species.
- (viii) 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 should be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.
- (ix) 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 shall not be affected. Regular monitoring of ground water level and quality shall be carried out around the mine lease area by establishing a network of existing wells and installing new piezometers during the mining operation. The periodic monitoring [(at least four times in a year- pre-monsoon (April-May), monsoon (August), post monsoon (November) and winter (January); once in each season)] shall be carried out.



consultation with the State Ground Water Board/Central Ground Water Authority and the data thus collected may be sent regularly to Ministry of Environment and Forests and its Regional Office Lucknow, Central Ground Water Authority and the Regional Director, Central Ground Water Board. If at any stage, it is observed that the groundwater table is getting depleted due to the mining activity, necessary corrective measures shall be carried out.

(x) The project proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of water (surface water and groundwater), if any, required for the project.

(xi) Appropriate mitigative measures shall be taken to prevent pollution of the river in consultation with the State Pollution Control Board. It shall be ensured that there is no leakage of oil and grease in the frust of the vehicles used for transportation.

(xii) Vehicular emissions shall be kept under control and regularly monitored. The mineral transportation shall be carried out through the covered trucks only and the vehicles carrying the mineral shall not be overloaded.

(xiii) No drilling and blasting operation shall be carried out.

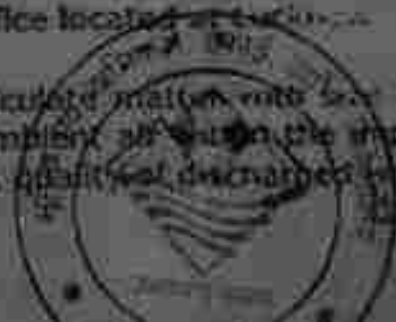
(xiv) Mineral handling area shall be provided with the adequate number of high efficiency dust extraction system. Loading and unloading areas including all the transfer points should also have efficient dust control arrangements. These should be properly maintained and operated.

(xv) Periodical medical examination of the workers engaged in the project shall be carried out and records maintained. For the purpose, schedule of health examination of the workers should be drawn and followed accordingly.

(xvi) Provision shall be made for the housing of construction labour on the site with all necessary infrastructure and facilities such as () cooking, mobile toilets, mobile STP, safe drinking water, medical care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.

(xvii) Digital processing of the entire lease area using remote sensing technique should be done regularly once in three years for monitoring the change of river course, if any and report submitted to the Ministry of Environment and Forests and its Regional Office located at Lucknow.

(xviii) The critical parameters such as RSPM (Particulate matter with size less than 10 micron i.e., PM_{10}) and NO_x in the ambient air within the impact zone shall be monitored periodically. Further, quality of discharged water



shall also be monitored [(TDS, DO, PH, Fecal Coliform and Total Suspended Solids (TSS)]. The monitored data shall be uploaded on the website of the company as well as displayed on a display board at the project site at a suitable location near the main gate of the Company in public domain. The Circular No. J-20012/1/2006-IA.II(M) dated 27.05.2009 issued by Ministry of Environment and Forests, which is available on the website of the Ministry www.envfor.nic.in shall also be referred in this regard for its compliance.

- (xix) The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna namely elephant etc. found in the study area. Action plan for conservation of flora and fauna shall be prepared in consultation with the State Forest and Wildlife Department. All the safeguard measures brought out in the Wildlife Conservation Plan so prepared specific to this project site shall be effectively implemented. Necessary allocation of funds for implementation of the conservation plan shall be made and the funds so allocated shall be included in the project cost. A copy of action plan shall be submitted to the Regional Office of the Ministry of Environment and Forests, Lucknow.

B. General conditions

- (i) No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment & Forests.
- (ii) No change in the calendar plan including excavation, quantum of mineral rets, bajri and sand (minor mineral) and waste should be made.
- (iii) Four ambient air quality-monitoring stations should be established in the core zone as well as in the buffer zone for RSPM (Particulate matter with size less than 10micron i.e., PM_{10}) and NO_x monitoring. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with the State Pollution Control Board.
- (iv) Data on ambient air quality RSPM (Particulate matter with size less than 10micron i.e., PM_{10}) & NO_x should be regularly submitted to the Ministry of Environment and Forests including its Regional office located at Lucknow and the State Pollution Control Board / Central Pollution Control Board once in six months.
- (v) Fugitive dust emissions from all the sources should be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points should be provided and properly maintained.



(vi) Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training & information on safety and health aspects.

Occupational health surveillance program of the workers should be undertaken periodically to observe any contraindications due to exposure to dust and take corrective measures, if needed.

(vii) A separate environmental management cell with suitable personnel should be set-up under the control of a Senior Executive who will report directly to the Head of the Organization.

(viii) The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the Ministry of Environment and Forests and its Regional Office located at Lucknow.

(ix) The project authorities should inform to the Regional Office located at Lucknow regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.

(x) The Regional Office of this Ministry located at Lucknow shall monitor compliance of the stipulated conditions. The project authorities shall extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information / monitoring reports.

(xi) The project proponent shall submit six monthly reports on the status of compliance of the stipulated environmental clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the Ministry of Environment and Forests, its Regional Office at Lucknow, the respective Zonal Office of Central Pollution Control Board and the State Pollution Control Board. The proponent shall upload the status of compliance of the environmental clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the Ministry of Environment and Forests, Lucknow, the respective Zonal Office of Central Pollution Control Board and the State Pollution Control Board.

(xii) A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad/ Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/ representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company/ proponent.

(xiii) The State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre and the Collector's office/ Tehsildar's Office for 30 days.



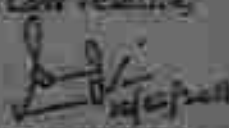
(xv) The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the Regional Office of the Ministry of Environment and Forests, Lucknow by e-mail.

(xvi) The project authorities should advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and also at web site of the Ministry of Environment and forests at <http://envfor.nic.in> and a copy of the same should be forwarded to the Regional Office of this Ministry located at Lucknow.

7. The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.

8. Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.

9. The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules made thereunder and also any other orders passed by the Hon'ble Supreme Court of India/High Court of Uttarakhand and any other Court of Law relating to the subject matter.


(SATISH C. GARKOTI)
Scientist 'F'

Copy to:

- (i) The Secretary, Ministry of Mines, Government of India, Shastri Bhawan, New Delhi.
- (ii) The Secretary, Department of Mines & Geology, Government of Uttarakhand, Secretariat, Dehradun.
- (iii) The Secretary, Department of Environment, Government of Uttarakhand, Secretariat, Dehradun.
- (iv) Chief Wildlife Warden, Government of Uttarakhand, Secretariat, Dehradun.



भूतत्व एवं खनिजार्थ हकाई, राष्ट्रीय निदेशालय,
उत्तराखण्ड, देहरादून।

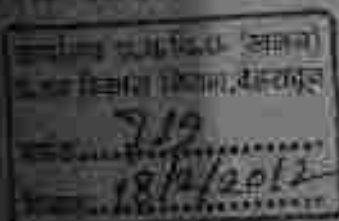
प्रिस्ताधिकारी
देहरादून।

उपखनिज/01/उपवनविनिर्णय/भूखनिर्णय/2010-11 दिनांक 04 फरवरी 2012,

जायकित वन क्षेत्र की नदियाँ सौंग-1 एवं सौंग-2 के सीमाबन्धन के सम्बन्ध में।

कृपया उपरोक्त विषयक आपके कार्यादेश सं01871/खनिज-खनन-सुतान-2011 दिनांक 19 सितम्बर 2011 व प्रभागीय वन विकास प्रमन्त्रक (खनन) देहरादून के पत्र सं0 443/सीमाबन्धन दिनांक 12-12-2011 के क्रम में जनपद देहरादून के आरक्षित वन क्षेत्र की नदियों सौंग-1 एवं सौंग-2 का सीमाबन्धन इस कार्यालय के सर्वेक्षक के द्वारा वन विभाग के प्रतिनिधि व उत्तराखण्ड वन विकास निगम के जूनियर जेनरल की उपस्थिति में दिनांक 08-01-2012 से 05-01-2012 को सम्पन्न किया गया। तबसे खोजी की सीमाबन्धन आख्या एवं मानचित्र इस पत्र के साथ संलग्न कर आवश्यक कार्यवाही हेतु प्रेषित किया जा रहा है।

सन्तुष्ट। अधिकारी।



भवदीय,

(एस0 एस0 वैदिक)

ज्योत खान अधिकारी

सं0 52-उपखनिज/01/उपवनविनिर्णय/भूखनिर्णय/2010-11 दिनांक 04 फरवरी 2012
प्रभागीय वन विकास प्रमन्त्रक (खनन) उत्तराखण्ड वन विकास निगम देहरादून को उगाई पत्र सं0 443/सीमाबन्धन दिनांक 12-12-2011 के क्रम में खोजी नदियों की सीमाबन्धन आख्या एवं मानचित्र की प्रिस्ता सूचनाएं एवं आवश्यक कार्यवाही हेतु प्रेषित।

18/2/12
(एस0 एस0 वैदिक)
ज्योत खान अधिकारी



संयुक्ता सीमा वनान् ओष्यात्

$$217/1/11 - 1/123 - 27/2011$$

दिनांक 14 नवम्बर 2011 को बना

[Faint handwritten notes at the bottom of the page]

भारत सरकार, नई दिल्ली, 7.2.1954

४. जयपुर दिनांक २७/११/७७ साहसीपुत्र

13650 प्रमाण / सैपटेमा सुनि म

५७- ऑनियरिङ्ग अफ्टी मेडरी

1.0 (25)

यदि कोई आदिमिक को मिला देता है

विद्या भवतः। उपरत शास्त्रनादेश एव जिज्ञासिष्यते।

24/10/2014

21/03/2022 - रविवार सुभाह - 200/1000 19.00/20.00 के अन्तर में

॥ योग्य कथन श्रुत्य एव स्थानकम् इत्यहं को चर्यात् निर्देशात्वा ज्ञातव्यम् यो अस्ति नरः

संज्ञा-
१. संज्ञा

१०३. श्री वाणराज आर्सेनिकल भास्कर

136-50 136-50

॥ अथ शिवस्य चतुर्भुजस्य स्तुतिः ॥

जो सोने पर सीमाबद्ध क्षेत्र को सीमा पर स्थित क्षेत्र या सोना सत्यापन 15 दिन में अग्रिम

एवम् विना अधिकारी/प्रभारी अधिकारी, मूलतः एवं प्रतिजन इकाई

इन् का सुचित कलमे हेतु निर्देशित। जव दिया माया हे।

1990

$$= \frac{24}{100} \times 100 = 24$$

सं. १००० - १ (१०००) १०००

काला काला कीट, माने रंग की वन पुष्प

मार्गदर्शक की आवश्यकता है।

... ..

पुनः

प्रमाणित किया जाता है कि उपरोक्त विवरण सही और पूर्ण है।

प्रमाणित करने वाला _____
मुख्य अधिकारी / प्रभुत्व अधिकारी

दिनांक: _____

11

92009

[illegible]

0. वाचना ३।

1947



- 5- नियम धुआन कार्य से किसी भी वन सम्पदा को नहीं पहुँचायेगा। यदि वन सम्पदा को कोई खतरा पहुँचती है या पहुँचाये जाती है तो उसके लिए सम्बन्धित प्रशासिक प्रशासिकाधीन द्वारा निर्धारित अधिकार उत्तराखण्ड वन विकास निगम द्वारा देय होगा।
- 6- उक्त वन भूमि उत्तराखण्ड वन विकास निगम के उपयोग में रहे, तब तक वन क्षेत्रों एवं वन कि उत्तराखण्ड वन विकास निगम को उत्तरी उक्त प्रयोजन हेतु आवश्यकता होगी। यदि उत्तराखण्ड वन विकास निगम को उक्त वन भूमि अथवा उसके किन्हीं भाग की आवश्यकता न रहेगी तो उक्त भूमि अथवा उसका ऐसा भाग, जो उत्तराखण्ड वन विकास निगम के लिए आवश्यक न रहे, वन विभाग को बिना किसी प्रतिफल की सुरक्षा के यथा स्थिति वापस हो जायेगी।
- 7- वन विभाग के कर्मचारी/अधिकारी या उनके अभिकर्तव्यों को किसी भी समय जब वे आवश्यक समझे, प्रशंगत वन भूमि का निरीक्षण करने का पूर्ण अधिकार होगा।
- 8- कृषि वन क्षेत्र में कार्य करने वाले मजदूर तथा कर्मचारी अपनी ईंधन की आवश्यकता के लिए वनों को छानि न पहुँचाये, इसके लिए उत्तराखण्ड वन विकास निगम द्वारा उन्हें ईंधन की सुव्यवस्था अथवा उन्हें ईंधन की सामग्री की आपूर्ति की जायेगी।
- 9- उत्तराखण्ड वन विकास निगम द्वारा वृक्षों का घातन नहीं किया जायेगा।
- 10- उत्तराखण्ड वन विकास निगम द्वारा नु-शरण रोडवे में प्रशंगत मटिया व लकड़ों का सुदृढीकरण हेतु आवश्यक धनराशि का अनुमान वन विभाग को किया जायेगा, वन विभाग द्वारा वन विकास निगम द्वारा उपलब्ध करायी गई धनराशि से निम्न ट्रैकिंग व अन्य विभिन्न अभियांत्रिकी कार्य सम्पादित किये जायेंगे। नदी तट से निकाल जाने वाले वन-विकास के विकास से प्राप्त राजस्व का 25 प्रतिशत भाग रोडवे ट्रैकिंग एवं अन्य समान कार्य के लिए हेतु व्यय किया जायेगा। नदी तटों का उपचार वन विभाग द्वारा किया जायेगा। नदी तटों के अनुसंधान कराया जायेगा व यदि आवश्यक हो तो अन्यत्र मुद्रास्व वन विभाग सरकार, देह-दान का तकनीकी परामर्श भी प्राप्त किया जायेगा।
- 11- प्रशंगत क्षेत्र में कार्य करने वाले कर्मियों के लिए वन क्षेत्र में अन्य किसी प्रकार के श्रमिक इष्ट-संस्थित नहीं किये जायेंगे।
- 12- उपखनिजों का धुआन नदी के मध्य में किया जायेगा तथा नदी से वन क्षेत्रों से दूर दूर का 100 मीटर दूरी छोड़ा जायेगा।
- 13- प्रशंगत क्षेत्र में उपखनिजों के धुआन हेतु किसी भी विस्तृतक प्रकार के उपकरणों का उपयोग नहीं किया जायेगा व धुआन कार्य केवल हार्ड ट्रैकिंग द्वारा ही किया जायेगा।
- 14- प्रशंगत क्षेत्र में उपखनिजों के धुआन का कार्य सुप्रीम से गैर-क्या सुप्रीम से नहीं किया जायेगा।
- 15- रोडवे ट्रैकिंग का कार्य वन सीमा से बाहर किया जायेगा।
- 16- प्रशंगत क्षेत्र में उपखनिजों के धुआन का कार्य यदि जरूरत है तो वन विभाग के निरीक्षक द्वारा नहीं किया जायेगा।
- 17- वन पर्यटन को स्थानीय के मध्य में वन क्षेत्रों में वन विभाग के अधिकारियों द्वारा सज्जत भाव से किया जायेगा।



- 12- किसी सार्वजनिक विनायस्थल, सम्पत्ति अथवा कश्चित् या व्यक्ति के लिये कोई द्वारा पवित्र माने जाने वाला स्थान, मकान अथवा शास्त्रालय, सार्वजनिक सड़क या कोई अन्य स्थान जो जिलाधिकारी द्वारा सार्वजनिक स्थान घोषित किया गया हो, ऐसे स्थान पर न तो कोई चीज लट्ठी की जायेगी न ही स्थापित की जायेगी और न ही कोई गलत सोचवसल को पायेगी, जिससे किसी मन्दिर, भवन निर्माण कार्य, संरक्षित या अन्य व्यक्तियों के अधिकारों का क्षति पहुँचे।
- 13- पट्टे में अन्तर्निहित निर्माण कार्यों या अन्य प्रयोजनों के निर्मित कोई ऐसी भूमि काट सड़कियों के लिए प्रयुक्त नहीं की जायेगी जो राज्य सरकार से विभिन्न व्यक्तियों के स्वतन्त्र न पहले से ही हों।
- 14- किसी भी मार्ग का उपयोग करने के अधिकार पर उत्तरदायक न किया जायेगा।
- 15- उत्तराखण्ड वन विकास निगम द्वारा उप-खनिजों के निक्षेप से प्राप्त समस्त लाभ प्रत्यक्ष यम भूमि पर 10 वर्षों की अवधि में अतिपूरक वृक्षारोपण कार्य किया जायेगा। वन विभाग द्वारा उपरोक्तानुसार किये गये वृक्षारोपण का आगामी पाँच वर्ष तक रक-रकद किया जायेगा।
- 16- प्रस्तावित क्षेत्र में खनन कार्य शुरू करने से पूर्व प्रवेश व निकासी मार्गों पर पर्याप्त संख्या में अस्थाई चैक-पोस्ट स्थापित किये जायेंगे। निकासी किये जाने वाले उपखनिजों के उचित अभिलेखों का रख रखाव उत्तराखण्ड वन विकास निगम द्वारा किया जायेगा।
- 17- वन विकास निगम द्वारा उप खनिज की निकासी की मात्रा पर निर्धारित रकबाटी आदि नियमानुसार जना किया जायेगा।
- 18- उपखनिज परिहार नियमावली 2001 के नियम-73 के अनुसूचि प्राप्त परमाण्व-13 पर वैज्ञानिक विवरण जिलाधिकारी, देहरादून एवं निदेशक, भूतत्व एवं खनिज इन्फोर्मेशन को प्रेषित की जायेगी।
- 19- इसके अतिरिक्त इस हेतु जो भी शर्तें स्थानीय जिला प्रशासन तथा भूतत्व एवं खनिज इकाई द्वारा निर्धारित की जायेगी, का अनुपालन उत्तराखण्ड वन विकास निगम द्वारा किया जायेगा।
- 20- उत्तराखण्ड वन विकास निगम द्वारा उक्त भूमियों से उपखनिजों के खनन हेतु वन विभाग/अन्य प्राधिकारियों को प्रदत्त समस्त वचनबद्धताओं का अनुपालन सुनिश्चित किया जायेगा।
- 21- निगम द्वारा उपखनिजों के खनन हेतु मुख्य वन्य जीव प्रविधान, उत्तराखण्ड का संरक्षित वन व वन्य जीव संरक्षण-समय पर जारी निर्देशों का अनुपालन सुनिश्चित किया जायेगा।



- 1- सचिव, राज्य सरकार, पर्यावरण एवं वन विभाग, पर्यावरण विभाग, गुरुदासपुरा, जिला।
- 2- प्रमुख सचिव, भा. मुख्य मंत्री श्री. उत्तराखण्ड शासन।
- 3- प्रमुख सचिव, वन एवं पर्यावरण विभाग, उत्तराखण्ड शासन।
- 4- आयुक्त, गढ़वाल संघ, पौड़ी गढ़वाल।
- 5- स्टाफ आफिसर, मुख्य सचिव, उत्तराखण्ड शासन।
- 6- निदेशक, भूतत्व एवं खनिकी, जिला, उत्तराखण्ड शासन।
- 7- प्रमुख वन संरक्षक, उत्तराखण्ड, गढ़वाल।
- 8- प्रमुख निदेशक, उत्तराखण्ड वन विभाग, गढ़वाल।
- 9- अपर प्रमुख वन संरक्षक एवं तालुका अधिकारी, वन संरक्षण, हिन्दुवागढ़ जिला, गढ़वाल।
- 10- गार्ड फाईल।

माता से
 दिनांक 10/11/2011
 जिला गढ़वाल



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सौरा नदी भाग-III का मानचित्र

सैमापत्ती - 1. 10. 1935

नदी का नाम: सौरा नदी
 नदी का लंबाई: 1. सौरा भाग 5
 2. " " 5
 3. " " 5
 4. " " 1
 5. " " 1
 नदी का क्षेत्रफल: 273.0 कि.
 नदी की लंबाई: 6.25 किमी.

INDEX

1. FOREST OUTER BOUNDARY
2. BLOCK BOUNDARY
3. COMPT. ---
4. RLY LINE
5. ROAD
6. FOREST CHAUKI
7. NADI

FC

LACHHAWALA
BLOCK

SONO
BLOCK

LAMBIRAY BASH

RAMNAGAR
BLOCK

VALI BLOCK

Range Officer
Thane

THANE DISTRICT
THANE



1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 26

संक्षेपसहित उपसंहार (बाल, कला, खेल, इत आदि) नीति, २०१३

(१) इस नोटि आ.संविन नमः कालकण्ठ उमादेवि (शङ्ख, मङ्गल, गीत, हस्त-चन्द्रिका) मीमा. २०१६ है।

[2] B. Korte and M. Rübinfeldt.

2

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गणित के अन्तर्गत निम्नलिखित प्रश्नों का उत्तर दीजिए ?

(वि. ७५४८८८, पृ. ३६०) जहां कि गणना १९८० के मुहुरे में की गई थी।

1997年12月 第11卷第12期

(2) जलपान के विषय में 1945 में गवर्नर जनरल के द्वारा जारी की गई नीति का अंगीकार है।

(२) संजयजी महिपति ने जहाँ कहा था, वहाँ व्यक्तिगत रूप से गिरा, और जिला बोर्ड का निर्णय था, उन्हें प्रमाणित है, दूसरा मामला पदावधि लागू प्रमाणित। और निम्नलिखित जिला बोर्ड के निर्णय के संबंध में यह स्पष्ट है कि यह सत्य है। यह निम्नलिखित निर्णय के प्रमाणित प्रमाणित है।

(10) यहाँ के जलानि को अपनी जगहों पर खड़े किया जाये।



10) $\lim_{x \rightarrow 0} \frac{\sin x}{x}$ का मान ज्ञात करें।

(३) यह भी ध्यान रखें कि यदि आप अपने विचारों को दूसरों के सामने प्रस्तुत करते हैं तो आपको अपने विचारों को स्पष्ट रूप से बताना चाहिए।

[illegible]

[8] "मध्य प्रदेश को अभिशापित नहीं है, दल-मुक्तता का यह आन्दोलन 1987 में प्रारम्भित है, जो जारी रहे और जो राष्ट्रीय स्तर पर अग्रगण्य है, इसे हमें है।"

वनिज की मात्रा का 1
आकलन

चरण में बलानिष्ठ शेषों को संयोजित किया। एवं संयोजन के माता भूमि में प्रारंभिक चरण के संयोजन में जो नियम संयोजन (Zygote) में परिवर्तित किए जाते हैं :-

[illegible]

आज-काल के जमाने में हमारे देश में अनेक प्रकार के अंधविश्वास और जादू-टोना के लोग बहुत हैं। हमें इनसे बचना चाहिए।

[illegible]

संस्था प्रोत्साहित करता है कि नवीन व्यवस्था
सिन्धु प्रणाली के आधार पर समायोजित की जाये





SITE PICTURE, NEAR BOUNDARY OF SONG-2





इन योजना तैयार करने के लिए अर्हता प्राप्त व्यक्ति के रूप में मान्यता
प्रमाण पत्र

**CERTIFICATE OF RECOGNITION AS QUALIFIED PERSON TO PREPARE
MINING PLANS**

(अनिष्ट रियायत नियमावली, 1960 के नियम 22 (सी) के अंतर्गत)
(Under Rule 22(C) of Mineral Concession Rules, 1960)

पंजीकृत नाम: श्री/ मैम: _____ स्थिति: _____
Mr./Smt. Bhawan Joshi _____

पंजीकृत कार्यालय: _____ having _____

registered office at C/O B.S. Rawat, Kamal Bhawan, House No.-6, Vijay
Colony, Lane No.-1, New Cantt Road, Dehradun (Uttarakhand)

ज्या विद्वांसने अपने प्रमुख व्यक्तियों की योग्यताओं एवं अनुभवों का संतोषजनक
and having given satisfactory evidence of the qualification and experience of
प्रमाण दिया है उन्हें एतद्वारा अनिष्ट रियायत नियमावली, 1960 के नियम 22 (सी) के अंतर्गत
their key persons is hereby granted recognition under rule 22 (C) of the Mineral
अनिष्ट योजनाओं को तैयार करने के लिए अर्हता प्राप्त व्यक्ति के रूप में मान्यता प्रदान की जाती है।
Concession Rules, 1960 as a qualified person to prepare Mining Plans

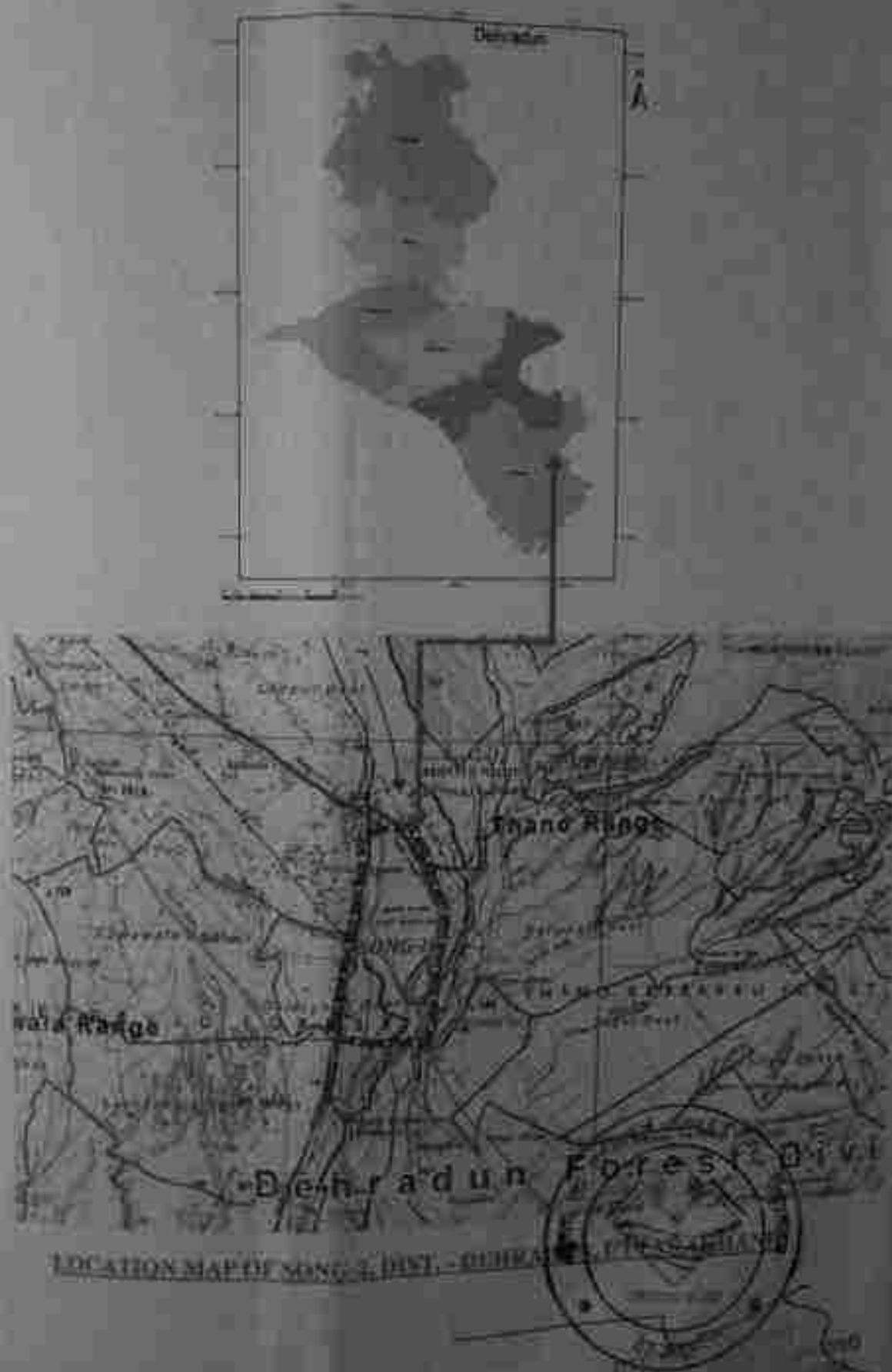
पंजीकृत क्रमांक - _____ है।

The registration No. is RQP/DDN/180/2009/A

यह मान्यता दस वर्ष की अवधि के लिए वैध है जो कि दिनांक _____ को समाप्त होगी।
The Recognition is valid for a period of ten years ending 30/08/2019

स्थान/Place: AJMER
दिनांक / Date: 31/08/2009

E. J. Joshi
प्रमुख निदेशक
जान निदेशक/विभागीय
Controller of Mines
भारतीय खान भूज
Indian Bureau of Mines
CONTROLLER OF MINES
भारतीय खान भूज
INDIAN BUREAU OF MINES



24



NAME	
POSITION	
DATE	
LOCATION	
REMARKS	
APPROVED BY	
DATE	

NOTE:
ALL DIMENSIONS IN METERS & CENTIMETERS
UNLESS OTHERWISE NOTED



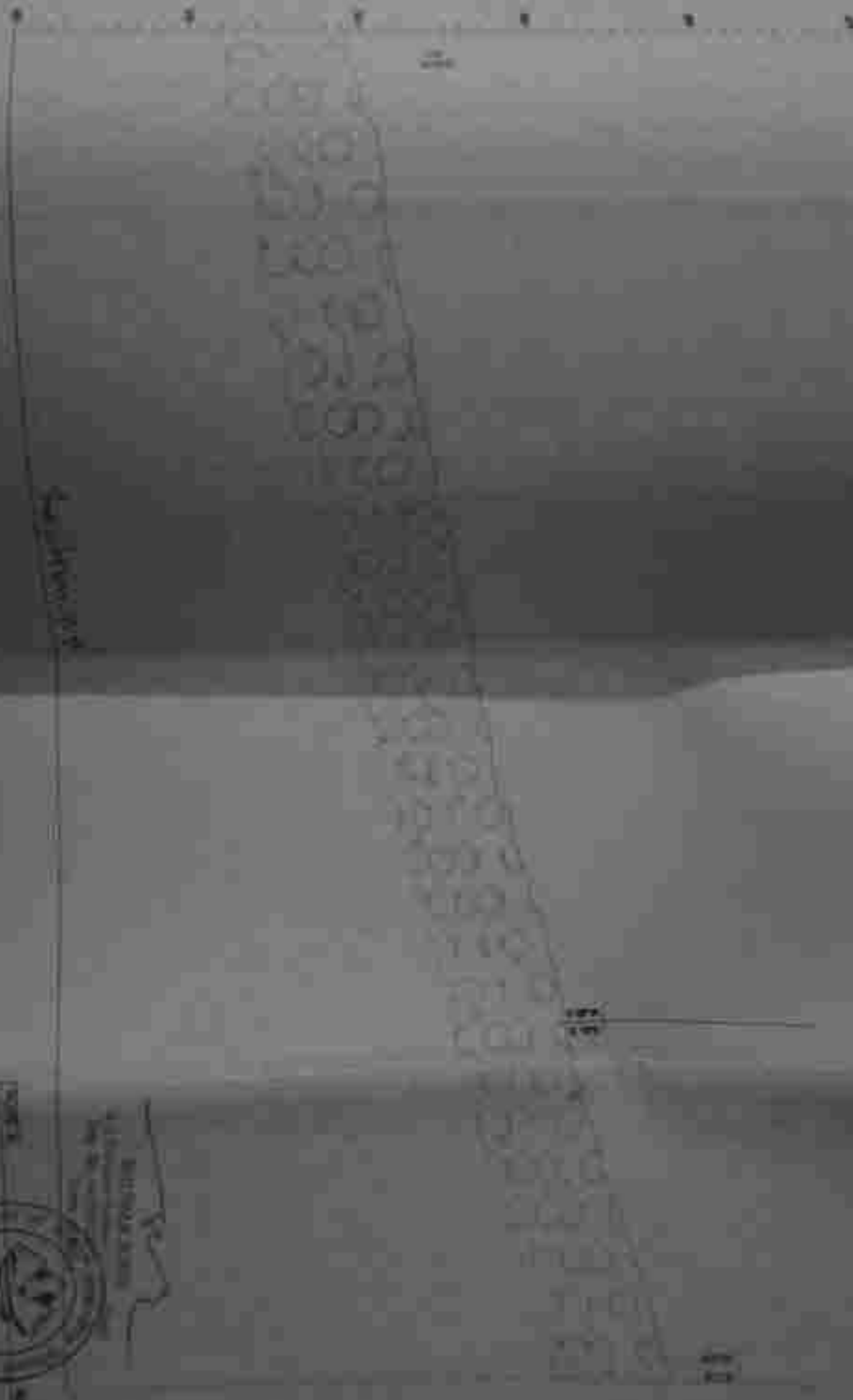
STANDARD ROUTE
U.S. Military Highway No. 1 (Hanoi-Haiphong)
Map No. 1-1000000, Edition of 1964
Scale, 1:100,000

PLATE 1

STANDARD ROUTE, 1:100,000

NAME & GRADE	
ROUTE NO.	
DATE	
LOCATION	
REMARKS	
APPROVED BY	
DATE	

1	2	3	4	5	6	7	8	9	10



100

150

100

100



100



ՀԱՅԱՍՏԱՆԻ ՀԱՆՐԱՊԵՏՈՒԹՅԱՆ
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ՄԻՆԻՍՏԵՐԱԿԱՆ ԿԵՆՏՐԱԼԻ
ԿՐԹԱԿԱՆԱԿԱՆ ՆԱԽԱՐԱՐՈՒԹՅԱՆ
ՄԻՆԻՍՏԵՐԱԿԱՆ ԿԵՆՏՐԱԼԻ
ԿՐԹԱԿԱՆԱԿԱՆ ՆԱԽԱՐԱՐՈՒԹՅԱՆ
ՄԻՆԻՍՏԵՐԱԿԱՆ ԿԵՆՏՐԱԼԻ

ՀԱՅԱՍՏԱՆԻ ՀԱՆՐԱՊԵՏՈՒԹՅԱՆ
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ԿՐԹԱԿԱՆԱԿԱՆ ՆԱԽԱՐԱՐՈՒԹՅԱՆ
ՄԻՆԻՍՏԵՐԱԿԱՆ ԿԵՆՏՐԱԼԻ

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ԿՐԹԱԿԱՆԱԿԱՆ ՆԱԽԱՐԱՐՈՒԹՅԱՆ
ՄԻՆԻՍՏԵՐԱԿԱՆ ԿԵՆՏՐԱԼԻ

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ՄԻՆԻՍՏԵՐԱԿԱՆ ԿԵՆՏՐԱԼԻ
ԿՐԹԱԿԱՆԱԿԱՆ ՆԱԽԱՐԱՐՈՒԹՅԱՆ
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ՀԱՅԱՍՏԱՆԻ ՀԱՆՐԱՊԵՏՈՒԹՅԱՆ
ԿՐԹԱԿԱՆԱԿԱՆ ՆԱԽԱՐԱՐՈՒԹՅԱՆ
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ԿՐԹԱԿԱՆԱԿԱՆ ՆԱԽԱՐԱՐՈՒԹՅԱՆ
ՄԻՆԻՍՏԵՐԱԿԱՆ ԿԵՆՏՐԱԼԻ



Sl. No.	Particulars	Remarks
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2	...	...
3	...	...
4	...	...
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7	...	...
8	...	...
9	...	...
10	...	...

NOTES:
 ALL DIMENSIONS IN METERS & CENTIMETERS
 APPROXIMATELY 1:1000

PLAN 4
 PROPOSED PROJECT LAYOUT PLAN FOR FISH HATCHERY
 SITUATED AT ...
 DISTRICT ...
 STATE ...



PROJECT	12
DATE	12/12/2012
BY	12/12/2012
FOR	12/12/2012
SCALE	1:1000
REVISION	1

NOTES:
 ALL DIMENSIONS IN METERS & CENTS
 1:1000

PROJECT	12
DATE	12/12/2012
BY	12/12/2012
FOR	12/12/2012
SCALE	1:1000
REVISION	1

12/12/2012
 12/12/2012
 12/12/2012





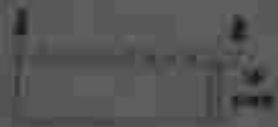
DATE	10-10-60
BY	J. H. HARRIS
FOR	STATE OF CALIFORNIA
PROJECT	STATE HIGHWAY 100
SECTION	100-100
SCALE	1" = 1 MILE
COMMISSIONER	JOHN W. HARRIS
DEPUTY COMMISSIONER	JOHN W. HARRIS
ASSISTANT COMMISSIONER	JOHN W. HARRIS
CHIEF ENGINEER	JOHN W. HARRIS
CHIEF SURVEYOR	JOHN W. HARRIS
CHIEF PLANNER	JOHN W. HARRIS
CHIEF DESIGNER	JOHN W. HARRIS
CHIEF CONSTRUCTION	JOHN W. HARRIS
CHIEF MAINTENANCE	JOHN W. HARRIS
CHIEF TRAFFIC	JOHN W. HARRIS
CHIEF SAFETY	JOHN W. HARRIS
CHIEF ENVIRONMENT	JOHN W. HARRIS
CHIEF FINANCE	JOHN W. HARRIS
CHIEF ADMINISTRATION	JOHN W. HARRIS
CHIEF LEGAL	JOHN W. HARRIS
CHIEF PUBLIC AFFAIRS	JOHN W. HARRIS
CHIEF RESEARCH	JOHN W. HARRIS
CHIEF EDUCATION	JOHN W. HARRIS
CHIEF CULTURE	JOHN W. HARRIS
CHIEF HISTORY	JOHN W. HARRIS
CHIEF ARTS	JOHN W. HARRIS
CHIEF RECREATION	JOHN W. HARRIS
CHIEF TOURISM	JOHN W. HARRIS
CHIEF PROMOTION	JOHN W. HARRIS
CHIEF MARKETING	JOHN W. HARRIS
CHIEF SALES	JOHN W. HARRIS
CHIEF DISTRIBUTION	JOHN W. HARRIS
CHIEF RETAIL	JOHN W. HARRIS
CHIEF WHOLESALE	JOHN W. HARRIS
CHIEF EXPORT	JOHN W. HARRIS
CHIEF IMPORT	JOHN W. HARRIS
CHIEF FREIGHT	JOHN W. HARRIS
CHIEF SHIPPING	JOHN W. HARRIS
CHIEF CARRIER	JOHN W. HARRIS
CHIEF LOGISTICS	JOHN W. HARRIS
CHIEF SUPPLY	JOHN W. HARRIS
CHIEF DEMAND	JOHN W. HARRIS
CHIEF INVENTORY	JOHN W. HARRIS
CHIEF ORDER	JOHN W. HARRIS
CHIEF DELIVERY	JOHN W. HARRIS
CHIEF CUSTOMER	JOHN W. HARRIS
CHIEF SERVICE	JOHN W. HARRIS
CHIEF SUPPORT	JOHN W. HARRIS
CHIEF BACKUP	JOHN W. HARRIS
CHIEF RECOVERY	JOHN W. HARRIS
CHIEF CONTINGENCY	JOHN W. HARRIS
CHIEF EMERGENCY	JOHN W. HARRIS
CHIEF DISASTER	JOHN W. HARRIS
CHIEF REPAIR	JOHN W. HARRIS
CHIEF MAINTENANCE	JOHN W. HARRIS
CHIEF REPLACEMENT	JOHN W. HARRIS
CHIEF UPGRADE	JOHN W. HARRIS
CHIEF MODERNIZATION	JOHN W. HARRIS
CHIEF RENOVATION	JOHN W. HARRIS
CHIEF RESTORATION	JOHN W. HARRIS
CHIEF PRESERVATION	JOHN W. HARRIS
CHIEF PROTECTION	JOHN W. HARRIS
CHIEF DEFENSE	JOHN W. HARRIS
CHIEF SECURITY	JOHN W. HARRIS
CHIEF PROTECTION	JOHN W. HARRIS
CHIEF SAFETY	JOHN W. HARRIS
CHIEF HEALTH	JOHN W. HARRIS
CHIEF WELFARE	JOHN W. HARRIS
CHIEF EDUCATION	JOHN W. HARRIS
CHIEF CULTURE	JOHN W. HARRIS
CHIEF RECREATION	JOHN W. HARRIS
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CHIEF PROMOTION	JOHN W. HARRIS
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CHIEF DEFENSE	JOHN W. HARRIS
CHIEF SECURITY	JOHN W. HARRIS
CHIEF PROTECTION	JOHN W. HARRIS
CHIEF SAFETY	JOHN W. HARRIS
CHIEF HEALTH	JOHN W. HARRIS
CHIEF WELFARE	JOHN W. HARRIS

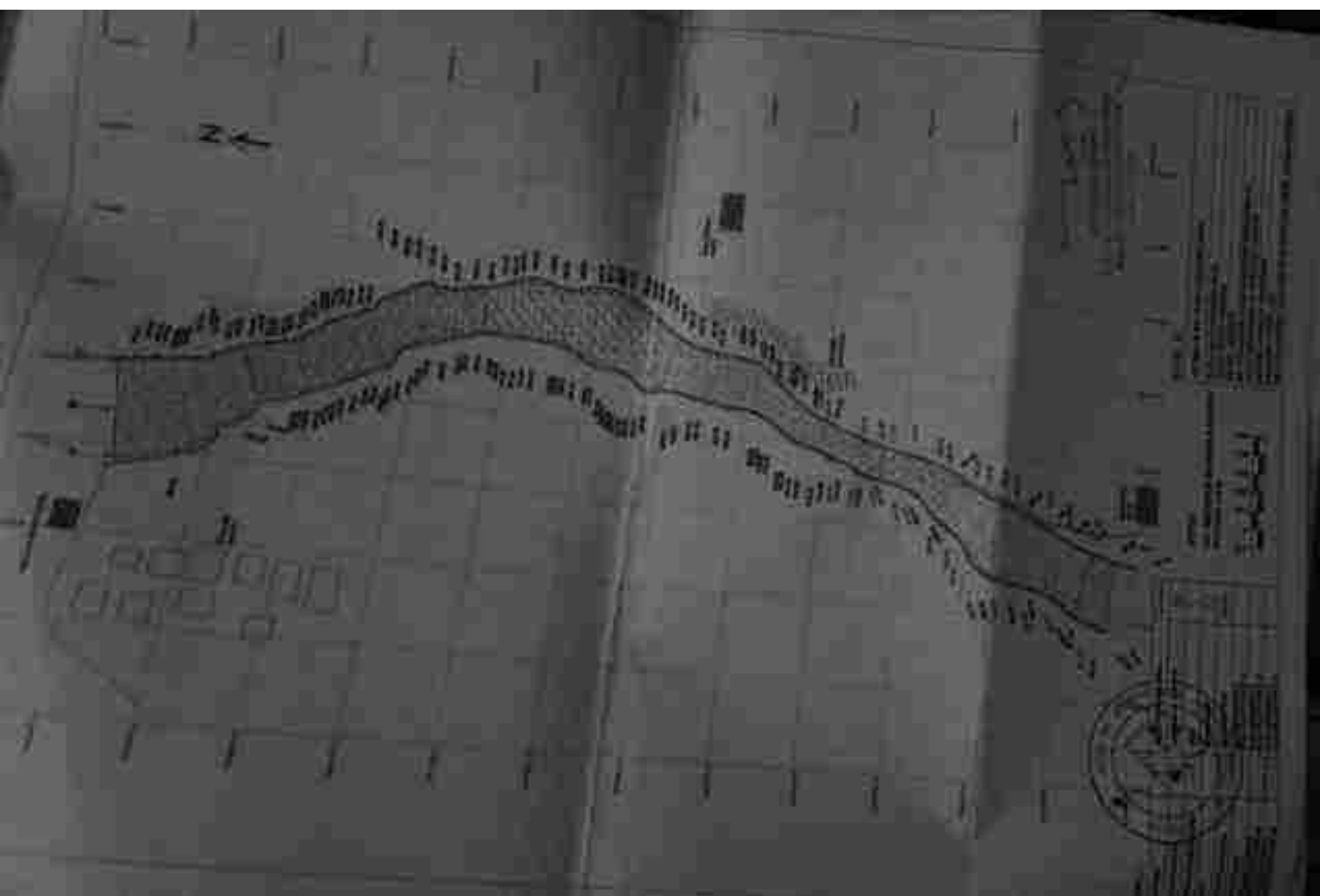
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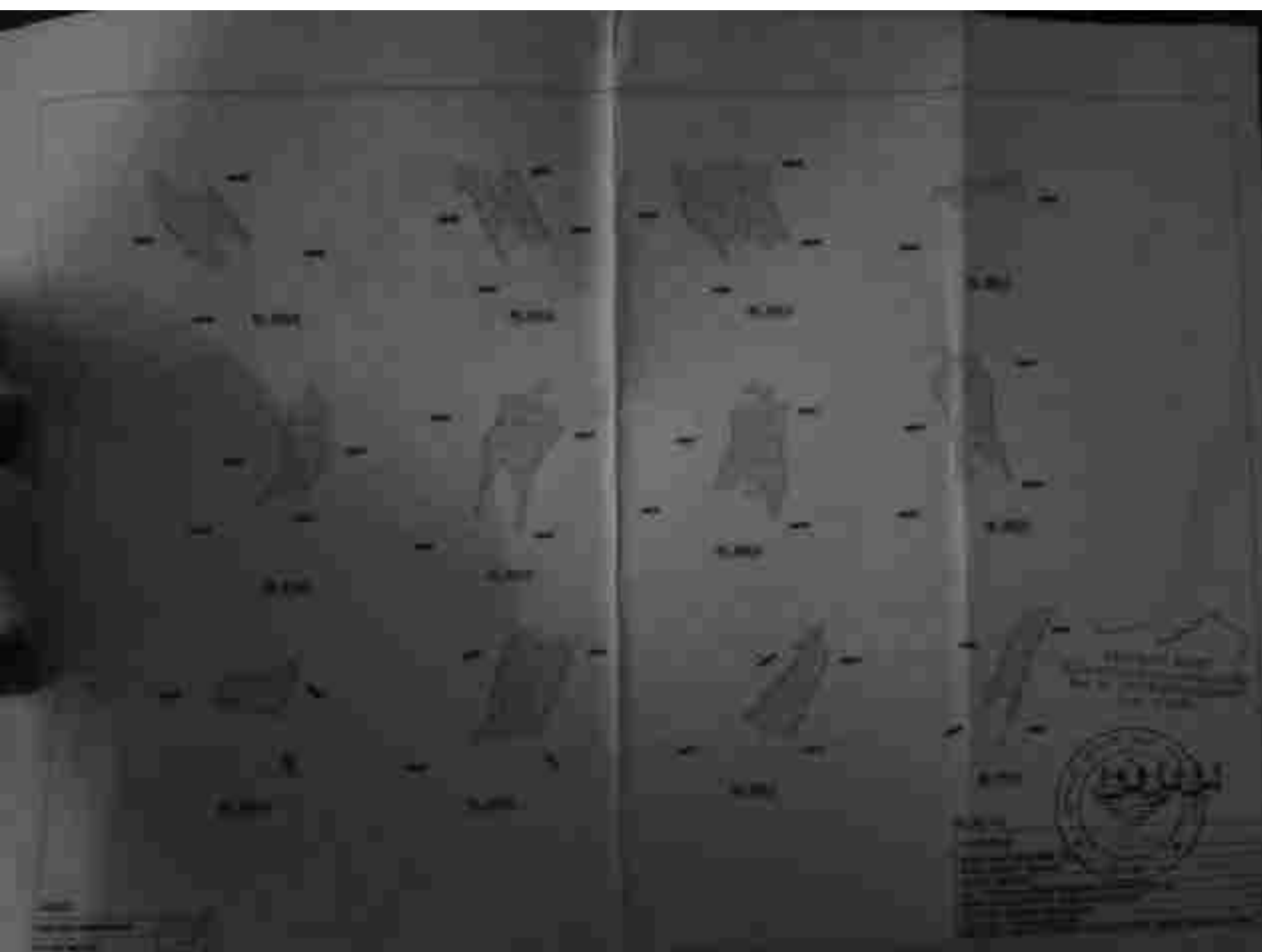


