INTRODUCTION

Indeed the origins of mining dates back to the Stone Age, when the ancestors mined flints, and the dependence of man on minerals has increased as the society has evolved. Today the civilization/society could not exist, without the products of mining and the demands for these products continue to grow in the days to come also. Mining can only take place where the minerals present. Another important aspect of mining is that it's a robber economy in that a mineral deposit is finite resource and so mining comes to end when the deposit is exhausted.

The proposed mining plan covers a scientific and systematic assessment of the deposit, which includes details and protection of environment in and around the mining area.

The mining plan will be approved by District Magistrate's Office and accordingly the mining will be done as per provision incorporated in Rule 34 of U.P. Minor Mineral concession Rule 1963, 35th amendment.

It is noted that submission of an approved Mine Plan has now become mandatory for all the mining projects. Reconstituted committee of the Expert Appraisal Committee for Environmental Appraisal of mining Projects constituted under EIA Notification 2006, states at his various meeting points this clearly.

CHAPTER -1

1.1 GENERAL INFORMATION:

1.1	Applicant Name & Full address :	**M/s Sushil Kumar S/o Hari Kumar**, R/o Paigumburpur, Bindki, Fatehpur
1.2	Applicant's post/social status	Individual Person
1.3	Mineral or Minerals which the applicant intends to mine	Yellow Soil
1.4	Period of excavation	2 Years after grant EC
1.5	Date of first opening	After grant EC
1.6	Name & address of RQP & Regd.No.	Dr. Vijay Kumar Mishra Registration No. RQP/UPDGM/No. 007/Year 2018 403,Aimen Apartment,29 Chandralok Colony, Aliganj, Lucknow, U.P.226024
1.6	Certificate valid up to	16/12/2023
1.7	Name of the prospecting Agency	Not required

LAND DETAILS

S.No.	Gata	Owner	Area, Ha	Area, m2	Depth , feet	Depth . Meter	Excavation Period, Years	Safety Area, 10%	Mineable Area, m2	Top Soil Depth, m	Top Soil, m3	Total Mineable Reserve, m3
1	283	Dhooni singh	0.1835	1835		2	2	183.5	1651.5	0.2	330.3	2972.7
2	286	Chhotelal	0.125	1250		2	2	125	1125	0.2	225	2025
3	285 Mi	Prema Kumari	0.364	3640		2	2	364	3276	0.2	655.2	5896.8
	285 Mi	Parwati Devi	0.364	3640		2	2	364	3276	0.2	655.2	5896.8
	285 Mi	Pushpa Devi	0.267	2670	6	1.83	2	267	2403	0.2	480.6	3914.0
4	288	Barelal	0.224	2240	6	1.83	2	224	2016	0.2	403.2	3283.7
	288	Nanku, Chhotelal Rajesh, Suresh.	0.448	4480	4	1.22	2	448	4032	0.2	806.4	4109.4
5	192	Harimohan	1.152	11520	6	1.83	2	1152	10368	0.2	2073.6	16887.3984
6	31/7	Heerala	0.178	1780		2	2	178	1602	0.2	320.4	2883.6
7	32/7	Heeralal	0.081	810		2	2	81	729	0.2	145.8	1312.2
8	33/2	Badluprasad	0.517	5170	6	1.83	2	517	4653	0.2	930.6	7578.8064
Total			3.9035	39035				3903.5	35131.5		7026.3	56760.4

CHAPTER -2

2.0LOCATION AND ACCESSIBILITY:

2.1Location of the area:

