

**BEFORE THE NATIONAL GREEN TRIBUNAL,
Principal Bench, New Delhi
Original Application No. 23/2017(EZ)**

In the matter of:-

Syed Arshad Nasar

Applicant(s)

Vs.

Union of India & Ors.

Respondent(s)

With

In the matter of:-

Original Application No. 776/2018

Ramchandra Chaurasia

Applicant (s)

Vs.

State of Jharkhand

Respondent (s)

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(S.K. Gupta)
Scientist 'E'

Central Pollution Control Board
Parivesh Bhawan East Arjun Nagar
Delhi-110032

Place: - Delhi

Dated: - 10.03.2021

Compliance Report in the matter of Syed Arshad Nasar Vs Union of India with Ramchandra Chaurasia Vs State of Jharkhand (O.A. No. 23/2017/EZ with O.A. No 776/2018/PB)

Hon'ble NGT in order dated 23.09.2020(Annexure "A-1" constituted and directed :-

"....a four-member Committee to be headed by an officer of the rank of Joint Secretary in the MoEF&CC, Government of India. The other three members will be the nominees of Indian Institute of Technology (IIT), Dhanbad, a Senior Officer of CPCB and Secretary Environment, Government of Jharkhand. The State PCB and the District Magistrate, Sahebganj will provide all logistic support to the Committee to undertake their task. It will be open to the Committee to co-opt any other Expert or Institution and to conduct the proceedings in such manner as may be found viable. CPCB will be the nodal agency for compliance."

The committee was constituted to enforce the rule of law and for protection of environment and public health, with a view to prepare scientific action plan after in depth study of the problem with a clear road map. The committee was directed to undertake the following:

- I. First meeting of the committee may be held within one month.
- II. Restoration plan and mode of execution may also be proposed.
- III. The report may be furnished within three months.
- IV. There is a need to examine as to how many stone crushers and mining units can be allowed and subject to what special conditions, having regard to the existing scenario already noted and to what extent the existing activities need to be regulated.
- V. The 'Polluter Pays' principle should be implemented effectively having regard to the cost of restoration, extent of damage and deterrent element.

Action Taken

1. With reference to the order, a four-member committee was constituted
 - a. Joint Secretary, MoEF&CC, GoI. (Head of the Committee)
 - b. Nominees of Indian Institute of Technology (IIT), Dhanbad (Committee Member)
 - c. Senior officer of CPCB (Nodal Agency & Committee Member)
 - d. Secretary Environment, Government of Jharkhand (Nodal Agency & Committee Member)
2. The Principle investigator (P.I) of the study "Source Apportionment Study, Carrying Capacity Assessment and Clean Air Action Plan" from Centre for Environment and Energy Development (CEED), Delhi has been co-opted by CPCB, being the nodal agency.
3. Till date three meetings of Joint Committee were held on 12.11.2020, 30.12.2020& 01.02.2021 respectively.
4. Major Decisions of Joint Committee Meetings.

1st Joint Committee Meeting Decision dated 12.11.2020

- I. Inventorization of all activities shall be carried out along with compliance verification status by individual units w.r.t. EC & CTO.
- II. The units being operated illegally shall be targeted first and action including issuance of closure order by JSPCB be issued and closure be ensured through District Mining Task Force (DMTF).
- III. The units which are not following SOP as per CTO & EC and penalties may be imposed on them.
- IV. Air Quality Index data from 14/02/2017 to till date shall be compiled by JSPCB and time series analysis of the trend shall be carried out in consultation with IIT ISM Dhanbad to show the improvement in air quality since the date of filling petition.
- V. Monitoring of the transportation system to ensure transportation of goods in covered vehicle and take necessary actions.
- VI. The Jharkhand State Pollution Control Board shall prepare the comprehensive report and in consultation with ERD Kolkata.
- VII. The report to be submitted by CEED would be considered by the committee for further action

Copy of the Minutes of the 1st Joint Committee Meeting dated 12.11.2020 is annexed and marked as **Annexure “A-2”**

2nd Joint Committee Meeting Decision dated 30.12.2020

- I. 1st Draft committee report to be prepared by Dr. M.K. Jain, committee member, IIT-ISM Dhanbad and member from JSPCB.
- II. The action taken w.r.t Hon'ble NGT order and proposed restoration plans to be presented before committee by Dr. M. K. Jain, IIT-ISM Dhanbad.
- III. The Principle investigator (P.I) of the study “Source Apportionment Study, Carrying Capacity Assessment and Clean Air Action Plan” from Centre for Environment and Energy Development (CEED), Delhi is co-opted by the committee as a member and to be invited in the next joint committee meeting to give their input.
- IV. Field visit by the committee members to be scheduled after preparation of 1st draft report for verification of the stone mines and crushers.
- V. The committee members were of the opinion that the final report on action plan and other assessment for reporting to Hon'ble NGT may require another 3 months considering the submission of carrying capacity report. It was decided that a progress report on the action taken and the verification report on the compliance assessment made till 30 Jan 2020 shall form part of a request to Hon'ble NGT for granting extension of time of another 4 months, i.e. 30 April 2021. CPCB-ERD may co-ordinate and prepare necessary documents in this regard. The 1st draft committee report to be filed before the next date of hearing i.e. 01.02.2021.