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प्रेमक,

निदेशक,

भूतल एवं खानिकी इकाई,
उद्योग निदेशालय उत्तराखण्ड
देहरादून।

स्वा. में

प्रबन्ध निदेशक,
उत्तराखण्ड वन विकास निगम लि०,
आत्मदा विकास भवन,
73, नेहरू रोड देहरादून।

संख्या:

/30370/मा0प्लान/ 12.05.2016-17

दिनांक 12.05.2017

विषय:-

पट्टाधारक उत्तराखण्ड वन विकास निगम लि० के पक्ष में जनपद देहरादून के आरक्षित वन क्षेत्रान्तर्गत स्थित खनन लॉट सौम नदी-3 कुल क्षेत्रफल 270.00 हे० मध्ये 135.00 हे० आरक्षित वन भूमि में उपखनिज बालू, बजरी, बोल्टर के खनन हेतु दिनांक 03.04.2017 से 25.05.2019 तक शासनादेश संख्या 490/VII-1/2012/123-ख/2011 दिनांक 03 अप्रैल 2012 में निर्धारित शर्तों/प्रतिबन्धों तथा उत्तराखण्ड उपखनिज (बालू, बजरी, बोल्टर) वृगान नीति 2016 के प्रावधानों के अन्तर्गत खनन पट्टे पर स्वीकृत क्षेत्र की खनन योजना के अनुमोदन के सम्बन्ध में।

संदर्भ:-

आर्क द्वारा जनपद देहरादून के आरक्षित वन क्षेत्रान्तर्गत स्थित खनन लॉट सौम नदी-3 कुल क्षेत्रफल 270.00 हे० मध्ये 135.00 हे० आरक्षित वन भूमि में जिसमें शासनादेश संख्या 59/VII-1/123-ख/2011 दिनांक 16 मार्च 2017 के द्वारा आर्क के पक्ष में उपखनिज बालू/बजरी/बोल्टर का दिनांक 03.04.2017 से 25.05.2019 तक शासनादेश संख्या 490/VII-1/2012/123-ख/2011 दिनांक 03 अप्रैल 2012 में निर्धारित शर्तों/प्रतिबन्धों तथा उत्तराखण्ड उपखनिज (बालू, बजरी, बोल्टर) वृगान नीति 2016 के प्रावधानों के अन्तर्गत खनन पट्टे स्वीकृत किया गया है। से सम्बन्धित प्रस्तुत खनन योजना जी कि सी भूधन पॉली आर०ए०/000/180/2009/A में द्वारा तैयार की गयी है, जो वैज्ञानिक, तकनीकी एवं पर्यावरण सुरक्षा के दृष्टिकोण से खनन संक्रियाओं के सुविशेषित संयोजन एवं उपयुक्त पाये जाने के दृष्टिकोण उत्तराखण्ड उपखनिज परिवहार नियमावली-2001 के नियम-34 एवं उत्तराखण्ड उपखनिज नीति-2015 के विन्दु 30-6 (2) एवं उत्तराखण्ड उपखनिज (बालू, बजरी, बोल्टर) वृगान नीति 2016 विन्दु-8(क) के अन्तर्गत प्रदत्त अभिलेख का प्रयोग करते हुए प्रस्तुत खनन योजना का अनुमोदन निम्नलिखित शर्तों के अधीन किया जाता है:-

शर्तें

1. खनन योजना का अनुमोदन शासनादेश संख्या 59/VII-1/1/123-ख/2011 दिनांक 16 मार्च 2017 के अनुसार दिनांक 03.04.2017 से दिनांक 25.05.2019 तक की अवधि के लिए किया गया है।
2. पट्टाधारक द्वारा वन एवं पर्यावरण संचालन माता सत्कार के पत्र संख्या No. F-11015/141/2009-1 (AMMY Dated 15th April 2011, P.No 8-62/99-FC dated 26 May, 2009 and ENO-62770-FC 02 dated 2009) की समस्त शर्तों का अनुपालन करना।

प्रस्तावित द्वारा शासनादेश संख्या शासनादेश संख्या 59/VII-I-1/123-ख/2011 दिनांक 18 मार्च 2017 एवं शासनादेश संख्या 490/VII-I/2012/123-ख/2011 दिनांक 03 अप्रैल, 2012 पट्टा विलेख की समस्त बातों का अनुपालन करेगा।

प्रस्तावित खनन क्षेत्र में खनन कार्य अनुमोदित खनन योजना के अनुसार किया जायेगा तथा खनन योजना के अनुसार प्रथम वर्ष में 8,60,000.00 टन एवं द्वितीय वर्ष में 8,60,000.00 टन उपखनिज का खनन किया जायेगा।

यह खनन योजना अन्य किसी अधिनियम जो कि इस खान या क्षेत्र पर लागू होती है या समय-समय पर राज्य सरकार या केन्द्र सरकार या अन्य किसी संस्थान द्वारा प्रख्यापित किये जाते हैं, को छोड़ कर अनुमोदित की जाती है।

यह खनन योजना धन (संरक्षण) अधिनियम-1980, धन संरक्षण नियमावली 1981 और अन्य सम्बन्धित अधिनियम और नियमावली, आदेश और दिशा निर्देश जो कि इस खनन पट्टे पर समय-समय पर दिये जाते लागू होंगे।

अनुमोदित खनन योजना किसी भी प्रभावी क्षेत्रान्तर्गत गानगीय न्यायालय के आदेश एवं दिशा निर्देश के लागू होने को बाधित नहीं करती है।

अनुमोदित अवधि में किये गये खनन कार्य के निरीक्षण के उपरान्त यदि खनन योजना में संशोधन हेतु आदेश दिये जाते हैं तो संशोधित खनन योजना प्रस्तुत करने का पूर्ण उत्तरदायित्व आवेदक का होगा।

आवद्ध/नियोजित श्रमिकों को सुरक्षात्मक उपकरण प्रदान करने तथा सुरक्षित खनन कार्य करने हेतु सभी आवश्यक साधनानिर्वाह स्वतन्त्रों का दायित्व आवेदक का होगा।

अनुमोदित खनन योजना की एक-एक प्रमाणित प्रति सम्बन्धित जिलाधिकारी कार्यालय एवं निदेशालय के क्षेत्रीय कार्यालय में अभिलेखागार प्रणाली पर प्रस्तुत करने का दायित्व भी आवेदक का होगा।

अनुमोदित खनन योजना के अनुसार आवेदक द्वारा खनन कार्य न किये जाने पर आवेदक के विरुद्ध पट्टे की शर्तों का उल्लंघन माना जायेगा और तदनुसार कार्यवाही की जायेगी।

खनन योजना इस शर्त के साथ अनुमोदित की जा रही है कि पर्यटन श्रमिकों की सुरक्षा एवं स्वास्थ्य की सुरक्षा व्यवस्था करेंगे।

लगभग:- खनन योजना की अनुमोदित प्रति।

भवदीय

(विनय शंकर पाण्डेय)
निदेशक

संख्या 302 / नाप्लान/उपखनिज/2016-17 तददिनांकित।

मिलिए:- जिलाधिकारी, देहरादून को सूचना एवं आवश्यक कार्यवाही हेतु प्रेषित।

(विनय शंकर पाण्डेय)
निदेशक

MINING PLAN
FOR
PICKING / EXTRACTION OF MINOR
MINERALS (SAND, BAJRI AND
BOULDERS) FROM A PART OF RIVER
SONG-3 (AREA- 270.0 HA.), DEHRADUN
FOREST DIVISION, TEHSIL & DISTRICT-
DEHRADUN, UTTARAKHAND

APPLICANT

**Uttarakhand Forest
Development Corporation**

Aranya Vikash Bhawan, 73- Nehru Road
Dehradun, Dist. Dehradun, Phone: 0135-2657610

PREPARED BY

BHUWAN JOSHI

Empanelled Geologist, RQP, IBM
Forest & Rural Development Cell (FRDC)
Empanelment No. URRDA/2008-09/3190
Govt. of Uttarakhand
RQP, Registration No. RQP/DDN/180/2009/A
Indian Bureau of Mines
Govt. of India

Address-

**Progressive Geological & Geotechnical Services
(PG2S)**

REGD. OFFICE

House No.-6, Kamal Bhawan,
Vijay Colony, Lane No.-1, Dehradun
Uttarakhand

E-mail: joshibhuvan@yahoo.co.in
Mo. No. 09412152105

भूतत्व एवं भूगर्भिक सर्वेक्षण
उद्योग निदेशालय, उत्तराखण्ड
देहरादून

पत्रों के आगमन अनुसंधान
क्रमांक 402/सांख्यिक
दिनांक 12-9-2017

STRATEGICAL KNOWLEDGE FOR MAKING
DISASTER RESILIENT COMMUNITY

11/9/17
मुख्य निदेशक

MINING PLAN
FOR PICKING / EXTRACTION OF MINOR MINERALS (SAND,
BAJRI AND BOULDERS) FROM A PART OF RIVER SONG-3
(AREA- 270.0 HA), DEHRADUN FOREST DIVISION, TEHSIL &
DISTRICT- DEHRADUN, UTTARAKHAND

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MINE PLAN

CHAPTER-I

INTRODUCTION

Forest Clearance (FC), Environmental Clearance (EC) & Letter of Consent (LoC), released in the favor of Uttarakhand Forest Development Corporation (UKFDC) for extraction of extraction of Minor minerals (RBM i.e. sand, bajari & boulders) from a part area of Song River called as Song-3 (ANN. 1,2,3) Dehradun Forest Division, Dist. Dehradun, over an area of 270.00 Hec. for the period of 10 years (FC & EC) (Ann. 1&3), the demarcated topographic map (Ann. 6) is provided by UKFDC. The available area of Song-3 is 270hec, falls under Dehradun forest division, Dehradun, Uttarakhand. The said area belongs to reserved forest region. The collection/picking of minor minerals will be carried out from 50% of the total area i.e. 135 Hec. after leaving 25% area on each of the banks for better channelization of the water during the rainy season and to protect the nearby forest land and habitat from the floods. Mineral extraction target is about 3, 00000 cubic meter/year or 6, 60,000 tons/year.

The Song River originates from the Ladwaker forest in the Dehradun District of Uttarakhand. The river flow direction is from north to south and the region falls under the Dehradun Forest Division. The river carries with a huge quantity of sediment consisting of stones, gravel and sand during every monsoon. The sediment in the form of river bed material (RBM) deposited in the last 100 years had changed the shape of the river bed from a valley to a raised land. Because of this, every year during monsoon season, heavy and devastating floods damage large tracts of forest land as well as agricultural land lying on both the banks of the river. Hence, it was thought necessary to make a channel in the middle 50% width of the river to create an area of cross section for the river water to flow unhindered during the monsoon season. The Ministry of Environment and Forest of India has agreed in principle and issued the

1 | PROGRESSIVE GEOLOGICAL & GEOTECHNICAL SERVICES (PGGS)



BHUVAN JOSHI

B. Q. S. Indian Bureau of Survey (BQS)

Reg. No. 100/2000/10000

Govt. of India

State Government to get and estimate of annual permissible extraction and rate of sedimentation along with the total approximate RBM available.

Uttarakhand Forest Development Corporation (UKFDC) is a statutory body constituted by the State Government. The Corporation was formed for the better preservation, supervision and development of forest also for better exploitation of forest produce within the State and for matters connected therewith.

The Mining Plan of the proposed area is prepared by Bhuwan Joshi, RQP & Geological Consultant, Proprietor- Progressive Geological & Geotechnical Services, 6- Vijay Colony, Lane-1, New Cant Road, Dehradun, Registration No. RQP/DEN/180/2009/A, authorized by Uttarakhand Forest Development Corporation (UKFDC) for preparation of said Mining Plan.



CHAPTER-2

GENERAL

2.1	Name of the Applicant	Uttarakhand Forest Development Corporation (UFDC)
	Address	Aranya Vikash Bhawan, 73-Nehru Road, Dehradun
	District	Dehradun
	State	Uttarakhand
	Pin Code	248001
	Phone	0135-2657610, Fax: 0135-2655488, Email: uafdemd@yahoo.com
2.2	Status of the Applicant	Uttarakhand Forest Development Corporation (UFDC) is a statutory body constituted by the Govt. of Uttarakhand
2.3	Mineral(s) which the applicant intends to mine	Sand, Bajri and Boulder. The mineral collected/extracted from the lease area shall be sold in the open market as per the demand.
2.4	Period for which the mining lease is required or granted / renewed	a) Approval in principle is granted by MoEF (FC Division), GOI vide letter No. F.No. 8-62/99-FC dated 26th May 2009 & dated 2nd June 2009 for Ten years. b) State Government consent for FIA



		clearance is granted vide letter no. 1929/VII-I /163 Rha/2009, dated 8 December 2009. c) Environmental Clearance is granted by MoEP (IA Division) vide letter no. J-11015/341/2009-IA.II (81), dated 15th April 2011. d) Concern about this proposed mining over Song-3 taken by Geology & Mining Department, Govt. of Uttarakhand vide letter no. Avid-51/Ddn/Khamun/bhu.khani.ekai/2008-9, dated 19 February 2009 (Docs. attached as Ann. 1,2,3,4)
25	Name of the RQP preparing the mining plan	Bhawan Joshi
	Address	C/o B.S. Rawat Kamal Bhawan House No. 6 Vijay Colony Lane No. 1 New Chon Road, Dehradun (Uttarakhand) 248001
	Phone	+91-9412152105
	EMAIL	joshihbhawan@yahoo.co.in
	Registration No.	RQP/DDN/189/2009

4 | PROGRESSIVE GEOLOGICAL & GEOTECHNICAL SERVICES (PGGS)

RQP Registration No. RQP/DDN/189/2009



every aspect of the environment. Thus there was a need for channelization of rivers for which extraction of sand through mining was expedient. The haphazard mining of river bed material being practiced for now long through unregulated, uncontrolled and illegal manner added almost an irreversible damage to the environment, which became a cause of serious concern. Though sand is very important mineral source for development, its mining through scientific methods have also become equally imperative. It is for this purpose that 'mining plan' is being drawn so that all its aspects are taken care of justifiably, according to law, protecting the environment, removing all adverse impacts and creating a direct and indirect employment opportunities, improving socio-economic conditions of the local inhabitants and all round status of life, achieving thereby a sustainable development. Besides above, the process of mining of minor minerals is a constant source of revenue generation to the State Government.

3.2 PROJECT BACKGROUND

Status and Stages of regulatory clearances

- 1- Approval in principle is granted by MoEF (FC Division), GOI vide letter No. F-No. 8-62/99-FC dated 26th May 2009 & dated 2nd June 2009 for ten years.
- 2- State Government consent for EIA clearance is granted vide letter no. 1929/VII-1/163Kha/2009 dated 8 Dec, 2009.
- 3- Environmental Clearance is granted by MoEF (IA Division) vide letter no. J-11015/341/2009-IA-II (M), dated 15th April 2011.
- 4- Concern about this proposed mining over Song3 taken by Geology & Mining Department, Govt. of Uttarakhand vide letter no. vivid/51/Ddn/Khanan/bhu.khani.eia/2008-9, dated 19 February 2009.
- 5- State Govt. consent about the about this proposed mining vide letter no 490/VII-1/2012/123-Kha/2001, dated 03 April 2012 (ann. 5).

6 | PROGRESSIVE GEOLOGICAL & GEOTECHNICAL SERVICES (PG25)



INTER/AN-10511
 NATIONAL INSTITUTE OF MINING
 100, KANUNO, NEW DELHI
 INDIA

This mine plan is being prepared to abide by change in Mining Policy as per Gazette of Uttarakhand State Government, Industrial Development Section No: 1033/VII-1/2015/146-3772010, dated 31st July, 2015.

3.3 LOCATION, GENERAL AND ACCESSIBILITY

3.3.1 LOCATION

(a)	Details of Area	Location Map is attached as Plate No. 1
(b)	District and State	Dehradun, Uttarakhand
(c)	Tehsil	Dehradun & Doiwala/ Dehradun Forest Division
(d)	Village	There are many villages lining the bank area of Song-3; Chhodamniwala, Khairi villages fall on the west bank while Fatepur, Majrigrant on the east bank of the river.
(e)	Khasra No./ Plot No./ Block Range /	Dehradun Forest Division
(f)	Felling Series etc.	None
(g)	Area (hectares)	270 hac
(h)	Whether the area is in forest (please specify whether protected, reserved etc.)	Yes, Dehradun Forest Division, many reserved forests regions surround the project area. They are Lachhiwala Reserved Forest



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2015

		Dwara Reserved Forest Paled Reserved Forest Malkot Reserved Forest Kansrao Reserved Forest Barko Reserved Forest Motichur Reserved Forest
(f)	Ownership/ Occupancy	Govt. Land, Forest Department (Map Attached as Ann. 6)
(g)	Latitude	30° 08' 24.30" to 30° 06' 52.78" North
	Longitude	78° 07' 51.41" to 78° 07' 30.72" East

3.3.2 GENERAL

(a)	Mineral being worked	Sand, Boulder and Bajri
(b)	Period of mining Lease/permission	Approval in principle is granted by MoEF (FC Division), GOI vide letter No: F-No. 8-62/89-FC dated 26th May 2009 & dated 2nd June 2009 for ten years, Mining Plan is prepared for Five years, attached as Annexure I.
(c)	Category of Landuse	Forest Land
(d)	General Ground Level	400 m above MSL
(e)	Elevation Range of River Bed	377m to 428m



GEOLOGY & EXPLORATION

4.1 GEOLOGY

Geologically the project area belongs to Doon gravels i.e. the area falls in the Intermountain Doon Valley and is underlain by recent to sub recent Doon Gravels, which lie over the Upper Siwalik sediments. The Doon gravels have been broadly divided in older Doon Gravels and younger Doon Gravels. The older Doon Gravel consists of partly of crushed Upper Siwalik Cobbles, Angular Pebbles of Quartzites, Slates and Shales from the Nagthai, Chandpur and Tal formations and Limestone Pebbles from Krol limestone alternating with clay beds.

The younger Doon Gravels rest unconformably over the older Doon gravels in the northern part. The disconformable relationship gradually disappears in the southern part. The younger Doon gravels are characterized by very large boulders in the alluvial fans and debris flow deposits and consist of moderately sorted mixture of clay, sand, gravels and boulders. The sandy and gravelly units are separated from each other by clay beds. The thickness of these units varies from place to place and also may be traced laterally.

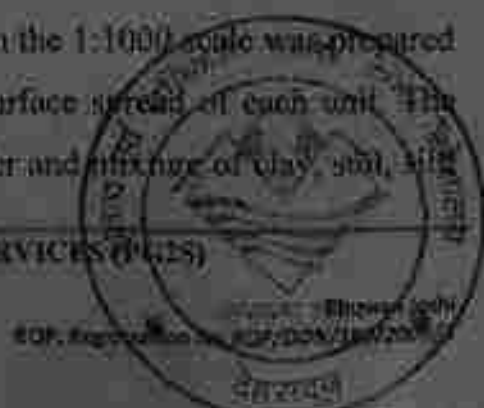
4.2 EXPLORATION

Adequate amount of sand, bajri and boulder in reserve is available for meeting consumer demand. Moreover mining will be carried out by batch rotation manner and the mined out area is fully replenishable.

4.3 ESTIMATION OF RESERVE

The method of cross section has been adopted for computing the reserve. The mining lease boundary, proven and mining limits are marked on the plan which is thereafter transferred to cross section for determining the different categories of reserve.

In order to calculate the mineable reserve the geological map on the 1:1000 scale was prepared and main litho units were marked on the plan to know the surface spread of each unit. The different constituents of the deposits such as sand, bajri, boulder and mixture of clay, sand, silt



based on sized classification were considered for the reserve calculation. Although it is not possible to mark these units separately on the geological map, as such five pits of 1x1x1 meters were got dug in the mineable area and material so excavated was separated into different size and their percentage was worked out. This percentage was taken into account during calculation of the reserve. The cumulative result of the test pits are given in the following Table no.1.

Table No. 1. Classification of Minerals available

Sr. No.	Mineral	Size	Percentage
1.	Sand	0.06-2 mm	70%
2.	Bojri	8-64 mm	8%
3.	Boulder	256 mm<	20%
4.	Silt/clay	1-62.5 μ m	2%

Bulk density is taken as 2.2 for calculation (as per GoUK, Industrial Development Section Notification: 1033/VII-1/ 2015/ 146 -Kha/ 2010, dated 31st July 2015). Calculation of reserve has been done as following:

1. Cross sections have been prepared at intervals. Refer Plate No.3
2. Area of every cross section has been taken. For example, if the area of cross section A-A' is 'X' and area of B-B' is 'Y', then average of both calculating the reserve (i.e. $(X+Y)/2$).
3. Distance between the two sections has been multiplied with the average area of the two sections to get the total volume. Eg. $[(X+Y)/2] \times \text{Distance between A-A' \& B-B'}$.

The overall geological reserves have been estimated through geological cross section method. The area of each section line is calculated. The section area is multiplied by the strike influence



to get the volume. The target geological reserve classified in to three categories i.e. Proved reserve, Probable reserve & Possible reserve. In this project the proved reserve assessed as 10m depth & further 5m as probable reserve whereas 3m considered as possible reserve. Out of total volume the 80% considered as the recoverable reserve & 2.2 bulk density.

Table No. 2. Reserve Estimation (Proved Reserve)

Cross-Section Line	Sectional Area, M ²	Strike influence (m)	Volume (m ³)	Quantity (MT)
A-A' to B-B'	46289	95.28	3528332.7	7762332.01
B-B' to C-C'	45648.5	76.37	2788940.7	6135669.66
Total	-	-	6317273.4	13898001.67

Table No. 3. Reserve Estimation (Probable Reserve)

Cross-Section Line	Sectional Area, M ²	Strike influence interval (m)	Volume (m ³)	Quantity (MT)
A-A' to B-B'	23144.5	95.28	1764166.36	3881165.99
B-B' to C-C'	17824.5	76.37	1394485.65	3067868.43
Total	-	-	3158652.01	6949034.42

Table No. 4. Reserve Estimation (Possible Reserve)



Cross-Section Line	Sectional Area, M ²	Strike influence interval (m)	Volume (m ³)	Quantity (MET)
A-A' to B-B'	10886.5	95.28	1058484.57	2328666.06
B-B' to C-C'	13694.5	76.37	1036679.17	1840694.17
Total	-	-	1895163.74	4169360.23

Geological Reserves:

The summarized category-wise geological reserve estimated by is:-

Proved Reserve- 13898001.67 Tons

Probable Reserve- 6949034.42 Tons

Possible Reserve- 4169360.23 Tons

Mineable reserve:-

The proved mineable reserve is calculated as referred in Uttarakhand Minor Mineral Policy 2015 for Category C, minor mineral area (Zone C). The mineable reserve within allowable area is 44, 55000 tonnes/year. This is fully replenished every year.

Quantity of minerals (tonnes) = mine area x 1.5 m depth x 2.2 bulk density

4.4 MINE REPLENISHMENT

It has been assessed that proposed mining area/ mineral picking area generally gets flooded during monsoon season and gets completely replenished. However, The Department of



Geology & Mining may monitor the replenishment within the lease area and specific consultation or study may be conducted whenever required.

CHAPTER-5

MINING

5.1 METHOD OF WORKING

The mining process is conventionally opencast river bed mining of minor minerals with hand tools, shovels and pan without drilling & blasting. Proposed mining will be start from lowest level of river end to highest river end phase wise and block wise going to the maximum depth of 1.5m bgl or above ground water level whichever is less. Length/size of the blocks/pits may be decided on the spot convenience & available material but a ideal way of progression of mining pits as left to right or series wise lower to upper level i.e. downstream to upstream direction. Mining would be carried within 1st half of the course as demarcated & mapped. Each year the mining will be carried within about 2,00,000 sqm area as per yearly Target reserves i.e. 3,00,000m³ with area wise rotation method. Total 13,50,000m³ area is available and replenishable yearly. Retaining wall within both banks would be provided of about 2.5 to 3m to check too erosion & flooding during monsoon season. Mineral collection will be done for a period of 225 days in a year.



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Following guidelines will be followed while carrying out mining:

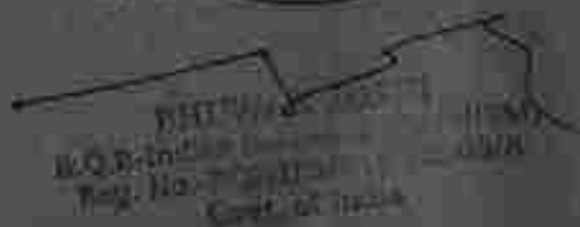
- 1- Conditions under which Forest Clearance has been granted by MoEF (FC Division), GOI vide letter No. F.No. 8-62/99-FC dated 26th May 2009 & dated 2nd June 2009 for ten years.
- 2- State Govt. concern about the about this proposed mining vide letter no 490/VII-1/2012/123-4ha/2001, dated 03 April 2012 (ann. 5).
- 3- Conditions under which Environmental Clearance is granted by MoEF (EA Division) vide letter no J-11015/341/2009-4A, II (M), dated 15th April 2011.
- 4- Concern about this proposed mining over Song-3 taken by Geology & Mining Department, Government of Uttarakhand vide letter no vivid/51/Ddn/Khanam/bhu.khanam/2008-9, dated 19 February 2009
- 5- State Govt. consent about the about this proposed mining vide letter no 490/VII-1/2012/123-4ha/2001, dated 03 April 2012 (ann. 5).
- 6- The Uttarakhand Minor Mineral (Sand, Bajri, Boulder and Bricks etc.) Policy 2015
- 7- Uttarakhand Secondary Mineral Policy-2015
- 8- All other guidelines, Circulars, Gazettes of the Ministry of Environment & Forests and Government of Uttarakhand.

5.2 EXTENT OF MECHANIZATION

No mechanization is required as the operation will be manual method without drilling or blasting.

5.3 MODE OF WORKING

For the optimum utilization of the mineral available in the lease area, mine working has been planned and scientific layout has been designed considering the following parameters:



- Extraction of minor minerals shall be restricted to middle half of the width of the river bed after leaving intact the 1/4th of width of the river bed along its each bank.
- The approach road will be repaired from time to time
- The quarry planning is done in simple rotational manner since deposit is very simple, shallow and beds are almost horizontal.
- Simultaneous plantation will also be done within the left bank area & boundary to protect the toe erosion and landslide phenomena.

5.4 YEARWISE DEVELOPMENT & PRODUCTION PROGRAM

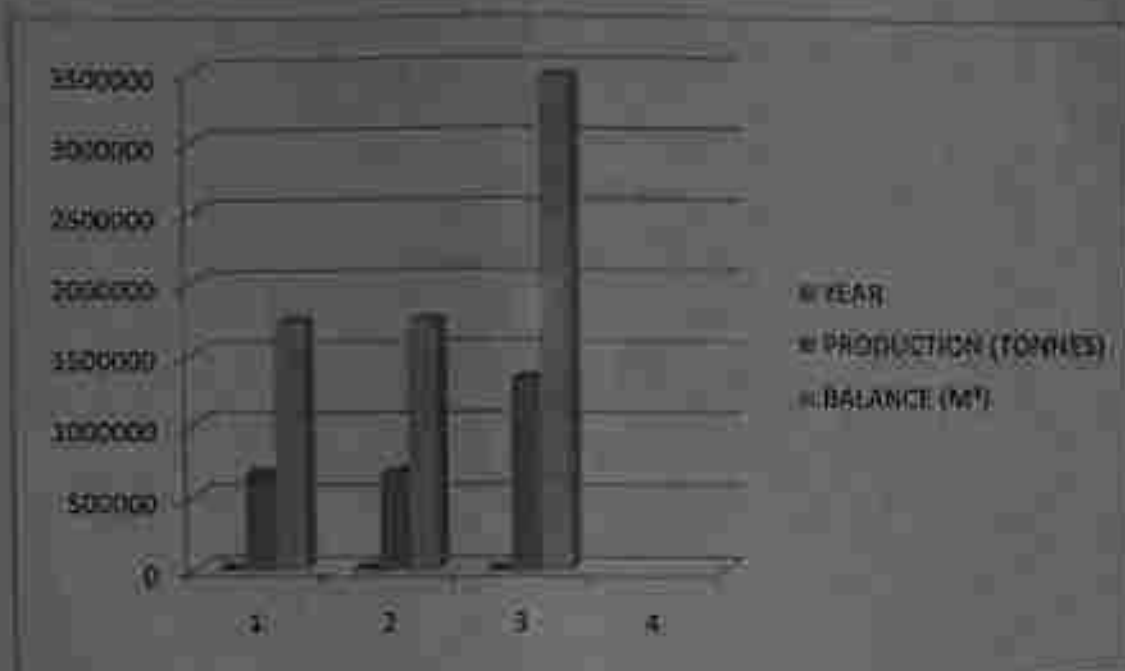
Table No. 5.

PRODUCTION FOR REMAINING TWO YEARS

YEAR (<u>remaining</u> <u>two years</u>)	MINEABLE AREA (TOTAL LEASE AREA- NON WORKABLE AREA)	DEPTH (M)	PRODUCTION (TONNES)	BALANCE (M ³)
1 st Year	2,00,000m ²	1.5	6,60,000	17,25,000
2 nd Year	2,00,000m ²	1.5	6,60,000	17,25,000
TOTAL	-	-	13,20,000 TONS	34,50,000 M ³



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COLUMN GRAPH SHOWING PRODUCTION IN TWO YEARS

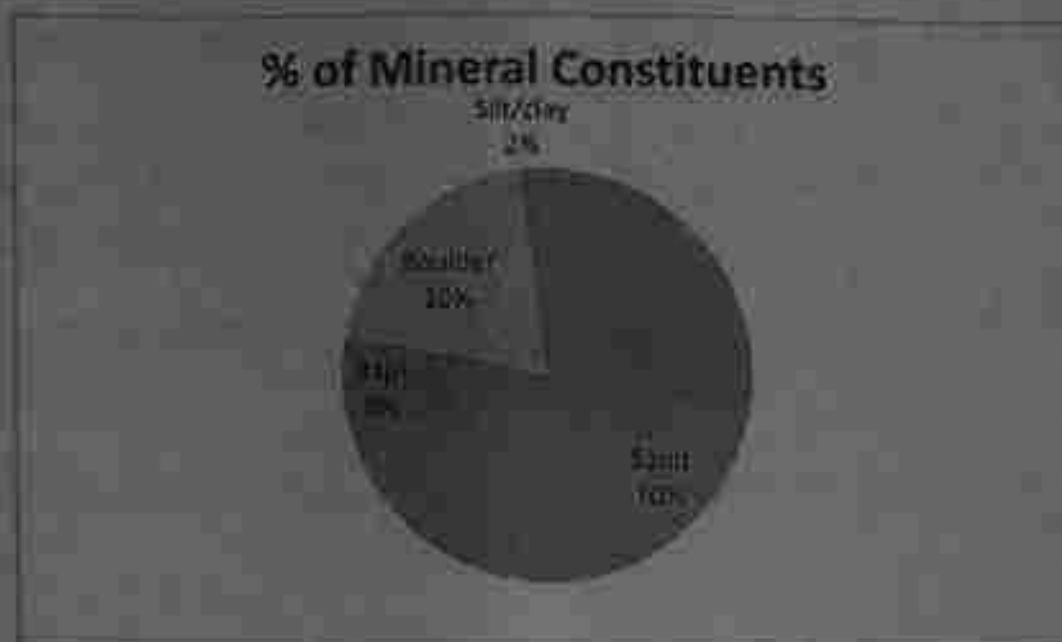
5.5 DEVELOPMENT & PRODUCTION FOR REMAINING FIRST YEAR

Development & Production Programme for remaining first year; the mining is proposed in 2,00,000 sqm area. The production of each mineral constituent would be on an average as under:-

Table No.6.
FIRST YEAR

(3760-383M)

Sr. No.	Mineral Constituents	Production (±) in tonnes
1.	Sand	4,62,000.00
2.	Bajri	52,800.00
3.	Boulder	1,32,000.00
4.	Silt/clay	13,200.00
TOTAL		6,60,000



Pie Graph of % of Mineral Constituents

5.6 DEVELOPMENT & PRODUCTION FOR REMAINING SECOND YEAR

Development & Production Programme for remaining Second year, the mining is proposed in 2,00,000sqm area. The production of each mineral constituent would be on an average as under:-

Table No.7,
SECOND YEAR

(382-389M)

Sr. No.	Mineral Constituents	Production (±) in tonnes
1.	Sand	4,62,000.00
2.	Gravel	52,800.00
3.	Boulder	1,32,000.00
4.	Silt/clay	13,200.00
TOTAL		6,60,000

3.14 MINERAL PROJECTION

The mineral mining will consist of sand and stone production may vary to a great extent depending upon availability. Therefore, quantity of sand quoted is estimated on highest possible. The figures given here above may increase. The production target is as shown.

3.15 DEVELOPMENT AND PRODUCTION PROGRAMME FOR REMAINING TWO YEARS

Prior to start production, some the work items development work has to be completed as under

- Final sand preparation
- Location of a site office and storage shed for material
- Road work surrounding all around the mining area may be provided to avoid accident and transportation easy.
- Construction of boundary wall towards back side (river bank) to derive from the private & drinking.

CHAPTER-6

DREDGING & BLASTING

Dredging and blasting is required to undertake mining of riverbed materials.

14. PROJECT WORK: CONCEPTUAL & CONSTRUCTIONAL SERVICES (JICA)



CHAPTER-7

WATER AND DRAINAGE SYSTEM

As per the proposed mining the working shall be confined upto 1.5m bgl or above the ground water table, whichever is less. Hence no water clogging is likely to be encountered. Therefore, there is no need of any such arrangements.

CHAPTER-8

DISPOSAL OF WASTE MATERIAL.

2% waste i.e. about 13200 tons/year will be generated in the form of slt/clay etc. This will be dumped back into the mined area.

Sewerage System: ~

Portable Toilets will be provided.

Solid Waste Management:

It would be in fitness of things to repeat that there will be no solid waste generated in the proposed activity.

CHAPTER-9

USE OF MINERALS

Sand, ball and boulders are used in construction activities like building, roads, bridges etc. The requirement for the mineral is always high in the nearby cities and towns.



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CHAPTER-10

OTHERS

1- SITE SERVICES

The site services like stay/rest shelters, portable toilets, first aid facility and drinking water will be provided.

2- WATER REQUIREMENT

Total water requirement for the project is 1 KLD, it breaks up as under:

Table No. 11. Water Requirement

S. No.	Purpose	Water Requirement (KLD)
1.	Dust Suppression	0.5
2.	Drinking	1.0
3.	Miscellaneous (Plantation etc)	0.3
Total		1.8

3- EMPLOYMENT

Depending upon the General shifts working, following will be the proposed manpower.

Table No. 12. Employment Break-up

S.No.	Category	Numbers
1.	Mining Competent Person	1
2.	Administrative	1
3.	Supervisor	1
4.	Unskilled/workers	500
	Total	503



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Bidders above Geological Mining & Environmental Consultancy Services may be hired as per requirement on part-time basis or per day basis.

4- SAFETY PROVISION

All provision in safety rules & regulation will be maintained by providing required materials to the employees. The Applicant will provide safety shoes, First Aid facility, drinking water etc to all the employees. There will be no violation of safety provision.

CHAPTER-11

MINERAL PROCESSING & TRANSPORT

MINERAL BENEFICIATION

Mineral Sand doesn't require processing or beneficiation. The excavated mineral will be directly loaded into the bucket.

HAULAGE AND SURFACE TRANSPORT

Mode of transportation of material is by trucks/tractors, of size of 8-10 tonnes capacity have been planned. Mining area is connected with an unmetalled road upto the NH 72. The mine road is adequate to permit easy maneuverability of trucks allowing cross overs and changing points. Water will be sprayed two times a day by tractor mounted sprinklers until dust remains airborne.

MINE MACHINERY

Mining will be done using hand tools like shovel, spades, pick-axes. Other machineries on the mining site will be water sprinkler.



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CHAPTER-12

ENVIRONMENT MANAGEMENT PLAN

12.1 SOLID WASTE MANAGEMENT

2% waste will be generated in the form of silt/clay etc. This will be dumped back into the mined area.

Sewerage System:

Portable Toilets will be provided.

Solid Waste Management:

It would be in fitness of things to repeat that there will be no solid waste generated in the proposed activity.

12.2 PLANTATION

Plantation in the mining area is not possible. Instead, Plantation will be done along both banks of the river with consultation of local authorities. Every year 25 to 30 trees will be planted.

12.3 BASELINE INFORMATION

12.3.1 Land Use Pattern

Entire area is a wasteland & barren; scattered seasonal bushes & shrubs cover area. There is no agricultural land most of the land is barren.

12.3.2 Flora & Fauna

Deliradun has a rich vegetation cover. Although the major portion of Doon is occupied by the Sal (*Shorea robusta*) but miscellaneous forests are also found here. The hydro-geological and meteorological conditions of the valley are responsible for the condition for the different types of forest cover. Sal and its associates can be classified in Northern tropical moist and dry



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deciduous communities. They are found throughout the Siwaliks across large tracts of the valley and also along the lower foothills of the Himalayas. A presence of large proportion of clay soil and better drainage set as favorable conditions for the growth of Sal trees.

Faunal Community: as per data provided by UKFDC, in general following categories of faunal classification given in the EIA report.

(i) **Core Zone:** There was no unique faunal community within the core zone of the project area, except most common ones like toad, frog, crow, Sparrow and mada etc.

(ii) **Buffer Zone:** In 10 km radius around the project area:

Amphibians: Among amphibians toad (*Bufo* sp.) and frog (*Rana tigrina*).

English Name - Scientific Name

Common Toad- *Bufo melanostictus*

India bull frog- *Rana tigrina*

India tree frog- *Polypedates maculatus*

Marbled toad- *Bufo atomaticus*

Skipping frog- *Rana cymophyllis*

a. **Reptiles:** Among reptiles Indian garden lizards (*Calotes versicolor*), house lizards (*Hemidactylus* sp.).

b. **Mammals:** Among mammals Indian palm squirrel (*Fumambulus pennanti*), cat, dog (*Canis* sp.), cow, Buffalo, rat (*Rattus rattus*) etc.

c. **Aves:** Among aves common birds like crow (*Corvus splendens*), sparrow (*Passer domesticus*), parrot (*Psittacula krameri*), mya (*Ploceus philippinus*), peafowl (*Pavo cristatus*), pigeon (*Columba livia*), Egretta sp, etc.

12.3.3 Climatic Condition

Dehradun valley has moderate climate because of oneness of Himalaya and due to average elevation of 700 meters above sea level. The climate of the study area exhibits the character of sub-temperate climate of mountain areas because of the combined effect of plain-like warm



climate and cool inner Himalayan climate. The mean minimum and maximum annual temperature varies from 2.70C in December and January to about 26.0C in May and June. Only the months of May and June are hot though they are mild and oppressive. Like all other parts of India, Dehradun is also greatly affected by the Monsoons that generally break in the middle of June and remains active till the middle of the September. The months of July and August have heaviest rainfall. From October to December, the climate remains dry. In the end of December, January and early February the valley receives winter rains. The months of March and April receive very less rainfall. Normally, the rainfall in Dehradun is sufficient and averages around 2000mm.

12.3.4 Social Infrastructure

The nearest health & education facilities are available in all nearby villages of the proposed mining area. Other major facilities are available in Rishikesh, Dehra Dun and Dehradun (about 15 to 16 km range).

12.4 EFFECT OF MINING ON ENVIRONMENT

Due to the mining activity following things are going to be affected

- Degradation of land
- Destruction of Flora & Fauna
- Air Pollution
- Water Pollution
- Noise Pollution

These effects will be either minimized or nullified by adopting following measures:

- o The mining activity will take place in barren/waste land which is of no use to the inhabitants or ambient environment.
- o Due to manual mining there may be generation of dust which in turn affects the ambient air. This may be maintained to the permissible limit by doing water spraying on the haul road.



- c. Mining will be done above the ground water table and thus it is not going to be affected concerning the ground water. There will be no discharge of mine water to the nearby water source, except minewater during rainy season, and thus there will be no contamination of water of the nearby water course, if at all present.
- d. Due to manual mining there may be no generation of noise.
- e. Ground vibration & Noise pollution it is not possible because manual mining.
- f. The applicant has plan for plantation along the both banks with permission of local authority.

CHAPTER-13

MINE CLOSURE PLAN

13.1 Introduction:- Forest Clearance (FC), Environment Clearance (EC) & Letter of Consent (LoC), released in the favor of Uttarakhand Forest Development Corporation (UKFDC) for extraction of extraction of Minor minerals (RBM) i.e. sand, bajari & boulders) from a part area of Song River called as Song-3 (ANN. 1.2.3) Dehradun Forest Division, Dist. Dehradun, over an area of 270.00 Hec. for the period of 10 years (FC & EC) (Ann. 1&3). The demarcated topographic map (Ann. 6) is provided by UKFDC. The available area of Song-3 is 270hac, falls under Dehradun forest division, Dehradun, Uttarakhand. The said area belongs to reserved forest region. The collection/picking of minor minerals will be carried out from 50% of the total area i.e. 135 Hec. after leaving 25% area on each of the banks for better channelization of the water during the rainy season and to protect the nearby forest land and habitat from the floods. Mineral extraction target is about 3,00,000 cubic meter/year or 60,000 tons/year.

13.2 Name of the Lessee:-

As already discussed in previous paragraphs.



13.3 Location of Mine:-

Already discussed in previous paragraphs

13.4 Detail Description of the Area:-

Already discussed in previous paragraphs

13.5 Land Use Pattern of the Area:-

Already discussed in previous paragraphs

13.6 Method of Mining:-

1. The mining/ collection of minerals shall involve shovelling by simple hand tool and loading into trucks/ tractors- trailers for transporting them to crusher site.
2. Picking and extraction of minor minerals/ trenches and pits for the mining purpose shall be made in such a way that these should not be more than 1.5 meter
3. With the replenishment of the pits and trenches during the high floods, the process of the controlled mining can continue year after year.
4. Though the major mining activities will be under taken during the dry seasons but restrained mining can be under taken during the dry days of rainy season.

13.7 Name & Address of the Recognized Person:-

Already discussed in previous paragraphs

13.8 Mine Description:-

Picking / extraction of minor minerals (sand, baji & boulders), detail already discussed in previous paragraphs

13.9 Geology:-

Already discussed in previous paragraphs



13.14 Safety and Security

The picking and extractions of minor minerals shall be carried on only up to a depth of 1.5meter, no blasting is involved. Hence there is no danger and no special precaution is required. However standard precautions are always to be kept in mine for the safety of workers and general public.

13.15 Disaster Management and Risk Management

No blasting is involved, picking and extractions of minor minerals (sand, bairs & boulders) shall be carried on only up to a depth of 1.5meter therefore negligible scope of landslides & subsidence.

CHAPTER-14

CONCLUSION

The project involves collection of sand, bairs and boulder. The river bed material extracted is in high demand in the local market which is used in making bridges, road & building material etc. The project operation will provide livelihood to the poorest section of the society. It provides employment to the people residing in the vicinity directly or indirectly by the project. The applicant will undertake mining activity as per the plan indicated in this Mine Plan with proper taking care of environment aspects i.e. without disturbing the environment condition.



AUTHORIZATION LETTER BY THE APPLICANT

Uttarakhand Forest Development Corporation (U/FDC), Aranya Vikash Bhawan, 73, Nehru Road, Dehradun hereby authorizes Sri. Bhuvan Joshi, Geological Consultant & ROP, Registration No. ROP/DON/180/2009/A, to prepare Mining Plan under New Mining Policy i.e. Uttarakhand Minor Mineral Policy-2015 (Sand, Bajri, Boulder and Bricks etc) over an area of 270 Hectares for extraction of RRM (sand, bajri and boulders) from a part of Song-3 river zone, Dist. Dehradun, Uttarakhand.

I request the Director, Geology & Mining Department, Uttarakhand, to make further correspondence regarding modification and to collect the approved copies of the aforesaid Mining plan to the said concerned person in his following address or communicate in other modes:-

Name of the ROP- BHUWAN JOSHI
ROP, Registration No. ROP/DON/180/2009/A

Address:-

House No.-6, Kamal Bhawan
Vijay Colony, Lane No.-1, Dehradun
Uttarakhand
E-mail: joshibhuvan@yahoo.co.in
Mo. No. 09412152105

Place Dehradun

Date- 23-11-15

[Signature]
Districtal Logging Manager (Khana)
Uttarakhand Forest Development Corporation
Dehradun





PROGRESSIVE GEOLOGICAL & GEOTECHNICAL SERVICES (PG2S)

HEAD OFFICE

House No. R. Kamal Bhawan,
Vijay Colony, Lane No. 1
Dehradun. Mobile No. 05412357300
Email: joshiibhuvan@yahoo.co.in

BHUVAN JOSHI

Corporate Geologist

Forest & Rural Development Cell (FRDC)

Registration No. U/RTD/2002-09/2100

Govt. of Uttarakhand

RTI, Registration No. RQP/DO/180/2008/A

Indian Bureau of Mines, Govt. of India

Date 02-12-15

CERTIFICATE

I Bhuvan Joshi hereby certify that the provisions of Uttarakhand Minor Mineral Rules Policy- 2015 for extraction of RBM (Sand, Bajri, Boulders etc) have been observed in the preparation of Mining Plan for Picking /Extraction of minor minerals (sand, bajri and boulders) from a part of Song river zone i.e. Song-3, Tahseel & Dist. Dehradun, Uttarakhand, over an area of 270Hac. for Uttarakhand Forest Development Corporation (URFDC), Aranya Vikash Bhawan, 73-Nehru Road, Dehradun.

The information provided and data furnished in this mining plan with Closure Plan is correct to the best of my knowledge.

Place Dehradun.