<table>
<tr><td>S.N.</td><td>PARTICULAR</td><td>DISCRIPTION</td></tr>
<tr><td>1</td><td>Ownership & Status Of Occupancy</td><td>Private Land</td></tr>
<tr><td>2</td><td>Area(Ha)</td><td>3.9035 Ha</td></tr>
<tr><td>3</td><td>Gata/Khasra No./Khasra No./Araji No.</td><td>283, 285Mi,286, 288, 192, 33/2, 31/7, 32/7</td></tr>
<tr><td>4</td><td>Village</td><td>Manikpur</td></tr>
<tr><td>5</td><td>Tehsil</td><td>Bindki</td></tr>
<tr><td>6</td><td>District</td><td>Fatehpur</td></tr>
<tr><td>7</td><td>State</td><td>Uttar Pradesh</td></tr>
<tr><td>8</td><td>Latitude</td><td rowspan="2"><table><tr><th>Gata</th><th>Latitude</th><th>Longitude</th></tr><tr><td>283</td><td>26°10'15.228"N</td><td>80°35'2.808"E</td></tr><tr><td>286</td><td>26°10'12.606"N</td><td>80°34'58.404"E</td></tr><tr><td>285 Mi</td><td>26°10'14.406"N</td><td>80°34'59.97"E</td></tr><tr><td>285 Mi</td><td>26°10'15.006"N</td><td>80°35'1.044"E</td></tr><tr><td>285 Mi</td><td>26°10'14.358"N</td><td>80°34'55.74"E</td></tr><tr><td>288</td><td>26°10'13.218"N</td><td>80°34'54.678"E</td></tr><tr><td>288</td><td>26°10'13.806"N</td><td>80°34'54.48"E</td></tr><tr><td>192</td><td>26°10'15.786"N</td><td>80°34'54.294"E</td></tr><tr><td>31/7</td><td>26°10'13.614"N</td><td>80°35'3.93"E</td></tr><tr><td>32/7</td><td>26°10'13.48"N</td><td>80°35'3.85"E</td></tr><tr><td>33/2</td><td>26°10'13.524"N</td><td>80°35'3.366"E</td></tr></table></td></tr>
<tr><td>9</td><td>Longitude</td></tr>
</table>

2.2 GENERAL

S.N.	Particular	Description
1	Land use patterns (Forest, Agricultural Grazing, and Barren etc.)	Non forest Land
2	Mineral	Yellow Soil
3	Category of land	Private Land
4	Ownership Of Land	Individual
6	General Ground Level	117mRL
7	Period of mining	2 Years
8	Method of Mining	Opencast Semi-Mechanized using JCB, Poclain Machines

2.3 INFRASTUCTURAL FACILITIES-

(A)ACCESSIBILITY:

The lease area is located in villageManikpur.The lease area is well connected non-metal road to metalroad.

Villages/Town:

Manikpur- 200m, West
Shivrajpur-450 m, West
Sugunapur- 1100 m, South
Keechakpur- 1500 m, East

Road:

NH2 – 3 km, East
ManikpurShivrajpurVillage Road-66 m, North

Railway Station:

Aung Railway Station:4.5 KM East
Bindki Road Railway Station – 6.2 Km, South
Karbigwan Railway Station: 9.5 Km North
Prempur Railway Station – 15 KM NW

Airport:

Kanpur Airport –31Km, North
Lucknow Airport – 71 Km, NE

Water Body/River:

Canal – 1km, North East
Ganga River –2.3 Km, East

Temple/Mosque:

Lord SriKrishna Temple, Shivrajpur: 600 meterEast.
Shiv MandirBadahar –2.5Km,West
Jai Mahamaya Temple, Abhaypur –3.0, Km, South
Santoshi Mata Mandir, Ravatpur – 3.8 KM South
AshrafiMazar: 5.1 KM South
EidgaahBindki – 15 KM South

(B)WATER SUPPLY:

Hand pumps, wells &tube wells are the source of water in area. They use agriculture and house hold purpose. The mining staff shall use water from well. This water will be supplied from the nearby area.

(C) ELECTRIFICATION-
Village Manikpuris well connected with electricity while mining area is not connected with electricity.