Date 02-12-15

BHUVAN JOSHI, RQP
Reg. No. - RQP/DO/180/2008/A

BHUVAN JOSHI
B.Q.P-10001 Bureau of Mines (B.M.)
Reg. No. - RQP/DO/180/2008/A
Govt. of India



प्रेषक

शैलेश बगौली,
सचिव,
उत्तराखण्ड शासन।

सेवा में

जिलाधिकारी,
देहरादून।

औद्योगिक विकास अनुभाग-1

देहरादून : दिनांक 16 मार्च 2017

विषय: जनपद देहरादून के आरक्षित वन क्षेत्रान्तर्गत स्थित खनन लाट सींग नदी-3, जाखन नदी-1 एवं जाखन नदी-2 में उपखनिज के घुगान की स्वीकृति के सम्बन्ध में।

सहायक

उपरोक्त विषयक निदेशक, भूतत्व एवं खनिकर्म इकाई, उद्योग निदेशालय, उत्तराखण्ड, देहरादून के पत्र संख्या-916/खनन/देहरादून/भूखनिज/10/2016-17 दिनांक 30 जनवरी, 2017 के संबंध में मुझे यह कहने का निदेश हुआ है कि वन एवं पर्यावरण मंत्रालय, भारत सरकार के पत्र संख्या-08-62/99-FC दिनांक 26 मार्च, 2008 के द्वारा जनपद देहरादून के आरक्षित वन क्षेत्रान्तर्गत स्थित खनन लाट सींग नदी-3 कुल क्षेत्रफल 270 हे० मध्ये 135 हे०, जाखन नदी-1 कुल क्षेत्रफल 195 हे० मध्ये 97.5 हे० एवं जाखन नदी-2 कुल क्षेत्रफल 100 हे० मध्ये 50 हे० क्षेत्र में उपखनिज बालू, बजरी, बोल्टर के घुगान हेतु वन संरक्षण अधिनियम, 1980 की धारा-2 के अन्तर्गत Forest Clearance 10 वर्ष की अवधि अर्थात् 25.05.2019 तक अनुमति प्रदान की गयी है, के दृष्टिगत शासनादेश संख्या-490/VII-1/2012/123-स/2011 दिनांक 03 अप्रैल, 2012 के द्वारा उक्त खनन लाट से 05 वर्ष की अवधि हेतु उपखनिजों के घुगान हेतु उत्तराखण्ड वन विकास निगम को कतिपय शर्तों के अधीन अनुमति प्रदान की गयी, जो दिनांक 02.04.2017 को समाप्त हो रही है।

2- उत्तराखण्ड उपखनिज (बालू, बजरी, बोल्टर) घुगान नीति, 2016 में पूर्व स्वीकृत खनन पट्टी की अवधि विस्तारित किये जाने का प्रावधान न होने के कारण शासनादेश संख्या-490/VII-1/2012/123-स/2011 दिनांक 03 अप्रैल, 2012 के द्वारा जनपद देहरादून के आरक्षित वन क्षेत्रान्तर्गत स्थित खनन लाट सींग नदी-3 कुल क्षेत्रफल 270 हे० मध्ये 135 हे०, जाखन नदी-1 कुल क्षेत्रफल 195 हे० मध्ये 97.5 हे० एवं जाखन नदी-2 कुल क्षेत्रफल 100 हे० मध्ये 50.00 हे० क्षेत्र में 05 वर्ष की अवधि हेतु स्वीकृत खनन पट्टी की अवधि समाप्त होने के पश्चात् वन एवं पर्यावरण मंत्रालय, भारत सरकार द्वारा वन संरक्षण अधिनियम, 1980 की धारा-2 के अन्तर्गत निर्यत Forest Clearance 10 वर्ष की अवधि अर्थात् 25.5.2019 तक होने के दृष्टिगत शासनादेश संख्या-490/VII-1/2012/123-स/2011 दिनांक 03 अप्रैल, 2012 में निर्धारित शर्तों/प्रतिबन्धों तथा उत्तराखण्ड उपखनिज (बालू, बजरी, बोल्टर) घुगान नीति, 2016 के प्रावधानों का अनुपालन किये जाने के अधीन उपखनिजों का घुगान कार्य करने की अनुमति उत्तराखण्ड वन विकास निगम को प्रदान की जाती है।

3- यह अनुमति दिनांक 02.04.2017 से प्रभावी होगी।

कार्यालयीन, सचिव, उत्तराखण्ड शासन

दिनांक 16.03.2017

सचिव



भवदीय

(शैलेश बगौली)
सचिव

संख्या: ८५५ (१)/४४५११/१२३-४/२०११ (प्रतिनिधि)

प्रतिनिधि विधायकता को सुव्यवस्था एवं आवश्यक कार्यवाही हेतु निर्दिष्ट:-

१. सचिव, भारत सरकार, पर्यावरण एवं वन मंत्रालय, पर्यावरण भवन, सी०जी०जी० कॉम्प्लेक्स, लोदी रोड, नई दिल्ली।
२. निजी सचिव, मुख्य सचिव, उत्तराखण्ड शासन को मुख्य सचिव महोदय के संज्ञानार्थ।
३. अपर सचिव, वन, उत्तराखण्ड शासन।
४. आयुक्त, नदियाँ मण्डल, पीडी गढ़वाल।
५. निर्देशक, भूतल एवं खनिजों इकाई, उत्तराखण्ड देहलीद्वारा।
६. प्रमुख वन संरक्षक, उत्तराखण्ड देहलीद्वारा।
७. निदेशक, उत्तराखण्ड वन विकास निगम देहलीद्वारा।
८. गार्ड फाईल।

अज्ञात से

(राजेंद्र सिंह पटियाल)
सुप सचिव



DE

- (vi) The State Government will endeavour to give N.V. as per the orders of Hon'ble Supreme Court of India in (N.V. No. 100 of 1972-1973).
- (vii) Adequate number of temporary work points will be provided at every and odd month to the labourers at work, and proper supply of material will be made available to them.
- (viii) Distribution of material should be done in the ratio of 100:50:50 after having due regard to the work and its nature.
- (ix) There shall be no direct supply of the material for the labour involved in the construction work.
- (x) No material shall be used which is unfit for the purpose and only best quality will be used for the construction of the work.
- (xi) Collection of material shall be done through the local agencies.
- (xii) Housing of labourers will be done under the local agencies.
- (xiii) The labourers engaged in collection work will be provided free transport and other facilities of transport to avoid any loss or damage to the material.
- (xiv) There shall be no collection of material from the open field during monsoon season, i.e. from June to October each year.
- (xv) The labourers shall be paid for any work done after dusk that is specified in the proposal.
- (xvi) Any other condition laid by the U.P. Government, Government of Uttar Pradesh or any other authority is to be taken into account for the purpose of collection and protection of the material.

Yours faithfully,

(M. K. Singh)

Joint Assistant Secretary, Forest Department, Government of Uttar Pradesh

- Copy to:
1. The District Officer, Forest Department, Government of Uttar Pradesh.
 2. The District Officer, Forest Department, Government of Uttar Pradesh.
 3. The District Officer, Forest Department, Government of Uttar Pradesh.
 4. The District Officer, Forest Department, Government of Uttar Pradesh.
 5. The District Officer, Forest Department, Government of Uttar Pradesh.
 6. The District Officer, Forest Department, Government of Uttar Pradesh.

(M. K. Singh)

Joint Assistant Secretary, Forest Department, Government of Uttar Pradesh



GOVERNMENT OF INDIA
Ministry of Environment & Forests
(F&R Division)

Mayavirat Bhawan,
110-001, Connaught Place, New Delhi-110 003
Dated: 02nd June, 2009.

To

The Principal Secretary, Forests,
Forest and Revenue Department,
Government of Uttarakhand,
Dehradun.

Sub: Renewal of permission for 12.50 ha of forest land for collection of sand, baji and boulders from river bed in Jhansi, Dehradun, Uttarakhand.

Sir,

I am directed to refer to Government of Uttarakhand's letter No. S609/14-2-98-300(64)/1998 dated 12th April, 1998 and Model Officer's letter No. 625/1(C-977) (Dehradun) dated 29th August, 2008 and as mentioned above seeking prior approval of the Central Government under the Forest (Conservation) Act, 1980. After careful consideration of the proposal by the Forest Advisory Committee constituted under Section-3 of the said Act, in-principle approval for the said proposal was granted vide this Ministry's letter of even number dated 22nd September, 2008, subject to fulfillment of certain conditions. The State Government has furnished compliance in respect of the conditions stipulated in the in-principle approval and the Central Government has granted its approval in favour of Uttarakhand Forest Development Corporation accordingly even numbered 2009-0001.

I am further directed to refer to reference to Managing Director, Uttarakhand Forest Development Corporation, Dehradun's letter No. C-93 dated 2nd May, 2009, that the work has to be carried out through State Forest Development as per the condition stipulated in the above mentioned order dated 22nd September, 2008 and the decision of the State Government taken in meeting of 24.09.2008. Character of work is Chief Secretary, Uttarakhand.

Yours faithfully



(B. K. Singh)

Asstt. Inspector General of Forests

Copy to:

1. The Principal Chief Executive Officer, Government of Uttarakhand, Dehradun.
2. The Model Officer, Forests, Government of Uttarakhand, Dehradun.
3. The Chief Conservator of Forests, Uttarakhand, Dehradun.
4. User Agency.
5. Monitoring Cell, Ministry of Environment and Forests.
6. Guard File.



No. 3-11015/341/2009-1A.II(M)
Government of India
Ministry of Environment and Forests
EA Division

Paryavaran Bhawan
CGO Complex, Lodhi Road,
New Delhi-110 003

Dated the 15th April, 2011

M/s Uttaranchal Forest Development Corporation
Aranya Vikas Bhawan,
73, Nehru Road,
Dehradun-248 001
E-mail: safedamd@yahoo.com
varvikas12@gmail.com

Subject: Collection of Minor Mineral (Rata, Bajri and Boulders) from the river bed of River Song-3 by M/s Uttaranchal Forest Development Corporation, located in Dehradun Forest Division, District Dehradun, Uttarakhand -environmental clearance regarding.

Sr.

This has reference to your letter No.U-3514/32-29 dated 12.10.2010 and subsequent letter dated 14.01.2011 on the subject mentioned above. The project was earlier prescribed Terms of Reference (TORs) by the Ministry of Environment and Forests on 13.01.2010 for undertaking detailed EIA study for the purpose of obtaining environmental clearance. The proposal is for collection of 5,40,000 tonnes per annum (TPA) of minor minerals (Rata, Bajri and Boulders) from the river bed of the Song River.

2. The total mine lease area of the project is 270ha, which is a forestland covering a stretch of 6.5km length, lying in the Ganga River basin. Out of the total allotted area of 270ha, the minor mineral collection will be carried out from 20% of the total area i.e., 135ha. The area available for mining works therefore is 135ha along the centre of the river flow which is devoid of any flora.

3. The project area falls under the Shivalik Elephant Reserve. The Rajaji National Park is reported to be located at a distance of 1.0km towards South West from the mine lease. In support of this an authenticated map has been provided through the Chief Wildlife Warden, Government of Uttarakhand. However, from the map, it appears that the boundary of the Rajaji National Park is just abutting the mine lease boundary. Further, the Chief Wildlife Warden, Government of Uttarakhand vide letter No.SHL-1317/12-1 dated 28.12.2010 has accorded clearance for collection of minor mineral from the Song-3 River area of 270ha. Five Reserve forests namely, the Mithun Reserve (3.5km West and South of ML), the Barkota RF (3.5km East), the Ghatwar RF (3.5km North West) and the Mithun RF (3.8km South) and the Mithun RF (3.5km North West) are situated in the vicinity of the mine lease area.



The mine working will be opencast by manual method without involving blasting. The mining is confined to extraction ofreta, bajri and boulders from the river bed. The sand and bajri will be collected by sieving of river bed material using hand tools like shovel, pan, sieve etc. Mining will be carried out only during the day time. Extraction of river bed material will be completely stopped during the monsoon season. The targetted production capacity of the mine is 5.4lakh TPA (3lakh m³ per annum). The mined out material will be transported to their respective uses locations via private agencies using their own transport. Computerized weigh bridges have been installed in the mine to check the mining moment of material. The proposed mining area is reported to lies between 30°00'10.07" to 30°00'10.07" N latitude and 78°07'53.57" to 78°08'08.33"E Longitude in topo-sheet No. 531/4. The elevation from the sea level of the proposed area is reported as 454m. The river flow is bleak most of the year except during the monsoon season. Mining will be carried out upto a depth of 1.5m. No pumping of water from the river or from groundwater is envisaged.

5. The public hearing of the project was held on 22.09.2010 for collection of minor minerals from Song River-3 over mine lease area of 270ha. The Principal Secretary, Government of Uttarakhand vide letter No.2536/VII-1/163-KH/2009/10 dated 23.10.2010 informed that collection of minor mineral from the river bed does not require mine plan approval under Uttarakhand Minor Mineral Concession Rules 2001. The Ministry of Environment and Forests has accorded combined in-principle approval under Forest (Conservation) Act, 1980 for diversion of 1325ha forestland on 26.05.2009 and 2nd June, 2009 for collection of sand bajri and boulders from the river beds in the District Dehradun. The proponent has stated that there is no court case to the project or related activity.

5. The Ministry of Environment and Forests has examined the application in accordance with the EIA Notification, 2006 and the Doon Valley Notification, 1984 as amended on 13.12.2007 and hereby accords environmental clearance under the provisions thereof to the above mentioned Minor Mineral Mining Project of M/s Uttarakhand Forest Development Corporation for an annual collection of 5,40,000tonnes(5.4lakh tonnes) of reta, bajri and boulders (minor mineral) from the river bed of the Song-3 River by the opencast manual method involving total mining lease area of 270ha, subject to implementation of the following conditions and environmental safeguards.

A. Specific conditions

- The project proponent shall obtain Consent to Establish and Operate from the Uttarakhand Environment Protection & Pollution Control Board and effectively implement all the conditions stipulated in the Consent.
- Requisite prior clearance from the Standing Committee of the Ministry of Environment and Forests for Wildlife shall be obtained due to location of the project in proximity to Rajaji National Park and the critically endangered Ganges River Dolphin.



before starting any activity relating to the project at site. All the conditions stipulated by the Standing Committee shall be effectively implemented in the project. It shall be noted that this clearance does not necessarily imply that wildlife clearance shall be granted to the project and that your proposal for wildlife clearance shall be considered by the competent authorities on its merit and decision taken. The investment made in the project, if any based on environmental clearance granted to the project, in anticipation of this clearance from wildlife clearance shall be entirely at the cost and risk of the project proponent and Ministry of Environment and Forests shall not be responsible in this regard in any manner.

- (iii) Environmental clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No. 469 of 2004, as may be applicable to this project.
- (iv) Environmental clearance is subject to obtaining clearance under the Wildlife (Protection) Act, 1972 from the competent authority, as may be applicable to this project.
- (v) Environmental clearance is subject to grant of forestry clearance.
- (vi) The mine working shall be restricted to only the upper portion of the mine lease on the Northern side in such a manner that there is at least 1.0km distance between the closest boundary of the Rajaji National Park and the working area of the mine lease.
- (vii) The project proponent shall prepare the plan of mining in conformity with the mine lease conditions and the Rules prescribed in this regard clearly showing the no work zone in the mine lease i.e. the distance from the bank of river to be left unworked, distance from the bridges etc. It shall be ensured that no mining shall be carried out during the monsoon season.
- (viii) The project proponent shall ensure that wherever deployment of labour attracts the Mines Act, the provision thereof shall be strictly followed.
- (ix) The project proponent shall identify the degraded forest area within the mine lease in consultation with the State Forest Department and undertake plantation/afforestation work by planting the native species.
- (x) 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 points and all transfer points. Extensive water sprinkling shall be carried out during the mining operations. It should be ensured that the Ambient Air Quality conforms to the prescribed norms prescribed by the Central Pollution Control Board.
- (xi) The project proponent shall undertake adequate safeguard measures during extraction of river bed material and ensure that due to any



the hydro-geological regime of the surrounding area shall not be affected. Regular monitoring of ground water level and quality shall be carried out around the mine lease area by establishing a network of existing wells and installing new piezometers during the mining operation. The periodic monitoring [(at least four times in a year- pre-monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January); once in each season)] shall be carried out in consultation with the State Ground Water Board/Central Ground Water Authority and the data thus collected shall be sent regularly to the Ministry of Environment and Forests and its regional Office Lucknow, the Central Ground Water Authority and the regional Director, Central Ground Water Board. If at any stage, observed that the groundwater table is getting depleted due to the mining activity, necessary corrective measures shall be carried out.

- (xii) The project proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of water (surface water and groundwater), if any, required for the project.
- (xiii) Appropriate mitigative measures shall be taken to prevent pollution of the river in consultation with the State Pollution Control Board. It shall be ensured that there is no leakage of oil and grease in the river from the vehicles used for transportation.
- (xiv) Vehicular emissions shall be kept under control and regularly monitored. The mineral transportation shall be carried out through the covered trucks only and the vehicles carrying the mineral shall not be overloaded.
- (xv) No drilling and blasting operation shall be carried out.
- (xvi) Mineral handling area shall be provided with the adequate number of high efficiency dust extraction system. Loading and unloading areas including all the transfer points should also have efficient dust control arrangements. These should be properly maintained and operated.
- (xvii) Periodical medical examination of the workers engaged in the project shall be carried out and records maintained. For the purpose, schedule of medical examination of the workers should be drawn and followed accordingly.
- (xviii) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as (but not limited to) mobile toilets, mobile STP, safe drinking water, medical facilities, canteen etc. This housing may be in the form of temporary structure to be removed after the completion of the project.
- (xix) Digital processing of the entire lease area using remote sensing shall be done regularly once in three years for monitoring the change of river course, if any and report submitted to the Ministry of Environment and Forests and its Regional Office located at Lucknow.



(xiv) The critical parameters such as RSPM (Particulate matter with size less than 10micron i.e., PM_{10}) and NO_x in the ambient air within the impact zone shall be monitored periodically. Further, quality of discharged water shall also be monitored (TDS, DO, PH, Fecal Coliform and Total Suspended Solids (TSS)). The monitored data shall be uploaded on the website of the company as well as displayed on a display board at the project site at a suitable location near the main gate of the Company in public domain. The Circular No. J-20012/1/2005-IA.II(M) dated 27.05.2009 issued by Ministry of Environment and Forests, which is available on the website of the Ministry ~~www.mef.nic.in~~ shall also be referred in this regard for its compliance.

(xv) The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna namely elephant etc. found in the study area. Action plan for conservation of flora and fauna shall be prepared in consultation with the State Forest and Wildlife Department. All the safeguard measures brought out in the Wildlife Conservation Plan so prepared specific to this project shall be effectively implemented. Necessary allocation of funds for implementation of the conservation plan shall be made and the funds so allocated shall be included in the project cost. A copy of action plan shall be submitted to the Regional Office of the Ministry of Environment and Forests, Lucknow.

(xvi) The project proponent shall get a siltation study carried out within one year through some Expert Agency like Central Water Commission to determine the siltation load in the river bed so that there is no over exploitation of river bed material at any point of time. The mineral to be removed shall be determined based on siltation load. A copy of siltation study so carried out shall be submitted to the Ministry of Environment and Forests and its Regional Office Lucknow.

A. General conditions

(i) No change in mining technology and scope of mining shall be made without prior approval of the Ministry of Environment & Forests.

(ii) No change in the calendar plan including excavation, quantum of mineral, ore, baji and boulders (minor mineral) and waste should be made.

(iii) Four ambient air quality monitoring stations should be established in the core zone as well as in the buffer zone for RSPM (Particulate matter with size less than 10micron i.e., PM_{10}) and NO_x monitoring. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with the State Pollution Control Board.



(iv) Data on ambient air quality RSPM4 (Particulate matter with size less than 10 micron i.e., PM₁₀) & NO_x should be regularly submitted to the Ministry of Environment and Forests including its Regional office located at Lucknow and the State Pollution Control Board / Central Pollution Control Board once in six months.

(v) Fugitive dust emissions from all the sources should be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points should be provided and properly maintained.

(vi) Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects.

Occupational health surveillance program of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.

(vii) A separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.

(viii) The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the Ministry of Environment and Forests and its Regional Office located at Lucknow.

(ix) The project authorities should inform to the Regional Office located at Lucknow regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.

(x) The Regional Office of this Ministry located at Lucknow shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information / monitoring reports.

(xi) The project proponent shall submit six monthly reports on the status of compliance of the stipulated environmental clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the Ministry of Environment and Forests, its Regional Office Lucknow, the respective Zonal Office of Central Pollution Control Board the State Pollution Control Board. The proponent shall upload the status of compliance of the environmental clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the Ministry of Environment and Forests, Lucknow, the respective Zonal Office of Central Pollution Control Board and the State Pollution Control Board.



- (xii) A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad/ Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.
- (xiii) The State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre and the Collector's office/ Tehsildar's Office for 30 days.
- (xiv) The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the Regional Office of the Ministry of Environment and Forests, Lucknow by e-mail.
- (xv) The project authorities should advertise at least in two local newspapers of the District or State in which the project is located and widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and also at website of the Ministry of Environment and Forests at <http://www.mef.gov.in> and a copy of the same should be forwarded to the Regional Office of this Ministry located at Lucknow.

7. The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.

8. Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.

9. The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules made thereunder and also any other orders passed by the Hon'ble Supreme Court of India/High Court of Uttarakhand and any other Court of Law relating to the subject matter.



प्राकृत एवं पर्यावरण विभाग,
उत्तराखण्ड विधानसभा, उत्तराखण्ड,
25 गान्धीनगर रोड, देहरादून।

प्राकृत संरक्षित,
औद्योगिक विकास विभाग,
उत्तराखण्ड सरकार, देहरादून।

विविध/51/पेठदून/जनन/मुपनि040/2008-09, दिनांक 19 फरवरी, 2009

जनपद देहरादून में देहरादून वन प्रभाग देहरादून को अन्तर्गत 1325 हे० आसीत वन क्षेत्रों को पर्यावरण को सुरक्षित रखे।

कृपया उपर्युक्त विवरण को ध्यान में अवगत करना है कि पर्यावरण एवं वन मंत्रालय भारत सरकार के संज्ञा सं० F.N. 4-52/99-FC दिनांक 24 सितम्बर, 2008 के द्वारा देहरादून वन प्रभाग के अन्तर्गत प्रस्तावित होने वाले निम्नलिखित नदी तटों से उत्तराखण्ड के मुगान/खनन की अनुमति प्राप्त की गई है:-

1. मुल्तानी नदी 30.00 हे०
2. पोरु नदी 30.00 हे०
3. सींग नदी प्रथम (घाटी) 215.00 हे०
4. सींग नदी द्वितीय (घाटी) 371.00 हे०
5. सींग नदी तृतीय (सहयोगिता) 220.00 हे०
6. जालन नदी प्रथम (घाटी) 185.00 हे०
7. जालन नदी द्वितीय (सहयोगिता) 100.00 हे०
8. धनद भागा नदी प्रथम 100.00 हे०
9. धनद भागा नदी द्वितीय 22.00 हे०

10. लकड़घाट नदी अधिवेश 15.00 हे०/क्षेत्र 1325 हे०

संरक्षण में प्रस्तावित क्षेत्रों में संतोषजनक विवरण सरकार/देश दिनांक 17-10-2002 के द्वारा आदेशित वन क्षेत्र में नदी तटों की उपस्थिति के मुगान खनन हेतु उत्तराखण्ड वन विभाग के राज्य सरकार द्वारा अधिवेश किया गया है।

पर्यावरण एवं वन मंत्रालय के पत्र दिनांक 24-9-2008 को संज्ञा सं० 3 में यह उल्लेख किया गया है कि प्रस्तावित क्षेत्रों की NPV इत्यादि सत्यों का अनुपात करने के उपरांत ही वन विभाग अधिनियम 1960 के अधीन अनुमति प्रदान की जायेगी।

अतः वर्तमान नौति के अनुसार उत्तराखण्ड वन विकास निगम से शर्तों को परिपूर्ण करने एवं अर्हता प्रमाणों को प्राप्त प्रस्तावित किया जाता है।

भवदीय,

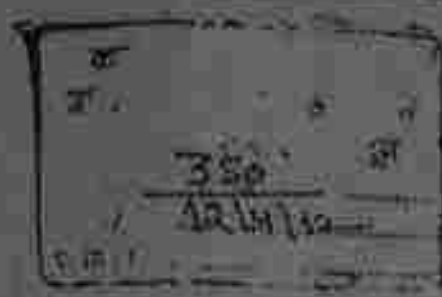
(मुनीश तामार)

प्रमुख, वन विभाग

Case No. 63,85
Date Recd. 23
Date Issued 03/03/09



सचिव,
प्रमुख सचिव,
उत्तराखण्ड शासन।



आवासिकारी,
देहरादून।

संस्थागत विकास अनुभाग-1

देहरादून : दिनांक: 03 अप्रैल, 2012

जनपद देहरादून के आश्रित वन क्षेत्र की, --- सींग नदी-3, जाखन-1 व जाखन-2 में उपखनिज चुगान की स्वीकृति की सम्बन्ध में।

प्रार्थना

उपरोक्त विषयक प्रबन्ध निर्देशक, उत्तराखण्ड वन विकास निगम, अरुण विकास भवन, 12-ब्लॉक रोड, देहरादून को पत्र संख्या एन-सी. 508 / खनन, दिनांक 01 मार्च, 2012 तथा निर्देशक, मुख्य सचिव, उत्तराखण्ड, उद्योग निर्देशालय, देहरादून के पत्र संख्या 344 खनन/देहरादून/पू0अनि050/एन-12, दिनांक 26 मार्च, 2012 के संदर्भ में सम्बन्ध विचारोपपन्नता मुझे यह कहने का निर्देश प्राप्त है कि उपरोक्त देहरादून के आश्रित वन क्षेत्र की सींग नदी-3 के कुल क्षेत्रफल 210 हेक्टेयर मध्ये 135 हेक्टेयर, जाखन नदी-1 कुल क्षेत्रफल 195 हेक्टेयर मध्ये 97.5 हेक्टेयर तथा जाखन नदी-2 कुल क्षेत्रफल 100 हेक्टेयर मध्ये 50 हेक्टेयर क्षेत्रफल में 05 (पाँच) वर्ष की अवधि हेतु उपखनिज रेत, बजरी, बाल्टर का चुगान की जाने की अनुमति उत्तराखण्ड वन विकास निगम को निम्नालिखित शर्तों के अधीन प्रदान की जाती है:-

1. वन भूमि की विधायिक स्थिति में कोई परिवर्तन नहीं होगा।
2. उत्तराखण्ड वन विकास निगम द्वारा राज्य नदियों से उपखनिजों के चुगान से पूर्व भारत सरकार, पर्यावरण एवं वन मंत्रालय, नई दिल्ली पर्यावरण एवं वन मंत्रालय, भारत सरकार के पत्र संख्या J-11015/363/2009-LA-IT(M), दिनांक 15.04.2011, पत्र संख्या J-11015/342/2009-LA-IT(M), दिनांक 15.04.2011 एवं पत्र संख्या J-11015/343/2009-LA-IT(M), दिनांक 15.04.2011 में उल्लिखित समस्त शर्तों का अक्षरस अनुपालन सुनिश्चित किया जाएगा।
3. पर्यावरण एवं वन मंत्रालय भारत सरकार द्वारा वन संरक्षण अधिनियम, 1980 तथा पर्यावरण संरक्षण अधिनियम, 1986 के अधीन अन्य समस्त अधिनियमों के अन्तर्गत समर्थ-समर्थ पर दिए गये निर्देशों का अनुपालन सुनिश्चित किया जाएगा।
4. निम्न चुगान कार्य से किसी भी वन सम्पदा पर क्षति नहीं पहुँचयेगी। यदि वन सम्पदा से कोई क्षति पहुँचती है या पहुँचती जाती है तो उससे लिए सम्बन्धित प्रयोगीय स्थापिकान द्वारा निर्धारित प्रतिफल उत्तराखण्ड वन विकास निगम द्वारा देया होगा।
5. फल वन भूमि उत्तराखण्ड वन विकास निगम के संपादन में एवं तक वनी रहती वन तक कि उत्तराखण्ड वन विकास निगम को ससकी उक्त प्रस्ताव हेतु आवश्यकता होगी। यदि उत्तराखण्ड वन विकास निगम को उक्त वन भूमि अथवा उससे किसी अन्य को संपादन प्राप्त न होगी तो उक्त भूमि अथवा वन तक ऐसा भाग, जो उत्तराखण्ड वन विकास निगम को लिए आवश्यक न रहे, वन विभाग को बिना किसी प्रतिफल का चुगान हेतु ससकी दिया जायेगा।



- एन विभाग के कर्मचारी/अधिकारी या उनके अधिकारियों को किसी भी समय जब वे आवश्यक समझे, प्रस्तावित वन भूमि का निरीक्षण करने का पूर्ण अधिकार होगा।
- स्थिति वन क्षेत्र में उत्पन्न करने वाले मजदूर तथा कर्मचारी अपनी ईंधन की आवश्यकता के लिए वनों को हानि न पहुंचाये, इसको लिए उत्तराखण्ड वन विकास निगम द्वारा सन्ने ईंधन की लकड़ी उद्योग उन्हें ईंधन की सामग्री की आपूर्ति की जायेगी।
- उत्तराखण्ड वन विकास निगम द्वारा बुंदों का पतन नहीं किया जाएगा।
- उत्तराखण्ड वन विकास निगम द्वारा सू-क्षरण रोकने व प्रस्तावित नदियों के तटबन्धों को सुदृढ़ीकरण हेतु आवश्यक धनराशि का भुगतान वन विभाग को किया जायेगा। वन विभाग द्वारा वन विकास निगम द्वारा उपलब्ध करायी गई धनराशि से रीवर ट्रेनिंग व अन्य जैविक अभियांत्रिक कार्य सम्पादित किये जायेंगे। नदी तल से निकाले जाने वाले उप-खनिजों के दिग्घ से प्राप्त सजाव का 26 प्रतिशत भाग रीवर ट्रेनिंग एंव जल समेट क्षेत्र को उपचार कार्यों हेतु खर्च किया जायेगा। नदी तटी का उपचार वन विभाग द्वारा गौला नदी में किये कार्यों के अनुरूप करवा जायेगा व यदि आवश्यक हो तो केन्द्रीय मुद्रा एवं जल संस्तर संस्थान, देहरादून को तकनीकी परामर्श भी प्राप्त किया जायेगा।
- प्रस्तावित क्षेत्र में कार्य करने वाले श्रमिकों के लिए वन क्षेत्र के अन्दर किसी प्रकार के श्रमिक हट स्थापित नहीं किये जायेंगे।
- उपखनिजों का चुगान नदी के मध्य में किया जायेगा तथा नदी के दोनों किनारों से नदी तल का 1/4 भाग छोड़ा जायेगा।
- प्रस्तावित क्षेत्र में उपखनिजों के चुगान हेतु किसी भी इस्फोटक पदार्थ का प्रयोग नहीं किया जायेगा व चुगान कार्य केवल हैण्ड टूलस द्वारा ही किया जायेगा।
- प्रस्तावित क्षेत्र में उपखनिजों के चुगान का कार्य सर्वोदय से पूर्व तथा सर्वोदय के पश्चात नहीं किया जायेगा।
- रीक्टर तोड़ने का कार्य वन सीमा से बाहर किया जायेगा।
- प्रस्तावित क्षेत्र से उपखनिजों के चुगान का कार्य वर्षा ऋतु के दौरान जुलाई से सह सितम्बर तक नहीं किया जायेगा।
- मानव पदचाल की रोकथाम के पश्चात् उस स्थल का सीमांकन भूतत्व एवं चामिकर्म कार्य को अधिकारियों द्वारा समस्त एवं वन विभाग के अधिकारियों को उपस्थिति में किया जायेगा।
- किसी सांस्कृतिक विनोदस्थल, समझान अथवा कुत्रिस्तान या आदिवासियों के किसी वर्ग द्वारा वादा माने जाने वाला स्थान, महान अथवा ग्रामस्थल, सांस्कृतिक सठक या कोई अन्य स्थान जो जिसाधिकारी द्वारा सांस्कृतिक स्थान घोषित किया गया हो, ऐसे स्थानों पर न तो कोई चीज खड़ी की जायेगी न ही स्थापित की जायेगी और न ही कोई सतह संशोधन की जायेगी, जिससे किसी भवन, मंदिर निर्माण कार्य, सम्पत्ति या अन्य अवस्थाओं के अधिकारियों को शक्ति पहुँचे।
- पट्टे में अज्ञानित निर्माण कार्यों या अन्य प्रयोजनों के निर्मित कोई ऐसी भूमि, सहाय संकेतकों के लिए प्रयुक्त नहीं की जायेगी जो राज्य सरकार से भिन्न व्यक्तियों के दखल में पते से हो रही।
- किसी भी मार्ग का उपयोग करने के अधिकार पर हस्तक्षेप न किया जायेगा।
- उत्तराखण्ड वन विकास निगम द्वारा उप-खनिजों के दिग्घ से प्राप्त धनराशि से अलग वन भूमि पर एक ईंधन बर्ष की अवधि में प्रतिवर्ष मुआवज़ा कार्य किया जायेगा। वन विभाग द्वारा उपलब्धतानुसार किये गये मुआवज़ा का आभावी बीच तक

21. प्रस्तावित क्षेत्र में खनन कार्य शुरू करने से पूर्व प्रवेश व निकासी गमनी पर पर्याप्त संख्या में अतिरिक्त बैक-पोस्ट स्थापित किये जायेंगे। निकासी दिवस होने वाले उपखानियों के अतिरिक्त वन विकास निगम द्वारा उप खनिज की निकासी की नीति पर निर्धारित राखटा आदि नियमानुसार प्रभा किया जायेगा।
22. उपखनिज परिवहन नियमावली 2001 के नियम-73 के अनुसार प्रपत्र एनएमओ-12 पर रेगुलिकेड विवरण प्रिन्सिपल, वेहसदून एवं निदेशक, भूतत्व एवं खनिकर्म इकाई को प्रेषित की जायेगी।
23. इसके अतिरिक्त इस हेतु जो भी चार्ज स्थानीय जिला प्रशासन तथा भूतत्व एवं खनिकर्म इकाई द्वारा निर्धारित की जायेगी, का अनुपालन उत्तराखण्ड वन विकास निगम द्वारा किया जायेगा।
24. उत्तराखण्ड वन विकास निगम द्वारा उक्त नदियों से उपखानियों के भुगतान हेतु वन विभाग/वन्य प्राधिकारियों को प्रदत्त समस्त वननवदताओं का अनुपालन सुनिश्चित किया जायेगा।
25. निगम द्वारा उपखानियों के भुगतान हेतु मुख्य वन्य जीव प्रतिपालक, उत्तराखण्ड की संरक्षित वन समूहों द्वारा समय-समय पर जारी निर्देशों का अनुपालन सुनिश्चित किया जायेगा।

उक्त के अतिरिक्त यह भी निर्दिष्ट किया जाता है कि उक्त लॉटों में खनन/भुगतान को कार्य प्रत्येक दशा में दिनांक 15 अप्रैल, 2012 तक प्रारम्भ करते हुए शासन की अवज्ञा कराया जाना सुनिश्चित करें।

भवदीय,

 संतोष गग्गी
 प्रमुख सचिव।

संख्या: 490 (1)/VII-1/2012/123-ख/2011, तदुद्दिष्ट।

निम्नलिखित को सूचना एवं आवश्यक कार्यवाही हेतु प्रेषित:-

- 1- सचिव, भाला सरकार, पर्यावरण एवं वन मंत्रालय, पर्यावरण भवन, सी0जी0जी0 वांग्पलेखर, लोदी रोड, नई दिल्ली।
- 2- प्रमुख सचिव, मध्यमूल्य मंत्री जी, उत्तराखण्ड शासन।
- 3- प्रमुख सचिव, वन एवं पर्यावरण विभाग, उत्तराखण्ड शासन।
- 4- आगुता, गढ़वाल भांडल, पौड़ी गढ़वाल।
- 5- स्टाफ ऑफिसर, मुख्य सचिव, उत्तराखण्ड शासन।
- 6- निदेशक, भूतत्व एवं खनिकर्म इकाई, उद्योग निदेशालय, उत्तराखण्ड, देहरादून।
- 7- प्रमुख वन संरक्षक, उत्तराखण्ड, देहरादून।
- 8- प्रमुख निदेशक, उत्तराखण्ड वन विकास निगम, देहरादून।
- 9- अपर प्रमुख वन संरक्षक एवं मोडल अधिकारी, वन संरक्षण, इन्डियन कोरेस्ट कार्पोरेशन, उत्तराखण्ड, देहरादून।
- 10- गार्ड फाईल।



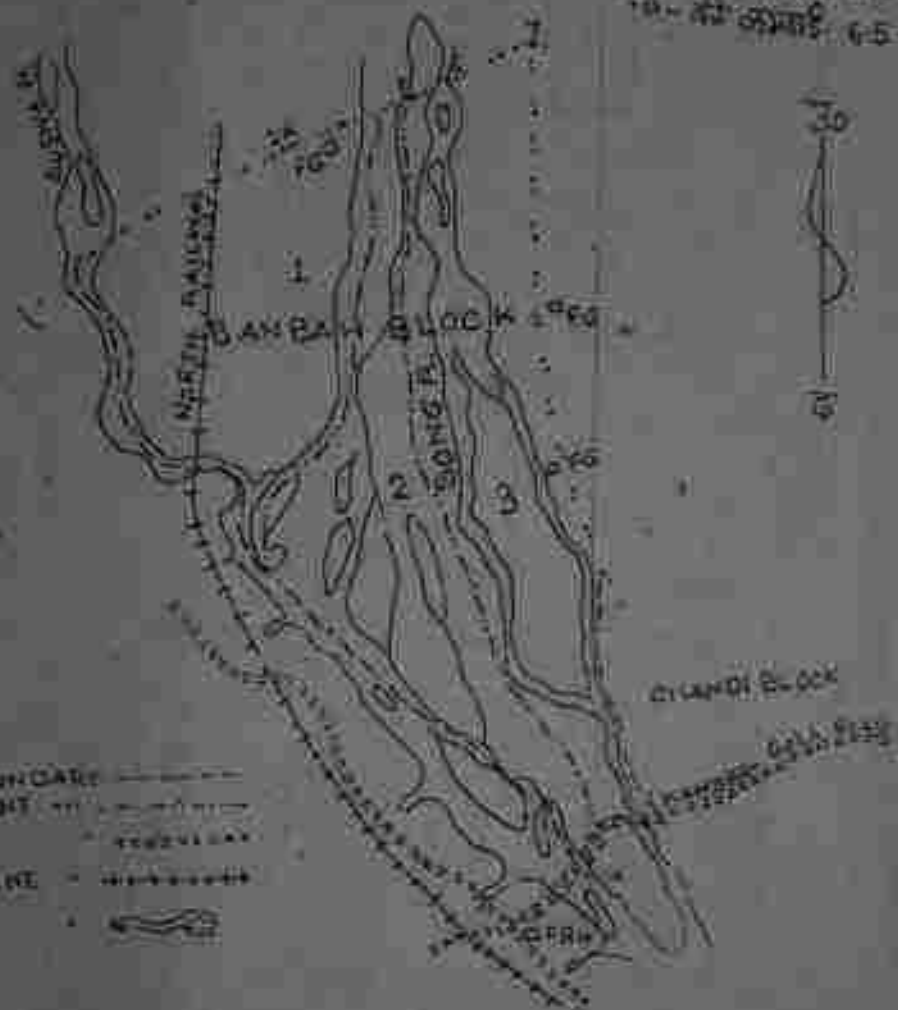
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 वनवाह क० सं० 2 व 3 का मानचित्र

सिमांक 1:50000

सिमांक नं० - सूर्योदय
 नदी का नाम - सौन नदी
 स्थापक नं० - वनवाह नं० 2
 क्षेत्र का विवरण - 30 वर्ग मील
 नदी की लंबाई - 6.5 K.M.

INDEX

- 1. BLOCK BOUNDARY
- 2. COMPARTMENT
- 3. ROAD
- 4. RAILWAY LINE
- 5. NADI



[Signature]
 H.O. Dindori

[Signature]
 District Officer
 Dindori



अभिलेखः १५५

सातसंस्थाप्य उपसमिते (बालू, कजरी, बोल्लर ईट आदि) नीति, 2015

प्रश्न : (1) इस नीति का निर्धारण किस संस्था/संस्थानों द्वारा किया गया है ?
(2) इस नीति का उद्देश्य क्या है ?

(12) क्या दुःख प्रकृत हीन ?

उत्तर: 2. जब तक हमें नहीं पता कि कौन सा व्यक्ति हमारे लिए है, हमें नहीं जाना कि वह हमारे लिए है।

(b) "संयोजक" के सम्बन्ध में निम्नलिखित शर्तें लागू होंगी।

(ख) "समूहकार" से किसी जिले के एकलिंग प्रजासभ का मूल्य मार, लालच, अधिभारों प्रदर्शित है।

(ग) संस्कृत में उल्लेखितपत्रों से संबंधित प्रमाण है।

सर्व आनुवंशिक विविधता को सुरक्षित रखना, जो कि हमारे अस्तित्व के लिए आवश्यक है।

[illegible][illegible]

(1) क्षेत्रीय क्षेत्र (क्षेत्र-क) - के अंतर्गत विभिन्न प्रकार के विकास क्षेत्रों को सम्मिलित है।

(2) राज्य स्तरीय क्षेत्र (क्षेत्र-ख) - के अंतर्गत विभिन्न प्रकार के विकास क्षेत्रों को सम्मिलित है।

(3) क्षेत्रीय क्षेत्र (क्षेत्र-ग) - के अंतर्गत विभिन्न प्रकार के विकास क्षेत्रों को सम्मिलित है।

(4) राज्य स्तरीय क्षेत्र (क्षेत्र-घ) - के अंतर्गत विभिन्न प्रकार के विकास क्षेत्रों को सम्मिलित है।

क्षेत्रीय क्षेत्र का
विवरण

क्षेत्र के उपखंडों को जो क्षेत्रीय स्तर पर सम्मिलित हैं वे क्षेत्रों का एक समूह है जो कि क्षेत्रीय स्तर पर सम्मिलित हैं।

(1) प्रांतीय स्पर्धात्मक क्षेत्र (क्षेत्र-क) - इसके अंतर्गत क्षेत्रों को सम्मिलित है जो कि क्षेत्रीय स्तर पर सम्मिलित हैं।

क्षेत्रीय स्तर पर सम्मिलित क्षेत्रों को सम्मिलित है जो कि क्षेत्रीय स्तर पर सम्मिलित हैं।

क्षेत्रीय स्तर पर सम्मिलित क्षेत्रों को सम्मिलित है जो कि क्षेत्रीय स्तर पर सम्मिलित हैं।

क्षेत्रीय स्तर पर सम्मिलित क्षेत्रों को सम्मिलित है जो कि क्षेत्रीय स्तर पर सम्मिलित हैं।





(For the use of
 the Government
 Controller of Finance
 and
 Indian Bureau of Finance

Page 1 of 1

at power 5101

The registration No. is

WANDERLUST

Emerson, *Essays*, 1841, p. 100. (Quoted in *The Emerson Encyclopedia*, 1903, p. 100.)