(D)EDUCATION-
School:
Primary SchoolManikpur :1.1km, North East
Primary School, Thanpur- 1.3Km, North
SSRB Public School- 6.0 Km, East

(E)HEALTH-
Hospital:
Govt Hospital, Bindki– 15 Km, South
Primary Health Centre, Shivrajpur –1 Km, SE

(F) BUS STOP
Nearest bus stop – Hajipur Bus Stop – 3.2 Km, West

CHAPTER -3

3.1 GEOLOGY:

TOPOGRAPHY: Ganga tract comprises poor sandy soil (full of kankar) with stretches of sodic lands popularly known as 'USAR'. The district is mainly characterized with Ganga, Yamuna alluvial plain. G.S.I. (2001) has identified the following geomorphic features.

1. Active Flood Plain: It is quite localized and confined only to the river system.

2. Older Alluvial Plain: It is characterized by depositional and erosional terraces found in patches along the active plain.

The site comprises of total 8 gata no which vary from highest elevation of 116.4 mRL to lowest 117.5 mRL.

3.2 REGIONAL GEOLOGY:

The Gangatic Plains are buildup of layers of sands, clays and occasional organic debris of geologically very recent date (Pleistocene and Recent), filling up a deep depression between the two other units.

Group	Age	Formation	Lithology
Quaternary	Recent to Upper Pleistocene	Newer/Younger Alluvium	Fine sand silt, clay admixed with gravels
	Upper Pleistocene	Older Alluvium	Clay with kankar and sand of different grades
……Unconformity……..			
Paleozoic	Cambrian	Upper Vindhyans (Bhawder Series)	Red sandstone &shales

3.3 LOCAL GEOLOGY

The district area represents alluvial, as well as hard rock. District is bifurcatedby river Yamuna,.Physiographically district is characterized withGanga and Yamuna plain .It can be divided into three natural subdivisions; i) Active Flood Plain ii) Older Alluvial Plain and Rock Surface (Denudational Hills). The Active Alluvial Plain is of low relief characterized by thick deposition of clay, kankar, sand and gravel. Older Alluvial Plain lies along river

Ganga. It is less pronounced in transYamuna area. The Denudational hills are quite prominent in Trans Yamuna area the stratigraphic sequence is as follows:

Geomorphic Units	**Lithology**
Recent flood plain of stream	Yellow colored clay, silt Sand of various grades.
Terrace Zone Sand and kankar beds	Yellow and grey coloured silt
Older Alluvial Plains Sand and kankar beds.	Yellow grey coloured silt

CHAPTER-4

4. RESERVES

4.1 METHOD OF ESTIMATION OF RESERVES

Yellow Soil reserves have been estimated as per the standard procedures. The area of mining land (as per agreement details) and the average thickness of mineral (not more than 1.5m is multiplied to get the volume. 10% area left forsafety zone all along the periphery of mining land to get the area available for actual mining. About 10% mining losses reserves blocked due to slope has been considered to get the mineable quantity. Detail of calculation is given ahead:

PRODUCTION DETAILS

S.No.	Gata	Owner	Area, Ha	Area, m2	Depth , feet	Depth . Meter	Excavation Period, Years	Safety Area, 10%	Mineable Area, m2	Top Soil Depth, m	Top Soil, m3	Total Mineable Reserve, m3
1	283	Dhooni singh	0.1835	1835		2	2	183.5	1651.5	0.2	330.3	2972.7
2	286	Chhotelal	0.125	1250		2	2	125	1125	0.2	225	2025
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	285 Mi	Parwati Devi	0.364	3640		2	2	364	3276	0.2	655.2	5896.8
	285 Mi	Pushpa Devi	0.267	2670	6	1.83	2	267	2403	0.2	480.6	3914.0
4	288	Barelal	0.224	2240	6	1.83	2	224	2016	0.2	403.2	3283.7
	288	Nanku, Chhotelal Rajesh, Suresh.	0.448	4480	4	1.22	2	448	4032	0.2	806.4	4109.4
5	192	Harimohan	1.152	11520	6	1.83	2	1152	10368	0.2	2073.6	16887.3984
6	31/7	Heerala	0.178	1780		2	2	178	1602	0.2	320.4	2883.6
7	32/7	Heeralal	0.081	810		2	2	81	729	0.2	145.8	1312.2
8	33/2	Badluprasad	0.517	5170	6	1.83	2	517	4653	0.2	930.6	7578.8064
Total			3.9035	39035				3903.5	35131.5		7026.3	56760.4

Total mineable reserve quantity for 2 years=56760.4 Cubic meter.