Colony, Lane No-1, New Canal Road, Dehradun (Uttarakhand)

Registered office in C/O B. S. Rawal, Kamal Bhawan, House No.-6, Vijay

Duration _____ Maximum Weight _____

1950-1951-52

(Under Rule 22(C) of Mineral Concession Rules, 1960)

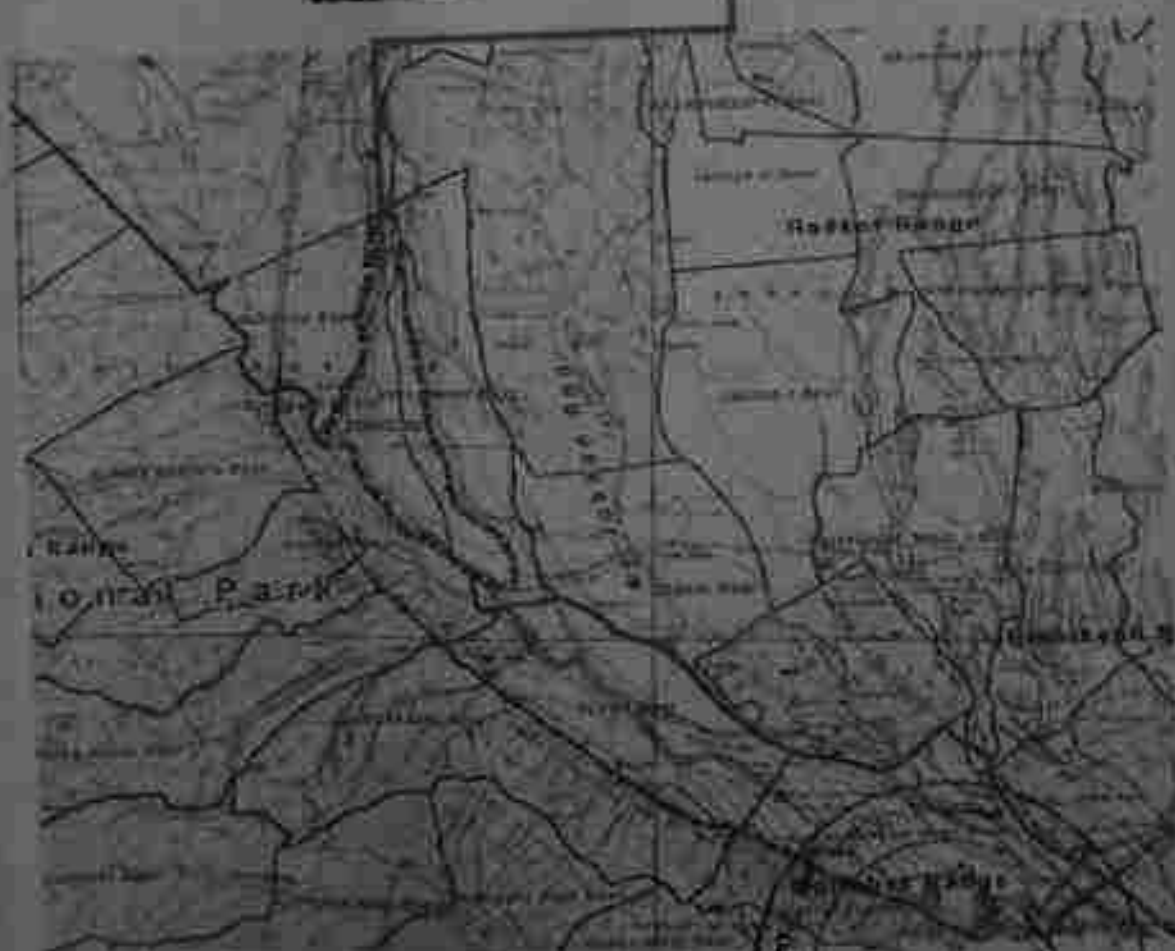
(Original Report furnished 1960 to Page 22 of 22)

WINNING PLANS

CERTIFICATE OF RECOGNITION AS QUALIFIED PERSON TO PREPARE
FUNDING PLANS

155-156

[illegible]



LOCATION MAP OF SONG 3, DIST. - DEHRADUN, U.P. INDIA



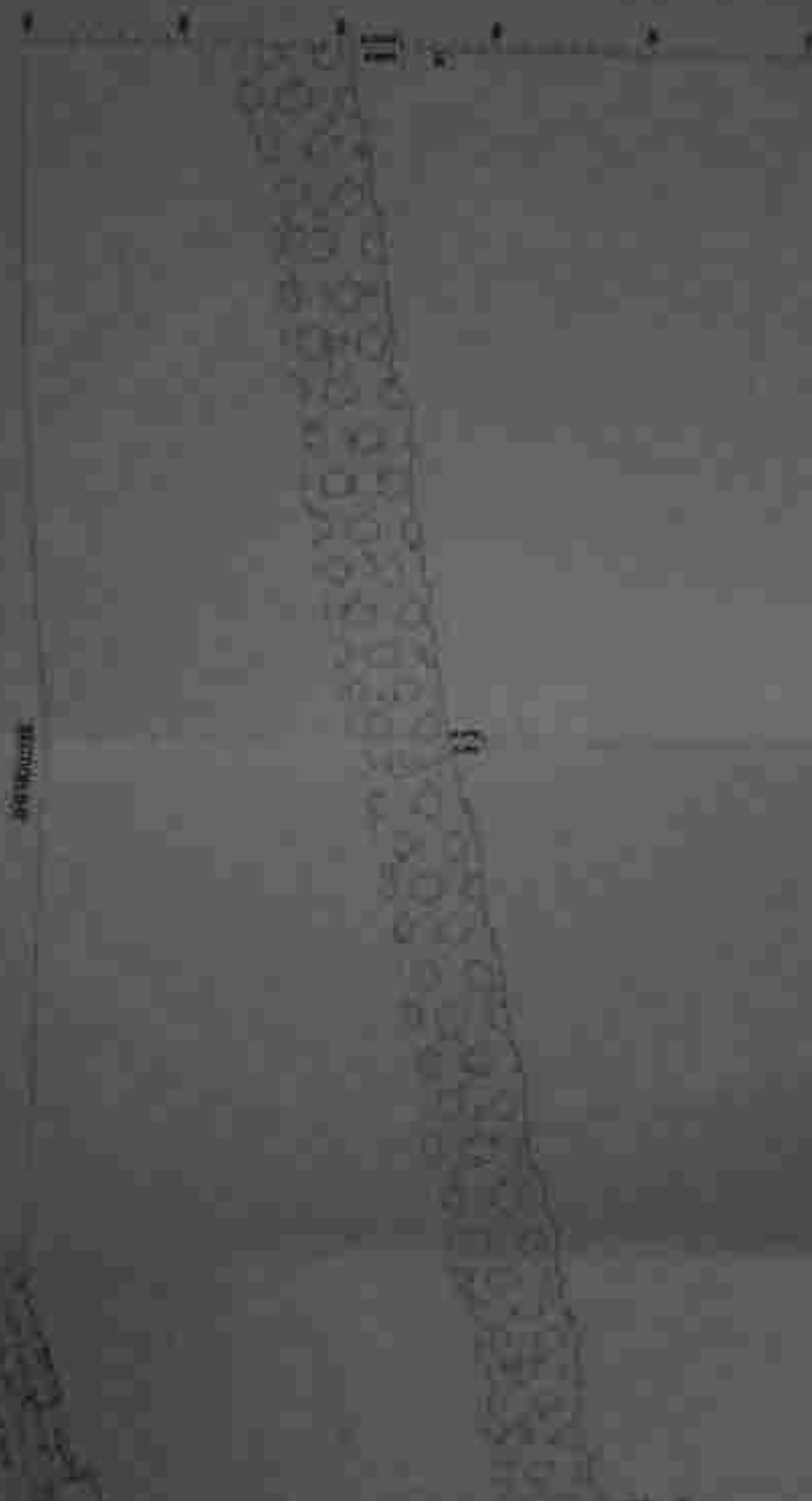
24



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400 Meters



1900

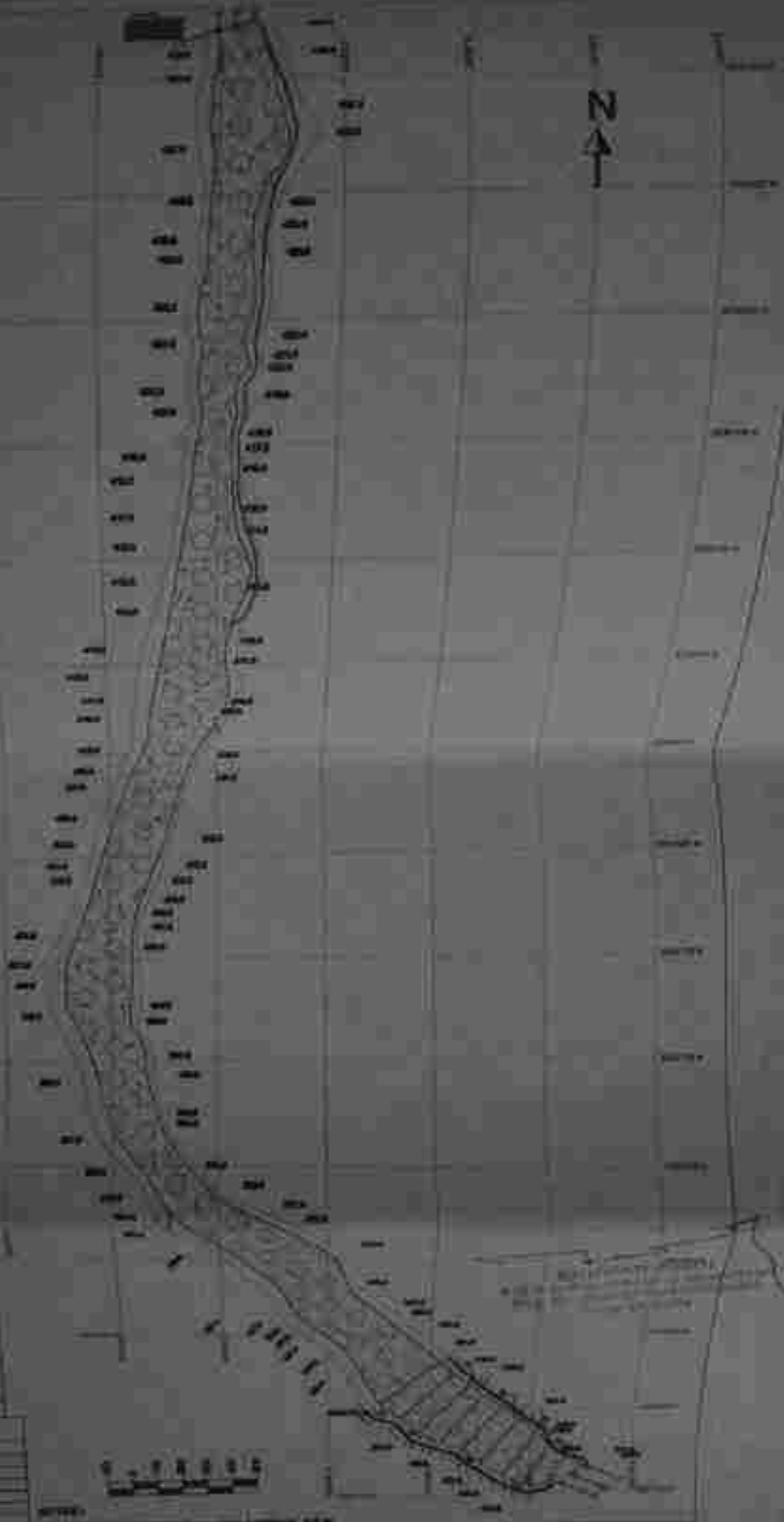
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Volume

1000
900
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300
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600
700
800
900
1000



N
↑



NOTES:
ALL DIMENSIONS IN FEET UNLESS OTHERWISE SPECIFIED

N



1 2 3 4 5 6 7 8 9 10

350

375

N 74°W

S 25°E

LB

PIT SECTION OF FIRST YEAR

N 21°E

S 3°W

375

400

N 74°W

S 25°E

LB

PIT SECTION OF SECOND YEAR

N 21°E

S 3°W





Table with 2 columns and 10 rows. The first column contains numbers 1 through 10. The second column contains text.

1	2
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10

प्रमाण

निदेशक
मृदा एवं खनिज संसाधन
पश्चात्तम निदेशिका उत्तराखण्ड
देहरादून

समाप्त

प्रमाण निदेशक
उत्तराखण्ड वन विकास निगम लि०
आरंभ विकास भवन
रड, मोहल्ला सेठ देहरादून

संख्या

/30280/मृदा/देहरादून/2018-17

दिनांक 12 मई 2017

विषय-

पश्चात्तम उत्तराखण्ड वन विकास निगम लि० के पक्ष में जनपद देहरादून के आरंभित वन क्षेत्रान्तर्गत स्थित खनन साइट जालन नदी-1 कुल क्षेत्रफल 195.00 हे० मध्ये 97.5 हे० आरंभित वन भूमि में उपखनिज बालू, बजरी, बोल्टर के खनन हेतु दिनांक 03.04.2017 से 25.05.2018 तक शासनादेश संख्या 490/VII-1/2012/123-ख/2011 दिनांक 03 अप्रैल, 2012 में निर्धारित शर्तों/प्रतिबन्धों तथा उत्तराखण्ड उपखनिज (बालू, बजरी, बोल्टर) चुमान नीति 2015 के प्रावधानों के अन्तर्गत खनन पट्टे पर स्वीकृत क्षेत्र की खनन योजना के अनुमोदन के सम्बन्ध में।

संदर्भ

आपके द्वारा जनपद देहरादून के आरंभित वन क्षेत्रान्तर्गत स्थित खनन साइट जालन नदी-1 कुल क्षेत्रफल 195.00 हे० मध्ये 97.5 हे० आरंभित वन भूमि में जिसमें शासनादेश संख्या 490/VII-1/2012/123-ख/2011 दिनांक 03 अप्रैल, 2012 के द्वारा आपके पक्ष में उपखनिज बालू/बजरी/बोल्टर का दिनांक 03.04.2017 से 25.05.2018 तक शासनादेश संख्या 490/VII-1/2012/123-ख/2011 दिनांक 03 अप्रैल, 2012 में निर्धारित शर्तों/प्रतिबन्धों तथा उत्तराखण्ड उपखनिज (बालू, बजरी, बोल्टर) चुमान नीति 2015 के प्रावधानों के अन्तर्गत खनन पट्टे पर स्वीकृत किया गया है, से सम्बन्धित प्रस्तुत खनन योजना के कि. श्री भुवन-जोशी आर०एम०पी०/DDM/180/2009/A के द्वारा तैयार की गयी है, को वैज्ञानिक, तकनीकी एवं पर्यावरण सुरक्षा के दृष्टिकोण से खनन संश्लेषण व सुनिश्चिता समाप्त-10 उपखनिज पट्टे आने व दृष्टिगत उत्तराखण्ड उपखनिज परिकार नियमावली-2001 के नियम-34 एवं उत्तराखण्ड उपखनिज नीति-2015 के बिन्दु सं-8 (2) एवं उत्तराखण्ड उपखनिज (बालू, बजरी, बोल्टर) चुमान नीति 2015 के बिन्दु-8(1) के अन्तर्गत प्रस्तावित परिकार का प्रयोग करते हुए प्रस्तुत खनन योजना का अनुमोदन निर्धारित शर्तों के अन्तर्गत किया जाता है-

शर्तें

1. खनन योजना का अनुमोदन शासनादेश संख्या 490/VII-1/2012/123-ख/2011 दिनांक 03 अप्रैल, 2012 के द्वारा दिनांक 03.04.2017 से दिनांक 25.05.2018 तक की अवधि के लिए किया गया है।
2. पश्चात्तम इस वन एवं पर्यावरण संचालन अधिनियम के अन्तर्गत शा. 1-11(15)/341/2009-1A II (M) dated 15th April 2011, E.No.B-62/99-FC dated 26 May, 2009 and E.No.B-62/99-FC dated 02nd June, 2009 के अन्तर्गत स्वी. के अनुमोदन किया गया।

3. पञ्चाधारक द्वारा शासनार्थक संख्या शासनार्थक संख्या 59/VII-1-1/123-ख/2011 दिनांक 16 मार्च, 2012 एवं शासनार्थक संख्या 890/VII-1/2012/123-ख/2011 दिनांक 03 अप्रैल, 2012 पक्ष विरोध की समस्त बातों को अनुपालन करेगा।
4. प्रस्तावित खनन क्षेत्र में खनन कार्य अनुमोदित खनन योजना के अनुसार किया जाएगा तथा खनन योजना के अनुसार प्रथम वर्ष में आरक्षण 376.00 मी० से आरक्षण 383.00 मी० तक 660,000.00 टन एवं द्वितीय वर्ष में आरक्षण 376.00 मी० से आरक्षण 383.00 मी० तक 660,000.00 टन उपखनिज का खनन किया जाएगा।
5. यह खनन योजना अन्य किसी अधिनियम को कि इस खनन या क्षेत्र पर लागू होते हैं या समय-समय पर राज्य सरकार या केंद्र सरकार या अन्य किसी सक्षम द्वारा प्रस्तावित किये जाते हैं, को धेड़ कर अनुमोदित की जाती है।
6. यह खनन योजना वन (संरक्षण) अधिनियम-1980 वन संरक्षण नियमावली 1981 और अन्य सम्बन्धित अधिनियम और नियमावली, आदेश और दिशानिर्देश जो कि इस खनन पट्टे पर समय-समय पर दिये जाते लागू होंगे।
7. अनुमोदित खनन योजना किसी भी प्रस्तावी क्षेत्रांतर्गत माननीय न्यायालय के आदेश एवं दिशानिर्देश के ताम्र सीने को बाधित नहीं करती है।
8. अनुमोदित अधिनियम में किंचित भी खनन कार्य के निरोधन को उपरान्त यदि खनन योजना में संशोधन हेतु आदेश दिये जाते हैं तब संशोधित खनन योजना प्रस्तुत करने का पूर्ण उत्तरदायित्व आवेदक का होगा।
9. आवेदक/नियोजित श्रमिकों को सुरक्षात्मक उपकरण प्रदान करने तथा सुरक्षित खनन कार्य करने हेतु सभी आवश्यक साधनानिधि खरतने का दायित्व आवेदक का होगा।
10. अनुमोदित खनन योजना की एक-एक प्रतिलिपि प्रति सम्बन्धित जिलाधिकारी कार्यालय एवं निदेशालय के क्षेत्रीय कार्यालय में अभिलेखार्थ पंजीकृत करने का दायित्व भी आवेदक का होगा।
11. अनुमोदित खनन योजना के अनुसार आवेदक द्वारा खनन कार्य में किंचित भी खनन पर आवेदक के विरुद्ध पट्टे की सीमा में उल्लंघन माना जाएगा और तदनुसार कार्यवाही की जाएगी।
12. खनन योजना इस तर्क के साथ अनुमोदित की जा रही है कि पट्टाधारक श्रमिकों की सुरक्षा एवं स्वास्थ्य को जमिनीय ध्यान देकर करेंगे।

संलग्नक - खनन योजना की अनुमोदित प्रति।

सचिवता:

(विनय शर्मा पाण्डेय)
निदेशक

संख्या 3523 / शासन / 3 / 11 / 2018-17 तदतिनांकित।

प्रतिलिपि - जिलाधिकारी, देहरादून को सूचनाएँ एवं आवश्यक कार्यवाही हेतु प्रेषित।

(विनय शर्मा पाण्डेय)
निदेशक

MINING PLAN
FOR
PICKING / EXTRACTION OF MINOR
MINERALS (SAND, BAJRI AND
BOULDERS) FROM A PART OF RIVER
JAKHAN-1 (AREA- 195.0 HA.), DEHRADUN
FOREST DIVISION, TEHSIL & DISTRICT-
DEHRADUN, UTTARAKHAND

APPLICANT

**Uttarakhand Forest
Development Corporation**
Aranya Vikash Bhawan, 73- Nehru Road
Dehradun, Dist. Dehradun, Phone: 0135-2657610

PREPARED BY

BHUWAN JOSHI
Empanelled Geologist, RQP, IBM
Forest & Rural Development Cell (FRDC)
Empanelment No. *URDA/2008-09/3190*
Govt. of Uttarakhand
RQP, Registration No. *RQP/DDN/180/2009/A*
Indian Bureau of Mines
Govt. of India

Address-

Progressive Geological & Geotechnical Services
(PG2S)

FIELD OFFICE

House No.-6, Kamal Bhawan

Vijay Colony, Lane No.-1, Dehradun
(Uttarakhand)

E-mail: *joshi@bhuvan.org@yahoo.co.in*

Mo. No. 99412152105

भूतल एवं खनिज सर्वेक्षण,
उद्योग निवेशन एवं विकास
विभाग

राज्य के अग्रणी अभियंता

फोन: 103, पारा 103

फोन: 12-5-17

USE GEOLOGICAL KNOWLEDGE FOR MAKING
DISASTER RESILIENT COMMUNITY

15/10
2014

MINING PLAN
FOR PICKING /EXTRACTION OF MINOR MINERALS (SAND,
BAJRI AND BOULDERS) FROM A PART OF RIVER JAKHAN-I
(AREA- 195.0 H.A.), DEHRADUN FOREST DIVISION, TEHSIL &
DISTRICT- DEHRADUN, UTTARAKHAND

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MINE PLAN

CHAPTER-1

INTRODUCTION

Forest Clearance (FC), Environment Clearance (EC) & Letter of Consent (LoC), released in the favor of Uttarakhand Forest Development Corporation (UKFDC) for extraction of extraction of Minor minerals (RBM i.e. sand, bazar & boulders) from a part area of Jakhn River called as Jakhn-1 (ANN. 1, 3, 4, 5) Dehradun Forest Division, Dist. Dehradun, over an area of 195.00 Hec. for the period of 10 years (FC & EC) (Ann. 1, 3), the demarcated topographic map (Ann. 6) is provided by UKFDC. The available area of Jakhn-1 is 195hec, falls under Dehradun forest division, Dehradun, Uttarakhand. The said area belongs to reserved forest region. The collection/picking of minor minerals will be carried out from 50% of the total area i.e. 97.5 Hec. after leaving 25% area on each of the banks for better channelization of the water during the rainy season and to protect the nearby forest land and habitat from the floods. Mineral extraction target is about 3, 25000 cubic meter/year or 7, 15000 tons/year.

The Jakhn River originates from the Dehradun District of Uttarakhand and flow through the foot hills of Dehradun Forest Division of Siwalik Circle. The river carries with it huge quantity of sediment consisting of stones, gravel and sand during every monsoon every year which is deposited in the foothills. Keeping in view, the environmental consideration for the eco-system of the rivers it is essential to remove this material from the river bed. The sediment in the form of river bed material (RBM) deposited in the last 100 years had changed the shape of the river bed from a valley to a raised land. Hence, it was thought necessary to make a channel in the middle 50% width of the river to create an area of cross section for the river water to flow unhindered during the monsoon season. The Ministry of Environment and Forest of India has agreed in principle and asked the State Government to get the approval of

1 | PROGRESSIVE CLIMATOLOGICAL & GEOTECHNICAL SERVICE



annual permissible extraction and rate of sedimentation along with the total approximate RMB available.

Uttarakhand Forest Development Corporation (UKFDC) is a statutory body constituted by the State Government. The Corporation was formed for the better preservation, supervision and development of forest also for better exploitation of forest produce within the State and for matters connected therewith.

The Mining Plan of the proposed area is prepared by Bhawan Joshi, BQP & Geological Consultant, Proprietor- Progressive Geological & Geotechnical Services, 6- Vijay Colony, Lane-1, New Cona Road, Dehradun. Registration No. BQP/DDN/140/2009/A, authorized by Uttarakhand Forest Development Corporation (UKFDC) for preparation of said Mining Plan.



CHAPTER-2

GENERAL

2.1	Name of the Applicant	Uttarakhand Forest Development Corporation (UFDC)
	Address	Aranya Vikash Bhawan, 73-Nehru Road, Dehradun
	District	Dehradun
	State	Uttarakhand
	Pin Code	248001
	Phone	0135-2657610, Fax: 0135-2655488, Email: uafdcmd@yahoo.com
2.2	Status of the Applicant	Uttarakhand Forest Development Corporation (UFDC) is a statutory body constituted by the Govt. of Uttarakhand
2.3	Mineral(s) which the applicant intends to mine	Sand, Bajri and Boulder. The mineral collected/extracted from the lease area shall be sold in the open market as per the demand.
2.4	Period for which the mining lease is required or granted / renewed	a) Approval in principle is granted by MoEF (FC Division), GOI vide letter No. F.No. 8-62/99-FC dated 26th May 2009 & dated 2nd June 2009 for Ten years. b) State Government consent for F.R.R. clearance is granted vide letter no. 1929/VII-E

		/163 Khajuraho/2009, dated 8 December 2009. c) Environmental Clearance is granted by MoEF (IA Division) vide letter no J-11013/342/2009-IA-II (M), dated 15th April 2011. d) Concern about this proposed mining over Jakhum-1 taken by Geology & Mining Department, Govt. of Uttarakhand vide letter no.vivid/51/Ddn/Kharan/ahukhani.ekal/2008-9, dated 19 February 2009. (Docs. attached as Ann. 1 to 6)
2.5	Name of the RQP preparing the mining plan	Bhuvan Joshi
	Address	C/o B.S. Rawat Kamal Bhawan House No. 6 Vijay Colony Lane No. 1 New Cantt Road, Dehradun (Uttarakhand) 248001
	Phone	+91-9412153105
	EMAIL	joshibhuvan@yahoo.co.in
	Registration No.	RQP/DDN/180/2009
	Valid upto	30/06/2019

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Signature and stamp of Bhuvan Joshi, RQP/DDN/180/2009.

2.6	Name of the prospecting agency	The baseline data is collected from UKFDC reports & detailed prospecting of the area carried by the RQP
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CHAPTER-3

PROJECT DESCRIPTION

3.1 NEED OF THE PROJECT

Sand, Bajri and Boulder are available everywhere and is being used from the time immemorial for wide applications in our daily life like infrastructure, building construction, highways, roads, townships, multiplexes, foundations of buildings and industrial units etc. and is an integral part of development. Over the millennia, the weathering effect, the flow of water at high velocities in rivers and the pressure of water from the high mountainous reservoirs converted and pushed the hard ground underneath into sand, gravel etc. which travelled as sediments with the flow. This sand gets deposited along the river course wherever conditions were favorable. In deep past this settled sand was not extracted in a quantity in which it is deposited, since due to less population the requirement was not enough. As a result of continuous deposit of sand, bajri etc. the river course continued changing by widening itself, eroding the fields and expanding. This started resulting in floods, inundation and breaking their banks, causing devastation of property and loss of life. There has been a severe impact on every aspect of the environment. Thus there was a need for channelization of rivers for which extraction of sand through mining was expedient. The haphazard extraction of river bed material

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being practiced for now long through unregulated, uncontrolled and illegal manner added almost an irreversible damage to the environment, which became a cause of serious concern. Though sand is very important mineral source for development, its mining through scientific methods have also become equally imperative. It is for this purpose that 'mining plan' is being drawn so that all its aspects are taken care of justifiably, according to law, protecting the environment, removing all adverse impacts and creating a direct and indirect employment opportunities, improving socio-economic conditions of the local inhabitants and all round status of life, achieving thereby a sustainable development. Besides above, the process of mining of minor minerals is a constant source of revenue generation to the State Government.

3.2 PROJECT BACKGROUND

Status and Stages of regulatory clearances

- 1- Approval in principle is granted by MoEF (FC Division), GOI vide letter No. F-No. 8-62/09-FC dated 26th May 2009 & dated 2nd June 2009 for ten years.
- 2- State Government consent for EIA clearance is granted vide letter no. 1929/VH-I/163Kha/2009 dated 8 Dec, 2009.
- 3- Environmental Clearance is granted by MoEF (IA Division) vide letter no. J-11015/342/2009-IA.II (M), dated 15th April 2011.
- 4- Concern about this proposed mining over Jakhn-I taken by Geology & Mining Department, Govt. of Uttarakhand vide letter no. vivid/51/Din/Khann/bhu.khani,ekai/2008-9, dated 19 February 2009
- 5- State Govt. consent about the about this proposed mining vide letter no 490/VH-I/2012/123-kha/2001, dated 05 April 2012 (ann. 5).

This mine plan is being prepared to abide by change in Mining Policy per Directive of Uttarakhand State Government, Industrial Development Section No. 1012/VH-I/2015/1464/2 (2010) dated 31st July, 2015.



3.3 LOCATION, GENERAL AND ACCESSIBILITY

3.3.1 LOCATION

(a)	Details of Area	Location Map is attached as Plate No. 1
(b)	District and State	Dehradun, Uttarakhand
(c)	Tehsil	Dehradun & Doiwala/ Dehradun Forest Division
(d)	Village	There are many village falls near bank area of Jakhan-I, Bhognpur, Malai, Ramnagar Danda, Nathurawal, Ranipokhari
(e)	Khasra No./ Plot No./ Block Range/	Dehradun Forest Division
(f)	Felling Series etc.	None
(g)	Area (hectares)	195 ha.
(h)	Whether the area is to forest (please specify whether protected, reserved etc.)	Yes, Dehradun Forest Division, many reserved forests regions surround the project area. They are:- Lachhiwala Reserved Forest Dwara Reserved Forest Paled Reserved Forest Malkot Reserved Forest Kunwar Reserved Forest Burko Reserved Forest



(i)	Ownership/ Occupancy	Govt. Land, Forest Department (Map Attached as Ann. 6)
(j)	Latitude	30° 14' 21.59" to 30° 11' 19.59" North
	Longitude	78° 13' 28.62" to 78° 12' 14.37" East

3.3.2 GENERAL

(a)	Mineral being worked	Sand, Boulder and Bajri
(b)	Period of mining Lease/permission	Approval in principle is granted by MoEF (FC Division), GOI vide letter No. F-No. 8-62/96-FC dated 26th May 2009 & dated 2nd June 2009 for ten years. Mining Plan is prepared for Five years, attached as Annexure I
(c)	Category of Landuse	Forest Land
(d)	General Ground Level	600 m above MSL
(e)	Elevation Range of River Bed	560m to 649m

3.3.3 ACCESSIBILITY

The proposed site is having a total area of 195 Hectares. The location map of the site is attached as Plate-1. The project area is located in the Dehradun forest division limits in the Dehradun city of Uttarakhand. The Rishikesh-Dehradun connecting NH-72 is the shortest highway. The Rishikesh Railway Station is about 15 km from the proposed site.

Location of the Mining Site

PROGRESSIVE GEOLOGICAL & GEOTECHNICAL SERVICES (P.G.S.)

PGS, Progressive Geological & Geotechnical Services



THIRUVANANTHAPURAM

The mining area is located in the Dehradun Forest Division limits in Dehradun District of Uttarakhand. The mining lease area falls in Survey of India Toposheet No.55/14 bearing Toposheet A5514.

Toposheet No. 5514

(Latitude: $30^{\circ} 14' 21.59''$ to $30^{\circ} 11' 19.59''$ North)

Longitude: $78^{\circ} 13' 28.62''$ to $78^{\circ} 12' 14.37''$ East

Dehradun, the district head quarter is 30 km away from the area. The nearest railway station is at Rishikesh which is at a distance of 10 km from the applied area. The nearest airport is the Jolly Grant Airport which is at a distance of 63 km from the project area. There are many villages lining the banks of the river, Bhogpur, Muli, Ramnagar Danda, Nathurawala, Rampur.

There are no Ecologically Sensitive Areas present in the study area, but many reserved forests regions surround the project area. They are- Lachhrawala Reserved Forest, Dwara Reserved Forest, Paired Reserved Forest, Mulhot Reserved Forest, Kumaon Reserved Forest, Haridwar Reserved Forest.

CHAPTER-4

GEOLOGY & EXPLORATION

4.1 GEOLOGY

Geologically the project area belongs to Doon gravels i.e. the area falls in the intermountain Doon Valley and is underlain by recent to sub recent Doon Gravels, which lie over the Upper Siwalik sediments. The Doon gravels have been broadly divided in older Doon Gravels and younger Doon Gravels. The older Doon Gravel consists of partly of graded Upper Siwalik Cobble, Angular Pebbles of Quarries, Slates and Shales from the Nagbati, Chantyal and Tal Baramulla and Lower Siwalik from Kail limestone alternating with clay beds.

PROGRESSIVE GEOLOGICAL & GEOTECHNICAL SERVICES (PGGS)



The younger Doon Gravels rest unconformably over the older Doon gravels in the northern part. The disconformable relationship gradually disappears in the southern part. The youngest Doon gravels are characterized by very large boulders in the alluvial fans and debris flow deposits and consist of moderately sorted mixture of clay, sand, gravels and boulders. The sandy and gravelly units are separated from each other by clay beds. The thickness of these units varies from place to place and also may be traced laterally.

4.2 EXPLORATION

Adequate amount of sand, bajri and boulder in reserve is available for meeting consumer demand. Moreover mining will be carried out by batch rotation manner and the mined out area is fully replenishable.

4.3 ESTIMATION OF RESERVE

The method of cross section has been adopted for computing the reserve. The mining lease boundary, proven and mining limits are marked on the plan which is thereafter transferred to cross section for determining the different categories of reserve.

In order to calculate the mineable reserve the geological map on the 1:1000 scale was prepared and main litho units were marked on the plan to know the surface spread of each unit. The different constituents of the deposits such as sand, bajri, boulder and mixture of clay, soil, silt, based on sized classification were considered for the reserve calculation. Although it is not possible to mark these units separately on the geological map, as such five pits of 1x1x1 meters were got dug in the mineable area and material so excavated was separated into different size and their percentage was worked out. This percentage was taken into account during calculation of the reserve. The cumulative result of the test pits are given in the following Table no 1.

Table No. 1. Classification of Minerals available

Sr. No.	Mineral	Size
10	PROGRESSIVE GEOLOGICAL & GEOTECHNICAL SERVICES (P.G.S.)	



Handwritten signature and text at the bottom right, including the name 'HITENDRA' and some illegible text.

1.	Sand	0.06-2 mm	65%
2.	Gravel	8-64 mm	8%
3.	Boulder	256 mm <	25%
4.	Silt/clay	1-62.5 μ m	2%

Bulk density is taken as 2.2 for calculation (as per GoUK, Industrial Development Section Notification 1033/VII-1/ 2015/ 146 -Kha/ 2010, dated 31st July 2015). Calculation of reserve has been done as following:

1. Cross sections have been prepared at intervals. Refer Plate No.3
2. Area of every cross section has been taken. For example, if the area of cross section A-A' is 'X' and area of B-B' is 'Y', then average of both calculating the reserve (i.e. $(X+Y)/2$).
3. Distance between the two sections has been multiplied with the average area of the two sections to get the total volume. Eg. $[(X+Y)/2] \times \text{Distance between A-A' \& B-B'}$.

The overall geological reserves have been estimated through geological cross section method. The area of each section line is calculated. The section area is multiplied by the strike influence to get the volume. The target geological reserve classified in to three categories i.e. Proved reserve, Probable reserve & Possible reserve. In this project the proved reserve assessed as 10m depth & further 5m as probable reserve whereas 3m considered as possible reserve. Out of total volume the 90% considered as the recoverable reserve & 3.2 bulk density.



Table No. 2. Reserve Estimation (Proved Reserve Part-1)

Cross-Section Line	Sectional Area, M ²	Strike influence (m)	Volume (m ³)	Quantity (MT)
A-A' to B-B'	31320.5	121.5	3044352.6	6697575.72
B-B' to C-C'	31447.5	117	2943486	6475669.2
Total	-	-	5987838.6	13173244.92

Table No. 3. Reserve Estimation (Proved Reserve Part-2)

Cross-Section Line	Sectional Area, M ²	Strike influence (m)	Volume (m ³)	Quantity (MT)
A-A' to B-B'	10733.5	121.5	1043296.2	2295251.64
B-B' to C-C'	10727.5	117	1004094	2209006.8
Total	-	-	2047390.2	4504258.44

Table No. 4. Reserve Estimation (Probable Reserve Part-1)

Cross-Section Line	Sectional Area, M ²	Strike influence interval (m)	Volume (m ³)	Quantity (MT)
A-A' to B-B'	15660.5	121.5	1522200.6	3348841.32
B-B' to C-C'	15324	117	1471766.4	3237886.08
Total	-	-	2993967	6586727.4



Table No. 5. Reserve Estimation (Probable Reserve Part-2)

Cross-Section Line	Sectional Area, M ²	Strike influence interval (m)	Volume (m ³)	Quantity (MT)
A-A' to B-B'	5368.5	121.5	821623.8	1147572.36
B-B' to C-C'	5363.5	117	502023.6	1104451.92
Total	-	-	-	2252024.28

Table No. 6. Reserve Estimation (Possible Reserve Part-1)

Cross-Section Line	Sectional Area, M ²	Strike influence interval (m)	Volume (m ³)	Quantity (MT)
A-A' to B-B'	9396	121.5	913291.2	2009240.64
B-B' to C-C'	9434.25	117	883045.8	1942700.76
Total	-	-	-	3951941.4

Table No. 7. Reserve Estimation (Possible Reserve Part-2)

Cross-Section Line	Sectional Area, M ²	Strike influence interval (m)	Volume (m ³)	Quantity (MT)
A-A' to B-B'	11230	121.5	312984	688564.8
B-B' to C-C'	3218	117	301204.8	662650.56
Total	-	-	-	1351215.36

Geological Reserve

The summarized category-wise geological reserve estimated by is:-



Proved Reserve- Part 1+ Part 2= $13173244.92 + 4504258.44 = 17677503.36$ Tons

Probable Reserve- Part 1+ Part 2= $6586727.4 + 2252024.28 = 8838751.68$ Tons

Possible Reserve- Part 1+ Part 2= $3951941.4 + 1351215.36 = 5303156.76$ Tons

Mineable reserves:-

The proved mineable reserve is calculated as referred in Uttarakhand Minor Mineral Policy 2015 for Category C, minor mineral area (Zone C). The mineable reserve within allowable me is 32,17500 tonnes/year. This is fully replenished every year.

Quantity of minerals consumed in the mining area (2 to 4 gms x 2.24 mill. demand)

4.4 MINE REPLENISHMENT

It has been assessed that proposed mining area/ mineral picking area generally gets flooded during monsoon season and gets completely replenished. However, The Department of Geology & Mining may monitor the replenishment within the lease area and specific consultation or study may be conducted whenever required.



DEPARTMENT OF GEOL. & MINING
PUNJ
27/11/2020

CHAPTER-5

MINING

5.1 METHOD OF WORKING

The mining process is conventionally opencast river bed mining of minor minerals with hand tools, shovels and pan without drilling & blasting. Proposed mining will be start from lowest level of river end to highest river end phase wise and block wise going to the maximum depth of 1.5m bgl or above ground water level whichever is less. Length/size of the blocks/pits may be decided on the spot convenience & available material but an ideal way of progression of mining pits as left to right or series wise lower to upper level i.e. downstream to upstream direction. Mining would be carried within 1st half of the course as demarcated & mapped. Each year the mining will be carried within about 2.16,666 sqm area as per yearly Target reserves i.e. 3,23,000m³ with area wise rotation method. Total 9,75,000m³ area is workable and replenishable yearly. Retaining wall within both banks would be proposed of about 2.5 to 3m to check the erosion & flooding during monsoon season. Mineral extraction will be done for a period of 225 days in a year.

Following guidelines will be followed while carrying out mining:

- 1- Conditions under which Forest Clearance has been granted by MoEF (FC Division), GOI vide letter No. F.No. 8-62/99-FC dated 26th May 2009 & dated 2nd June 2009 for ten years.
- 2- Conditions under which Environmental Clearance is granted by MoEF (EA Division) vide letter no. 3-1/015742/2009-IA.II (M), dated 15th April 2011.



Table No. 8.

YEARWISE PRODUCTION FOR REMAINING TWO YEARS

YEAR (for remaining two years)	MINEABLE AREA (TOTAL LEASE AREA- NON WORKABLE AREA)	DEPTH (M)	PRODUCTION (TONNES)	BALANCE (M ³)
1 st Year	2,16,666 m ²	1.5	7,14,997.8	11,37,501
2 nd Year	2,16,666 m ²	1.5	7,14,997.8	11,37,501
TOTAL	-	-	14,29,995.6	22,75,002

COLUMN GRAPH SHOWING PRODUCTION IN REMAINING TWO YEARS

5.5 DEVELOPMENT & PRODUCTION FOR REMAINING FIRST YEAR

Development & Production Programme for remaining first year, the mining is proposed in 216,000 sqm area. The production of each mineral constituents would be on an average in

Table No. 9.

REMAINING FIRST YEAR (560-57611)

Sr. No.	Mineral Constituents	Production (±) to 1000
1.	Sand	4,64,748.00
2.	Bajri	57,199.8
3.	Boulder	1,78,749.45
4.	Silt/clay	14,209.95
TOTAL		7,14,997.8

% of Mineral Constituents



PIE GRAPH OF % OF MINERAL CONSTITUENTS

5.8 DEVELOPMENT & PRODUCTION FOR THE REMAINING SECOND YEAR

Development & Production Programme for remaining second year; the mining is proposed in 2,16,666 sqm area. The production of each mineral constituent would be on an average as under:-

Table No. 10

REMAINING SECOND YEAR (576-580M)

Sr. No.	Mineral Constituents	Production (—) in tonn
1.	Sand.	4,64,748.00
2.	Gravel	57,199.5
3.	Boulder.	1,78,749.45
4.	Silt/clay	14,290.95
TOTAL		7,14,997.90

5.10 MINERAL PRODUCTION

The riverbed mining will consist of sand and their production may vary to a great extent depending upon availability. Therefore quantity of sand cannot be estimated on logical parameters, the figures given here above only tentative. The production target is as above.

5.11 DEVELOPMENT AND PRODUCTION PROGRAMME FOR REMAINING TWO YEARS

Before start production from the area, some development work has to be completed as under
Plan No. 1 to 6

- Haul road preparation
- Erection of a site office and Stay/rest shelter for workers
- Barbed wire fencing/trenching all around the mining area may be provided to avoid accident and inadvertent entry.
- Construction of Retaining wall towards bank area (river bank) to abstain from toe erosion & flooding

CHAPTER-6

DRILLING & BLASTING

No drilling and blasting is required to undertake mining of riverbed minerals.

CHAPTER-7

WATER AND DRAINAGE SYSTEM

As per the proposed mining the working shall be confined upto 1.5m bgl or above the ground water table, whichever is less. Hence no water clogging is likely to be encountered. Therefore, there is no need of any such arrangements.

CHAPTER-8

DISPOSAL OF WASTE MATERIAL



The waste will be generated in the form of silt/slay etc. This will be dumped back into the mined area.

Sewerage System:

Portable Toilets will be provided.

Solid Waste Management:

It would be in fitness of things to repeat that there will be no solid waste generated in the proposed activity.

CHAPTER-9

USE OF MINERALS

Sand, balti and boulders are used in construction activities like building, roads, bridges etc. The requirement for the mineral is always high in the nearby cities and towns.

CHAPTER-10

OTHERS

1- SITE SERVICES

The site services like dayrest shelters, portable toilets, first aid facility and drinking water will be provided.

2- WATER REQUIREMENT

Total water requirement for the project is 1 KLD, it breaks up as under:

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Author: JGK
VCA, Rajkot under the PWD, GPR, (2018/2019)



Table No. 11. Water Requirement

S. No.	Purpose	Water Requirement (KLD)
1.	Dust Suppression	0.5
2.	Drinking	0.2
3.	Miscellaneous (Plantation etc)	0.3
Total		1.0

3- EMPLOYMENT

Depending upon the General shifts working, following will be the proposed manpower.

Table No. 12 Employment Break-up

S.No.	Category	Numbers
1.	Mining Competent Person	1
2.	Administrative	1
3.	Supervisor	1
4.	Unskilled workers	150
Total:		153

Besides above Geological, Mining & Environmental Consultancy Services may be hired as per requirement on part-time basis or per day basis.

4- SAFETY PROVISION

All provision in safety rules & regulation will be maintained by providing required materials to the employees. The Applicant will provide safety shoes, First Aid facility, drinking water etc to all the employees. There will be no violation of safety provision.



CHAPTER-11

MINERAL PROCESSING & TRANSPORT

MINERAL BENEFICIATION

Mineral Sand doesn't require processing or beneficiation. The excavated mineral will be directly loaded into the bucket.

HAULAGE AND SURFACE TRANSPORT

Mode of transportation of material is by trucks/tractors. of size of 8-10 tonnes capacity have been planned. Mining area is connected with an unmetalled road upto the NH 72. The mine road is adequate to permit easy maneuverability of trucks allowing cross overs and changing points. Water will be sprayed two times a day by tractor mounted sprinklers until dust remains airborne.

MINE MACHINERY

Mining will be done using hand tools like shovel, spades, pick-axes. Other machineries on the mining site will be water sprinkler.

CHAPTER-12

ENVIRONMENT MANAGEMENT PLAN

12.1 SOLID WASTE MANAGEMENT

2% waste will be generated in the form of silt/clay etc. This will be dumped back into the mined area.

Sewerage System:



Portable Toilets will be provided.

Solid Waste Management

It would be in fitness of things to expect that there will be no solid waste generated in the proposed activity.

12.2 PLANTATION

Plantation in the mining area is not possible. Instead, Plantation will be done along both banks of the river with consultation of local authorities. Every year 25 to 30 trees will be planted.

12.3 BASELINE INFORMATION

12.3.1 Land Use Pattern

Entire area is a wasteland & barren, scattered seasonal bushes & shrubs cover area. There is no agricultural land most of the land is barren.

12.3.2 Flora & Fauna

Dehradun has a rich vegetation cover. Although the major portion of Dehra is occupied by the Sal (*Shorea robusta*) but miscellaneous forests are also found here. The hydro-geological and meteorological conditions of the valley are responsible for the condition for the different types of forest cover. Sal and its associates can be classified in Northern tropical moist and dry deciduous communities. They are found throughout the Sivalliks across large tracts of the valley and also along the lower foothills of the Himalayas. A presence of large proportion of clay soil and better drainage act as favorable conditions for the growth of Sal trees.

Faunal Community: as per data provided by UKFDC, in general following categories of faunal classification given in the EIA report:

- (i) Core Zone: There was no unique faunal community within the core zone of the project area, except most common ones like rat, dog, crow, Sparrow, and many etc.
- (ii) Buffer Zone: In 1/2 km radius around the project area:

Amphibians: Among amphibians toad (*Bufo* sp.) and frog (*Rana tigrina*).

English Name -Scientific Name

Common Toad- *Bufo melanostrigatus*

India bull frog- *Rana tigrina*

India tree frog- *Polypedates maculatus*

Marbled toad- *Bufo stomaticus*

Skipping frog- *Rana Cyanophyllus*

a. Reptiles: Among reptiles Indian garden lizard (*Calotes versicolor*), house lizard (*Hemidactylus* sp.).

b. Mammals: Among mammals Indian palm squirrel (*Eumambolus pumilus*), cat, dog (*Canis* sp.), cow, Buffalo, rat (*Rattus rattus*) etc.

c. Aves: Among aves common birds like crow (*Corvus splendens*), sparrow (*Passer domesticus*), parrot (*Psittacula krameri*), baya (*Picenus philippinus*), peafowl (*Pavo cristatus*), pigeon (*Columba livia*), Egretta sp. etc.

12.3.3 Climatic Condition

Dehradun valley has moderate climate because of nearness of Himalaya and due to average elevation of 700 meters above sea level. The climate of the study area exhibits the character of sub-temperate climate of mountain areas because of the combined effect of plain-like warm climate and cool lesser Himalayan climate. The mean minimum and maximum annual temperature varies from 2.70C in December and January to about 26.90c in May and June. Only the months of May and June are hot though they are seldom oppressive. Like all other parts of India, Dehradun is also greatly affected by the Monsoons that generally break in the middle of June and remains active till the middle of the September. The months of July and August have heaviest rainfall. From October to December, the climate remains dry. In the end of December, January and early February the valley receives winter rains. The months of March and April receive very less rainfall. Normally the rainfall in Dehradun is sufficient and averages around 2000mm.

12.3.4 Social Infrastructure

The nearest health & education facilities are available in all nearby villages of the proposed mining area. Other major facilities are available in Rishikesh, Deewala and Dehraun (about 15 to 16 km range).

12.4 EFFECT OF MINING ON ENVIRONMENT

Due to the mining activity following things are going to be affected

- Degradation of land
- Destruction of Flora & Fauna
- Air Pollution
- Water Pollution
- Noise Pollution

These effects will be either minimized or nullified by adopting following measures:

- o The mining activity will take place in barren/waste land which is of no use to the inhabitants or ambient environment.
- o Due to manual mining there may be generation of dust which in turn affects the ambient air. This may be maintained to the permissible limit by doing water spraying on the haul road.
- o Mining will be done above the ground water table and thus it is not going to be effected/contaminate the ground water. There will be no discharge of mine water to the nearby water source; except rainwater during rainy season, and thus there will be no contamination of water of the nearby water course, if at all present.
- o Due to manual mining there may be no generation of noise.
- o Ground vibration & Noise pollution it is not possible because manual mining.
- o The applicant has plan for plantation along the both banks with permission of local authority.



CHAPTER 13

MINE CLOSURE PLAN

13.1 **Introduction:** Forest Clearance (FC) Government Collieries (FC) is Letter of Consent (LC) issued to the form of Underground Forest Development Corporation (UGFDC) for extraction of resources of minor minerals (MM) i.e. sand, lignite & building stone & part area of Mahanadi River valley as follows: 1. 2. 3. 4. 5. Odisha, Forest Division, Dist. Odisha, area of 100.00 Ha. for the period of 10 years (FC & LC) (Ann. 1). The detailed topographic map (Ann. 2) is provided by UGDFC. The available area of Mahanadi is 100.00 Ha. under Odisha Forest Division, Odisha, Underground. The said area belongs to reserved forest category. The collection/packing of minor minerals will be carried out from 20% of the total area i.e. 20.00 Ha. after leaving 20% area on each side of the banks for better administration of the water during the rainy season and to protect the nearby forest land and villages from the floods. Mineral extraction target is about 3,25,000 cubic cumm/year or 3,25,000 tonnes/year.

13.2 Name of the Lessee:

As per document in previous paragraph

13.3 Location of Mine:

As per document in previous paragraph

13.4 Detail Description of the Area:

As per document in previous paragraph

13.5 Land Use Pattern of the Area:

As per document in previous paragraph

13.6 Method of Mining:

As per document in previous paragraph



Signature of the Lessee

Signature of the Lessee



1. The mining/ extraction of minerals shall involve shovelling by simple hand tool and loading into trucks/ tractors/ trailers for transporting them to crusher etc.
2. Picking and extraction of minor minerals (sand, bazar & boulders) and pits for the mining purpose shall be made in such a way that there should not be more than 1.5 meter.
3. With the replenishment of the pits and trenches during the high floods, the process of the controlled mining can continue year after year.
4. Though the major mining activities will be under taken during the dry seasons but retained mining can be under taken during the dry days of rainy season.

13.7 Name & Address of the Recognized Person:-

Already discussed in previous paragraphs

13.8 Mine Description:-

Picking/ extractions of minor minerals (sand, bazar & boulders), detail already discussed in previous paragraphs.

13.9 Geology:-

Already discussed in previous paragraphs



13.10 Reserves:-

Already discussed in previous paragraphs

13.11 Progressive Closure Plan

The mining area belongs to river borne deposits (RBD) which are deposited by Mahanadi River, mostly during rainy season. The mining process is conventionally open cast even had mining of minor minerals with hand tools, shovels and pan without drilling & blasting. Proposed mining will be start from lowest level of river and go to highest river and phase wise and block wise mining to the maximum depth of 1.5m high or above ground water level whichever is less. Impurities of the block/ pits may be located on the spot continuously & available material has

A ideal way of progression of mining pit is left to right or better way lower to upper level i.e. downwards to upstream direction. Mining would be carried within 1" half of the contour as demarcated & mapped. Each year the mining will be carried within about 2,16,666 sqm area as per yearly Target reserves i.e. 3,25,000m³ with open mine method. Total 4,75,000m³ area is workable and replenishable yearly. Retaining wall within both banks would be provided of about 2.5 to 3m to check toe erosion & flooding during monsoon season. Minimal extraction will be done for a period of 225 days in a year.

During the monsoon/rainy season 1.5 to 2m average stacking of sand, baji & boulders exposed. So it is clear that the deposit would be annually replenishing as such no need to develop or plan for closure scheme but towards bank side temporary construction of retaining wall is suggested to reduce the impacts of toe erosion & flooding.

13.12 Air Quality Management

Details already discussed in previous paragraphs.

13.13 Waste Management

Already discussed in previous paragraphs.

13.14 Safety and Security

The picking and extractions of minor minerals shall be carried on only up to a depth of 1.5meter, no blasting is involved. Hence there is no danger and no special precaution is required. However standard precautions are always to be kept in mind for the safety of workers and general public.

13.15 Disaster Management and Risk Management

No blasting is involved, picking and extractions of minor minerals (sand, baji & boulders) shall be carried on only up to a depth of 1.5meter therefore negligible scope of landslides & subsidence.



[Handwritten signature]

CHAPTER-14

CONCLUSION

The project involves collection of sand, bari and boulders. The river bed material extracted is in high demand in the local market which is used in making bridges, road & building material, etc. The project optimum will provide livelihood to the poorest section of the society. It provides employment to the people residing in the vicinity directly or indirectly by the project. The applicant will undertake mining activity as per the plan indicated in this Mine Plan with proper taking care of environment aspects i.e. without disturbing the environment condition.



Handwritten signature of the applicant.

AUTHORIZATION LETTER BY THE APPLICANT

Uttarakhand Forest Development Corporation (UKFDC), Aranya Vidya Bhawan, 73-Nehru Road, Dehradun hereby authorizes Sri. Bhuvan Joshi, Geological Consultant & RQP, Registration No. RQP/DDN/180/2009/A, to prepare Mining Plan under New Mining Policy i.e. Uttarakhand Minor Mineral Policy-2015 (Sand, Bajri, Boulder and Bricks etc) over an area of 195 Hectares for extraction of RBM (sand, bajari and boulders) from a part of Jalkhan-I river zone, Dist. Dehradun, Uttarakhand.

I request the Director, Geology & Mining Department, Uttarakhand, to make further correspondence regarding modification and to collect the approved copies of the aforesaid Mining plan to the said recognized person in his following address or communicate in other modes:-

Name of the RQP- BHUWAN JOSHI
RQP, Registration No. RQP/DDN/180/2009/A

Address:-

House No.-6, Kamal Bhawan
Vijay Colony, Lane No.-1, Dehradun
Uttarakhand
E-mail: joshibhuvan@yahoo.co.in
Mo. No. 99412152105

Place Dehradun

Date 23-11-15


Divisional Geology Manager (Khamn)
Uttarakhand Van Vikas Nigam
Dehradun



CERTIFICATE

I Bhuvan Joshi hereby certify that the provisions of Uttarakhand Minor Mineral Rules/Policy- 2015 for extraction of RBM (Sand, Bajri, Boulders etc.) have been observed in the preparation of Mining Plan for Picking /Extraction of minor minerals (sand, bajri and boulders) from a part of Jakhn river zone i.e. Jakhn-1, Tahseel & Dist. Dehradun, Uttarakhand, over an area of 195Hac. for Uttarakhand Forest Development Corporation (UKFDC), Aranya Vikash Bhawan, 73-Nehru Road, Dehradun.

The information provided and data furnished in this mining plan with Closure Plan is correct to the best of my knowledge.

Place Dehradun

Date-02-12-15

BHUVAN JOSHI, RQP
Reg. No. - RQP/DDN/180/2009/A

BHUVAN JOSHI
B.Q.P.-Indian Institute of Mines (IIM)
Reg. No.-RQP/DDN/180/2009/A
Govt. of India



प्रति,

सेल्स मनीसी,
सचिव,
उत्तराखण्ड शासन।

लिना में,

वित्तप्रकारण,
देहरादून।

संख्या: 54 / VII-1 / 123-ख / 2011

औद्योगिक विकास अनुभाग-1

देहरादून : दिनांक 16 मार्च, 2017

विषय: जनपद देहरादून के आश्रित वन क्षेत्रांतर्गत स्थित खनन साइट सीम नदी-3, जाखन नदी-1 एवं जाखन नदी-2 में उपखनिजों के भुगान की स्वीकृति के सम्बन्ध में।

संदर्भ:

उपरोक्त विषयक निदेशांक, भूतत्व एवं खनिकर्त इकाई, उद्योग निदेशालय, उत्तराखण्ड, देहरादून के पत्र संख्या-216/वनन/देहरादून/भूतत्वनिदेश/2016-17 दिनांक 30 जनवरी, 2017 के संख्या में भुगतान करने के निदेश हुआ है कि वन एवं पर्यावरण मंत्रालय, भारत सरकार के पत्र संख्या-08-62/99-एन दिनांक 28 मई, 2008 के द्वारा जनपद देहरादून के आश्रित वन क्षेत्रांतर्गत स्थित खनन साइट सीम नदी-3 कुल क्षेत्रफल 270 हे० मी० 135 हे०, जाखन नदी-1 कुल क्षेत्रफल 195 हे० मी० 97.5 हे० एवं जाखन नदी-2 कुल क्षेत्रफल 100 हे० मी० 50.00 हे० क्षेत्र में उपखनिज बालू, बजरी, बोल्टर के भुगान हेतु वन संरक्षण अधिनियम, 1980 की धारा-2 के अन्तर्गत Forest Clearance 10 वर्ष की अवधि अर्थात् 25.05.2019 तक अनुमति प्रदान की गयी है। के पृथिवीय शासनादेश संख्या-490/VII-1/2012/123-ख/2011 दिनांक 03 अप्रैल, 2012 के द्वारा उक्त खनन साइटों से 06 वर्ष की अवधि हेतु उपखनिजों के भुगान हेतु उत्तराखण्ड वन विकास निगम को कतिपय शर्तों के अधीन अनुमति प्रदान की गयी, जो दिनांक 02.04.2017 को सम्पन्न हो रही है।

2- उत्तराखण्ड उपखनिज (बालू, बजरी, बोल्टर) भुगान नीति, 2016 में पूर्व स्वीकृत खनन पट्टों की अवधि निर्यातीत किये जाने का प्रावधान न होने के कारण शासनादेश संख्या-490/VII-1/2012/123-ख/2011 दिनांक 03 अप्रैल, 2012 के द्वारा जनपद देहरादून के आश्रित वन क्षेत्रांतर्गत स्थित खनन साइट सीम नदी-3 कुल क्षेत्रफल 270 हे० मी० 135 हे०, जाखन नदी-1 कुल क्षेत्रफल 195 हे० मी० 97.5 हे० एवं जाखन नदी-2 कुल क्षेत्रफल 100 हे० मी० 50.00 हे० क्षेत्र में 06 वर्ष की अवधि हेतु स्वीकृत खनन पट्टों की अवधि समाप्त होने से सम्बन्धित वन एवं पर्यावरण मंत्रालय, भारत सरकार द्वारा वन संरक्षण अधिनियम, 1980 की धारा-2 के अन्तर्गत निर्मित Forest Clearance 10 वर्ष की अवधि अर्थात् 25.5.2019 तक होने के पृथिवीय शासनादेश संख्या-490/VII-1/2012/123-ख/2011 दिनांक 03 अप्रैल, 2012 में निर्धारित शर्तों/प्रतिकर्षों तथा उत्तराखण्ड उपखनिज (बालू, बजरी, बोल्टर) भुगान नीति, 2016 के प्रावधानों का अनुसरण किये जाने के अधीन पर्यावरण एवं भुगान कार्य करने की अनुमति उत्तराखण्ड वन विकास निगम को प्रदान की जाती है।

3- यह अनुमति दिनांक 03.04.2017 से प्रवर्ती होगी।



प्रमाणित/प्रमाणित/प्रमाणित
दिनांक 18/03/17
19054/18/03/17
18/03/17
18/03/17

(5)/VII-1/17/123-अ/2011 मधुबनी।

निम्नलिखित को सूचना एवं आवश्यक कार्यवाही हेतु प्रेषित:-

1. सचिव, भारत सरकार, पर्यावरण एवं वन मंत्रालय, पर्यावरण मन्त्र, सी० जे० ४४०, इन्दिरा पार्क, नई दिल्ली।
2. निजी सचिव, मुख्य सचिव, उत्तराखण्ड शासन को मुख्य सचिव, भारत के सचिव।
3. उपर सचिव, वन, उत्तराखण्ड शासन।
4. अनुमति, मद्रास मण्डल, पीडी गढ़वाल।
5. निर्देशक, मुलाख एवं सैनिकी इकाई, उत्तराखण्ड देहरादून।
6. प्रमुख वन संरक्षक, उत्तराखण्ड देहरादून।
7. प्रमुख भिद्यगाव, उत्तराखण्ड वन विभाग, देहरादून।
8. गार्ड फाईल।

आज्ञा से

(सुबेन्द्र सिंह चौधरी)
वन सचिव



GOVERNMENT OF INDIA
Ministry of Environment & Forests
(IC Division)

31

For: Forest Officer,
CCF, Camp, on Lathi Road,
New Delhi-110 002.
Date: 30th May, 2000.

The Principal Secretary (Forest),
Forest and Revenue Department,
Government of Uttar Pradesh,
Lucknow.

Removal of permission over 1553.00 ha of forest land for collection of sand,
logs and boulders from river beds in district Pilibhit, Uttar Pradesh.

I am directed to refer to the Government of Uttar Pradesh's letter No. 5629/142-
11/2000/1002 dated 07th May, 1999 and Forest Officer's letter No. (262)12-977
(Domestic) dated 19th August, 1998 on the subject mentioned above seeking prior
approval of the Central Government under the Forest (Conservation) Act, 1980
for removal of permission of the project by the Forest Advisory Committee
constituted under Section 5 of the said Act, in principle approved in the said
project and granted vide the Ministry's letter of even number dated 12th
September, 2000 subject to fulfillment of certain conditions. The State Government
has furnished compliance report in respect of the conditions stipulated in the
project approved and has requested the Central Government to grant final
approval.

In this connection, I am directed to say that on the basis of the compliance
report furnished by the CCF vide letter (262)12-977(Domestic) dated 19th
September, 1998, approval of the Central Government is hereby granted under
Section 5 of the Forest (Conservation) Act, 1980 for removal of permission over
1553.00 ha of forest land for collection of sand, logs and boulders from river beds
in district Pilibhit, Uttar Pradesh, subject to fulfillment of the following
conditions:

1. The legal owner of forest land shall remain unchanged.
2. No of revenue realized from disposal of material from river bed shall
be spent on site training and education of dependent area.
3. Compensatory Afforestation will be raised over 1553.00 ha of degraded
forest land over approved period of 10 years @ Rs 12.50 ha per
hectare/annum each year, from the funds as collected/realized
from sale of the materials.



- (iv) The User Agency will undertake to pay 10% as per the orders of Hon'ble Supreme Court of India in IA No. 262 of 1977 FC No. 202/1977.
- (v) Adequate number of temporary check posts will be established at entry and exit points before start of work, and proper record of material collected and removed will be maintained.
- (vi) Extraction of material should be from the middle of the river bed after leaving one-fourth of the river bed on each bank unspoiled.
- (vii) There shall be no labour camp in the forest area for the labour involved in the extraction work.
- (viii) No explosive shall be used while extracting the material and only hand tools will be used for the collection of boulders, bunt etc.
- (ix) Collection time shall be from sun rise to sunset.
- (x) Breaking of boulders will be done outside the forest boundaries.
- (xi) The labourers engaged in collection work will be provided free food and/or other source of energy to avoid any pressure on adjoining forest areas.
- (xii) There shall be no extraction of material from the river beds during monsoon period, i.e. from June to October each year.
- (xiii) The forest area shall not be used for any other purpose other than that specified in the proposal.
- (xiv) Any other conditions that the CCFC, Regional Office, Lucknow may impose from time to time in the interest of Afforestation and protection of flora and fauna, that may be applicable.

Yours faithfully

21

(B. K. Singh)

Sr. Assistant Inspector General of Forests

Copy to

- 1. The Principal Chief Conservator of Forests, Government of Uttar Pradesh, Dehradun.
- 2. The District Officer, Forest Department, Government of Uttar Pradesh, Dehradun.
- 3. The Chief Conservator of Forests, Regional Office, Lucknow.
- 4. User Agency.
- 5. Ministering Cell, Ministry of Environment and Forests.
- 6. Guard File.

(B. K. Singh)

Sr. Assistant Inspector General of Forests



GOVERNMENT OF INDIA
Ministry of Environment & Forests
(CC, Dehradun)

Daryasanku Bhawan,
CCO Complex, 100th Road,
New Delhi-110 003.
Date: 02nd June, 2009.

To

The Principal Secretary (R&A),
Forest and Revenue Department,
Government of Uttarakhand,
Dehradun.

Sub: Renewal of permissions for 12.50 ha of forest land for collection of sand, burl and boulders from river bed in District Dehradun, Uttarakhand.

Sir,

I am directed to refer to the Government of Uttarakhand's letter No. 5609/14-2-98-500(648/1998 dated 07th Jan. 2007 and the Joint Field Officer's letter No. 626/11C-977 (Dehradun) dated 29th August, 2009 in the above mentioned above seeking prior approval of the Central Government under the Forest Conservation Act, 1980. After careful consideration of the proposal by the Forest Advisory Committee constituted under Section-3 of the said Act, in-principle approval for the same is granted vide this Ministry's letter of even number dated 22nd September, 2009 subject to fulfillment of conditions stipulated in the in-principle approval and the Central Government has granted final approval in favour of Uttarakhand Forest Development Corporation Limited vide its letter dated 26.09.2009.

I am further directed to convey in reference to Managing Director, Uttarakhand Forest Development Corporation, Dehradun's letter No. C-93 dated 23rd May, 2009, that the work has to be carried out through State Forest Development as per the condition stipulated in the above mentioned in-principle approval and the decision of the State Government taken in meeting of 24.09.2009. C-102/2009, C-11/Secretary, Uttarakhand.

Yours faithfully


(R. K. Singh)

SE, Assistant Inspector General of Forests

Copy to

1. The Principal Chief Conservator of Forests, Government of Uttarakhand, Dehradun.
2. The Joint Field Officer, Forest Department, Government of Uttarakhand, Dehradun.
3. The Chief Conservator of Forests, Forest Officer, Lucknow.
4. Joint Agency.
5. Monitoring Cell, Ministry of Environment and Forests.
6. Guard File.



1999

श्री. विजयलक्ष्मी
इन्द्रा. साहिब
दत्तात्रय. इन्द्रा.

Amplexus - 1

吉成

७८५३ निदेशांक:
प्रस्तावनासह वन विजयन नियम
देखादून।

श्रीमान् विद्यापतिः अनुनादः-१

संशोधन दिनांक: 8 दिसम्बर 2009

विषय- राज्य के नदी तटों से ई000ई000 नोटिफिकेशन, 2008 के अर्बन उप तटियों के पुनर्न
ई0 पर्यावरण संरक्षित प्राप्त किए जाने के सम्बन्ध में।

—

[illegible]

44

पुनः प्रविष्टः।

Downloaded from <http://www.jstor.org/stable/1111111>

श्रीशिवः विमलविद्या नो मुकुतः इव कल्पान्तरादपि ह्यु प्रोक्ता -

[illegible]

३- श्रीमन्मानवप्रतिष्ठापनी भूतान्त एव गणितज्ञां प्रकृत्यै, पञ्चमे विद्याभ्यासे ।

54/55

DATE: 10/10/10



No. 1-11015/342/2009-IA.IX(M)
Government of India
Ministry of Environment and Forests
IA Division

Paryavaran Bhawan
CGO Complex, Lodhi Road,
New Delhi-110 003

Dated the 15th April, 2011

M/s Uttaranchal Forest Development Corporation
Attn: Vikas Bhawan,
73, Rohru Road,
Dehradun-248 001
E-mail: unfilemof@yahoo.com
Vanvikas12@gmail.com

Subject: Collection of Minor Mineral(Reta, Bajri and Boulders) from the river bed of River Jakhan-1 by M/s Uttaranchal Forest Development Corporation, located in Dehradun Forest Division, District Dehradun, Uttarakhand -environmental clearance regarding.

1. This has reference to your letter No.U-3512/32-29 dated 12.10.2010 and subsequent letter dated 14.01.2011 on the subject mentioned above. The project has earlier prescribed Terms of Reference (TORs) by the Ministry of Environment and Forests on 15.01.2010 for undertaking detailed EIA study for the purpose of obtaining environmental clearance. The proposal is for collection of 5.35,000 tonnes per annum (TPA) of minor minerals (Reta, Bajri and Boulders) from the river bed of the Jakhan River.

2. The total mine lease area of the project is 195ha, which is a hirstiane covering a stretch of 6.4km length, lying in the Ganga river basin. Out of the total leased area of 195ha, the minor mineral collection will be carried out from 50% of the total area i.e., 97.5ha. The area available for mining would therefore be 97.5ha along the centre of the river flow which is devoid of any flora.

3. No national park and wildlife sanctuary are reported to be located in the core and buffer zone of the mine. The project area falls under the Saranagar Forest Reserve and the Doon Valley Reserve. The Rajaji National Park is reported to be located at a distance of 12.3km from the project boundary. An authenticated map has been provided to the Chief Wildlife Warden, Government of Uttarakhand. Further, the Chief Wildlife Warden, Government of Uttarakhand vide letter no. 5811/2010 dated 15.01.2011 has accorded clearance for collection of minor mineral from the Jakhan River in an area of 195ha. Three Reserve Forests namely the Tehri RF (adjacent to West of ML), the JF (adjacent to East of ML) and the Tehri RF (S.E. of ML) are located in the buffer zone of the mine.



The mine working will be opencast by manual method without involving drilling and blasting. The mining is confined to extraction of reta, bajri and boulders from the river bed. The reta and bajri will be collected by sifting of river bed material using hand tools like shovel, pan, sieve etc. Mining will be carried out only during the day time. Extraction of river bed material will be completely stopped during the monsoon season. The targetted production capacity of the mine is 5.85 lakh TPA (3.25 lakh m³ per annum). The mined out material will be transported to their respective uses locations via private agencies using their own transport. Computerized weigh bridges have been installed in order to check and monitor moment of material. The proposed mining area is reported to lies between 30°12'56.82" to 30°11'19.59" N Latitude and 78°13'38.02" to 78°12'14.37"E Longitude in topo sheet No. 53/4. The elevation from the sea level of the proposed area is reported as 567m. The river flow is thick most of the year except during the monsoon season. Mining will be carried out upto a depth of 1.5m. No pumping of water from the river or from groundwater is envisaged.

5. The public hearing of the project was held on 24.03.2010 for collection of minor minerals from Jakhan-1 River over mine lease area of 195ha. The Principal Secretary, Government of Uttarakhand vide letter No.2536/VII-I/163-134/2009/10 dated 23.10.2010 informed that collection of minor mineral from the river bed does not require mine plan approval under Uttarakhand Minor Mineral Concession Rules 2001. The Ministry of Environment and Forests has accorded combined in-principle approval under Forest (Conservation) Act, 1980 for diversion of 1325ha forestland on 26.05.2009 and 2nd June, 2009 for collection of sand bajri and boulders from the river beds in the District Dehradun. The proponent has stated that there is no court case to the project or related activity.

6. The Ministry of Environment and Forests has examined the application in accordance with the EIA Notification, 2006 and the Doon Valley Notification, 1989 as amended on 13.12.2007 and hereby accords environmental clearance under the provisions thereof to the above mentioned Minor Mineral Mining Project of M/s Uttarakhand Forest Development Corporation for an annual collection of 5,85,000 tonnes (5.85 lakh tonnes) of reta, bajri and boulders (minor mineral) from the river bed of the Jakhan-1 River by the opencast manual method involving total mining lease area of 195ha, subject to implementation of the following conditions and environmental safeguards:

A. Specific conditions

- a) The project proponent shall obtain Consent to Establish and Operate from the Uttarakhand Environment Protection Board and effectively implement all the conditions stipulated thereon.
- b) Requisite prior clearance from the Standing Committee of the Forests and Wildlife shall be obtained due to location of the project in the Shivalik Elephant Reserve, before starting any activity relating to the



project at site. All the conditions stipulated by the Standing Committee shall be effectively implemented in the project. It shall be noted that this clearance does not necessarily implies that wildlife clearance shall be granted to the project and that your proposal for wildlife clearance shall be considered by the competent authorities on its merit and decision taken. The investment made in the project, if any based on environmental clearance granted to the project, in anticipation of the clearance from wildlife clearance shall be entirely at the cost and risk of the project proponent and Ministry of Environment and Forests shall not be responsible in this regard in any manner.

- (vi) Environmental clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No. 460 of 2004, as may be applicable to this project.
- (vii) Environmental clearance is subject to obtaining clearance under the Wildlife (Protection) Act, 1972 from the competent authority, as may be applicable to this project.
- (viii) Environmental clearance is subject to grant of forestry clearance.
- (ix) The project proponent shall prepare the plan of mining in conformity with the mine lease conditions and the Rules prescribed in this regard clearly showing the no work zone in the mine lease i.e. the distance from the bank of river to be left unworked, distance from the bridges etc. It shall be ensured that no mining shall be carried out during the monsoon season.
- (x) The project proponent shall ensure that wherever deployment of labour attracts the Mines Act, the provision thereof shall be strictly followed.
- (xi) The project proponent shall identify the degraded forest area within the mine lease in consultation with the State Forest Department and undertake plantation/afforestation work by planting the native species.
- (xii) 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 should be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.
- (xiii) 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 shall not be affected. Regular monitoring of ground water level and quality shall be carried out around the mine lease area by establishing a network of piezometers and installing new piezometers during the mining operation. Monitoring shall be carried out at least four times in a year pre-monsoon, monsoon, post-monsoon and winter.



monsoon (August), post-monsoon (November) and winter (January), once in each season) shall be carried out in consultation with the State Ground Water Board/Central Ground Water Authority and the data thus collected may be sent regularly to the Ministry of Environment and Forests and its Regional Office Lucknow, the Central Ground Water Authority and the Regional Director, Central Ground Water Board. If at any stage, it is observed that the groundwater table is getting depleted due to the mining activity, necessary corrective measures shall be carried out.

- (v) The project proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of water (surface water and groundwater), if any, required for the project.
- (vi) Appropriate mitigative measures shall be taken to prevent pollution of the river in consultation with the State Pollution Control Board. It shall be ensured that there is no leakage of oil and grease in the river from the vehicles used for transportation.
- (vii) Vehicular emissions shall be kept under control and regularly monitored. The mineral transportation shall be carried out through the covered tracks only and the vehicles carrying the mineral shall not be overloaded.
- (viii) No drilling and blasting operation shall be carried out.
- (ix) Mineral handling area shall be provided with the adequate number of high efficiency dust extraction system. Loading and unloading areas including all the transfer points should also have efficient dust control arrangements. These should be properly maintained and operated.
- (x) Periodical medical examination of the workers engaged in the project shall be carried out and records maintained. For the purpose, schedule of health examination of the workers should be drawn and followed accordingly.
- (xi) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- (xii) Digital processing of the entire lease area using remote sensing techniques should be done regularly once in three years for monitoring the change of land use, cover, if any and report submitted to the Ministry of Environment and Forests and its Regional Office located at Lucknow.
- (xiii) The critical parameters such as RSPM (Particulate matter with size less than 10micron i.e., PM₁₀) and NO_x in the ambient air within the project zone shall be monitored periodically. Further, quality of discharged effluents shall also be monitored [(TDS, DO, PH, Fecal Coliforms and Total Suspended Solids (TSS)]. The monitored data shall be uploaded on the website of the



company as well as employed all a day's board at the project site. It is
 therefore a violation of the law made by the Company in public domain. The
 Circular No. 17042/2/1/2005 (A III) dated 27.05.2005 issued by Ministry
 of Environment and Forests, which is available on the website of the
 Ministry www.mef.nic.in should also be referred in this regard for its
 compliance.

- (ii) The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna namely elephant etc. found in the study area. Action plan for conservation of flora and fauna shall be prepared in consultation with the State Forest and Wildlife Department. All the safeguard measures brought out in the Wildlife Conservation Plan so prepared specific to this project site shall be effectively implemented. Adequate allocation of funds for implementation of the conservation plan shall be made and the funds so allocated shall be included in the project cost. A copy of action plan shall be submitted to the Regional Office of the Ministry of Environment and Forests, Lucknow.
- (iii) The project proponent shall get a siltation study carried out within one year through some Expert Agency like Central Water Commission to decommission the siltation load in the river bed so that there is no over exploitation of river bed material at any point of time. The mineral to be removed shall be determined based on siltation load. A copy of siltation study so carried out shall be submitted to the Ministry of Environment and Forests and its Regional Office Lucknow.

2. General conditions

- (i) No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment & Forests.
- (ii) Any change in the calendar plan including excavation, quantum of mineral rate, baffle and hostlers (minor mineral) and waste should be made.
- (iii) For ambient air quality monitoring stations should be established at the site and also at the buffer zone for RSPN (particulate matter, SO₂, CO, NO₂, O₃, PM₁₀) and NO_x monitoring. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and monitoring of consistency should be undertaken in consultation with the State Pollution Control Board.
- (iv) There should be an ambient air quality RSPN (Particulate matter, SO₂, CO, NO₂, O₃, PM₁₀) at site should be regularly monitored in the buffer zone of the mine and records including the Regional office, District level and the State Pollution Control Board / Central Pollution Control Board should be maintained.



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company as well as displayed on a display board at the project site at a suitable location near the main gate of the Company in public domain. The Circular No. J-20012/1/2006-IA.II(M) dated 27.05.2009 issued by Ministry of Environment and Forests, which is available on the website of the Ministry www.envfor.nic.in shall also be referred in this regard for its compliance.

- (x) The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna namely elephant etc. found in the study area. Action plan for conservation of flora and fauna shall be prepared in consultation with the State Forest and Wildlife Department. All the safeguard measures brought out in the Wildlife Conservation Plan so prepared specific to this project site shall be effectively implemented. Necessary allocation of funds for implementation of the conservation plan shall be made and the funds so allocated shall be included in the project cost. A copy of action plan shall be submitted to the Regional Office of the Ministry of Environment and Forests, Lucknow.
- (xxi) The project proponent shall get a siltation study carried out within one year through some Expert Agency like Central Water Commission to determine the siltation load in the river bed so that there is no over exploitation of river bed material at any point of time. The mineral to be removed shall be determined based on siltation load. A copy of siltation study so carried out shall be submitted to the Ministry of Environment and Forests and its Regional Office Lucknow.

B. General conditions

- (i) No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment & Forests.
- (ii) No change in the calendar plan including excavation, quantum of mineral rets, baji and boulders (minor mineral) and waste should be made.
- (iii) Four ambient air quality-monitoring stations should be established in the core zone as well as in the buffer zone for RSPM (Particulate matter with size less than 10micron i.e., PM_{10}) and NO_x monitoring. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with the State Pollution Control Board.
- (iv) Data on ambient air quality RSPM (Particulate matter with size less than 10micron i.e., PM_{10}) & NO_x should be regularly submitted to the Ministry of Environment and Forests including its Regional office located at Lucknow and the State Pollution Control Board / Central Pollution Control Board once in six months.



- 4) Facilities that will be used by the workers should be considered carefully. Drinking water supply arrangements for food, bathing and sleeping and all transfer points should be designed and properly maintained.

Occupational health surveillance program of the worker should be undertaken periodically to observe any variations due to exposure to dust and other occupational measures, if needed.

- (iii) A separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organisation.
- (iv) The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purposes. Year wise expenditure should be reported to the Ministry of Environment and Forests and its Regional Office located at Lucknow.
- (v) The project authorities should inform to the Regional Office located at Lucknow regarding date of financial closure and final approval of the project by the concerned authorities and the date of start of land development work.
- (vi) The Regional Office of this Ministry located at Lucknow shall monitor compliance of the stipulated condition. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information / monitoring reports.
- (vii) The project proponent shall submit its monthly reports on the status of compliance of the stipulated environmental clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the Ministry of Environment and Forests, its Regional Office Lucknow, the respective Zonal Office of Central Pollution Control Board the State Pollution Control Board. The Project shall update the status of compliance of the environmental clearance conditions, including results of monitored data on flow sheets and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the Ministry of Environment and Forests, Lucknow; the respective Zonal Office of Central Pollution Control Board and the State Pollution Control Board.
- (viii) A copy of the compliance letter shall be sent by the Project Authority to the District, Panchayat Municipal Corporation, Urban Local Body or the local BML, if any, from whom water supply is being received or any other institution which discharging the effluent. The discharge of effluent shall be subject to the consent of the authority having jurisdiction.

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Fugitive dust emissions from all the sources should be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points should be provided and properly maintained.

- (i) Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects.

Occupational health surveillance program of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.

- (vii) A separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.

- (viii) The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the Ministry of Environment and Forests and its Regional Office located at Lucknow.

- (ix) The project authorities should inform to the Regional Office located at Lucknow regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.

- (x) The Regional Office of this Ministry located at Lucknow shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information / monitoring reports.

- (xi) The project proponent shall submit six monthly reports on the status of compliance of the stipulated environmental clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the Ministry of Environment and Forests, its Regional Office Lucknow, the respective Zonal Office of Central Pollution Control Board the State Pollution Control Board. The proponent shall upload the status of compliance of the environmental clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the Ministry of Environment and Forests, Lucknow, the respective Zonal Office of Central Pollution Control Board and the State Pollution Control Board.

- (xii) A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parishad/ Municipal Corporation, Urban Local Body and the Local NGO, if any, from whom suggestions, if any, were received while processing the proposal. The Clearance letter shall also be put on the website of the Company by the proponent.

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(iii) The State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre and the Collector's office/ Tehsildar's Office for 30 days.

(iv) The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the Regional Office of the Ministry of Environment and Forests, Lucknow by e-mail.

(v) The project authorities should advertise at least in two local newspapers of the District or State in which the project is located and widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and also at web site of the Ministry of Environment and Forests at <http://envfor.nic.in> and a copy of the same should be forwarded to the Regional Office of this Ministry located at Lucknow.

7. The Ministry or any other competent authority may alter, modify the above conditions or stipulate any further condition in the interest of environment protection.

8. Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.

9. The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules made thereunder and also any other orders passed by the Hon'ble Supreme Court of India/High Court of Uttarakhand and any other Court of Law relating to the subject matter.

Copy to:

- The Secretary, Ministry of Mines, Government of India, New Delhi.
- The Secretary, Department of Mines & Geology, Government of Uttarakhand, Secretariat, Dehradun.



नृसिंह एवं प्रविशर्म-दुर्गा
राष्ट्रीय मिशनारम्भ, उत्तराखण्ड
23 मार्च 2009 रोज, देहरादून।

नृसिंह नमिर्,
राष्ट्रीय मिशनारम्भ, उत्तराखण्ड
उत्तराखण्ड नगर, देहरादून।

दिनांक 51/देहरादून/जगत्, नृसिंह/050/2008-09, दिनांक 19 फरवरी, 2009

विषय : देहरादून में देहरादून नगर प्रभाग देहरादून के अन्तर्गत 1325 हे० आसक्ति वन क्षेत्रफल की खोज की जा रही है।

संदर्भ : नृसिंह नमिर्, उत्तराखण्ड नगर, देहरादून में अवगत कराया है कि पर्यावरण एवं वन मंत्रालय भारत सरकार के पत्र सं० F.N. 8-62/09-PC दिनांक 24 सितम्बर, 2008 के द्वारा देहरादून नगर प्रभाग के अन्तर्गत प्रस्तावित होने वाले निम्नलिखित नदी तटों से उपखनिज के धुगान/खनन की अनुमति दी गई है :-

1. गुरुदास नदी 30.00 हे०
2. बरह नदी 20.00 हे०
3. सीम नदी प्रथम (आमो) 223.00 हे०
4. सीम नदी द्वितीय (आमो) 223.00 हे०
5. सीम नदी तृतीय (आमो) 223.00 हे०
6. पाखन नदी प्रथम (आमो) 223.00 हे०
7. पाखन नदी द्वितीय (आमो) 223.00 हे०
8. चन्द नामा नदी प्रथम 223.00 हे०
9. चन्द नामा नदी द्वितीय 223.00 हे०

10. सखारु घाट नदी प्रविशर्म 1325 हे०

संदर्भ : नृसिंह नमिर्, उत्तराखण्ड नगर, देहरादून में अवगत कराया है कि पर्यावरण एवं वन मंत्रालय भारत सरकार के पत्र सं० F.N. 8-62/09-PC दिनांक 24 सितम्बर, 2008 के द्वारा देहरादून नगर प्रभाग के अन्तर्गत प्रस्तावित होने वाले निम्नलिखित नदी तटों से उपखनिज के धुगान/खनन हेतु उत्तराखण्ड नगर विकास विभाग को राज्य सरकार द्वारा अनुमति प्राप्त है।

पर्यावरण एवं वन मंत्रालय की पत्र दिनांक 24-8-2008 के बिन्दु सं० 2 में यह बतलाया गया है कि पर्यावरण संरक्षण को ध्यान में रखते हुए नदी तटों का अनुपालन करने के सम्बन्ध में वन विभाग अधिनियम, 1980 के अधीन अनुमति प्रदान की जाएगी।

अतः पर्यावरण एवं वन मंत्रालय उत्तराखण्ड नगर विकास विभाग से नदी तटों को परिपूर्ण करने का आदेश जारी किया गया प्रस्तावित किया गया है।

भवदीय

(सुनील कुमार)

सुनील कुमार

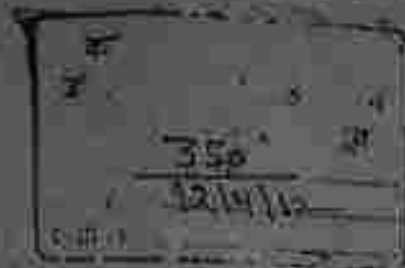


दिनांक 03/03/09

संख्या 498/VII-1/2012/102-स/2011

राजेश शर्मा,
प्रमुख सचिव,
उत्तराखण्ड सरकार।

जिलाधिकारी,
देहरादून।



सौधमिक विकास अनुभाग-1

देहरादून : दिनांक 03 अक्टूबर, 2012

विषय: जनपद देहरादून के अधिष्ठित वन क्षेत्र की सीमा नदी-3, जाखन-1 व जाखन-2 में उपस्थित भुगतान की स्वीकृति के सम्बन्ध में।

महोदय,

उपरोक्त विषयक प्रमुख निदेशक, उत्तराखण्ड वन विकास निगम, अल्पकालिक मवन 73-नं. 100, देहरादून के पत्र संख्या एन-सी. 504/खनन, दिनांक 01 मार्च 2012 तथा निदेशक, मातृशाला एवं खनिकर्मा इकाई, उत्तराखण्ड निदेशालय, देहरादून के पत्र संख्या 344/खनन/वे0युन0/भू/खनि050/2011-12, दिनांक 28 मार्च, 2012 के संदर्भ में सम्यक विधानोपरान्त भुगतान का करने का निदेश प्राप्त है कि जनपद देहरादून के अधिष्ठित वन क्षेत्र की सीमा नदी-3 की कुल क्षेत्रफल 270 हेक्टेयर मध्ये 135 हेक्टेयर, जाखन नदी-1 कुल क्षेत्रफल 185 हेक्टेयर मध्ये 97.5 हेक्टेयर तथा जाखन नदी-2 कुल क्षेत्रफल 100 हेक्टेयर मध्ये 50 हेक्टेयर क्षेत्रफल में 05 (पांच) वर्ग की अवधि हेतु कार्यान्वित करा जायेगी, बीकन का भुगतान किया जाने की अनुमति उत्तराखण्ड वन विकास निगम को निम्नलिखित शर्तों के अधीन प्रदान की जाती है:-

1. वन भूमि की विधानिक स्थिति में कोई परिवर्तन नहीं होगा।
2. उत्तराखण्ड वन विकास निगम द्वारा उक्त नदियों के उपस्थितियों के भुगतान से पूर्व भारत सरकार, पर्यावरण एवं वन मंत्रालय, नई दिल्ली पर्यावरण एवं वन मंत्रालय, भारत सरकार के पत्र संख्या J-11015/363/2009-I.A-IT(M), दिनांक 15.04.2011 एवं संख्या J-11015/342/2009-I.A-IT(M), दिनांक 15.04.2011 एवं पत्र संख्या J-11015/343/2009-I.A-IT(M), दिनांक 15.04.2011 में उल्लिखित समस्त शर्तों का अक्षरानुसार अनुपालन सुनिश्चित किया जायेगा।
3. पर्यावरण एवं वन मंत्रालय, भारत सरकार द्वारा वन संरक्षण अधिनियम, 1980 तथा पर्यावरण संरक्षण अधिनियम, 1986 के अधीन अन्य संलग्न अधिनियमों के अन्तर्गत सन-समय में निम्नलिखित निर्देशों का अनुपालन सुनिश्चित किया जायेगा।
4. निगम भुगतान कार्य से किसी भी परम्परा को क्षति नहीं पहुँचायेगा। यदि वन सम्पदा को कोई क्षति पहुँचती है या पहुँचायी जाती है तो उसके लिए सम्बन्धित प्रभावित वन अधिकारी द्वारा निर्धारित प्रतिफल उत्तराखण्ड वन विकास निगम द्वारा देया होगा।
5. उक्त वन भूमि उत्तराखण्ड वन विकास निगम को उपलब्ध है जब तक वनी रहेगी जब तक कि उक्त वन भूमि उत्तराखण्ड वन विकास निगम को उपलब्ध उक्त भूमि में कोई भी कार्य नहीं किया जायेगा। यदि उक्त वन भूमि उत्तराखण्ड वन विकास निगम को उपलब्ध वन भूमि भूमि में कोई भी कार्य नहीं किया जायेगा। यदि उक्त वन भूमि उत्तराखण्ड वन विकास निगम को उपलब्ध वन भूमि भूमि में कोई भी कार्य नहीं किया जायेगा।



6. वन विभाग के कर्मचारी/अधिकारी या उनके अधिकारियों को किसी भी स्तर पर आवश्यक समूह प्रशिक्षण वन भूमि का उपयोग करने का पूर्ण अधिकार होगा।
7. अधिकृत वन क्षेत्र में कार्य करने वाले मजदूर तथा कर्मचारी अपनी ईश्वर की आभारवाक्य के लिए भगवान को धन्यवाद प्रकट करेंगे, इसके लिए उत्तरदायक वन विकास विभाग द्वारा उन्हें ईश्वर की तस्वीर अथवा उन्हें ईश्वर की तस्वीरों की प्रतियों की जाएगी।
8. उत्तरदायक वन विकास विभाग द्वारा कुलों का ध्यान नहीं किया जाएगा।
9. उत्तरदायक वन विकास विभाग द्वारा मृ-संरक्षण योजना व प्रशिक्षण नदियों के तटस्थों के सुदृढीकरण हेतु आवश्यक जनशक्ति का भुगतान वन विभाग को किया जाएगा। वन विभाग द्वारा वन विकास विभाग द्वारा उपलब्ध कराई गई जनशक्ति से श्रम दूगिता व अन्य जैविक अभियंत्रित कार्य सम्पादित किये जाएंगे। नदी तट से निकाले जाते वाले उप-खनिजों के विषय से प्राप्त राजस्व का 25 प्रतिशत भाग रीकर ट्रेनिंग एवं जल सफाई क्षेत्र के उपचार कार्यों हेतु व्यय किया जाएगा। नदी तटों का उपचार वन विभाग द्वारा मोला नदी के किनारे कच्ची के अनुक्रम अलग जाएगा व यदि आवश्यक हो, तो केंद्रीय न्याय एवं जल संरक्षण संस्थान, देहरादून का तकनीकी परामर्श भी प्राप्त किया जाएगा।
10. प्रशिक्षण क्षेत्र में कार्य करने वाले अधिकारियों के लिए वन क्षेत्र के अन्दर किसी प्रकार के श्रमिक इट स्थापित नहीं किये जाएंगे।
11. उपखनिजों का भुगतान नदी के मध्य में किया जाएगा तथा नदी के दोनों किनारों से नदी तट का 1/4 भाग छोड़ा जाएगा।
12. प्रशिक्षण क्षेत्र में उपखनिजों के भुगतान हेतु किसी भी विशिष्ट पथों का प्रयोग नहीं किया जाएगा व भुगतान कार्य केवल हेमट ट्रक द्वारा ही किया जाएगा।
13. प्रशिक्षण क्षेत्र में उपखनिजों के भुगतान का कार्य सूर्योदय से पूर्व तथा सूर्यास्त के पश्चात नहीं किया जाएगा।
14. मोल्डर तोड़ने का कार्य वन सीमा से बाहर किया जाएगा।
15. प्रशिक्षण क्षेत्र में उपखनिजों के भुगतान का कार्य वर्षा ऋतु के दौरान जुलाई से माई दिसम्बर तक नहीं किया जाएगा।
16. वन भूदा की स्वीकृति के पश्चात वन स्वयं का सम्मानना भूतल एवं खनिजों इलाह के अधिकारियों द्वारा राजस्व एवं वन विभाग के अधिकारियों को सार्वजनिक में किया जाएगा।
17. किसी सार्वजनिक विनोदस्थान, मनोरंजन स्थल, पशुस्थान या व्यक्तियों के किसी भी रूप में या पशु जाने जाने वाला स्थान, पकान अथवा ग्रामस्थान, सार्वजनिक सड़क या कोई अन्य स्थान जो जिलाधिकारी द्वारा सार्वजनिक स्थान घोषित किया गया हो, ऐसे स्थानों पर न तो कोई खनिज खननी की जाएगी न ही स्थापित की जाएगी और न ही कोई भूतल स्थापना की जाएगी, जिससे किसी भवन, भवन निर्माण कार्य, सार्वजनिक या अन्य व्यक्तियों के अधिकारियों को बाधित रहे।
18. पर्यटन में अव्यक्तित निर्माण कार्य या अन्य प्रयोजनों के निर्मित कोई ऐसी भूमि, सड़क स्तंभों के लिए प्रयुक्त नहीं की जाएगी जो राजा सरकार से भिन्न व्यक्तियों के दखल में पाले से हो।
19. किसी भी नदी का उपयोग करने के अधिकार पर भूदाओं में किया जाएगा।
20. उत्तरदायक वन विकास विभाग द्वारा उप-खनिजों के विषय में प्राप्त जनशक्ति से अलग वन भूमि पर 05 (पांच) वर्षों की अवधि में छतिदूरक भुगतान, कार्य किया जाएगा वन विभाग द्वारा उपरोक्तानुसार किये गये भुगतान का आगामी भाग



21. प्रस्तावित योजना के अन्तर्गत कार्य शुरू करने से पूर्व प्रयोग के निदेशों मार्गों पर पर्याप्त संख्या में अल्पकालीन प्रयोग-प्लॉट स्थापित किये जाएंगे। निम्नलिखित शर्तों के अन्तर्गत कार्य किया जायेगा।
22. इन दिशानिर्देशों के अन्तर्गत कार्य करने की निम्नलिखित शर्तों पर निर्धारित राशियाँ आदि नियमानुसार जमा किये जायेंगे।
23. उपर्युक्त परीक्षण नियमावली 2001 के नियम-73 के अनुसार प्रथम एमओएम-12 पर वैज्ञानिक विद्वान, निदेशिका, वैज्ञानिक एवं निदेशिका, मुख्य एवं सहायक इकाई को प्रेषित की जायेगी।
24. इनके अतिरिक्त इस हेतु जो भी नवीन स्थायी विज्ञान प्रशासन तथा भूतत्व एवं सहायक इकाई द्वारा निर्धारित की जायेगी, का अनुपालन पर्याप्ततम पर निम्नलिखित नियम द्वारा किया जायेगा।
25. उत्तराखण्ड वन विभाग नियम द्वारा उक्त निर्देशों के अन्तर्गतियों के सुमान हेतु वन विभाग/अन्य प्राधिकारियों को प्रस्ताव समस्त बचनसम्बन्धीता का अनुपालन सुनिश्चित किया जायेगा।
26. नियम द्वारा उपर्युक्तियों के सुमान हेतु मुख्य वन्य प्राण प्रशासन, उत्तराखण्ड की संस्थितियों व उनके द्वारा समस्त-समस्त पर जारी निर्देशों का अनुपालन सुनिश्चित किया जायेगा।

उक्त के अतिरिक्त यह भी निर्देशित किया जाता है कि उक्त तारीखों में खनन/भूगर्भ का कार्य प्रत्येक दस में दिनांक 15 अप्रैल, 2012 तक प्रारम्भ करते हुए कार्यों को अवगत करवाया जाना सुनिश्चित करें।