4.2 CLASSIFICATION OF RESERVES

ALL the quantity estimated as above is considered under proved (111) category under UNFC classification) category.

4.3GEOLOGICAL RESERVES

Particulars	Unit	
Total Area available for mining (As per agreement)	39035	Sqm
Max Depth considered(As per agreement)	2	m
Total volume of Mineral (Yellow Soil)	78070	Cum
Total Geological Reserves upto 3m (Yellow Soil)	117105	Cum

4.4MINEABLE RESERVES

Particulars	Unit	
Total Area available for mining (As per agreement)	39035	Sqm
Max Depth considered(As per agreement)	2	m
Total Geological Reserves (Yellow Soil)	117105	cum
Safety Area (Area wise 10% of total area)	3903.5	sqm
Thickness of top soil	0.20	m
Total top soil	7026.3	cum
Total Mineable Reserves Considering 90%	56760.4	cum

Total Soil Excavation Quantity for 24 Months = 56760.4 m^3

CHAPTER-5

5.a DEVELOPMENT AND PRODUCTION PROGRAMME

5a.1 Methodology of Mining:/Proposed Mining Method

Proposed mining will be done in **opencast semi-mechanized method** using JCB and Poclain machine. Mining will be done only in the applied field (as per agreement) keeping the nearby plot (s) unaffected. Following geo-scientific methods are proposed to carry out the mining activity:

- Mining will be restricted to the applied fields (as per agreement) up to a maximum depth of 2m from the surface as per provision of MCR- 1960 and MMR 1961.
- The mining shall be done during daytime only.
- Before start mining the top fertile soil of each proposed mining field (up to 10 centimeter depth) shall be scraped & stacked on the berm or any earmarked place which will be spread over the mining pit, after completing mining activity. Thus the fertility of land will be restored.
- There will be No drilling and blasting.
- The operation will remain semi mechanized, using tools like excavators etc.
- 10 manpower will be required for the proposed project.
- Soil mining shall strictly be undertaken as per rules & regulation/permissions obtained from District Administration/Mining Department.

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5a.2 PROPOSED RATE OF PRODUCTION AND LIFE OF MINE

Depending upon the market and availability of yellow soil about 56760.4 of yellow soil is proposed to be mined out from the mining area. This material will be excavated up to 2 years period as per their agreement with land owners.

5.3 Year wise mining & development

Mining will be carried out in the agricultural fields. 7026.3cum top fertile soil will be generated every year. 90% saleable quantity is assumed due to blockage in slopes and other losses. About 56760.4 cum quantity of yellow soilis proposed to be excavated in 2 years.

5.4 CONCEPTUAL MINE PLAN AND LIFE OF MINE

0.30m wide strip all along the each individual field (mine area) as a statutory condition has been left in which top soil will be stored for temporary excavation of Soil which is restricted up to a maximum depth of 2.0 m. River/Stream will not be diverted in any case. No mining is proposed during rainy season. Agreement with land owners is made for minimum 2 years period. Area has sufficient material for the next coming 2 Year period.
A typical ultimate/conceptual plan & section is shown in Plate annexed.

5.b) MANPOWER DEPLOYMENT:

State average daily employment and statutory personnel under MCDR,1988.

1 Supervisor	1
3 Operator/Driver/Helper	2
4 Skilled/unskilled worker	7
Total	10

5.c) USE OF MINERAL : Describe the utilization of mineral and the type of industry(please specify) to whom it will be sold or is being sold.

The mined out Soil will be used for filling up of pits in nearby area.

CHAPTER-6

6. WASTE DISPOSAL ARRANGEMENTS

The mining activity is being carried out in agricultural fields. Upper 0.20 m thick layer of fertile soil has been considered as top soil which will be kept on a berm safely.

Due to mining activity about 56760.4 cum yellow soil will be mined out. About7026.3cum top soil will be generated. This will be dumped temporarily on the berm or earmarked place near mine working. After removing yellow soil, the top soil will be spread over the mined out area to restore the agricultural fields. No waste will be generated during mining hence, no waste disposal arrangements in the mining plan.

CHAPTER-7

7. RECLAMATION PLAN

As stated earlier that about 7026.3cum top soil will be generated .This top soil will be kept safely on the berm of mining site. After removal of all the proposed quantity of yellow soil, the top soil will be spread over the mined out pit so that the fields can be used for agricultural activity.

CHAPTER-8

8. STRATEGY FOR PROTECTION OF RIVER COURSES, NALAS, WATER TANKS , VILLAGES , IMPORTANT MONUMENTS , IF ANY

There is no river in or immediate surroundings of the activity area. River Ganga flows 2 KM away from the area. A canal passes 1000m in nearby mining area. There are no important monuments and water tanks nearby the mining area. Mining is confined in very small scale. Yellow soil from agricultural field will be kept safely. After removal of Yellow Soil from the area , safely kept top soil will be spread back on the mined out fields . Thus the mined out area will be used for agricultural activities in future.

CHAPTER-9

9. ANY OTHER RELEVANT INFORMATION

The project proponent is also required to comply with following stipulations as per MoEF , GOI OM No. 11011/47/2011-1A.II (M) dated 24.06.2013

i. The borrowing / excavation activity shall be restricted to a maximum depth of 2.0m. below general ground level at the site.
ii. The borrowing / excavation activity shall not alter the natural drainage pattern of the area.
iii. Workers / laborers shall be provided with facilities for drinking water and sanitation.
iv. A birm shall be left from the boundary of adjoining field having a width equal to at least half the depth of proposed excavation.
v. A minimum distance of 15 m from any civil structure shall be kept from the periphery of any excavation area.

9.2 **SITE SERVICES**

Working office: Temporary working office will be maintained at site. This will be a temporary structure and can easily be shifted from one side to another side as & when required. Safe drinking water will be kept in covered buckets / clay pitcher and will be provided to mine workers.

Rest Shelter: A temporary structure as a rest shelter to labors will be provided to the workers near mine site.
Primary Health / First Aid: First aid box with principle medicine will be kept at mine site to facilitate the first aid treatment to the workers.

Water arrangement: Water for drinking and sprinkling is required. Project proponent will arrange a water tanker for the purpose. Separate arrangements for drinking water for the labors will also be made in the working office.

CHAPTER-10

10. CONCLUSION

This mining area is small and in the agricultural fields. Mostly local peoples are employed in this activity. There will be minimum adverse effect of this activity on the drainage system.

Besides to generate direct employments, indirect employment will also generate in this area by this activity. This is also a source to generate revenue to the Government.

It can be concluded from the above facts that the mining of Soil from this area will not have any adverse impacts but would help in improving the socioeconomic condition of the surrounding villages. Hence this mining plan may kindly be approved at earliest.

PROGRESSIVE MINE CLOSURE PLAN

Introduction :

(a) **Name of Applicant**: Sushil Kumar

Address –S/o Hari Kumar, R/o Paigumberpur, Bindki, Fatehpur

(b) **Status of the lessee**: Private individual

(c) **Location**: The area is situated atVillage- Manikpur
Tehsil-Bindki, District-Fatehpur, UP.

(d) **Extent of lease area**: 3.9035 Ha

(e)**Type of lease area**:Semi mechanized & opencast

(f) **Present land use pattern**: Agricultural land

i. Present method of mining and mineral processing: No mining is being carried at present

1.1 Reasons for closure :

The progressive mine closure plan is being submitted under amended rule 23 (B)MCDR 1988 & 34 of amended rules of UPMMCR 1963 . No premature closure is anticipated.

1.2 Statutory Obligations:

As per rule 23 B of MCDR 1988 & 34 of amended rules of UP MMCR 1963 , for every fresh grant of mining lease a progressive mine closure plan is required to be submitted in compliance of the aforesaid rule of MCDR 1988 , the progressive mine closure plan is being in accordance with the guidelines issued by CCOM vide circular no . 14/2003& 19/2003.