भवदीय


निदेशिका मार्ग
प्रमुख कार्यालय

संख्या संख्या 490 (1)/VII-1/2012/123-ख/2011, तदतिरिक्त।

प्रतिनिधि निम्नलिखित को सूचना एवं आवश्यक कार्यवाही हेतु प्रेषित:-

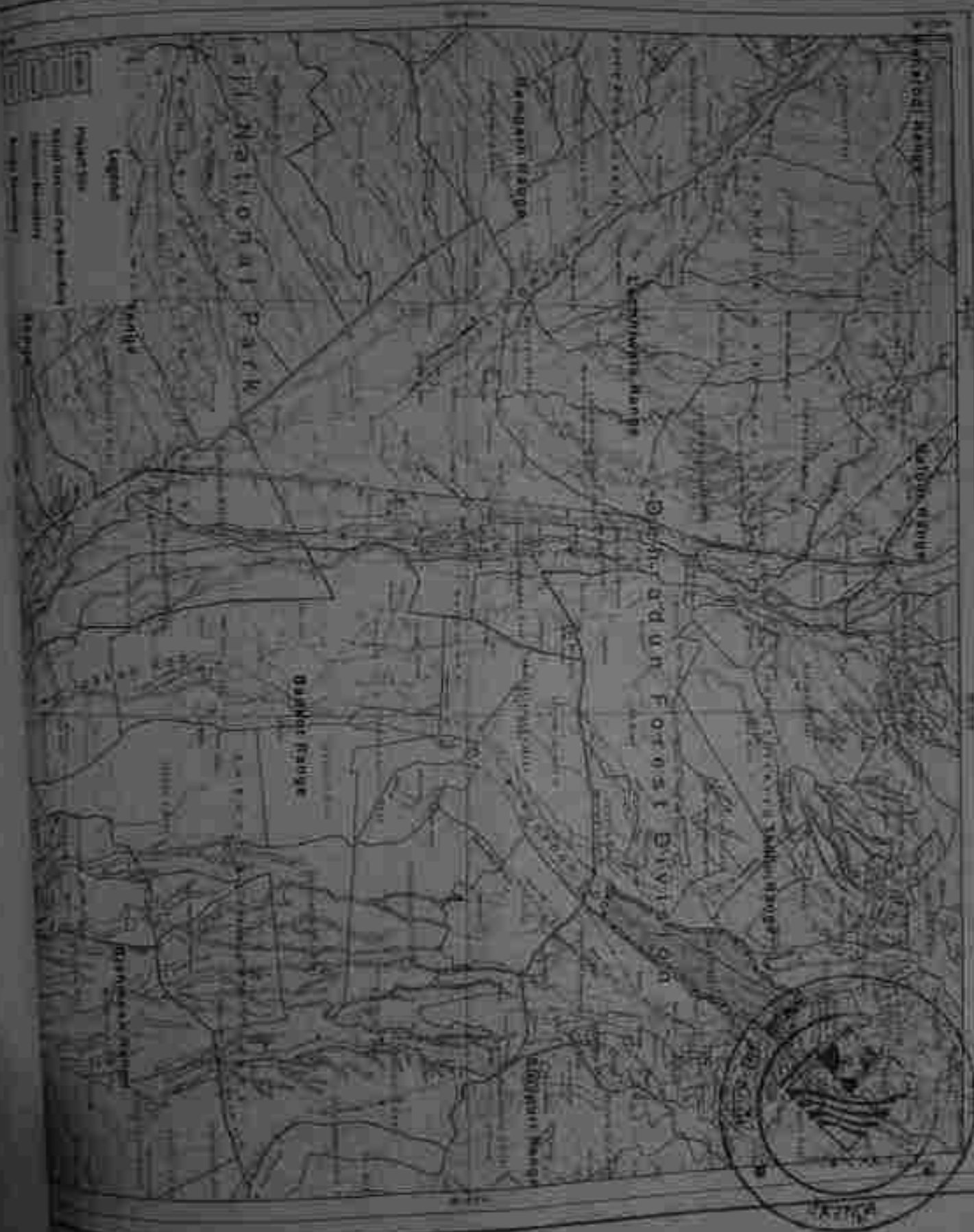
- 1- सचिव, भारत सरकार, पर्यावरण एवं वन मंत्रालय, पर्यावरण भवन, सी0जी0ओ0 कार्यालय, लोदी रोड, नई दिल्ली।
- 2- प्रमुख सचिव, माधुका भंडी जी, उत्तराखण्ड शासन।
- 3- प्रमुख सचिव, वन एवं पर्यावरण विभाग, उत्तराखण्ड शासन।
- 4- आचार्य, गढ़वाल मण्डल, पी0जी0 गढ़वाल।
- 5- मुख्य अधिकारी, मुख्य सचिव, उत्तराखण्ड शासन।
- 6- निदेशक, भूतत्व एवं सहायक इकाई, उद्योग निदेशिका, उत्तराखण्ड देहरादून।
- 7- प्रमुख वन संरक्षक, उत्तराखण्ड देहरादून।
- 8- प्रमुख निदेशक, उत्तराखण्ड वन विकास निगम, देहरादून।
- 9- अपर प्रमुख वन संरक्षक एवं भूतत्व अधिकारी, वन संरक्षण, चन्द्रिगनगर थारुन, पालोना उत्तराखण्ड, देहरादून।
- 10- गार्ड फाईल।

अतिरिक्त

निदेशिका मार्ग
प्रमुख कार्यालय



Topographical Map Showing Connecting Rivers to Rajaji National Park
Project Site: Jukhan - I



उत्तराखण्ड शासन
औद्योगिक विकास विभाग
संख्या ११३३/VI-१/२०१५-१४६-स/२०१०
देहरादून दिनांक ३० जुलाई २०१५
कार्यालय, ३५

[illegible]

उत्तराखण्ड शासनित (भा. बयरी बोल्डर ईट आदि) नीति २०१६

संदर्भ : 1) इस लेख में उद्धृत गये आलेखों पर <http://www.dailymail.co.uk> से 10 अप्रैल 2015 को।

2000年12月

परिचयार्थ २

(क) 'राष्ट्र' शब्द सीमा से बाहर कोई सामाजिक या तो

(ख) 'राष्ट्र' शब्द से तात्पर्य नहीं हो सकता है।

(ग) 'राष्ट्र' शब्द सीमा से बाहर कोई सामाजिक या तो

(घ) 'राष्ट्र' शब्द सीमा से बाहर कोई सामाजिक या तो

(ङ) 'राष्ट्र' शब्द सीमा से बाहर कोई सामाजिक या तो

(ख) पञ्चदश नौ मिनो, जिन के लक्ष्य परापूर्वक आ मुख्य भाग खोले जायेंगे, होंगे।

(ग) जलवायु से निपटारा करने के लिए एक समन्वित कोषिका के

मि. वासुदेव, जो दिल्ली मण्डल के तारक प्रान्त के मंत्री हैं, महोदय

[illegible][illegible]

(अ) प्रदीप क्षेत्र (क्षेत्र-क) :- इसमें जिस दिशि प्रदीप क्षेत्रों का वर्गीकरण किया जायेगा, उसी दिशि वर्गीकरण किया जायेगा।

(अ) प्रदीप क्षेत्र (क्षेत्र-क) :- इसमें जिस दिशि प्रदीप क्षेत्रों का वर्गीकरण किया जायेगा, उसी दिशि वर्गीकरण किया जायेगा।

(क) प्रदीप क्षेत्र (क्षेत्र-क) :- इसमें जिस दिशि प्रदीप क्षेत्रों का वर्गीकरण किया जायेगा, उसी दिशि वर्गीकरण किया जायेगा।

(ख) प्रदीप क्षेत्र (क्षेत्र-क) :- इसमें जिस दिशि प्रदीप क्षेत्रों का वर्गीकरण किया जायेगा, उसी दिशि वर्गीकरण किया जायेगा।

प्रदीप क्षेत्र का वर्गीकरण

प्रदीप क्षेत्रों का वर्गीकरण इस प्रकार किया जायेगा :-

(1) प्रदीप क्षेत्र (क्षेत्र-क) :- इसमें जिस दिशि प्रदीप क्षेत्रों का वर्गीकरण किया जायेगा, उसी दिशि वर्गीकरण किया जायेगा।

प्रदीप क्षेत्रों का वर्गीकरण इस प्रकार किया जायेगा :-

प्रदीप क्षेत्रों का वर्गीकरण इस प्रकार किया जायेगा :-

प्रदीप क्षेत्रों का वर्गीकरण इस प्रकार किया जायेगा :-



खनन योजना तैयार करने के लिए अर्हता प्राप्त व्यक्ति के रूप में मान्यता प्रमाण पत्र

CERTIFICATE OF RECOGNITION AS QUALIFIED PERSON TO PREPARE MINING PLANS

(खनिज रियायत नियमावली, 1960 के नियम 22 (सी) के अंतर्गत)
(Under Rule 22(C) of Mineral Concession Rules, 1960)

रजिस्ट्रार की / से _____, जिला _____
Mr./Shri. Bhawan Joshi _____

_____ एजीक्यूट कार्यालय _____, having
registered office at C/O B.S.Rawat, Kamal Bhawan, House No.-6, Vijay
Colony, Lane No.-1, New Cantt Road, Dehradun (Uttarakhand)

जो सिद्ध है अपने प्रमुख आविष्टियों की योग्यताओं एवं अनुभवों का संतोषजनक
and having given satisfactory evidence of the qualification and experience of
अनुभव है कि उन्हें एतद्वारा खनिज रियायत नियमावली, 1960 के नियम 22 (सी) के अंतर्गत
his key persons is hereby granted recognition under rule 22(C) of the Mineral
अनुभव है कि उन्हें एतद्वारा खनिज रियायत नियमावली, 1960 के नियम 22 (सी) के अंतर्गत
Concession Rules, 1960 as a qualified person to prepare Mining Plans

रजिस्ट्रार की / से _____

Registration No. is

RQM/DDN/180/2009/A

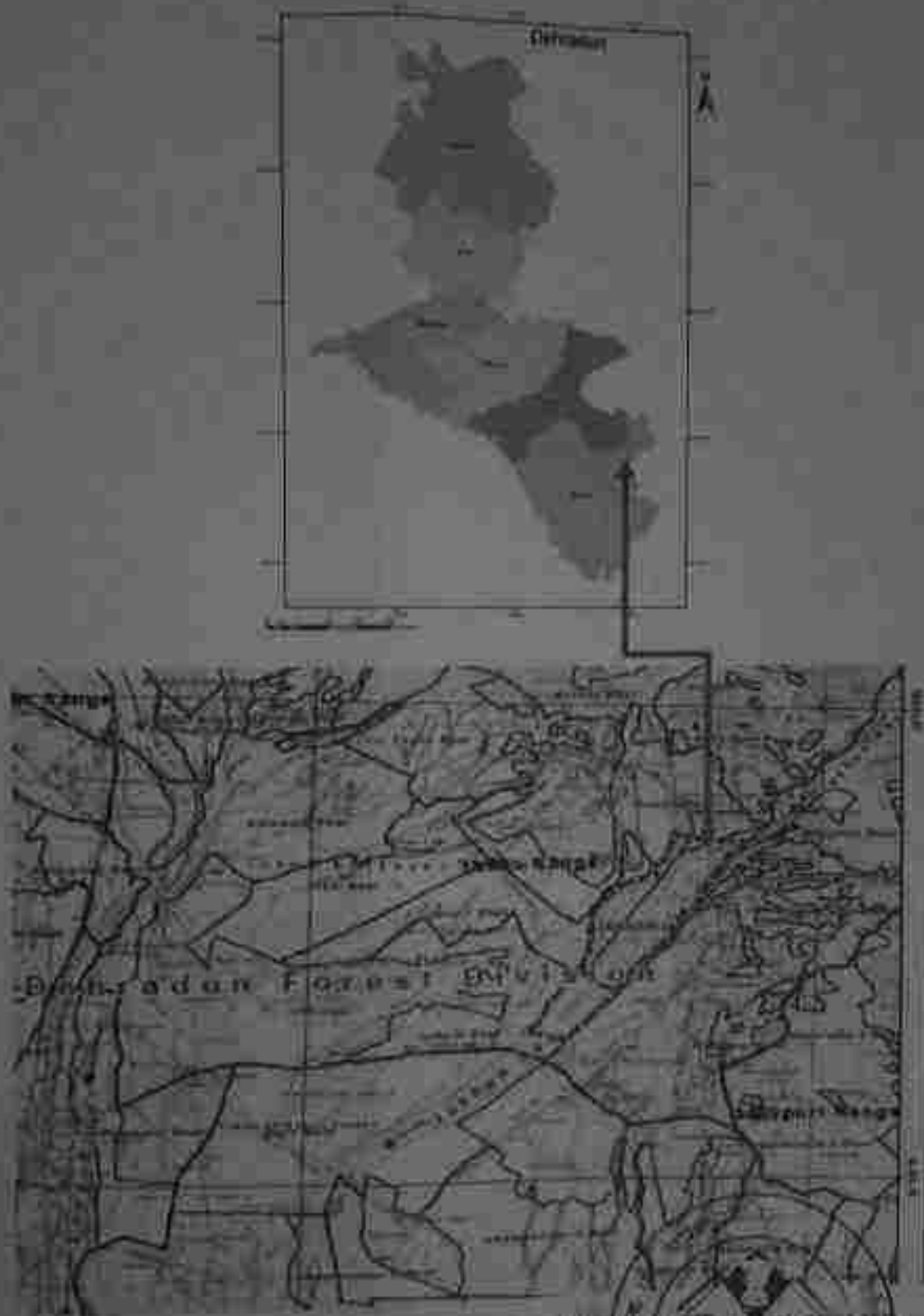
यह मान्यता दस वर्ष की अवधि के लिए है जो कि दिनांक _____ को समाप्त होगी।
The Recognition is valid for a period of ten years ending 30/08/2019.

Place: ATHER

Date: 30/08/2019

(एथर एतद्वारा)
जान नियंत्रक (खनिज)
Controller of Mines (N2)
भारतीय खनिज ब्यूरो
Indian Bureau of Mines



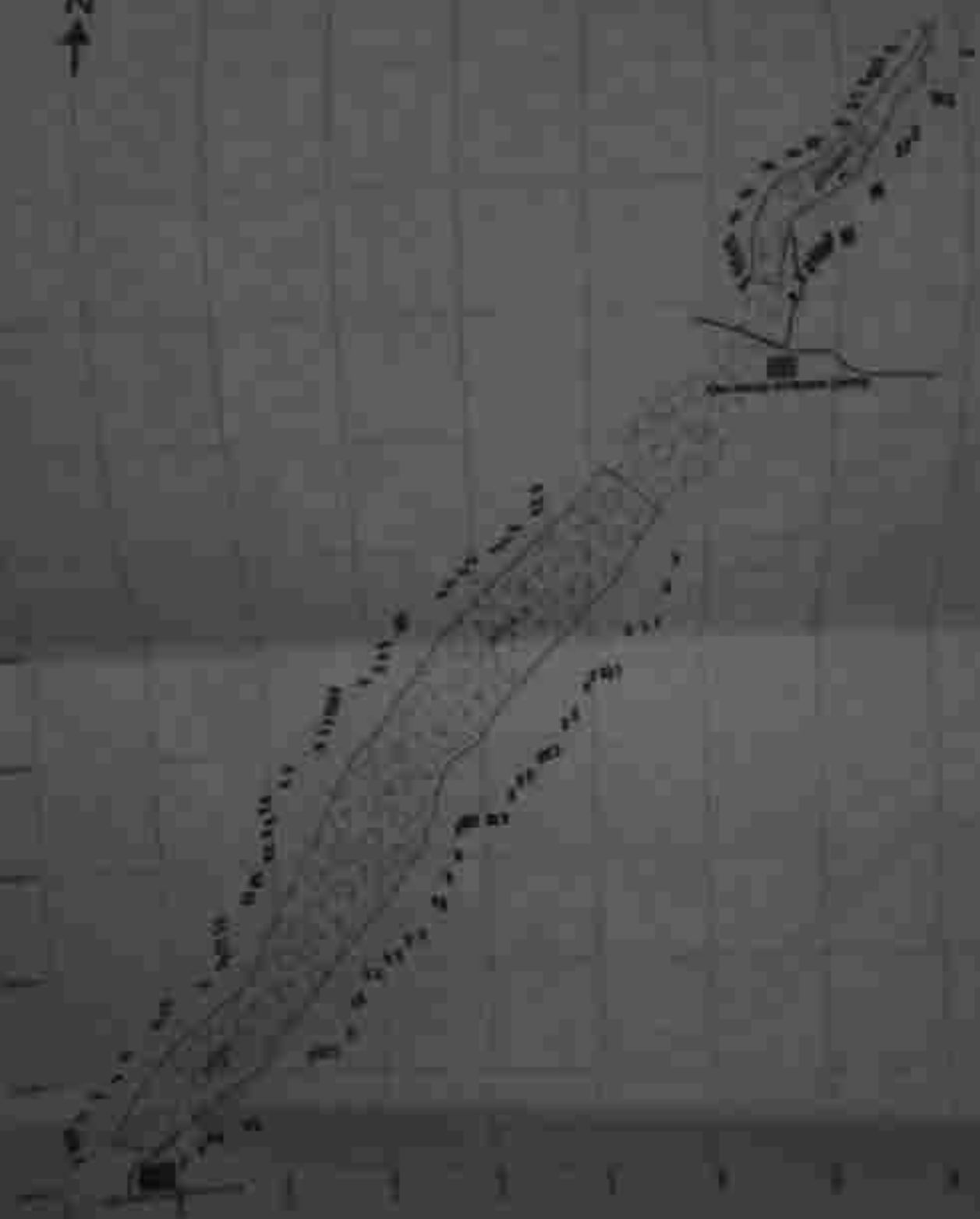


LOCATION MAP OF JARRAN-I, DIST. - DEHRADUN



DEHRADUN
INDIA

N



1 2 3 4 5 6 7 8 9 10

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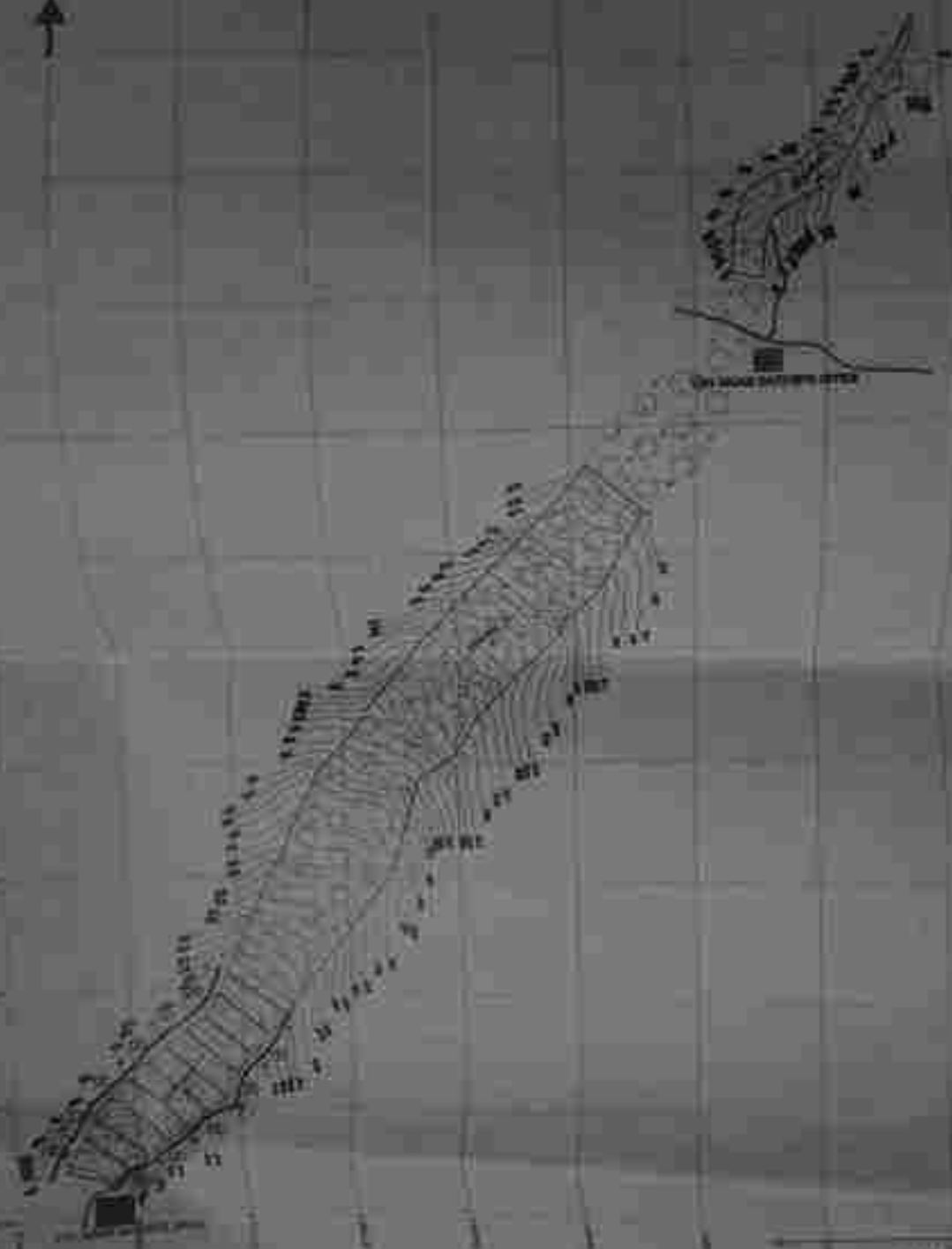
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RECONSTRUCTION OF THE
 U.S. BATTERY SITES AT FORT MONROE
 FROM 1862 TO 1917
 SCALE 1:50,000

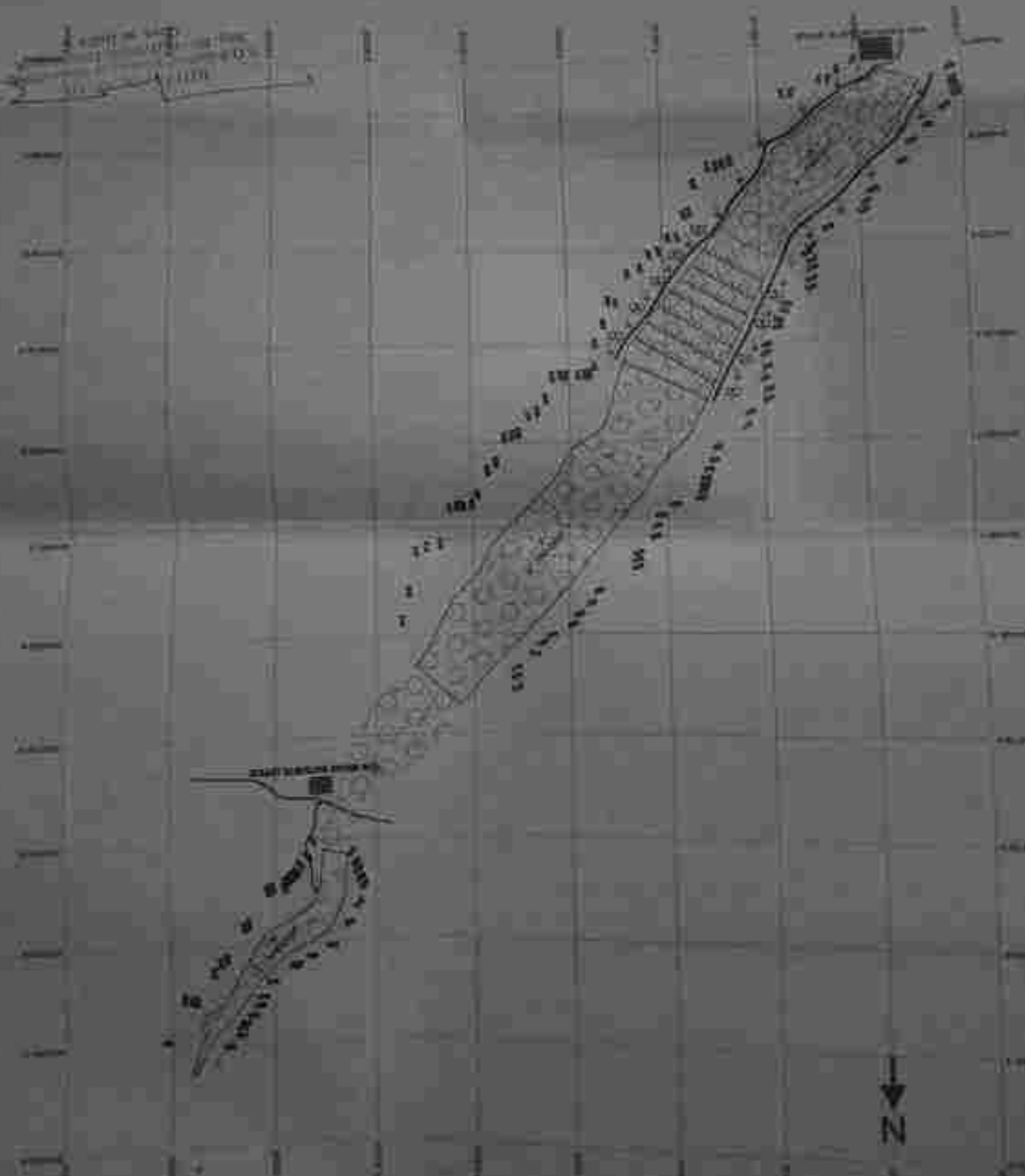
NOTE:
 All elevations in feet & distances in feet.

DATA		REMARKS	
DATE	1917	DATE OF SURVEY	1917
BY	U.S. Army	BY	U.S. Army
FOR	Fort Monroe	FOR	Fort Monroe
SCALE	1:50,000	SCALE	1:50,000



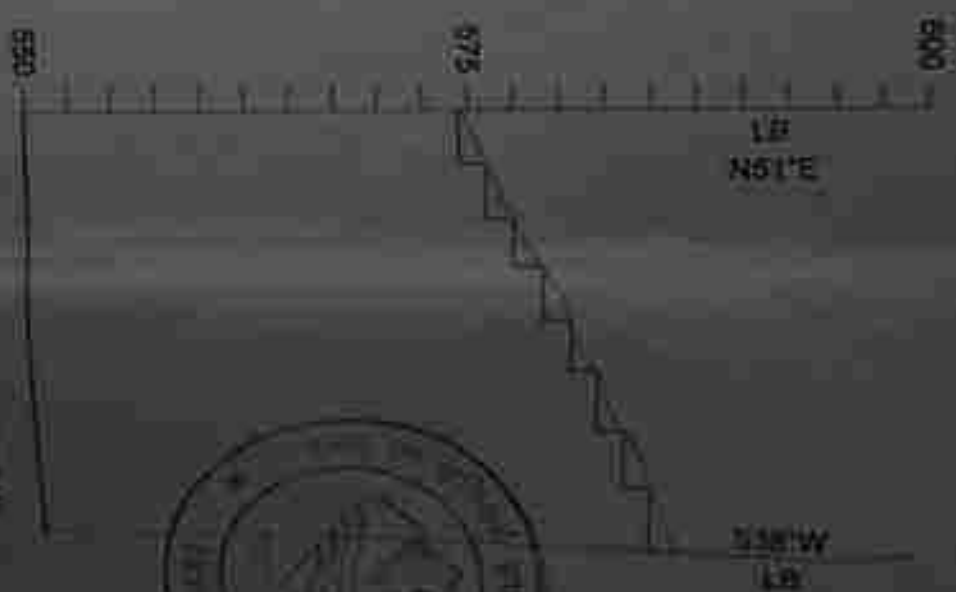
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PROJECT	W. J. H. H. H.	NO.	1000
DESCRIPTION	W. J. H. H. H.	DATE	10/10/50
BY	W. J. H. H. H.	NO.	1000
DATE	10/10/50	BY	W. J. H. H. H.
PROJECT	W. J. H. H. H.	NO.	1000
DESCRIPTION	W. J. H. H. H.	DATE	10/10/50
BY	W. J. H. H. H.	NO.	1000

NOTED: ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED





PIT SECTION OF FIRST YEAR



PIT SECTION OF BEYOND YEAR



INDEX :

PIT LIMIT SECTION	
RIVER BED MATERIAL (RBM)	
MEASURED MINERAL CONTACT	
INDICATED MINERAL CONTACT	

PLATE - 6

YEARWISE PIT SECTIONS

LANDWATER (LANDWATER RIVER) AREA - 2011/12
 FOREST DIVISION - DENHAMP
 DISTRICT - DENHAMP
 AND UTTARAKHAND FOREST DEVELOPMENT CORPORATION LTD.
 ARUNACHAL PRADESH (ARUNACHAL PRADESH)
 SURVEYED BY DENHAMP IV - BILAPAT PRADESH
 DENHAMP (DENHAMP)

24



1. Name of Project	
2. Name of Engineer	
3. Name of District	
4. Name of Division	
5. Name of Section	
6. Name of Sub-section	
7. Name of Detail	
8. Name of Station	
9. Name of Point	
10. Name of Line	
11. Name of Curve	
12. Name of Angle	
13. Name of Distance	
14. Name of Area	
15. Name of Volume	
16. Name of Weight	
17. Name of Length	
18. Name of Breadth	
19. Name of Depth	
20. Name of Height	
21. Name of Width	
22. Name of Thickness	
23. Name of Diameter	
24. Name of Circumference	
25. Name of Surface	
26. Name of Volume	
27. Name of Weight	
28. Name of Length	
29. Name of Breadth	
30. Name of Depth	
31. Name of Height	
32. Name of Width	
33. Name of Thickness	
34. Name of Diameter	
35. Name of Circumference	
36. Name of Surface	
37. Name of Volume	
38. Name of Weight	
39. Name of Length	
40. Name of Breadth	
41. Name of Depth	
42. Name of Height	
43. Name of Width	
44. Name of Thickness	
45. Name of Diameter	
46. Name of Circumference	
47. Name of Surface	
48. Name of Volume	
49. Name of Weight	
50. Name of Length	

1. Name of Project		2. Name of Engineer	
3. Name of District		4. Name of Division	
5. Name of Section		6. Name of Sub-section	
7. Name of Detail		8. Name of Station	
9. Name of Point		10. Name of Line	
11. Name of Curve		12. Name of Angle	
13. Name of Distance		14. Name of Area	
15. Name of Volume		16. Name of Weight	
17. Name of Length		18. Name of Breadth	
19. Name of Depth		20. Name of Height	
21. Name of Width		22. Name of Thickness	
23. Name of Diameter		24. Name of Circumference	
25. Name of Surface		26. Name of Volume	
27. Name of Weight		28. Name of Length	
29. Name of Breadth		30. Name of Depth	
31. Name of Height		32. Name of Width	
33. Name of Thickness		34. Name of Diameter	
35. Name of Circumference		36. Name of Surface	
37. Name of Volume		38. Name of Weight	
39. Name of Length		40. Name of Breadth	
41. Name of Depth		42. Name of Height	
43. Name of Width		44. Name of Thickness	
45. Name of Diameter		46. Name of Circumference	
47. Name of Surface		48. Name of Volume	
49. Name of Weight		50. Name of Length	

संख्या

निदेशक
भूतल एवं वाणिज्य इकाई
उत्तराखण्ड विकास निगम लि.
देहरादून।

संज्ञा में

प्रबन्ध निदेशक
उत्तराखण्ड वन विकास निगम लि.
अन्य विकास भवन,
13, मेहता रोड देहरादून।

संख्या: /30540/माप्लान/2016-17

दिनांक: 12 मई 2017

विषय- एडवाइस उत्तराखण्ड वन विकास निगम लि. के पत्र में जलपद देहरादून के आरक्षित वन क्षेत्रान्तर्गत स्थित खनन लॉट जाखन-2 कुल क्षेत्रफल 100.00 है। नवो 50.00 है। आरक्षित वन भूमि में उपखनिज बालू, रजरी, बोल्टर के खनन हेतु दिनांक 03.04.2017 से 25.05.2019 तक सारनादेश संख्या 400/VII-1/2012/123-ख/2011 दिनांक 03 अप्रैल 2012 में निष्पादित रातो/प्रतिबन्धों तथा उत्तराखण्ड उपखनिज (बालू, रजरी, बोल्टर) विनियम 2016 के प्रावधानों के अन्तर्गत खनन पट्टे पर स्वीकृत क्षेत्र की खनन योजना के अनुमोदन के सम्बन्ध में।

संदर्भ

आपके द्वारा जलपद देहरादून के आरक्षित वन क्षेत्रान्तर्गत स्थित खनन लॉट जाखन-2 कुल क्षेत्रफल 100.00 है। नवो 50.00 है। आरक्षित वन भूमि में उपखनिज बालू, रजरी, बोल्टर के खनन हेतु दिनांक 03.04.2017 से 25.05.2019 तक सारनादेश संख्या 400/VII-1/2012/123-ख/2011 दिनांक 03 अप्रैल 2012 में निष्पादित रातो/प्रतिबन्धों तथा उत्तराखण्ड उपखनिज (बालू, रजरी, बोल्टर) विनियम 2016 के प्रावधानों के अन्तर्गत खनन पट्टे पर स्वीकृत क्षेत्र की खनन योजना के अनुमोदन के सम्बन्ध में।

है।

1. खनन पट्टे के अनुमोदन सम्बन्धी संख्या 400/VII-1/2012/123-ख/2011 दिनांक 03 अप्रैल 2012 के अन्तर्गत दिनांक 03.04.2017 से दिनांक 25.05.2019 तक के अवधि के लिए किया गया है।
2. उत्तराखण्ड वन विनियम 2016 के अन्तर्गत खनन पट्टे के अनुमोदन के सम्बन्ध में 1-12-2015/443/2009-1A/11(2) दिनांक 17 अप्रैल 2016, F.No. 42/199-FC dated 26 May, 2009 एवं F.No. 42/199-FC dated 07-11-2009 के अन्तर्गत खनन पट्टे के अनुमोदन के सम्बन्ध में।

3. प्रस्तावित खनन सार्वजनिक संस्था अनुमोदित संस्था 30/VII-1/123-12/2011 दिनांक 03/04/2012 को संविधान संख्या 400/VII-1/2012/123-12/2011 दिनांक 03 अप्रैल, 2012 मध्य विभाग की समस्त कार्यवाही अनुमोदित करेगा।
4. प्रस्तावित खनन क्षेत्र में खनन कार्य अनुमोदित खनन योजना के अनुसार किया जायेगा तथा खनन योजना के अनुसार प्रदान की गई जमागत 465.5 मी० से अधिक 47000 मी० तक 27500022 टन एवं विभिन्न क्षेत्रों में जमागत 465.5 मी० से अधिक 47000 मी० तक 27500022 टन जमागत का खनन किया जायेगा।
5. यह खनन योजना अन्य किसी अधिनियम जो कि इस खनन या क्षेत्र पर लागू होते हैं या समझ-समझ पर राज्य सरकार के केन्द्र सरकार या अन्य किसी संस्था द्वारा प्रस्तावित हिस्से जाते हैं, को लागू कर अनुमोदित की जाती है।
6. यह खनन योजना तब (संस्था) अधिनियम-1986 एवं संस्था विभागकी 1981 और अन्य संस्था अधिनियम की निर्देशावली आदेश और दिशा निर्देश जो कि इस खनन पट्टे पर समझ-समझ पर दिये जाते लागू होंगे।
7. अनुमोदित खनन योजना किसी भी प्रभावी क्षेत्राधिकार मान्यता या अधिकार एवं दिशा निर्देश के लागू होने को बाधित नहीं करती है।
8. अनुमोदित अवधि में किए गये खनन कार्य को निर्देशित की जायेगा यदि खनन योजना में संशोधन की आवश्यकता दिखे जाये तो यह संशोधित खनन योजना प्रस्तुत करने का पूर्ण उत्तरदायित्व आवेदक का होगा।
9. आवेदक/निर्देशित अधिकारी को सुझावों पर प्रतिक्रिया प्रदान करने तथा सुझाव खनन कार्य करने हेतु सभी आवश्यक साधन/विधि प्रदान करने का दायित्व आवेदक पर होगा।
10. अनुमोदित खनन योजना की एक-एक प्रमाणित प्रति सम्बन्धित विभागाधीन अधिकारी एवं निर्देशावली के क्षेत्रों में प्रमाणित प्रमाणित प्रस्तुत करने का दायित्व की आवेदक का होगा।
11. अनुमोदित खनन योजना के अनुसार आवेदक द्वारा खनन कार्य के लिए जाते पर आवेदक के विरुद्ध पट्टे की सभी आवश्यकताएं समझ-समझ और अनुसार कार्यवाही की जायेगी।
12. खनन योजना इस बात के साथ अनुमोदित की जा रही है कि पर्याप्ततक अधिकारी की सुझा एवं आवश्यकता की पूर्ति करवाये।

संलग्नक:- खनन योजना की अनुमोदित प्रति।

महोदय

विनय शर्मा साहू
निर्देशक

संख्या 164 / माध्याम / उद्योग / 2016-17 तदनुमोदित।

प्रतिनिधि:- निम्नलिखित, देहवदूत को सुझा एवं आवश्यक कार्यवाही हेतु प्रेषित।

विनय शर्मा साहू
निर्देशक

MINING PLAN
FOR
PICKING / EXTRACTION OF MINOR
MINERALS (SAND, BAJRI AND
BOULDERS) FROM A PART OF RIVER
JAKHAN-2 (AREA- 100.0 HA.), DEHRADUN
FOREST DIVISION, TEHSIL & DISTRICT-
DEHRADUN, UTTARAKHAND

APPLICANT

**Uttarakhand Forest
Development Corporation**
Aranya Vikash Bhawan, 73- Nehru Road
Dehradun, Dist. Dehradun, Phone: 0135-2657610

PREPARED BY

BHUWAN JOSHI
Empowered Geologist, RQP, IBM
Forest & Rural Development Cell (FRDC)
Empowerment No. UKRDA/2008-09/3100
Govt. of Uttarakhand
RQP, Registration No. RQP/DDN/TH/2008/4
Indian Bureau of Mines
Govt. of India

Address-

**Progressive Geological & Geotechnical Services
(PG2S)**

RHQD OFFICE

House No.-6, Kamal Bhawan,
Vijay Colony, Lane No.-1, Dehradun
Uttarakhand
E-mail: joshi@bhawan@yahoo.co
Mo. No. 99442152103

भूखन एन. अभिलेखन सेवा,
अरुण मिश्रा रोड, देहरादून
देहरादून
पिन- 248005
फोन- 99442152103

THE GEOLOGICAL SURVEY OF INDIA FOR MINING
PERMIT REGISTRATION OFFICE

15/12
2008

MINING PLAN
FOR PICKING / EXTRACTION OF MINOR MINERALS (SAND, GRAVEL AND BOULDERS) FROM A PART OF RIVER JAKHAN-2
(AREA- 100.0 HA), DEHRADUN FOREST DIVISION, TEHSIL & DISTRICT- DEHRADUN, UTTARAKHAND

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MINE PLAN

CHAPTER-1

INTRODUCTION

Forest Clearance (FC), Environment Clearance (EC) & Letter of Consent (LoC) Govt. of Uttarakhand, released in the favor of Uttarakhand Forest Development Corporation (UKFDC) for extraction of extraction of Minor minerals (RBM i.e. sand, bajari & boulders) from a part area of Jakham River called as Jakham-2 (ANN. 1, 2, 3, 4, 5) Dehradun Forest Division, Dist. Dehradun, over an area of 100.00 Hae. for the period of 10-years (FC & EC) (Ann. 1, 5), the demarcated topographic map (Ann. 6) is provided by UKFDC. The available area of Jakham-2 is 100hae, falls under Dehradun forest division, Dehradun, Uttarakhand. The said area belongs to reserved forest region. The collection/picking of minor minerals will be carried out from 50% of the total area i.e. 50 Hae. after leaving 25% area on each of the banks for better channelization of the water during the rainy season and to protect the nearby forest land and habitat from the floods. Mineral extraction target is about 1, 25000 cubic meter/year or 2, 75000 ton/year.

The Jakham River originates from the Dehradun District of Uttarakhand and flow through the foot hills of Dehradun Forest Division of Siwalic Circle. The river carries with it huge quantity of sediment consisting of stones, gravel and sand during every monsoon every year which is deposited in the foothills. Keeping in view, the environmental consideration for the eco-system of the river, it is essential to remove this material from the river bed. The sediment in the form of river bed material (RBM) deposited in the last 100 years has changed the shape of the river bed from a valley to a raised land. Hence, it was thought necessary to make a channel in the middle 50% width of the river to create an area of open water for the river water to flow unhindered during the monsoon season. The Ministry of Environment and Forest of India has agreed in principal and asked the State Government.

2 | PROGRESSIVE GEOLOGICAL & GEOTECHNICAL SERVICES (P.G.S.)



Stamp, Registered Professional Engineer (Civil)

DEHRADUN REGION

REGISTRATION NO. 123456789
REG. FOR PROFESSIONAL ENGINEERING
GOVT. OF INDIA

annual permissible extraction and rate of sedimentation along with the total approximate RDM available.

Uttarakhand Forest Development Corporation (UKFDC) is a statutory body constituted by the State Government. The Corporation was formed for the better preservation, supervision and development of forest also for better exploitation of forest produce within the State and for matters connected there with.

The Mining Plan of the proposed area is prepared by Bhuvan Joshi, RQP & Geological Consultant, Proprietor- Progressive Geological & Geotechnical Services, 6- Vijay Colony, Lane-1, New Cant Road, Dehradun, Registration No. RQP/DDN/180/2009/A, authorized by Uttarakhand Forest Development Corporation (UKFDC) for preparation of said Mining Plan.

PROGRESSIVE GEOLOGICAL & GEOTECHNICAL SERVICES (P.G.S.)



RQP, Registration No. RQP/DDN/180/2009/A



DEHRADUN
RQP, Registration No. RQP/DDN/180/2009/A
DEHRADUN

GENERAL

2.1	Name of the Applicant	Uttarakhand Forest Development Corporation (UFDC)
	Address	Aranya Vilas, Bhawan, 73-Nelru Road, Dehradun
	District	Dehradun
	State	Uttarakhand
	Pin Code	248001
	Phone	0135-2657610, Fax: 0135-2655488, Email: uafdcmd@yahoo.com
2.2	Status of the Applicant	Uttarakhand Forest Development Corporation (UFDC) is a statutory body constituted by the Govt. of Uttarakhand
2.3	Mineral(s) which the applicant intends to mine	Sand, Bajri and Boulder. The mineral collected/extracted from the lease area shall be sold in the open market as per the demand.
2.4	Period for which the mining lease is required or granted / renewed	a) Approval in principle is granted by MoEF (FC Division), GOI vide letter No. F.1/3-62/99-FC dated 26th May 2009 & dated 2nd June 2009 for Ten years. b) State Government clearance is granted vide letter no. 1028-VII-1

2 | PROGRAMME GEOLOGICAL & GEOTECHNICAL SERVICES (PGGS)

BQP, Registration No. PG/2007/2009/10



Signature of the Secretary
 SECRETARY
 MINISTRY OF ENVIRONMENT AND FORESTS
 GOVERNMENT OF INDIA

being practiced for now long through unregulated, uncontrolled and illegal manner added almost an irreversible damage to the environment, which became a cause of serious concern. Though sand is very important mineral source for development, its mining through scientific methods have also become equally imperative. It is for this purpose that 'mining plan' is being drawn so that all its aspects are taken care of justifiably, according to law, protecting the environment, removing all adverse impacts and creating a direct and indirect employment opportunities, improving socio-economic conditions of the local inhabitants and all round ~~status~~ of life, achieving thereby a sustainable development. Besides above, the process of mining of minor minerals is a constant source of revenue generation to the State Government.

3.2 PROJECT BACKGROUND

Status and Stages of regulatory clearances

- 1- Approval in principle is granted by MoEF (FC Division), GOI vide letter No. F.No. 8-62/99-FC dated 26th May 2009 & dated 2nd June 2009 for ten years.
- 2- State Government consent for EIA clearance is granted vide letter no. 1929/VII-I/163Kha/2009 dated 8 Dec. 2009.
- 3- Environmental Clearance is granted by MoEF (IA Division) vide letter no. J-11015/343/2009-IA.II (M), dated 15th April 2011.
- 4- Concern about this proposed mining over Jakhni-2 taken by Geology & Mining Department, Govt. of Uttarakhand vide letter no. xviii/51/Dm/Kharan/dm.kharan/ekn/2008-9, dated 19 February 2009
- 5- State Govt. consent about the about this proposed mining vide letter no. 490/VII-I/2012/123-kha/2001, dated 03 April 2012 (ann. 5)

This mine plan is being prepared to abide by change in Mining Policy as per Circular of Uttarakhand State Government, Industrial Development Section No. 1033/VI/2011 dated 11th July, 2015.



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3.3 LOCATION, GENERAL AND ACCESSIBILITY

3.3.1 LOCATION

(a)	Details of Area	Location Map is attached as Plate No. 1
(b)	District and State	Dehradun, Uttarakhand
(c)	Tehsil	Dehradun & Doiwala Dehradun Forest Division
(d)	Village	There are many village falls near bank area of Jakhni-2, Chamanpur, Bishari, Boronwalla, Fatehpur, Lalpapur.
(e)	Khasra No / Plot No / Block Range /	Dehradun Forest Division
(f)	Felling Series etc.	None
(g)	Area (hectares)	100 ha.
(h)	Whether the area is in forest (please specify whether protected, reserved etc.)	Yes, Dehradun Forest Division, many reserved forests regions surround the project area. They are:- Lachniwala Reserved Forest Dwara Reserved Forest Palet Reserved Forest Malkot Reserved Forest Kumrao Reserved Forest Barko Reserved Forest



2 | PROGRAMME GEOLOGICAL & GEOTECHNICAL SERVICES (PGS)

PGS, Ministry of Environment, Forest and Climate Change, Government of India

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(i)	Ownership/ Occupancy	Govt Land, Forest Department (Map Attached as Anal. 4)
(j)	Latitude	30° 10' 59.25" to 30° 18' 33.58" North
	Longitude	76° 13' 59.64" to 76° 09' 57.44" East

3.3.2 GENERAL

(a)	Mineral being worked	Sand, Boulder and Bajt
(b)	Period of mining Lease/permission	Approval in principle is granted by MoEF (FC Division), GOI vide letter No. F-26, 8-62/99-FC dated 26th May 2009 & dated 2nd June 2009 for ten years. Mining Plan is prepared for five years, attached as Annexure-I.
(c)	Category of landuse	Forest Land
(d)	General Ground Level	500 m above MSL.
(e)	Elevation Range of River Bed	461m to 541m.

3.3.3 ACCESSIBILITY

The proposed site is having a total area of 100 Hectares. The location map of the site is attached as Photo-1. The project area is located in the south end of the Pithoragarh District. The Pithoragarh-Delhradim connecting NH-72 is the closest highway. The Pithoragarh-Delhradim road is about 15 km from the proposed site.

Location of the Mining Site

PROGRESSIVE GEOLOGICAL & GEOTECHNICAL SERVICES (P.G.S.)



FOR SIGNATURE AND STAMP OF THE CLIENT

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 S.D. Sharma
 Prop. P.G.S. (PVT.) LTD.



The mining area is located in the Dehradun Forest Division limits in Dehradun District of Uttarakhand. The mining lease area falls in Survey of India Toposheet No. 53 J4 bearing Toposheet Details.

Toposheet No. 53J4

Latitude: $30^{\circ} 10' 59.25''$ to $30^{\circ} 08' 33.58''$ North

Longitude: $78^{\circ} 11' 59.61''$ to $78^{\circ} 09' 57.44''$ East

Dehradun, the district head quarter is 20 km away from the area. The nearest railway station is at Rishikesh which is at a distance of 10 km from the applied area. The nearest airport is the Jolly Grant Airport which is at a distance of 1 km from the project area. There are many villages lining the banks of the river, Ghumundpur, Bichari, Bironwalla, Patehwa, Laluppar etc.

There are no Ecologically Sensitive Areas present in the study area, but many reserved forests regions surround the project area. They are- Lachhiwala Reserved Forest, Dwara Reserved Forest, Palad Reserved Forest, Malkot Reserved Forest, Kanatu Reserved Forest, Bako Reserved Forest.

CHAPTER-4

GEOLOGY & EXPLORATION

4.1 GEOLOGY

Geologically the project area belongs to Doon gravels. i.e. the area falls in the Intermountain Doon Valley and is underlain by recent to sub recent Doon Gravels, which lie over the Older Siwalik sediments. The Doon gravels have been broadly divided in older Doon Gravels and younger Doon Gravels. The older Doon Gravel consists of partly of gravelly sand, small cobbles, Angular Pebbles of Quartzites, Slates and Shales from the Nagina, Chail and Tal lamitlana and Limestone Pebbles from Kail limestone alternating with clay beds.

5 | PROGRESSIVE GEOLOGICAL & GEOTECHNICAL SERVICES (P.G.S.)



2020, Registration No. 2020/2021, Dehradun



DEHRADUN 10000
H.O.P.T. (H.O.P.T. is a part of the project area)
2020, Registration No. 2020/2021, Dehradun
C.O.P.T. (C.O.P.T. is a part of the project area)

The younger Doon Gravels rest unconformably over the older Doon gravels in the northern part. The disconformable relationship gradually disappears in the southern part. The younger Doon gravels are characterized by very large boulders in the alluvial fans and debris flow deposits and consist of moderately sorted mixture of clay, sand, gravels and boulders. The sandy and gravelly units are separated from each other by clay beds. The thickness of these units varies from place to place and also may be traced laterally.

4.2 EXPLORATION

Adequate amount of sand, baji and boulder in reserve is available for meeting consumer demand. Moreover mining will be carried out by batch rotation manner and the mined out area is fully replenishable.

4.3 ESTIMATION OF RESERVE

The method of cross section has been adopted for computing the reserve. The mining lease boundary, proven and mining limits are marked on the plan which is thereafter transferred to cross section for determining the different categories of reserve.

In order to calculate the mineable reserve the geological map on the 1:1000 scale was prepared and main litho units were marked on the plan to know the surface spread of each unit. The different constituents of the deposits such as sand, baji, boulder and mixture of clay, soil, silt, based on sized classification were considered for the reserve calculation. Although it is not possible to mark these units separately on the geological map, as such five pits of 1x1x1 meters were got dug in the mineable area and material so excavated was separated into different size and their percentage was worked out. This percentage was taken into account during calculation of the reserve. The cumulative result of the test pits are given in the following Table no.1.



Table No. 1. Classification of Minerals available

Sr. No.	Mineral	Size	Percentage
1.	Sand	0.06-2 mm	65%
2.	Bajri	8-64 mm	8%
3.	Boulder	256 mm+	25%
4.	Silt/clay	1-62.5 μ m	2%

Bulk density is taken as 2.2 for calculation (as per GoUK, Industrial Development Section Notification 1033/VI/1/ 2015/ 146 -Kha/ 2010, dated 31st July 2015). Calculation of reserve has been done as following:

1. Cross sections have been prepared at intervals. Refer Plate No.3
2. Area of every cross section has been taken. For example, if the area of cross section A-A' is 'X' and area of B-B' is 'Y', then average of both calculating the reserve (i.e. $(X+Y)/2$).
3. Distance between the two sections has been multiplied with the average area of the two sections to get the total volume. i.e. $[(X+Y)/2] \times \text{Distance between A-A' \& B-B'}$.

The overall geological reserves have been estimated through geological cross section method. The area of each section line is calculated. The section area is multiplied by the strike influence to get the volume. The target geological reserve classified in to three categories i.e. Proved reserve, Probable reserve & Possible reserve. In this project the proved reserve assessed as 10m depth & further 5m as probable reserve whereas 3m considered as possible reserve. Out of total volume the 80% considered as the recoverable reserve & 2.2 bulk density.



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Table No. 2. Reserve Estimation (Proved Reserve)

Cross-Section Line	Sectional Area, M ²	Strike influence (m)	Volume (m ³)	Quantity (MT)
A-A' to B-B'	47297	60.16	2276510	3007882
B-B' to C-C'	47022.5	50.96	1917013.2	4217429.21
Total	-	-	4193523.2	9225311.21

Table No. 3. Reserve Estimation (Probable Reserve)

Cross-Section Line	Sectional Area, M ²	Strike influence Interval (m)	Volume (m ³)	Quantity (MT)
A-A' to B-B'	25048.5	60.16	1138153	2503941
B-B' to C-C'	23511	50.96	958496.44	2108692.18
Total	-	-	2096651.5	4612633.18

Table No. 4. Reserve Estimation (Probable Reserve)

Cross-Section Line	Sectional Area, M ²	Strike influence Interval (m)	Volume (m ³)	Quantity (MT)
A-A' to B-B'	14189	60.16	632888.19	1502354
B-B' to C-C'	14108.3	50.96	575093.8	1257981
Total	-	-	1257981	2760335

Geological Reserves:

The summarized category-wise geological reserve estimated by is:-

Proved Reserve- 92, 25311.21 Tons

Probable Reserve- 46, 12633.18 Tons

Possible Reserve- 2767560.3 Tons

Mineable reserve:-

The proved mineable reserve is calculated as referred in Uttarakhand Minor Mineral Policy 2015 for Category C, minor mineral area (Zone C). The mineable reserve within allowable are is 16, 50,000 tonnes/year. This is fully replenished every year.

Quantity of mineable reserve replenished every year = 16.5 million tons x 2.5 tons density.

4.4 MINE REPLENISHMENT

It has been assessed that proposed mining area/ mineral picking area generally gets flooded during monsoon season and gets completely replenished. However, The Department of Geology & Mining may monitor the replenishment within the lease area and specific consultation or study may be conducted whenever required.



PROGRESSIVE GEOLOGICAL & GEOTECHNICAL SERVICES PVT. LTD.

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CHAPTER-5

MINING

5.1 METHOD OF WORKING

The mining process is conventionally open cast river bed mining of minor minerals with hand tools, shovels and pan without drilling & blasting. Proposed mining will be start from lowest level of river end to highest river end phase wise and block wise going to the maximum depth of 1.5m bgl or above ground water level whichever is less. Length/size of the blocks/pits may be decided on the spot convenience & available material but an ideal way of progression of mining pits as left to right or series wise lower to upper level i.e. downstream to upstream direction. Mining would be carried within 1st half of the course as demarcated & mapped. Each year the mining will be carried within about 83,333.4 sqm area as per yearly Target reserves i.e. 1,25,000m³ with area wise rotation method. Total 5,00,000m³ area is workable and replenishable yearly. Retaining wall within both banks would be proposed of about 2.5 to 3m to check toe erosion & flooding during monsoon season. Mineral extraction will be done for a period of 225 days in a year.

Following guidelines will be followed while carrying out mining:

- 1- Conditions under which Forest Clearance has been granted by MoEF (FC Division), GOI vide letter No. F.No. 8-62/99-FC dated 26th May 2009 & dated 2nd June 2009 for ten years.
- 2- Conditions under which Environmental Clearance is granted by MoEF (EA Division) vide letter no. J-11015/343/2009-IA.II (M), dated 15th April 2010.
- 3- Concern about this proposed mining over Jakhua-2 taken by Geological & Mining Department, Government of Jharkhand as per vide no. 51(Ddr/Khumi/bm.khar), 44/2008-9, dated 19 February 2009.



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4. State Govt. consent about the about the proposed mining vide letter no.490/VII-1/2012/123-dha/2001, dated 03 April 2012 (ann. 5).
5. The Uttarakhand Minor Mineral (Sand, Gravel, Boulder and Bricks etc.) Policy 2015.
6. Uttarakhand Secondary Mineral Policy/2015.
7. All other guidelines, Circulars, Orders of the Ministry of Environment & Forests and Government of Uttarakhand.

5.2 EXTENT OF MECHANIZATION

No mechanization is required as the operation will be manual method without drilling or blasting.

5.3 MODE OF WORKING

For the optimum utilization of the mineral available in the lease area, mine working has been planned and scientific layout has been designed considering the following parameters:

- Extraction of minor minerals shall be restricted to middle half of the width of the river bed after leaving intact the 1/4th of width of the river bed along its each bank.
- The approach road will be repaired from time to time.
- The quarry planning is done in simple symmetrical manner since deposit is very simple, shallow and beds are almost horizontal.
- Simultaneous plantation will also be done within the left bank and a boundary to protect the tree ecosystem and landslide phenomena.

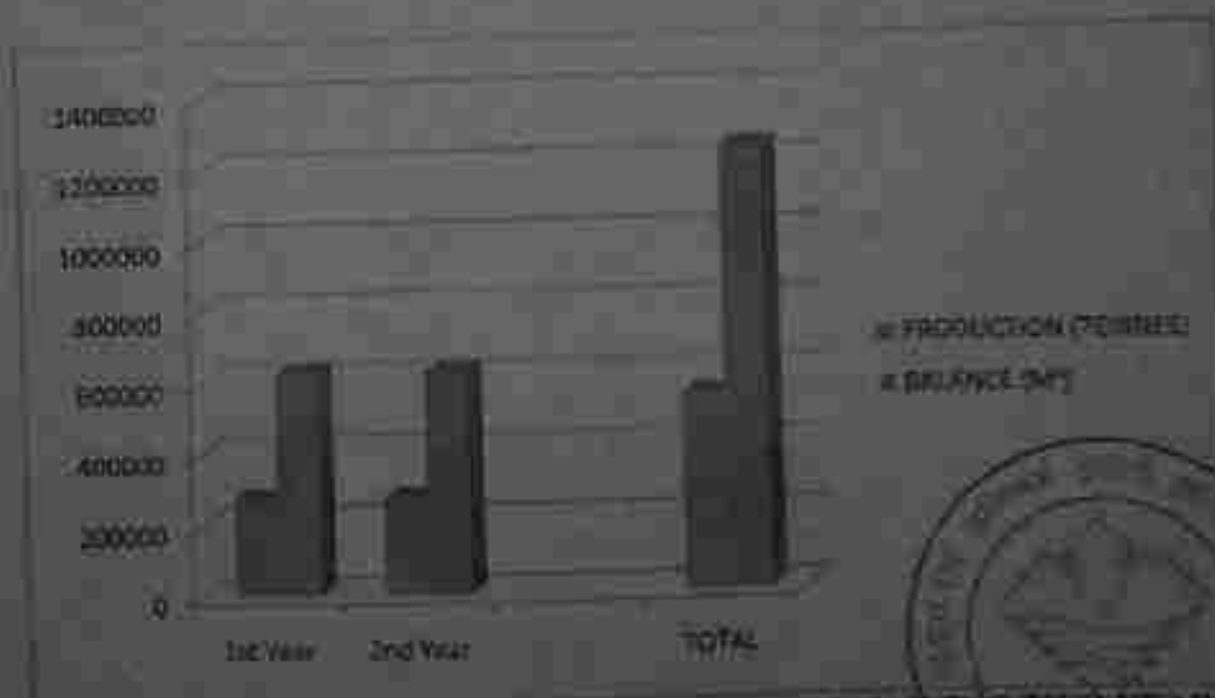


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Table No. 5

YEARWISE PRODUCTION FOR REMAINING TWO YEARS

YEAR (FOR REMAINING TWO YEARS)	MINEABLE AREA (TOTAL LEASE AREA- NON WORKABLE AREA)	DEPTH (M)	PRODUCTION (TONNES)	BALANCE (M ³)
1 st Year	83,333.4 m ²	1.5	2,75,000.22	62,49,999.8
2 nd Year	83,333.4 m ²	1.5	2,75,000.22	62,49,999.8
TOTAL	-	-	5,50,000.44	12,49,999.8



COLUMN GRAPH SHOWING PRODUCTION IN REMAINING TWO YEARS

5.5 DEVELOPMENT & PRODUCTION IN REMAINING FIRST YEAR

Development & Production Programme in remaining first year would be as:- the mining is proposed in 83,333.4 sqm area. The production of each mineral constituent would be on an average as under:-

TABLE NO. 6
REMAINING FIRST YEAR (463.5 - 479M)

Sr. No.	Mineral Constituents	Production (T) in tons
1.	Sand	1,78,750.00
2.	Bajri	32,000.00
3.	Boulder	68,750.00
4.	Silt/clay	5,500.00
TOTAL		2,75,000.22

% of Mineral Constituents



PIE GRAPH OF % OF MINERAL CONSTITUENTS

5.6 DEVELOPMENT & PRODUCTION FOR REMAINING SECOND YEAR

Development & Production Programme for remaining second year would be as:- the mining is proposed in 83,333.4 sqm area. The production of each mineral constituent would be on an average as under:-

Table No. 6.

REMAINING SECOND YEAR (479-493M)

Sr. No.	Mineral Constituents	Production (±) in tonnes
1.	Sand	1,78,750.00
2.	Bajri	22,000.00
3.	Boulder	68750.00
4.	Silt/clay	5,500.00
TOTAL		2,75,000.00

5.10 MINERAL PRODUCTION

The riverbed mining will consist of sand and their production may vary to a great extent depending upon availability. Therefore quantity of sand cannot be estimated on logical parameters, the figures given here above only tentative. The production target is as above.

5.11 DEVELOPMENT AND PRODUCTION PROGRAMME FOR REMAINING TWO YEARS

Prior to start production from the area, some development work has to be completed as under
Para No.5,6

- Haul road preparation
- Erection of a site office and Stay rest shelter for workers

- Barbed wire fencing/enclosing all around the mining area may be provided to avoid accident and inadvertent entry.
- Construction of Retaining wall towards bank area (river bank) to abstain from the erosion & flooding.

CHAPTER-6

DRILLING & BLASTING

No drilling and blasting is required to undertake mining of riverbed minerals.

CHAPTER-7

WATER AND DRAINAGE SYSTEM

As per the proposed mining the working shall be confined upto 1.5m bgl or above the ground water table, whichever is less. Hence no water clogging is likely to be encountered. Therefore, there is no need of any such arrangements.

CHAPTER-8

DISPOSAL OF WASTE MATERIAL

2% waste will be generated in the form of silt/clay etc. This will be dumped back into the mined area.

Sewerage System:

Portable Toilets will be provided.

Solid Waste Management:

It would be in fitness of things to repeat that there will be no solid waste generated in the proposed activity.



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CHAPTER-9

USE OF MINERALS

Sand, bgrl and boulders are used in construction activities like building, roads, bridges etc. The requirement for the mineral is always high in the nearby cities and towns.

CHAPTER-10

OTHERS

1- SITE SERVICES

The site services like stay/rest shelters, portable toilets, first aid facility and drinking water will be provided.

2- WATER REQUIREMENT

Total water requirement for the project is 1 KLD, it breaks up as under:

Table No. 7. Water Requirement

S. No.	Purpose	Water Requirement (KLD)
1.	Dust Suppression	0.5
2.	Drinking	0.2
3.	Miscellaneous (Plintation etc)	0.3
Total		1.0

3- EMPLOYMENT

Depending upon the General shifts working, following will be the proposed manpower.

Table No. & Employment Break-up

S.No.	Category	Numbers
1.	Mining Competent Person	1
2.	Administrative	1
3.	Supervise	1
4.	Unskilled workers	70
	Total	73

Besides above Geological, Mining & Environmental Consultancy Services may be hired as per requirement on part-time basis or per day basis.

4. SAFETY PROVISION

All provision in safety rules & regulation will be maintained by providing required materials to the employees. The Applicant will provide safety shoes, First Aid facility, drinking water etc to all the employees. There will be no violation of safety provision.

CHAPTER-11

MINERAL PROCESSING & TRANSPORT



MINERAL BENEFICIATION

Mineral Sand doesn't require processing or beneficiation. The excavated mineral will be directly loaded into the bucket.

HAULAGE AND SURFACE TRANSPORT

Mode of transportation of material is by trucks/tractors, of size of 8-10 tonnes capacity have been planned. Mining area is connected with an controlled road upto the NH-72. The mine

and is adequate to prevent any contamination of water flowing down river and discharge point. Water will be sprayed two times a day by hand operated sprayers with fuel powered sprayer.

MINE MACHINERY

Mining will be done using hand tools like shovel, spade, pick ax. Other machinery and the mining site will be kept protected.

CHAPTER-12

ENVIRONMENT MANAGEMENT PLAN

12.1 SOLID WASTE MANAGEMENT

The waste will be generated in the form of effluents etc. This will be dumped back into the natural area.

Sanitation System:

Portable Toilets will be provided.

Solid Waste Management:

It would be in terms of design to expect that there will be no solid waste generated in the proposed activity.



12.2 PLANTATION

Plantation in the mining area is not possible. Instead, plantation will be done along with roads, all the trees with circumference of least 100cm. Every year 25 to 30 trees will be planted.



12.3 BASELINE INFORMATION

12.3.1 Land Use Pattern

Infra area is a wasteland & barren, scattered seasonal bushes & shrubs cover area. There is no agricultural land most of the land is barren.

12.3.2 Flora & Fauna

Dehradun has a rich vegetation cover. Although the major portion of Dehra is occupied by the Sal (*Shorea robusta*) but miscellaneous forests are also found here. The hydro-geological and meteorological conditions of the valley are responsible for the condition for the different types of forest cover. Sal and its associates can be classified in Northern tropical moist and dry deciduous communities. They are found throughout the Siwalika across large tracts of the valley and also along the lower foothills of the Himalayas. A presence of large proportion of clay soil and better drainage act as favorable conditions for the growth of Sal trees.

Faunal Community: as per data provided by UKFDC, in general following categories of faunal classification given in the EIA report.

(i) Core Zone: There was no unique faunal community within the core zone of the project area, except most common ones like toad, frog, crow, Sparrow and mouse etc.

(ii) Buffer Zone: In 10 km radius around the project area:

Amphibians: Among amphibian's toad (*Bufo* sp.) and frog (*Rana tigrina*).

English Name - Scientific Name

Common Toad- *Bufo melanostictus*

India bull frog- *Rana tigrina*

India tree frog- *Polypedates maculatus*

Marbled toad- *Bufo stuartianus*

Skipping frogs *Rana cyanophlyctis*



* Reptiles: Among reptiles Indian pond lizard (*Coleony variegatus*), House lizard (*Hemidactylus* sp.)

b. Mammals: Among mammals Indian palm squirrel (*Fummbalus pennanti*), cat, dog (*Cuon* sp.), cow, Buffalo, rat (*Rattus tatus*) etc.

c. Aves: Among aves common birds like crow (*Corvus splendens*), sparrow (*Passer domesticus*), parrot (*Psittacula krameri*), myna (*Acridothera tristis*), peafowl (*Pavo cristatus*), pigeon (*Columba livia*), Egretta sp. etc.

12.3.3 Climatic Condition

Dehradun valley has moderate climate because of nearness of Himalaya and due to average elevation of 700 meters above sea level. The climate of the study area exhibits the character of sub-temperate climate of mountain areas because of the combined effect of plain-like warm climate and cool lesser Himalayan climate. The mean minimum and maximum annual temperature varies from 2.70C in December and January to about 26.90C in May and June. Only the months of May and June are hot though they are seldom oppressive. Like all other parts of India, Dehradun is also greatly affected by the Monsoons that generally break in the middle of June and remains active till the middle of the September. The months of July and August have heaviest rainfall. From October to December, the climate remains dry. In the end of December, January and early February the valley receives winter rains. The months of March and April receive very less rainfall. Normally the rainfall in Dehradun is sufficient and averages around 2000mm.

12.3.4 Social Infrastructure

The nearest health & education facilities are available in all nearby villages of the proposed mining area. Other major facilities are available in Dorwala and Dehradun (about 15 to 16 km range).

12.4 EFFECT OF MINING ON ENVIRONMENT

Due to the mining activity following things are going to be affected

- Degradation of land



- Destruction of Flora & Fauna
- Air Pollution
- Water Pollution
- Noise Pollution

These effects will be either minimized or nullified by adopting following measures:

- The mining activity will take place in barren/waste land which is of no use to the inhabitants or ambient environment.
- Due to manual mining there may be generation of dust which in turn affects the ambient air. This may be maintained to the permissible limit by doing water spraying on the haul road.
- Mining will be done above the ground water table and thus it is not going to be effected/contaminate the ground water. There will be no discharge of mine water to the nearby water source, except rainwater during rainy season, and thus there will be no contamination of water of the nearby water course, if at all present.
- Due to manual mining there may be no generation of noise.
- Ground vibration & Noise pollution it is not possible because manual mining.
- The applicant has plan for plantation along the both banks with permission of local authority.



CHAPTER-13

MINE CLOSURE PLAN

13.1 Introduction - Forest Clearance (FC), Environment Clearance (EC) & Letter of Consent (LoC) Govt. of Uttarakhand, released in the favor of Uttarakhand Forest Development Corporation (UKFDC) for extraction of extraction of Minor minerals (BMM i.e. sand, bajari & boulders) from a part area of Jakhn River called as Jakhn-2 (ANN. 1, 2, 3, 4, 5) Dehradun Forest Division, Dist. Dehradun, over an area of 100.00 Hec. for the period of 10 years (FC & EC Ann. 1, 3), the demarcated topographic map (Ann. 6) is provided by UKFDC. The available area of Jakhn-2 is 100hec. falls under Dehradun forest division, Dehradun, Uttarakhand. The said area belongs to reserved forest region. The collection/picking of minor minerals will be carried out from 50% of the total area i.e. 50 Hec. after leaving 25% area on each of the banks for better channelization of the water during the rainy season and to protect the nearby forest land and habitat from the floods. Mineral extraction target is about 1, 25000 cubic meter/year or 2, 25000 tons/year.

13.2 Name of the Lessee:-

Already discussed in previous paragraphs

13.3 Location of Mine:-

Already discussed in previous paragraphs

13.4 Detail Description of the Area:-

Already discussed in previous paragraphs

13.5 Land Use Pattern of the Area:-

Already discussed in previous paragraphs

13.6 Method of Mining:-



1. The mining/ collection of minerals shall involve shovelling by simple hand tool and loading into trucks/ tractors- trailers for transporting them to crusher site.
2. Picking and extraction of minor minerals (sand, bari & boulders), detail already discussed in previous paragraphs.
3. With the replenishment of the pits and trenches during the high floods, the process of the controlled mining can continue year after year.
4. Though the major mining activities will be under taken during the dry seasons but restricted mining can be under taken during the dry days of rainy season.

13.7 Name & Address of the Recognized Person:-

Already discussed in previous paragraphs.

13.8 Mine Description:-

Picking /extraction of minor minerals (sand, bari & boulders), detail already discussed in previous paragraphs.

13.9 Geology:-

Already discussed in previous paragraphs.

13.10 Reserves:-

Already discussed in previous paragraphs.

13.11 Progressive Closure Plan

The mining area belongs to river borne deposits (RBM) which are deposited by Song River, mostly during rainy season. The mining process is conventionally open cast river bed mining of minor minerals with hand tools, shovels and pan without drilling & blasting. Proposed mining will be start from lowest level of river cut to highest river and phase wise and block wise going to the maximum depth of 1.5m (5) or above ground water level whichever is less. Lengthwise of the block splits may be decided on the spot convenience & available material but



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a ideal way of progression of mining pits as left to right or series wise lower to upper level i.e. downstream to upstream direction. Mining would be carried within 1st half of the course as demarcated & mapped. Each year the mining will be carried within about 83,333.4 sqm area as per yearly Target reserves i.e. 1,25,000m³ with area wise rotation method. Total 5,00,000m² area is workable and replenishable yearly. Retaining wall within both banks would be proposed of about 2.5 to 3m to check toe erosion & flooding during monsoon season. Mineral extraction will be done for a period of 225 days in a year.

During the monsoon rainy season 1.5 to 2m average stocking of sand, bajari & boulders assessed. So it is clear that the deposit would be annually replenishing as such no need to develop or plan for closure scheme but towards bank side temporary construction of retaining wall is suggested to reduce the impacts of toe erosion & flooding.

13.12 Air Quality Management

Details already discussed in previous paragraphs

13.13 Waste Management

Already discussed in previous paragraphs

13.14 Safety and Security

The picking and extractions of minor minerals shall be carried on only up to a depth of 1.5meter, no blasting is involved. Hence there is no danger and no special precaution is required. However standard precautions are always to be kept in mine for the safety of workers and general public.

13.15 Disaster Management and Risk Management

No blasting is involved, picking and extractions of minor minerals (sand, bajari & boulders) shall be carried on only up to a depth of 1.5meter therefore negligible scope of landslides & subsidence.



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CHAPTER 14

CONCLUSION

The project involves collection of sand, boulders and rubble. The river bed material consisted of large stones in the local market which is used in making bridges, road & building material etc. The project operation will provide livelihood to the poorest section of the society. It provides employment to the people residing in the vicinity directly or indirectly by the project. The applicant will undertake mining activity as per the plan indicated in this Mining Plan with proper taking care of environmental aspects i.e. without disturbing the surrounding condition.



PROCESSED BY THE DEPARTMENT OF MINES AND GEOLOGY, BANGALORE



[Handwritten signature]

AUTHORIZATION LETTER BY THE APPLICANT

Uttarakhand Forest Development Corporation (UKFDC), Azmaya Vikash Bhawan, 71-Relhu Road, Dehradun hereby authorizes Sri, Bhuvan Joshi, Geological Consultant & RQP, Registration No RQP/DGN/180/2009/A, to prepare Mining Plan under New Mining Policy i.e. Uttarakhand Minor Mineral Policy-2015 (Sand, Bagn, Boulder and Bricks etc) over an area of 100 Hectares for extraction of RMM (sand, bagn and boulders) from a part of Jaldun-2 river zone, Dist. Dehradun, Uttarakhand.

I request the Director, Geology & Mining Department, Uttarakhand, to make further correspondence regarding modification and to collect the approved copies of the approved Mining plan to the said recognized person in his following address or communicate in other modes:-

Name of the RQP- BHUVAN JOSHI
RQP, Registration No. RQP/DGN/180/2009/A

Address:-

House No.-6, Kamal Bhawan
Vijay Colony, Lane No.-1, Dehradun
Uttarakhand
E-mail: jadhubhawan@yahoo.co.in
Mob. No. 09412152105

Place- Dehradun

Date- 23-11-15


Bhuvan Joshi, Geological Consultant & RQP
Uttarakhand Minor Mineral Policy-2015
Dehradun



Date 02-12-15

CERTIFICATE

I, Bhuvan Joshi hereby certify that the provisions of Uttarakhand Minor Mineral Rules/Policy-2015 for extraction of RBM (Sand, Bajri, Boulders etc) have been observed in the preparation of Mining Plan for Picking/Extraction of minor minerals (sand, bajri and boulders) from a part of Jakhn river zone i.e. Jakhn-2, Tahseel & Dist. Dehradun, Uttarakhand, over an area of 100Hec, for Uttarakhand Forest Development Corporation (UKFDC), Aranya Vikash Bhawan, 73-Nehru Road, Dehradun.

The information provided and data furnished in this mining plan with Closure Plan is correct to the best of my knowledge.

Place Dehradun.

Date 02-12-15

BHUVAN JOSHI, RQP
Reg. No. - RQP/DDY/178/2015

B. Q. P. Indian Bureau of Mines
Reg. No. - RQP/DDY/178/2015
Govt. of India



प्रेषक

सैयद बगौली,
सचिव,
उत्तराखण्ड शासन।

प्रेष्य में

जिलाधिकारी,
देहरादून।

औद्योगिक विकास अनुभाग-1

देहरादून : दिनांक 16 मार्च, 2017

विषय: जलपद देहरादून के आरक्षित वन क्षेत्रान्तर्गत स्थित खनन साइट सींग नदी-3, जाखन नदी-1 एवं जाखन नदी-2 में उपखनिज के चुगान की स्वीकृति के सम्बन्ध में।

संदर्भ

उपरोक्त विषयक निदेशक, भूतल एवं खनिकर्मा इकाई, उद्योग विभाग, उत्तराखण्ड, देहरादून के पत्र संख्या-218/खनन/देहरादून/भूतल-050/2016-17 दिनांक 30 जनवरी, 2017 के संघर्ष में मुझे यह कहने का निर्देश हुआ है कि वन एवं पर्यावरण मंत्रालय, भारत सरकार के पत्र संख्या-08-62/99-FC दिनांक 25 मई, 2008 के द्वारा जलपद देहरादून के आरक्षित वन क्षेत्रान्तर्गत स्थित खनन साइट सींग नदी-3 कुल क्षेत्रफल 270 हे० मध्ये 135 हे०, जाखन नदी-1 कुल क्षेत्रफल 195 हे० मध्ये 97.5 हे० एवं जाखन नदी-2 कुल क्षेत्रफल 100 हे० मध्ये 50 हे० क्षेत्र में उपखनिज बालू, बजरी, ग्रेलाइट के चुगान हेतु वन संरक्षण अधिनियम, 1980 की धारा-2 के अन्तर्गत Forest Clearance 10 वर्ष की अवधि अर्थात् 25.05.2019 तक अनुमति प्रदान की गयी है, के दृष्टिकोण शासनादेश संख्या-490/VII-1/2012/123-ख/2011 दिनांक 03 अप्रैल, 2012 के द्वारा उक्त खनन साइटों में 05 वर्ष की अवधि हेतु उपखनिजों के चुगान हेतु उत्तराखण्ड वन विकास निगम को कंसीपय सर्टों के अधीन अनुमति प्रदान की गयी, जो दिनांक 02.04.2017 को समाप्त हो रही है।

2- उत्तराखण्ड उपखनिज (बालू, बजरी, ग्रेलाइट) चुगान नीति, 2016 में पूर्ण स्वीकृत खनन पट्टों की अवधि समाप्त होने का प्रावधान न होने के कारण शासनादेश संख्या-490/VII-1/2012/123-ख/2011 दिनांक 03 अप्रैल, 2012 के द्वारा जलपद देहरादून के आरक्षित वन क्षेत्रान्तर्गत स्थित खनन साइट सींग नदी-3 कुल क्षेत्रफल 270 हे० मध्ये 135 हे०, जाखन नदी-1 कुल क्षेत्रफल 195 हे० मध्ये 97.5 हे० एवं जाखन नदी-2 कुल क्षेत्रफल 100 हे० मध्ये 50 हे० क्षेत्र में 05 वर्ष की अवधि हेतु स्वीकृत खनन पट्टों की अवधि समाप्त होने के पश्चात् वन एवं पर्यावरण मंत्रालय, भारत सरकार द्वारा वन संरक्षण अधिनियम, 1980 की धारा-2 के अन्तर्गत निर्मित Forest Clearance 10 वर्ष की अवधि अर्थात् 25.05.2019 तक होने के दृष्टिकोण शासनादेश संख्या-490/VII-1/2012/123-ख/2011 दिनांक 03 अप्रैल, 2012 में निर्धारित कर्तव्य/प्रतिबन्धों तथा उत्तराखण्ड उपखनिज (बालू, बजरी, ग्रेलाइट) चुगान नीति, 2016 के प्रावधानों का अनुपालन किये जाने के अधीन उपखनिजों का चुगान कार्य करने की अनुमति उत्तराखण्ड वन विकास निगम को प्रदान की जाती है।

3- यह अनुमति दिनांक 03.04.2017 से प्रभावी होगी।



सचिव
(सैयद बगौली)
तारीख

Sl. No. 12/2005-15
Department of Forests
Ministry of Environment and Forests
(CC Division)

Conservation Division
CCD Compound, Connaught Place
New Delhi-110 048
Dated: 15th May, 2005

To:

The Principal Secretary (Forest),
Forest and Revenue Department,
Government of Uttarakhand,
Dehradun.

Subject: Renewal of permission over 152500 ha of forest land for collection of sand, boulders and boulders from river beds in Uttarakhand, (Uttarakhand).

Re:

I am directed to refer to the Government of Uttarakhand's letter No. 1400147/05/2002/1984 dated 07th May, 2005 and Joint Officer's letter No. 200110-03/1400147 dated 29th August, 2005 on the subject mentioned above, regarding prior approval of the Central Government under the Forest (Conservation) Act, 1980 after careful consideration of the proposal by the Forest Advisory Committee constituted under Section 3 of the said Act, in principle approval for the said proposal was granted vide this Ministry's letter of even number dated 22nd September, 2005 subject to fulfilment of certain conditions. The State Government has furnished every three report to extent of the conditions stipulated in the in principle approval and has requested the Central Government to grant final approval.

In this connection, I am directed to say that on the basis of the compliance report furnished by the PCDF vide letter 1750/110-977/Dehradun dated 07th September, 2005, approval of the Central Government is hereby granted under Section 3 of the Forest (Conservation) Act, 1980 for renewal of permission over 152500 ha of forest land for collection of sand, boulders and boulders from river beds in Uttarakhand, Uttarakhand, subject to fulfilment of the following conditions:-

- (i) The legal status of forest land shall remain unchanged.
- (ii) 25% of reserved forest land shall be reserved for sand, boulders and boulders collection only.
- (iii) Compensatory Afforestation will be done over 152500 ha of degraded forest land over a period of 15 years @ 10000 ha per year, (10000/15 years) each year, from the funds as collected/collected from the sale of the products.



DL

- (b) The User Agency will undertake to pay MPY as per the orders of Hon'ble Supreme Court of India in TA No. 306 on 17/03/2012.
- (c) Adequate number of temporary check posts will be established in entry and exit points before start of work and proper record of material collected and removed will be maintained.
- (d) Extraction of material should be from the inside of the river bed after leaving one-fourth of the river bed uncut bank uncut.
- (e) There shall be no labour camp in the forest area for the labour engaged in the extraction work.
- (f) No explosive shall be used while extracting the material and only hand tools will be used for the collection of boulders, boulders.
- (g) Collection time shall be from 6 am to 5 pm.
- (h) Breaking of boulders will be done outside the forest boundaries.
- (i) The labourers engaged in collection work will be provided free food and adequate source of energy to avoid any problem in supplying forest area.
- (j) There shall be no extraction of material from the river beds during monsoon period, i.e., from June to December each year.
- (k) The forest area shall not be used for any other purpose other than that specified in the proposal.
- (l) Any other conditions that the CWC, Regional Office, Lucknow may impose from time to time in the interest of Afforestation and protection of forest and fauna in that area shall also be valid.

Yours faithfully

(D. K. Singh)

De. Assistant Inspector General of Forests

- Copy to:
- 1. The Principal Chief Conservator of Forests, Government of Uttar Pradesh, Lucknow.
 - 2. The Model Officer, Forest Department, Government of Uttar Pradesh, Dehradun.
 - 3. The Chief Conservator of Forests, Regional Office, Lucknow.
 - 4. User Agency.
 - 5. Monitoring Cell, Ministry of Environment and Forests.
 - 6. Comd V.C.

(D. K. Singh)

De. Assistant Inspector General of Forests



V. No. 42/99-1C
Government of India
Ministry of Environment & Forests
(1C Division)

Prayashant Bhawan,
(K) Complex, Lodi Road,
New Delhi-110 003.
Date: 02nd June, 2009.

To
The Principal Secretary, Forests,
Forest and Revenue Department,
Government of Uttarakhand,
Dehradun.

Sub: Renewal of permission vide 1525/80 No. of Forest Dept. for collection of sand, baji and boulders from river banks in Chail, Dehradun, Uttarakhand.

Sir,

I am directed to refer to Government of Uttarakhand's letter No. 5009/14-2-98-500(AY) 1998 dated 17th May, 1998 and Nodal Officer's letter No. 626/1(C-977 (Dehradun) dated 25th August, 2004 on the subject mentioned above seeking prior approval of the Central Government under the Forest (Amendment) Act, 1980. After careful consideration of the proposal by the Forest Advisory Committee constituted under Section-3 of the said Act, in-principle approval for the said proposal was granted vide this Ministry's letter of even number dated 22nd September, 2004 subject to fulfillment of certain conditions. The State Government has furnished compliance for each aspect of the conditions stipulated in the in-principle approval and the Central Government has granted final approval in favour of Uttarakhand Forest Development Corporation vide letter of even number dated 21st May, 2009.

I am further directed to convey in reference to Managing Director, Uttarakhand Forest Development Corporation's letter No. 603 dated 2nd May, 2009, that the work has to be carried out through State Forest Department as per the conditions stipulated in the above mentioned order dated 22nd September, 2004 by the decision of the State Government taken in meeting of 24.09.2008. Chief Secretary, Uttarakhand.

Yours faithfully

(H. K. Singh)
Sr. Asstt. Inspector General of Forests



(H. K. Singh)

Copy to:

1. The Principal Chief Conservator of Forests, Government of Uttarakhand, Dehradun.
2. The Nodal Officer, Forest Department, Government of Uttarakhand, Dehradun.
3. The Chief Conservator of Forests, Forest Deptt., Dehradun.
4. User Agency.
5. Monitoring Cell Attached to the Ministry of Environment & Forests.
6. Guard File.

प्रति,

श्री बी.सी.शर्मा,
मुख्य सचिव,
उत्तराखण्ड सरकार।

Annexure - 1

सेवा में,

प्रमुख निदेशक,
उत्तराखण्ड वन विकास निगम
देहरादून।

औद्योगिक विकास अनुभाग-1

देहरादून, दिनांक 08 दिसम्बर 2009

विषय:- राज्य के नदी तटों से दूरीआईएन नोटिफिकेशन, 2006 के अधीन जल संचितों के कुल
रेलु पर्यावरण स्वीकृति प्राप्त करने के सम्बन्ध में।

संदर्भ:-

राष्ट्रीय विधायक भूतल एवं खनिजों दूरीआई उद्योग नियोजनय देहरादून के मा. संख्या 1364/विधि/देहरादून/समन/भूखनिई0/2008-09 दिनांक 18 नवम्बर 2008 एवं अन्वये 03 संख्या 1364/संयोजित दिनांक 03 नवम्बर 2009 एवं अन्वये/संयोजित दिनांक 03 नवम्बर 2009 में अधिसूचित नदी तटों से संप खनिज (संसाधन भानु, मजरी, बोखल जैदि) के मुक्त करने के अधिकारों के प्रदान करने हेतु खान एवं खनिज (विकास एवं विनियमन) अधिनियम 1987 की धारा-15 के अधीन एम्बेडेड उत्तराखण्ड नदी खनिज प्रविष्टि नियमावली 2001 के अनुसार वर्तमान में राज्य में प्रविष्टि खनिज सन्धि 2001 के अन्तर्गत प्रविष्टि के अन्तर्गत प्रविष्टि उत्तराखण्ड वन विकास निगम को जगह निर्धारण के लिए (अन एम्बेडेड) पाना (223 हेक्टेयर) कोसी (254 हेक्टेयर) व समीर (266 हेक्टेयर) जल तटों (33.64 हेक्टेयर) पाना (100 हेक्टेयर) जगह सम्पादा की गंगा नदी (35.44 हेक्टेयर) शिवगंगा (12 हेक्टेयर) जगह 4.0 भूतल की माता नदी में (35.44 हेक्टेयर) बौलुवा (4.76 हेक्टेयर) सुसरी (25.44 हेक्टेयर) जगह देहरादून के मुक्त (30 हेक्टेयर) दरद (20 हेक्टेयर) चन्द्रगंगा-2 (29 हेक्टेयर) नाक्यावा (गंगा नदी) (15 हेक्टेयर) जगह-1 (10 हेक्टेयर) जगह-2 (10 हेक्टेयर) बौलु-1 (10 हेक्टेयर) सीम-2 (17.1 हेक्टेयर) सीम-3 (10 हेक्टेयर) चन्द्रगंगा-1 (10 हेक्टेयर) जल क्षेत्र में मुक्त के अन्तर्गत जगह जगह हेतु पर्यावरण संचित अधिनियम 1986 के अधीन पर्यावरण एवं वन मंत्रालय भारत सरकार द्वारा एम्बेडेड एम्बेडेड अधिनियम दिनांक 14 दिसम्बर 2006 के अधिनियम में मुक्त एवं करने का निर्देश हुआ है कि पर्यावरण रक्षक एवं संचित जगह को पर्यावरणीय स्वीकृति प्राप्त करने की राहगी प्राप्त की जाती है।

प्रमुख

(निदेशिका)
मुख्य सचिव

प्राप्तकन संख्या 1929/VII-3/1838/2009 तदनुसंधित।

अतिरिक्त निदेशिका के अनुसार एवं जगह के अन्तर्गत निम्न सेवा -

- 1- मुक्त हेतु प्रविष्टि समस्त प्रमुख निदेशक, उत्तराखण्ड।
- 2- जगह वन अधिकारी भूतल एवं खनिज दूरीआई अधिनियम



दिनांक 18/12/09

No. J-11015/343/2009-LA.II(M)
Government of India
Ministry of Environment and Forests
LA Division

Paryavaran Bhawan
CGO Complex, Lodi Road,
New Delhi-110 003

Dated the 15th April, 2011

To
M/s Uttarakhand Forest Development Corporation
Aruna Vikas Bhawan,
73, Nehru Road,
Dehradun-248 001
E-mail: uafdemd@yahoo.com
Vanvikas12@gmail.com

Subject: Collection of Minor Mineral (Reta, Bajri and Boulders) from the river bed of River Jakhan-2 by M/s Uttarakhand Forest Development Corporation, located in Dehradun Forest Division, District Dehradun, Uttarakhand -environmental clearance regarding.

Sir,

This has reference to your letter No. U-3513/32-29 dated 12.10.2010 and subsequent letter dated 14.01.2011 on the subject mentioned above. The project was earlier prescribed Terms of Reference (TORs) by the Ministry of Environment and Forests on 18.01.2010 for undertaking detailed EIA study for the purpose of obtaining environmental clearance. The proposal is for collection of 2,25,000 tonnes per annum (TPA) of minor minerals (Reta, Bajri and Boulders) from the river bed of the Jakhan River.

2. The total mine lease area of the project is 100ha, which is a forestland covering a stretch of 4km length, lying in the Ganga River basin. Out of the total allotted area of 100ha, the minor mineral collection will be carried out from 50% of the total area i.e., 50ha. The area available for mining would therefore be 50ha along the centre of the river flow which is devoid of any flora.

3. The project area falls under the Shivalik Elephant Reserve and the 2000 km² Rajaji National Park is reported to be located to the West of the mine at a distance of 7.42km towards West from the mine. The Chief Wildlife Warden, Government of Uttarakhand vide letter No. 1237/2010 dated 28.12.2010 has accorded clearance for collection of minor minerals from the Jakhan-2 river in an area of 100ha. Four Reserve Forests namely, the Thandi Rf (adjacent to West of RL), the Barkot Rf (adjacent to East of RL), the Thandi Rf (Jailan North) and the Telvi Rf (5.5km East) are reported to be located in the buffer zone of the mine.



4. The mine working will be opencast by manual method without involving drilling and blasting. The mining is confined to extraction of rets, bajri and boulders from the river bed. The rets and bajri will be collected by sieving of river bed material using hand tools like shovel, pan, sieve etc. Mining will be carried out only during the day time. Extraction of river bed material will be completely stopped during the monsoon season. The targetted production capacity of the mine is 2.25lakh TPA (1.25lakh m³/annum) of river bed material. The mined-out material will be transported to their respective uses locations via private agencies using their own transport. Computerized weigh bridges have been installed in order to check and monitor moment of material. The proposed mining area is reported to lies between 30°11'11.64" to 30°08'33.58" N Latitude and 78°11'58.64" to 78°09'57.44"E Longitude in topo sheet No. 531/4. The elevation from the sea level of the proposed area is reported as 567m. The river flow is bleak most of the year except during the monsoon season. Mining will be carried out upto a depth of 1.5m. No pumping of water from the river or from groundwater is envisaged.

5. The public hearing of the project was held on 29.09.2010 for collection of minor minerals from Jakhan-2 River over mine lease area of 100ha. The Principal Secretary, Government of Uttarakhand vide letter No.2536/VII-1/163-KJA/2009/10 dated 23.10.2010 informed that collection of minor minerals from the river bed does not require mine plan approval under Uttarakhand Minor Mineral Concession Rules-2001. The Ministry of Environment and Forests has accorded combined in-principle approval under Forest (Conservation) Act, 1980 for diversion of 1325ha forestland on 26.05.2009 and 2nd June, 2009 for collection of sand bajri and boulders from the river beds in the District Dehradun. The proponent has stated that there is no court case to the project or related activity.

6. The Ministry of Environment and Forests has examined the application in accordance with the EIA Notification, 2006 and the Doon Valley Notification, 1989 as amended on 13.12.2007 and hereby accords environmental clearance under the provisions thereof to the above mentioned Minor Mineral Mining Project of M/s Uttaranchal Forest Development Corporation for an annual collection of 2,25,000tonnes(2.25lakh tonnes) of rets, bajri and boulders (minor mineral) from the river bed of the Jakhan-2 River by the opencast manual method involving total mining lease area of 100ha, subject to implementation of the following conditions and environmental safeguards.

A. Specific conditions

- (i) The project proponent shall obtain Consent to Establish and Operate from the Uttarakhand Environment Protection & Pollution Control Board and effectively implement all the conditions stipulated therein.
- (ii) requisite prior clearance from the Standing Committee of the State Board for Wildlife shall be obtained due to location of the project area in the buffer zone of the Rajaji National Park and also within the Shivalik.



Elephant Reserve, before starting any activity relating to the project at site. All the conditions stipulated by the Standing Committee shall be effectively implemented in the project. It shall be noted that this clearance does not necessarily implies that wildlife clearance shall be granted to the project and that your proposal for wildlife clearance shall be considered by the competent authorities on its merit and decision taken. The investment made in the project, if any based on environmental clearance granted to the project, in anticipation of the clearance from wildlife clearance shall be entirely at the cost and risk of the project proponent and Ministry of Environment and Forests shall not be responsible in this regard in any manner.

- (iii) Environmental clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs. Union of India in Writ Petition (Civil) No. 450 of 2004, as may be applicable to this project.
- (iv) Environmental clearance is subject to obtaining clearance under the Wildlife (Protection) Act, 1972 from the competent authority, as may be applicable to this project.
- (v) Environmental clearance is subject to grant of forestry clearance.
- (vi) The project proponent shall prepare the plan of mining in conformity with the mine lease conditions and the Rules prescribed in this regard clearly showing the no work zone in the mine lease i.e. the distance from the bank of river to be left unworked, distance from the bridges etc. It shall be ensured that no mining shall be carried out during the monsoon season.
- (vii) The project proponent shall ensure that wherever deployment of labour attracts the Mines Act, the provision thereof shall be strictly followed.
- (viii) The project proponent shall identify the degraded forest area within the mine lease in consultation with the State Forest Department and undertake plantation/afforestation work by planting the native species.
- (ix) 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 points and transport points. Extensive water sprinkling shall be carried out in the mine area. It should be ensured that the Ambient Air Quality parameters shall not exceed the norms prescribed by the Central Pollution Control Board.
- (x) 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 shall not be affected. Regular monitoring of ground water level and quality shall be carried out around the mine lease area by establishing a network of monitoring points.



installing new piezometers during the mining operation. The periodic monitoring [(at least four times in a year- pre-monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January); once in each season)] shall be carried out in consultation with the State Ground Water Board/Central Ground Water Authority and the data thus collected may be sent regularly to the Ministry of Environment and Forests and its Regional Office, Lucknow, the Central Ground Water Authority and the Regional Director, Central Ground Water Board. If at any stage, it is observed that the groundwater table is getting depleted due to the mining activity, necessary corrective measures shall be carried out.