1.3 Closure plan preparation :

(a) Name and address of the applicant–

Mr. Sushil Kumar
S/o Hari Kumar, R/o Paigumberpur, Bindki, Fatehpur

(b) Name, address & Registration No of RQP. :

Dr. Vijay Kumar Mishra
RQP/UPDGM/No. 007/Year 2018
403, Aimen Apartment,29 Chandralok Colony,
Aliganj, Lucknow, U.P.226006

Name of the executing agency:

The lessee himself shall execute the provisions of mine closure plan.

2.0Mine Description :Given at Chapter 2

2.1Geology:

Topography- Given at Chapter 3.1

2.2Regional Geology- Given under para 3.2

LOCAL GEOLOGY Given under para **3.3**

METHOD OF ESTIMATION OF RESERVES-Given at 4.1

CLASSIFICATION OF RESERVES- Given at 4.2

GEOLOGICAL RESERVES- Given at 4.3

MINEABLE RESERVES- Given at 4.4

2.3 Proposed Mining method: Opencast Semi-mechanized using JCB, Poclain machines etc.

3.0 Review of implementation of mining plan / scheme of mining including next five years progressive closure plan up to the final closure of mine:

No activity was taken up during last two years in connection with mining and allied activities.

The activity proposed during the five year plan period is summarized as below:

S.No.	ACTIVITY	PARTICULARS
1	Exploration & Mine Development	At present there is no mining. About 56760.4 cubic mt of yellow soil will be excavated to get the required production
2	Disposal of Solid waste	There is no solid waste due to mining.
3	Reclamation & rehabilitation	No reclamation / rehabilitation proposed.
4	Control of dust	Activity is limited. Does not required.

5	Noise and ground vibration	Activity is limited. Does not required
6	Afforestation	No afforestation proposed.

4.0 Closure Plan:

4.1 Mined out land :

No proposal can be given for concurrent back – filling .Top soil is proposed to be spread over

Mined out benches.

4.2 Water Quality Management :

Activity is limited . Any change in water quality is not anticipated.

4.3 Air Quality Management:

Activity is limited. Any change in air quality is not anticipated.

4.4 Waste Management:

No waste is anticipated.

4.5 Top Soil Management:

Top soil will be scraped out carefully and stacked carefully on the berms or earmarked area. The top soil will be spread over the mined out area.

4.6 Tailing Dam Management:

No processing of mineral is proposed. Hence, no tailing dam is proposed

4.7 Infrastructure:

Activity does not require any such facilities.

4.8 Disposal of Mining Machinery:

Mining will be done in semi mechanized manner and disposal of mining machinery is not required.

4.9 Safety and Security:

Presently agreement has been made for Two Years period. Mining of Soil is proposed to be confined in a small area up to max depth of 2 m max.

4.10 Disaster Management and Risk Assessment:

No such system is required. Activity is limited up to a 2 m depth below ground level.

4.11 Care and Maintainance during Temporary Discontinuance:

Applicant will comply all necessary rules & regulations.

5.0 Economic Repercussions of Closure of mine and manpower retrenchment.

The land use of the area for mining is agricultural land. At the end of mine it will be again agricultural. In mining activity about 8 persons will get employment.

6.0 Time Scheduling for Reclamation &Rehabilitation:

No reclamation or rehabilitation activity is proposed.

7.0 Abandonment Cost:

The tentative cost for implementing the protective and rehabilitation measures proposed in the mining activity is limited.

8.0 Any other information:

The lessee also intends to spend some amount towards community service. The figures are tentative and are subject to generation of profit. Around of 5 % of the profit will be diverted towards this activity.

9.0 Financial Assurance:

The applicant shall submit a financial assurance as applicable to the district officer or the officer authorized by the State Government in his behalf.

10.0 Certificate:

Given separately & enclosed.

11.0 Plans & Sections:

All the plans and sections are enclosed with the plan.