- (vi) The project proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of water (surface water and groundwater), if any, required for the project.
- (vii) Appropriate mitigative measures shall be taken to prevent pollution of the river in consultation with the State Pollution Control Board. It shall be ensured that there is no leakage of oil and grease in the river from the vehicles used for transportation.
- (viii) Vehicular emissions shall be kept under control and regularly monitored. The mineral transportation shall be carried out through the covered trucks only and the vehicles carrying the mineral shall not be overloaded.
- (ix) No drilling and blasting operation shall be carried out.
- (x) Mineral handling area shall be provided with the adequate number of High efficiency dust extraction system. Loading and unloading areas including all the transfer points should also have efficient dust control arrangements. These should be properly maintained and operated.
- (xi) Periodical medical examination of the workers engaged in the project shall be carried out and records maintained. For the purpose, schedule of health examination of the workers should be drawn and followed accordingly.
- (xii) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical healthcare, canteen etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- (xiii) Digital processing of the entire lease area using remote sensing techniques should be done regularly once in three years to monitor the change of river course, if any and report submitted to the Ministry of Environment and Forests and its Regional Office located at Lucknow.
- (xiv) The critical parameters such as PM_{10} (particulate matter $\leq 10 \mu m$), $PM_{2.5}$ (particulate matter $\leq 2.5 \mu m$) and NO_x in the ambient air within the project area shall be monitored.

zone shall be monitored periodically. Further, quality of discharged water shall also be monitored [(TDS, DO, PH, Fecal Coliform and Total Suspended Solids (TSS))]. The monitored data shall be uploaded on the website of the company as well as displayed on a display board at the project site at a suitable location near the main gate of the Company in public domain. The Circular No. J-20012/1/2006-IA.II(M) dated 27.05.2009 issued by Ministry of Environment and Forests, which is available on the website of the Ministry www.mef.gov.in shall also be referred in this regard for its compliance.

(ix) The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered fauna namely elephant etc. found in the study area. Action plan for conservation of flora and fauna shall be prepared in consultation with the State Forest and Wildlife Department. All the safeguard measures brought out in the Wildlife Conservation Plan so prepared specific to this project site shall be effectively implemented. Necessary allocation of funds for implementation of the conservation plan shall be made and the funds so allocated shall be included in the project cost. A copy of action plan shall be submitted to the Regional Office of the Ministry of Environment and Forests, Lucknow.

(xi) The project proponent shall get a siltation study carried out within one year through some Expert Agency like Central Water Commission to determine the siltation load in the river bed so that there is no over exploitation of river bed material at any point of time. The mineral to be removed shall be determined based on siltation load. A copy of siltation study so carried out shall be submitted to the Ministry of Environment and Forests and its Regional Office Lucknow.

B. General conditions

(i) No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment & Forests.

(ii) No change in the calendar plan including excavation, quantum of mineral sets, bafri and boulders (minor mineral) and waste should be made.

(iii) Four ambient air quality monitoring stations should be established in the core zone as well as in the buffer zone for RSPM (Particulate matter with size less than 10micron i.e., PM_{10}) and NO_x monitoring. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with the State Pollution Control Board.

(iv) Data on ambient air quality RSPM (Particulate matter with size less than 10micron i.e., PM_{10}) & NO_x should be regularly submitted to the Ministry of Environment and Forests including its Regional Office Lucknow and the State Pollution Control Board / Central Pollution Control Board in six months.



negative dust emissions from all the sources should be controlled negative water spraying arrangement on haul roads, loading and unloading and at transfer points should be provided and properly maintained.

Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects.

Occupational health surveillance program of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.

- (vi) A separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.
- (vii) The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the Ministry of Environment and Forests and its Regional Office located at Lucknow.
- (ix) The project authorities should inform to the Regional Office located at Lucknow regarding date of financial closure and final approval of the project by the concerned authorities and the date of start of land development work.
- (x) The Regional Office of this Ministry located at Lucknow shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information / monitoring reports.
- (xi) The project proponent shall submit six monthly reports on the status of compliance of the stipulated environmental clearance conditions including results of monitored data (both in hard copies as well as by e-mail) to the Ministry of Environment and Forests, its Regional Office Lucknow, the respective Zonal Office of Central Pollution Control Board the State Pollution Control Board. The proponent shall upload the status of compliance of the environmental clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the Ministry of Environment and Forests, Lucknow, the respective Zonal Office of Central Pollution Control Board and the State Pollution Control Board.
- (xii) A copy of the clearance letter shall be sent by the proponent to the Panchayat, Zila Parishad/ Municipal Corporation, District Industry Centre and the Local NGO, if any, from whom suggestions/objections, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.
- (xiii) The State Pollution Control Board should display a copy of the clearance letter at the Regional office, District Industry Centre and the Collector's office/ Tehsildar's Office for 30 days.

- (iv) The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental clearance conditions and shall also be sent to the Regional Office of the Ministry of Environment and Forests, Lucknow by e-mail.
- (v) The project authorities should advertise at least in two local newspapers of the District or State in which the project is located and widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and also at web site of the Ministry of Environment and Forests at <http://envfor.nic.in> and a copy of the same should be forwarded to the Regional Office of the Ministry located at Lucknow.

7. The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.

8. Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.

9. The above conditions will be enforced inter-alia, under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules made thereunder and also any other orders passed by the Hon'ble Supreme Court of India/High Court of Uttarakhand and any other Court of Law relating to the subject matter.



Copy to:

- (i) The Secretary, Ministry of Mines, Government of India, New Delhi.
- (ii) The Secretary, Department of Mines & Geology, Government of Uttarakhand, Secretariat, Dehradun.
- (iii) The Secretary, Department of Environment, Government of Uttarakhand, Secretariat, Dehradun.

मुख्य एवं सचिव के नाम
उद्योग निदेशालय, उत्तराखण्ड
25 मालवीय रोड, देहरादून।

प्रमुख सचिव,
औद्योगिक विकास विभाग,
उत्तराखण्ड शासन, देहरादून।

दिनांक / 51 / देहरादून / खान / 10/10/2008 / 2008-08, दिनांक 17 अक्टूबर, 2008

विषय : खानबंद देहरादून में देहरादून वन प्रभाग देहरादून को अनाम 1325 के आधारित वन क्षेत्रों की स्वीकृति के संबंध में।

कृपया उपर्युक्त विषयक के अंतर्गत अद्यतन करना है कि पर्यावरण एवं वन मंत्रालय द्वारा सरकार के पत्र सं. F.N. 8-52/86-FC दिनांक 24 सितंबर, 2008 के द्वारा देहरादून वन प्रभाग के अंतर्गत प्रस्तावित होने वाले निम्नलिखित नदी तलों से उपखनिज के भुगतान/खनन की अनुमति प्राप्त की गई है :-

1. मुक्तटी नदी 30.00 हे०
2. हरद्वार नदी 30.00 हे०
3. सींग नदी प्रधान (थानी) 135.00 हे०
4. सींग नदी द्वितीय (थानी) 273.00 हे०
5. सींग नदी तृतीय (लच्छीवाला) 270.00 हे०
6. जाखन नदी प्रधान (थानी) 195.00 हे०
7. जाखन नदी द्वितीय (बड़कोट) 100.00 हे०
8. चन्द्र भागा नदी प्रधान 165.00 हे०
9. चन्द्र भागा नदी द्वितीय 20.00 हे०
10. लखनौट घाट नदी प्राधिकृत 15.00 हे०

यदिमान में प्रचलित खनिज नीति में संशोधन विवरण भारतभूदाय दिनांक 17-10-2002 के द्वारा अधिस्त वन क्षेत्र में नहीं है। से उपखनिज के भुगतान खनन हेतु उत्तराखण्ड वन विभाग निम्न से राज्य सरकार द्वारा अधिकृत किया गया है।

पर्यावरण एवं वन मंत्रालय के पत्र दिनांक 24-9-2008 के संख्या 110-3 में यह अत्यंत स्पष्ट है कि प्रदत्त संख्या की 1997 इत्यादि प्रमाणित करने का अनुपालन करने के संरक्षण की वन विभाग अधिनियम, 1980 के अधीन अनुमति प्रदान की जायेगी।

अतः वर्तमान नीति के अनुसार उत्तराखण्ड वन विभाग निम्न से प्राप्ति को चर्चित करने के लिए आदेश जारी किया जाना प्रस्तावित किया जाता है।

भवदीय

Handwritten signature and date 10/10/08

Handwritten notes and dates: 03/10/08, 09/10/08



5. इन विभाग के कर्मचारी/अधिकारी या उनके अभिकाशाओं को किसी भी समय जब वे आवश्यकता पड़े, प्रसंगत वन भूमि का निरीक्षण करने का पूर्ण अधिकार होगा।
7. अधिकृत वन क्षेत्र में कार्य करने वाले भव्यतर तथा कर्मचारी अपनी ईमान की आवश्यकता के लिए वन को बर्तन न पहुंचावे; इसके लिए उत्तरदायी वन विभाग निगम द्वारा उन्हें ईमान की एकत्री अवस्था उन्हें ईमान की समझौती की आपूर्ति की जायेगी।
8. उत्तरदायी वन विकास निगम द्वारा कृषि एवं पशुधन नहीं किया जायेगा।
9. उत्तरदायी वन विकास निगम द्वारा भू-संरक्षण संरक्षण व प्रसंगत भूमि को तादृशता के सुदृढीकरण हेतु आवश्यक अनुरोध का मुसलमान वन विभाग को किया जायेगा। वन विभाग द्वारा वन विकास निगम द्वारा उपलब्ध करायी गई अनुरोध से तीव्र ट्रेनिंग व अन्य उचित औपचारिक कार्य समाहित किये जायेंगे। नदी तट से निकाले जाने वाले उप-सुविधा के विकास से प्रत्येक संरक्षण का एक प्रतिरूप भाग तीव्र ट्रेनिंग एवं अन्य समेट क्षेत्र के उपचार कार्य हेतु कर दिया जायेगा। नदी तटों का उपचार वन विभाग द्वारा नदी में किये कार्य के अनुसार बताया जायेगा। यदि आवश्यक हो, तो कोन्द्रीय मृदा एवं जल संरक्षण संस्थान, देहरादून का तकनीकी परामर्श भी प्राप्त किया जायेगा।
10. प्रसंगत क्षेत्र में कार्य करने वाले अधिकारियों के लिए वन क्षेत्र के अन्दर किसी प्रकार के अनेक इत स्थापित नहीं किये जायेंगे।
11. उपस्थितिजों का घुमान नदी के मध्य में किया जायेगा तथा नदी के दोनों किनारों से नदी तट का 1/4 भाग छोड़ा जायेगा।
12. प्रसंगत क्षेत्र में उपस्थितिजों के घुमान हेतु किसी भी आवश्यक अवस्था का प्रयोग नहीं किया जायेगा व घुमान कार्य केवल हेमेट टूलस द्वारा ही किया जायेगा।
13. प्रसंगत क्षेत्र में उपस्थितिजों के घुमान का कार्य सूर्योदय से पूर्व तथा सूर्यास्त के पश्चात नहीं किया जायेगा।
14. बोल्टर तोड़ने का कार्य वन सीमा से बाहर किया जायेगा।
15. प्रसंगत क्षेत्र से उपस्थितिजों के घुमान का कार्य वन क्षेत्र के सीमांत जगहों से मात्र निम्नलिखित तक नहीं किया जायेगा।
16. वन पट्टा की स्वीकृति के पश्चात् उक्त स्थल का सीमांत वन भूखण्ड एवं सीमांत स्वरूप के अधिकारियों द्वारा संरक्षण एवं वन विभाग के अधिकारियों की उपस्थिति में किया जायेगा।
17. किसी सांख्यिक विनोदस्थल, मनोरंजन अथवा कविस्तान या प्रकृति के किसी वर्ग के सीमांत माने जाने वाला स्थान, भवन अथवा धर्मस्थल, सांख्यिक संरक्षण का कोई अन्य स्थान को जिसकाधिकारी द्वारा सार्वजनिक स्थान घोषित किया गया हो, ऐसे स्थानों पर न तो कोई सीमा खड़ी की जायेगी न ही स्थापित हो जायेगी और न ही कोई सीमा संचिकार की जायेगी जिससे किसी भवन, भवन निर्माण कार्य, संरक्षण या अन्य व्यक्तियों के अधिकारों को प्रति रोकने।
18. पट्टे में अस्वीकृत निर्माण कार्य या अन्य प्रसंगत के निर्मित कोई ऐसी भूमि, सीमा संचिकार के लिए प्रयुक्त नहीं की जायेगी या वन संचिकार से निम्न मापदंडों के संरक्षण में करने से हो के।
19. किसी भी नाम का उपचार करने के अधिकार पर प्रसंगत वन विभाग को दिया जायेगा।
20. उत्तरदायी वन विकास निगम द्वारा उप-सुविधा के विकास व प्रसंगत भूमि को तादृशता के सुदृढीकरण हेतु आवश्यक अनुरोध का मुसलमान वन विभाग को किया जायेगा। वन विभाग द्वारा वन विकास निगम द्वारा उपलब्ध करायी गई अनुरोध से तीव्र ट्रेनिंग व अन्य उचित औपचारिक कार्य समाहित किये जायेंगे। नदी तट से निकाले जाने वाले उप-सुविधा के विकास से प्रत्येक संरक्षण का एक प्रतिरूप भाग तीव्र ट्रेनिंग एवं अन्य समेट क्षेत्र के उपचार कार्य हेतु कर दिया जायेगा। नदी तटों का उपचार वन विभाग द्वारा नदी में किये कार्य के अनुसार बताया जायेगा। यदि आवश्यक हो, तो कोन्द्रीय मृदा एवं जल संरक्षण संस्थान, देहरादून का तकनीकी परामर्श भी प्राप्त किया जायेगा।



21. प्रस्तावित क्षेत्र में खनन कार्य शुरू करने से पूर्व प्रवेश व निकासी मार्गों पर पर्याप्त भंडार से अस्थायी बैंक-गैंगर स्थापित किये जायेंगे। निकाली जाने वाले उत्तराखण्ड के उचित अभिलेखों का रख रखाव उत्तराखण्ड वन विकास निगम द्वारा किया जायेगा।
22. वन विकास निगम द्वारा उप खनिज की निकाली की मात्रा पर निर्धारित रकमों आदि नियमानुसार जमा किया जायेगा।
23. उपखनिज परिसर नियमावली 2001 के नियम-73 के अनुसार प्रपत्र एनएमए-12 पर रेगुलर डिप्लोमा धारितायुक्त देहसदून एवं निदेशक, भूतत्व एवं खनिकर्ष इकाई की प्रेक्ति की जायेगी।
24. इसके अतिरिक्त इस हेतु जो भी नती स्थानीय जिला प्रशासन तथा भूतत्व एवं खनिकर्ष इकाई द्वारा निर्धारित की जायेगी, का अनुपालन उत्तराखण्ड वन विकास निगम द्वारा किया जायेगा।
25. उत्तराखण्ड वन विकास निगम द्वारा उक्त भूदियों से उपखनिजों के भुगान हेतु वन विभाग/अन्य प्राधिकारियों को प्रदत्त सम्स्त वन्यवस्तुओं का अनुपालन सुनिश्चित किया जायेगा।
26. निगम द्वारा उपखनिजों के भुगान हेतु मुख्य वन्य जीव प्रोटेक्टर, उत्तराखण्ड की संतुष्टियों व उनके द्वारा समय-समय पर जारी निर्देशों का अनुपालन सुनिश्चित किया जायेगा।

उक्त के अतिरिक्त यह भी निर्दिष्ट किया जाता है कि उक्त खानों में खनन/भुगान का कार्य प्रत्येक वर्ष में दिनांक 15 अप्रैल, 2012 तक प्रारम्भ करते हुए शासन की अवगत कक्षा का सुनिश्चित करे।

भवदीय,


श्रीमती
प्रमुख सचिव।

संख्या: 440 (1)/VII-1/2012/123-ख/2011, तदतिरिक्त।

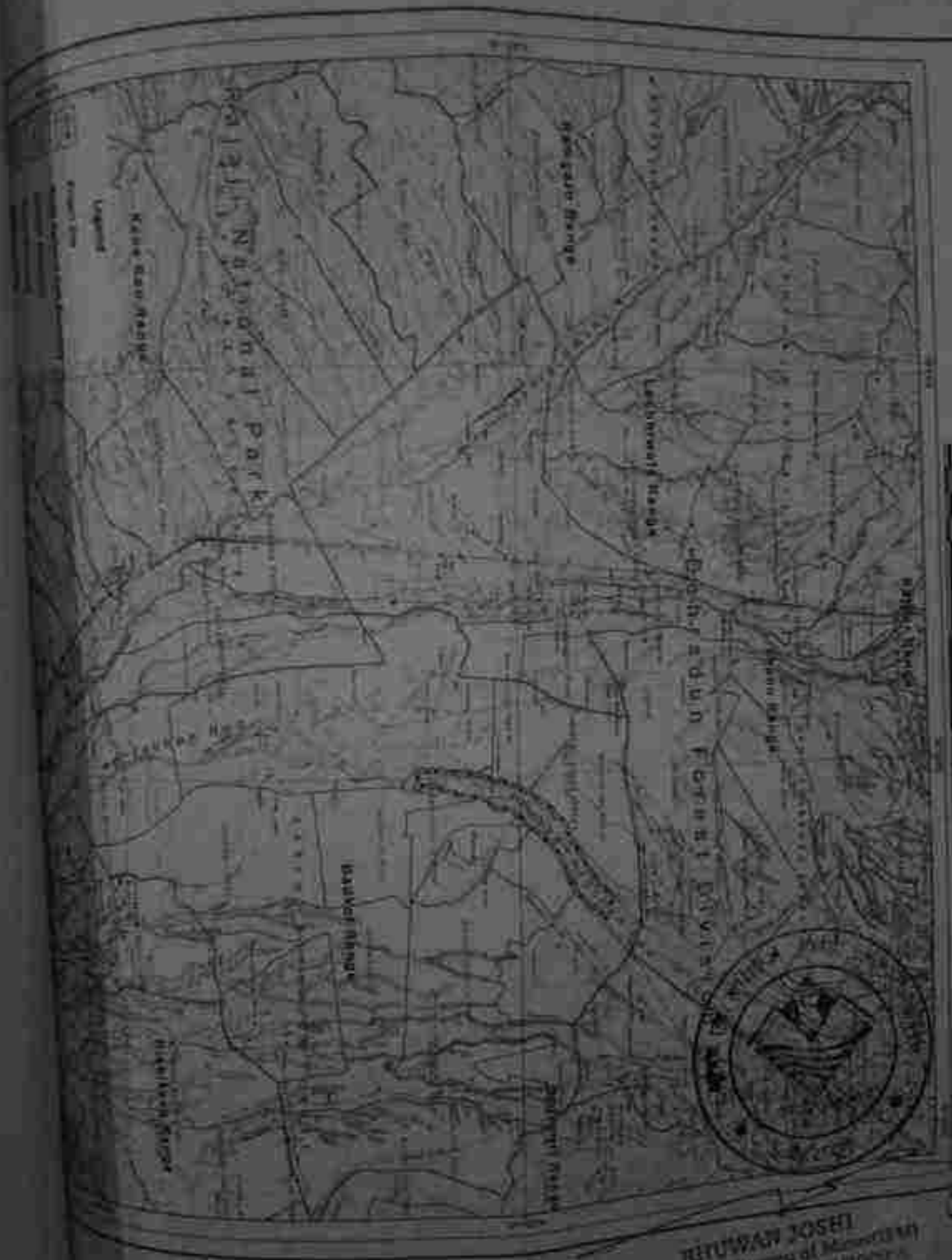
निम्नलिखित निम्नलिखित को सूचना एवं आवश्यक कार्यवाही हेतु प्रेषित:-

- 1- सचिव, भारत सरकार, पर्यावरण एवं वन मंत्रालय, पर्यावरण भवन, सी०जी०ओ० कॉम्प्लेक्स, लोदी रोड, नई दिल्ली।
- 2- प्रमुख सचिव, माधुसूता मंत्री जी, उत्तराखण्ड शासन।
- 3- प्रमुख सचिव, वन एवं पर्यावरण विभाग, उत्तराखण्ड शासन।
- 4- आयुक्त, गढ़वाल मण्डल, पी०डी गढ़वाल।
- 5- स्वयं आधीन, मुख्य सचिव, उत्तराखण्ड शासन।
- 6- निदेशक, भूतत्व एवं खनिकर्ष इकाई, उद्योग निदेशालय, उत्तराखण्ड, देहसदून।
- 7- प्रमुख वन संरक्षक, उत्तराखण्ड देहसदून।
- 8- प्रमुख निदेशक, उत्तराखण्ड वन विकास निगम, देहसदून।
- 9- अपर प्रमुख वन संरक्षक एवं नोडल अधिकारी, वन संरक्षण, इन्डियन गैंगर, जारेस्ट कारागार, उत्तराखण्ड, देहसदून।
- 10- गार्ड फाईल।

आज्ञा से


श्रीमती
प्रमुख सचिव।





DR. J. K. JOSHI
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Govt. of India

अभिषेक शर्मा

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સત્તાશાસ્ત્ર સપ્તાગીક (બાલુ, વજરી, ચોલ્હર, પુંટ આદિ) નીતિ 2016

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2014-2015-16

॥ श्रीगणेशाय नमः ॥



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(iv) यदि कोई एक निदेशिका नहीं है अतः प्रमाण सिद्ध अवधि 1991 में प्रविष्टि के 2 से अधिक वर्षों के बाद दिए गए अनुदान माह 1991 में।

कृषि विभाग, गुरुग्राम

Figure 7. Comparison of the effect of the different parameters on the results of the model. The model was run for 1000 iterations. The results were averaged over 100 iterations. The error bars represent the standard deviation. The parameters were: (a) α , (b) β , (c) γ , (d) δ , (e) ϵ , (f) ζ , (g) η , (h) θ , (i) ϕ , (j) ψ , (k) ω , (l) ν , (m) ξ , (n) λ , (o) μ , (p) κ , (q) ι , (r) σ , (s) τ , (t) ρ , (u) χ , (v) ψ , (w) ϕ , (x) θ , (y) η , (z) δ , (aa) γ , (ab) β , (ac) α , (ad) ζ , (ae) ϵ , (af) δ , (ag) γ , (ah) β , (ai) α , (aj) ζ , (ak) ϵ , (al) δ , (am) γ , (an) β , (ao) α , (ap) ζ , (aq) ϵ , (ar) δ , (as) γ , (at) β , (au) α , (av) ζ , (aw) ϵ , (ax) δ , (ay) γ , (az) β , (ba) α , (bb) ζ , (bc) ϵ , (bd) δ , (be) γ , (bf) β , (bg) α , (bh) ζ , (bi) ϵ , (bj) δ , (bk) γ , (bl) β , (bm) α , (bn) ζ , (bo) ϵ , (bp) δ , (bq) γ , (br) β , (bs) α , (bt) ζ , (bu) ϵ , (bv) δ , (bw) γ , (bx) β , (by) α , (bz) ζ , (ca) ϵ , (cb) δ , (cc) γ , (cd) β , (ce) α , (cf) ζ , (cg) ϵ , (ch) δ , (ci) γ , (cj) β , (ck) α , (cl) ζ , (cm) ϵ , (cn) δ , (co) γ , (cp) β , (cq) α , (cr) ζ , (cs) ϵ , (ct) δ , (cu) γ , (cv) β , (cw) α , (cx) ζ , (cy) ϵ , (cz) δ , (da) γ , (db) β , (dc) α , (dd) ζ , (de) ϵ , (df) δ , (dg) γ , (dh) β , (di) α , (dj) ζ , (dk) ϵ , (dl) δ , (dm) γ , (dn) β , (do) α , (dp) ζ , (dq) ϵ , (dr) δ , (ds) γ , (dt) β , (du) α , (dv) ζ , (dw) ϵ , (dx) δ , (dy) γ , (dz) β , (ea) α , (eb) ζ , (ec) ϵ , (ed) δ , (ee) γ , (ef) β , (eg) α , (eh) ζ , (ei) ϵ , (ej) δ , (ek) γ , (el) β , (em) α , (en) ζ , (eo) ϵ , (ep) δ , (eq) γ , (er) β , (es) α , (et) ζ , (eu) ϵ , (ev) δ , (ew) γ , (ex) β , (ey) α , (ez) ζ , (fa) ϵ , (fb) δ , (fc) γ , (fd) β , (fe) α , (ff) ζ , (fg) ϵ , (fh) δ , (fi) γ , (fj) β , (fk) α , (fl) ζ , (fm) ϵ , (fn) δ , (fo) γ , (fp) β , (fq) α , (fr) ζ , (fs) ϵ , (ft) δ , (fu) γ , (fv) β , (fw) α , (fx) ζ , (fy) ϵ , (fz) δ , (ga) γ , (gb) β , (gc) α , (gd) ζ , (ge) ϵ , (gf) δ , (gg) γ , (gh) β , (gi) α , (gj) ζ , (gk) ϵ , (gl) δ , (gm) γ , (gn) β , (go) α , (gp) ζ , (gq) ϵ , (gr) δ , (gs) γ , (gt) β , (gu) α , (gv) ζ , (gw) ϵ , (gx) δ , (gy) γ , (gz) β , (ha) α , (hb) ζ , (hc) ϵ , (hd) δ , (he) γ , (hf) β , (hg) α , (hh) ζ , (hi) ϵ , (hj) δ , (hk) γ , (hl) β , (hm) α , (hn) ζ , (ho) ϵ , (hp) δ , (hq) γ , (hr) β , (hs) α , (ht) ζ , (hu) ϵ , (hv) δ , (hw) γ , (hx) β , (hy) α , (hz) ζ , (ia) ϵ , (ib) δ , (ic) γ , (id) β , (ie) α , (if) ζ , (ig) ϵ , (ih) δ , (ii) γ , (ij) β , (ik) α , (il) ζ , (im) ϵ , (in) δ , (io) γ , (ip) β , (iq) α , (ir) ζ , (is) ϵ , (it) δ , (iu) γ , (iv) β , (iw) α , (ix) ζ , (iy) ϵ , (iz) δ , (ja) γ , (jb) β , (jc) α , (jd) ζ , (je) ϵ , (jf) δ , (jg) γ , (jh) β , (ji) α , (jj) ζ , (jk) ϵ , (jl) δ , (jm) γ , (jn) β , (jo) α , (jp) ζ , (jq) ϵ , (jr) δ , (js) γ , (jt) β , (ju) α , (jv) ζ , (jw) ϵ , (jx) δ , (jy) γ , (jz) β , (ka) α , (kb) ζ , (kc) ϵ , (kd) δ , (ke) γ , (kf) β , (kg) α , (kh) ζ , (ki) ϵ , (kj) δ , (kk) γ , (kl) β , (km) α , (kn) ζ , (ko) ϵ , (kp) δ , (kq) γ , (kr) β , (ks) α , (kt) ζ , (ku) ϵ , (kv) δ , (kw) γ , (kx) β , (ky) α , (kz) ζ , (la) ϵ , (lb) δ , (lc) γ , (ld) β , (le) α , (lf) ζ , (lg) ϵ , (lh) δ , (li) γ , (lj) β , (lk) α , (ll) ζ , (lm) ϵ , (ln) δ , (lo) γ , (lp) β , (lq) α , (lr) ζ , (ls) ϵ , (lt) δ , (lu) γ , (lv) β , (lw) α , (lx) ζ , (ly) ϵ , (lz) δ , (ma) γ , (mb) β , (mc) α , (md) ζ , (me) ϵ , (mf) δ , (mg) γ , (mh) β , (mi) α , (mj) ζ , (mk) ϵ , (ml) δ , (mm) γ , (mn) β , (mo) α , (mp) ζ , (mq) ϵ , (mr) δ , (ms) γ , (mt) β , (mu) α , (mv) ζ , (mw) ϵ , (mx) δ , (my) γ , (mz) β , (na) α , (nb) ζ , (nc) ϵ , (nd) δ , (ne) γ , (nf) β , (ng) α , (nh) ζ , (ni) ϵ , (nj) δ , (nk) γ , (nl) β , (nm) α , (nn) ζ , (no) ϵ , (np) δ , (nq) γ , (nr) β , (ns) α , (nt) ζ , (nu) ϵ , (nv) δ , (nw) γ , (nx) β , (ny) α , (nz) ζ , (oa) ϵ , (ob) δ , (oc) γ , (od) β , (oe) α , (of) ζ

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खनन योजना तैयार करने के लिए अर्हता प्राप्त व्यक्ति के रूप में मान्यता प्रमाण पत्र

CERTIFICATE OF RECOGNITION AS QUALIFIED PERSON TO PREPARE MINING PLANS

(खनिज रियायत नियमावली, 1960 के नियम 22 (सी) के अंतर्गत)
(Under Rule 22(C) of Mineral Concession Rules, 1960)

व्यक्ति का नाम: श्री. भिरवान जोशी जिनका पता:

पंजीकृत कार्यालय:

Registered office at C/O B.S.Rawat, Kamal Bhawan, House No.-6, Vijay Colony, Lane No.-1, New Cantt Road, Dehradun (Uttarakhand)

जिस जिन्होंने अपने प्रमुख व्यक्तियों की योग्यताओं एवं अनुभवों का संतोषजनक सबूत प्रस्तुत किया है और जिसके पास खनिज रियायत नियमावली, 1960 के नियम 22 (सी) के अंतर्गत आवश्यक योग्यता है।
and having given satisfactory evidence of the qualification and experience of their key persons is hereby granted recognition under rule 22 (C) of the Mineral Concession Rules, 1960 as a qualified person to prepare Mining Plans

है।

पंजीकृत क्रमांक -

The registration No. is

BQP/DDN/180/2008/A

यह मान्यता दस वर्ष की अवधि के लिए है जो कि दिनांक 30/08/2019 को समाप्त होगी।
This Recognition is valid for a period of ten years ending 30/08/2019

स्थान: AJMER

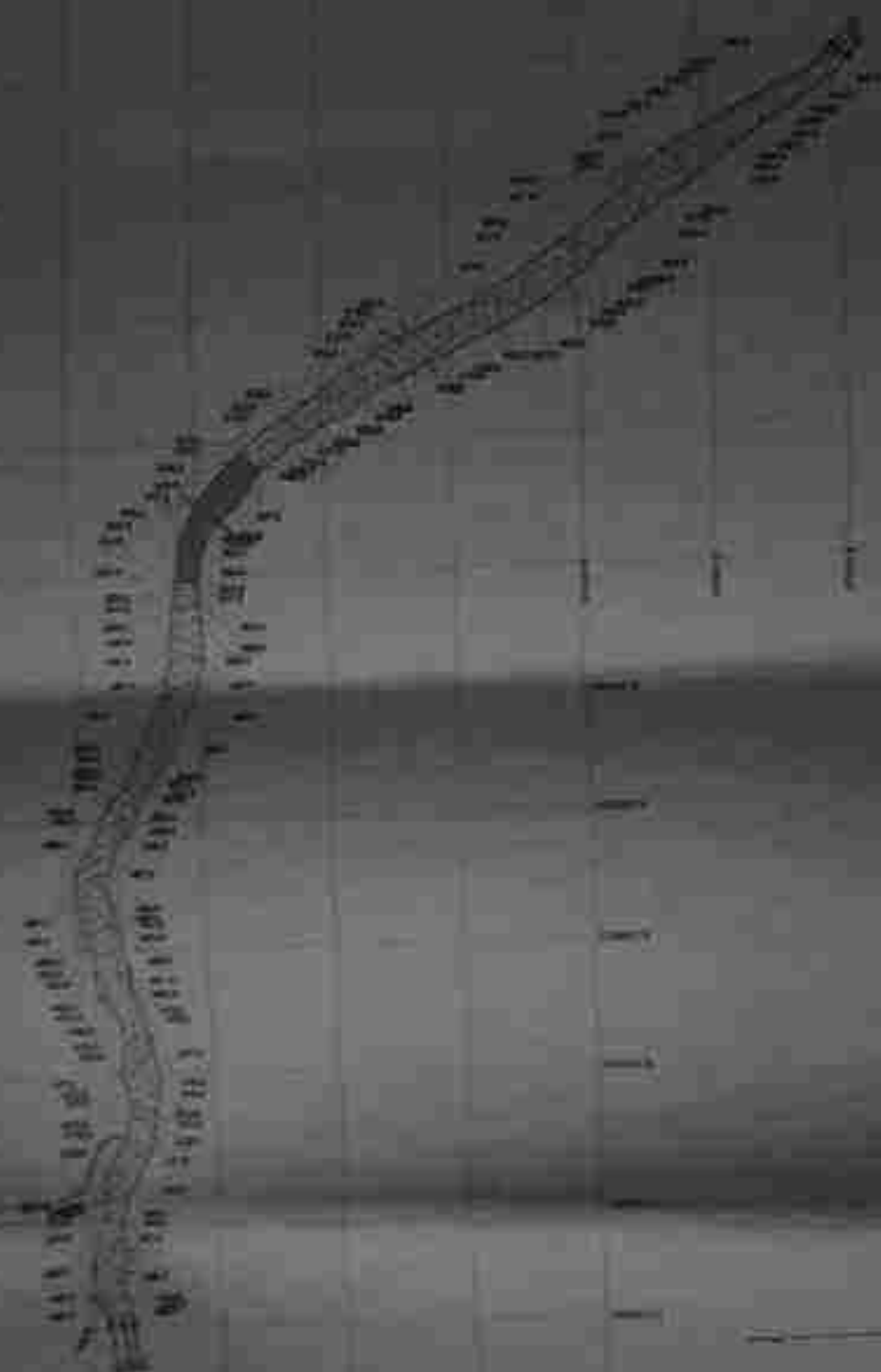
दिनांक: 24/03/2009

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भारतीय खनन विभाग
Indian Bureau of Mines





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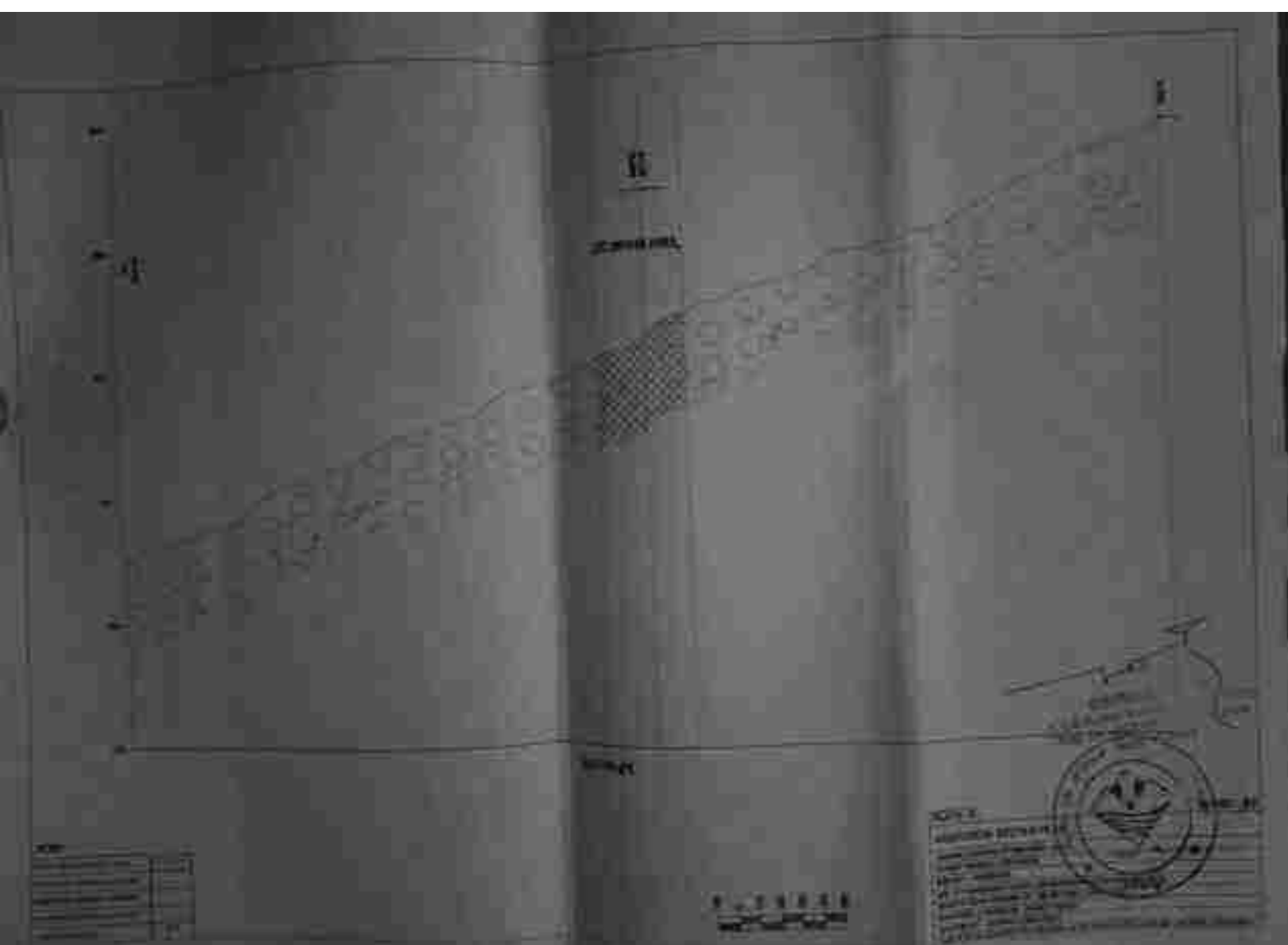


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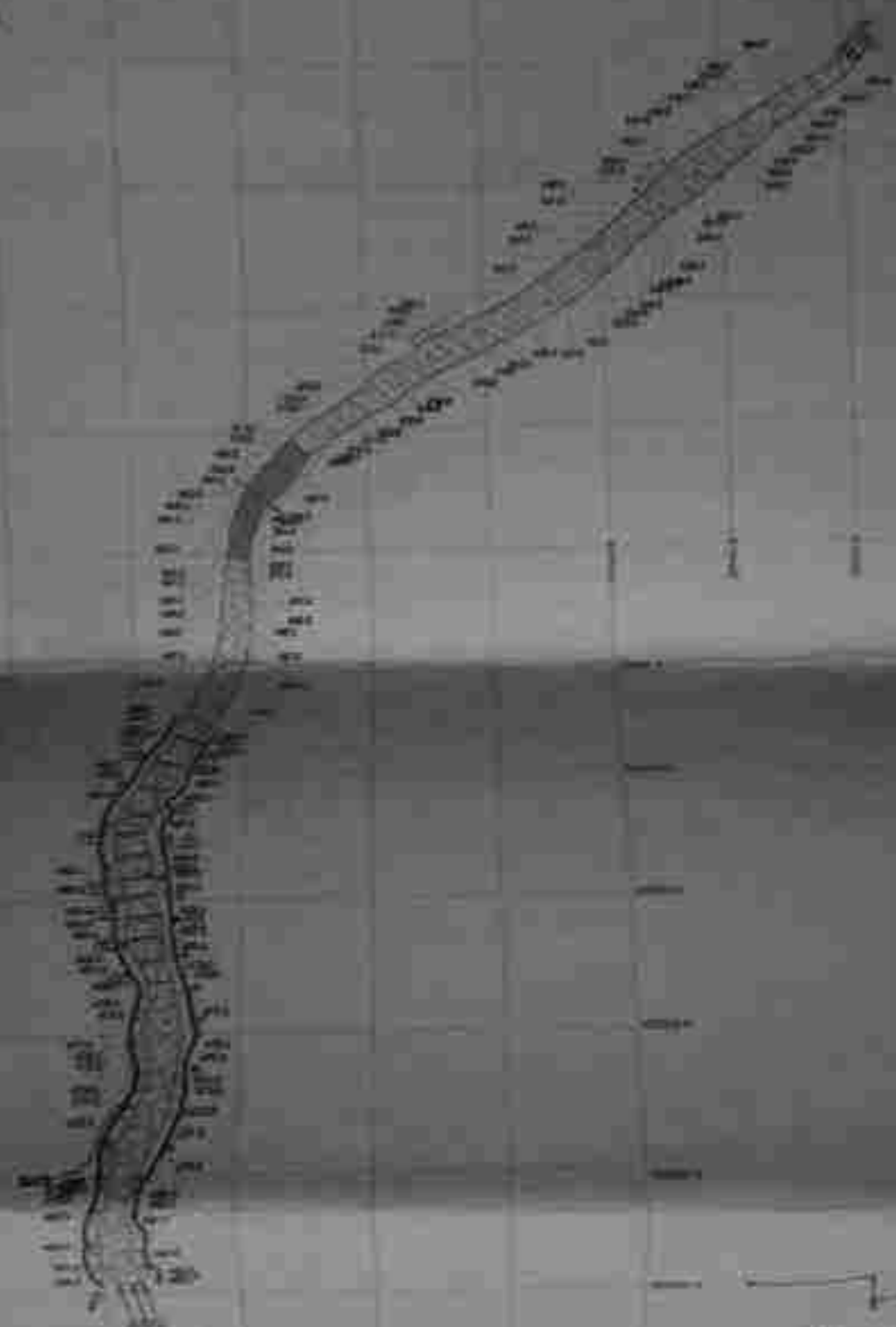
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PROPOSED JUNCTION
 OF THE RIVER OF SHANNON
 WITH THE RIVER OF LIMERICK
 DIST. OF LIMERICK



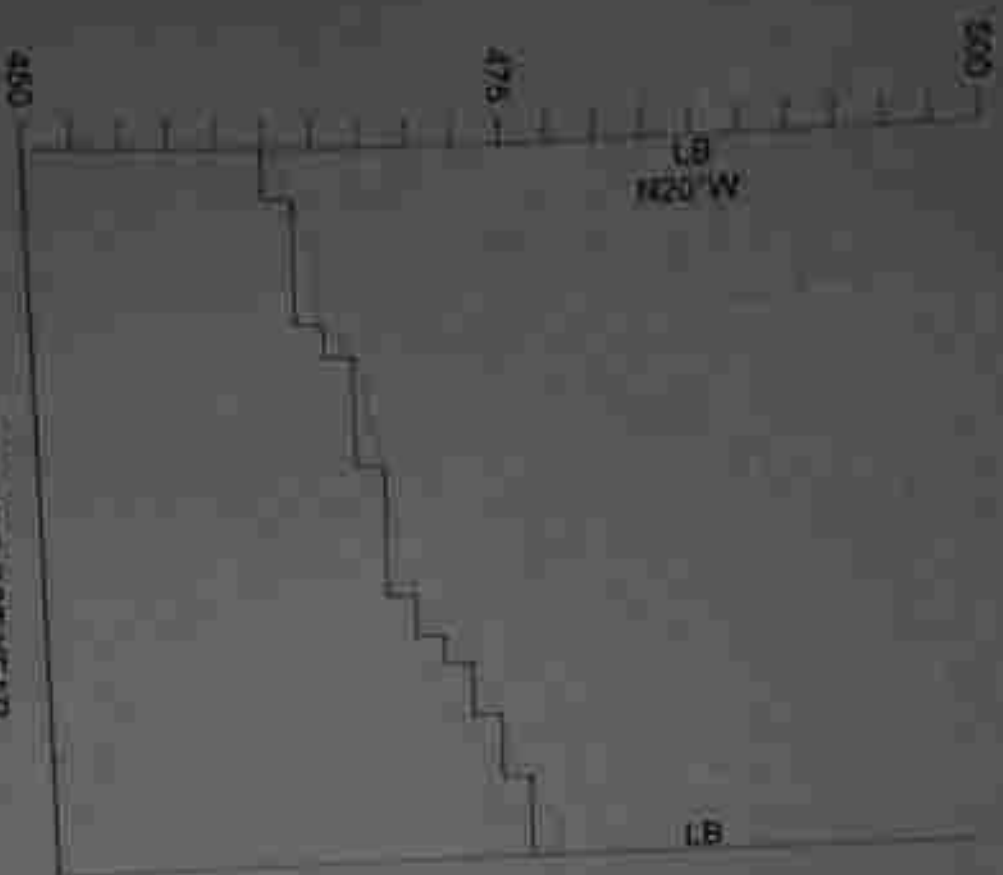
NOTES:

ALL DIMENSIONS IN FEET & INCHES UNLESS OTHERWISE SPECIFIED

SECTIONAL PLAN / FOR LAYOUT OF THE PROPOSED JUNCTION

DESIGNED BY	MR. J. J. O'NEILL
CHECKED BY	MR. J. J. O'NEILL
APPROVED BY	MR. J. J. O'NEILL
DATE	1900

THIS PLAN IS SUBJECT TO THE APPROVAL OF THE LIMERICK DISTRICT COUNCIL



PIT SECTION OF FIRST YEAR



PIT SECTION OF SECOND YEAR



INDEX :

RIVER BED MATERIAL (RBM)	100000
MEASURED MINERAL CONTACT	
INDICATED MINERAL CONTACT	
UNEXPLORED MINERAL CONTACT	
LEASING MINERALS	10

YEARWISE PIT SECTIONS

PLATE - 6

JANAKI LAKSHMI RIVER AREA - 100000
 FOREST DIVISION - DEHRADUN
 DISTRICT - DEHRADUN
 MR. LITABANDH FORREST DEPT. OF
 AGRICULTURE & FORESTRY, 13, NERBY RD.
 SURVEYED & DRAWN BY - BHARAT RAO
 CHECKED BY - BHARAT RAO
 THE PLAN IS CORRECT TO THE BEST OF
 KNOWLEDGE & BELIEF - BHARAT RAO

BHARAT RAO

1. Name of the vessel
 2. Name of the commanding officer
 3. Name of the observer
 4. Name of the recorder
 5. Name of the navigator
 6. Name of the pilot
 7. Name of the deck officer
 8. Name of the gunnery officer
 9. Name of the engineering officer
 10. Name of the medical officer
 11. Name of the chaplain
 12. Name of the steward
 13. Name of the cook
 14. Name of the carpenter
 15. Name of the blacksmith
 16. Name of the cooper
 17. Name of the sailmaker
 18. Name of the cooper
 19. Name of the cooper
 20. Name of the cooper



Time	Latitude	Longitude	Wind	Sea	Weather	Barometer	Thermometer	Humidity	Direction	Force	Height	Color	Clouds	Visibility	Distance	Remarks
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 15. Name of the blacksmith
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 17. Name of the sailmaker
 18. Name of the cooper
 19. Name of the cooper
 20. Name of the cooper