Copy of the Minutes of the 2nd Joint Committee Meeting dated 30.12.2020 is annexed and marked as **Annexure “A-3”**

3rd Joint Committee Meeting Decision dated 01.02.2021

- I. Inventorization of all activities shall be carried out along with compliance verification of individual units w.r.t. EC & CTO by JSPCB and DM Sahebganj by 15.02.2021.
- II. Jharkhand State Pollution Control Board should provide the information about the units (stone crushers/mines) in Rajmahal hills of the Vindhya mountains, District Sahebganj in a tabular format consisting the following details:
 - a. Total number. of units
 - b. Number of units without CTO and/or EC
 - c. Number of units with valid CTO and/or EC
 - d. Number of units for which the CTO has expired and renewal awaited
- III. Moreover, action taken against the stone mines/ crushers, which do not have EC and CTO as well as amount of environmental compensation imposed with respect to Hon'ble NGT order, dated 23.09.2020 is to be reported to the committee by 15.02.2021 for preparation of the draft comprehensive report.
- IV. The inventory available with CEED, Delhi shall be provided to Dr. M. K. Jain at the earliest.
- V. The final comprehensive report on the study "Source Apportionment Study, Carrying Capacity Assessment and Clean Air Action Plan" from Centre for Environment and Energy Development (CEED), Delhi is required to be submitted by 15.02.2021.
- VI. The 1st draft report presented in the meeting is to be communicated to all the concerned authorities as well as Environment Department of Jharkhand by IIT (ISM) Dhanbad and CPCB, ERD-Kolkata.
- VII. The generic recommendation and modification for betterment of the environment restoration plan should be given by all the concerned authorities such as environment department, transportation department, District Mining Task Force (DMTF), DM Sahebganj, JSPCB and other concerned government authorities within 10.02.2021. JSPCB shall coordinate with the respective state departments for obtaining the recommendations.
- VIII. 1st draft joint committee report including contents should be finalized by IIT (ISM) Dhanbad by 10.02.2021.
- IX. The input given by all the concerned authorities is to be complied and the rephrasing of the 1st draft joint committee report should be done by IIT (ISM) Dhanbad. Dr. M.K Jain may seek help from CPCB, ERD-Kolkata for redrafting the report.
- X. The draft report should be finalized by incorporating the information from the report submitted by CEED, Delhi, DMTF, DM, Sahebganj and JSPCB by IIT (ISM) Dhanbad by 15.02.2021. The same is to be discussed in the next meeting for further improvement.
- XI. Field visit by the committee members may be scheduled during February, 2021 after preparation of 1st draft report for verification of the stone mines and crushers.

Copy of the Minutes of the 3rd Joint Committee Meeting dated 01.02.2021 is annexed and marked as **Annexure "A-4"**

5. It has been reported by District Magistrate (DM), Sahebganj that the inspection of all the Stone Mines and Stone Crushers has already been carried out by the District Mining Task Force (DMTF) as per the formats provided by CPCB, ERD Kolkata. The inspection reports of the stone mines and crushers are already submitted, however, the final compiled as well as summary report is yet to be submitted.
6. Preliminary report consisting of the source profiling and air quality analysis has been submitted by Centre for Environment and Energy Development (CEED), Delhi. The findings are being studied.
7. Inventorization of the activities along with compliance verification w.r.t. EC & CTO of individual units has been provided by JSPCB. Field verification by a sub-committee is under progress.
8. DMTF has taken action against the non-complying Stone Mines and Crushers in which total FIR lodges-136 in involving trucks seized -537, crushers demolished – 161, crusher sealed – 44, reported for criminal proceeding against boats- 29, arrested accused persons involved in illegal operations- 53, sealed illegal mines – 17, seized JCB Equipment – 13, Requested for CTO cancellation - 39 units. Moreover, DMTF has also directed to Ex. Engineer Electricity for disconnection of 69 Illegal Crushing Plant's electricity. (Details is mentioned in Progress Report of the Joint Committee, **Annexure A-5**)
9. Action has been taken against the stone mines/ crushers, which do not have EC and CTO as well as Rs.6,33,57,000.00/- has been imposed as Environment Compensation against the 225 nos. of non-complying Stone Mines and Crushers with respect to Hon'ble NGT order, dated 23.09.2020 by JSPCB.
10. A draft joint committee report has been prepared by the joint committee, which includes, sources of Air Pollution, present scenario of the Stone Mines and Crushers, Environmental Status, Action taken, Key Issues and Suggested Measures, General guideline for abatement of Pollution for the Stone Crushers, Stone Mines, Transportation, and Common Area in each cluster. Copy of the Joint Committee Report is annexed and marked as **Annexure "A-5"**.
- 11. A draft guideline for abatement and control of pollution from stone crusher has been prepared and shall be implemented as per the finding from site visits.**

Issues Pending

Following work is pending, which is required for preparation of final comprehensive report by the joint committee:

1. The individual inspection reports of Environmental Management of the Stone Mines and Stone Crusher Units, as per the formats provided by CPCB, ERD Kolkata have been submitted by District Mining Task Force (DMTF), however, the information and data compilation of the hand-written inspection sheets are in progress.
2. The final report on "Source Apportionment Study, Carrying Capacity Assessment and Clean Air Action Plan" carried out by CEED, Delhi is awaited. The outcome of this report is required for preparation of the final comprehensive joint committee report, which is to be submitted to Hon'ble NGT.
3. Field visit by the committee members is to be done for verification of the stone mines and crushers.

4. Development of mechanism for ensuring sustainable compliance of the regulatory provision and deterrence based on on Polluters pay principle. This will be carried out based on the findings from field visit.

The final comprehensive joint committee report, which is to be submitted to Hon'ble NGT is proposed to consists of the restoration plan and minimum infrastructural requirements for control and abatement of pollution at sources along with compliance of regulatory provisions. A comprehensive clean air action plan, inventory of the activities along with compliance verification of individual units w.r.t. EC & CTO will also be submitted after compilation of all such information. It will also include action taken against the individual stone mines/ crushers with invalid EC and CTO, amount of environmental compensation imposed, environmental management status and field visit report of the committee members.

The study carried out by CEED, Delhi as well as inspection of the stone mines and crushers by DMTF Sahebganj for verification of environmental management status got delayed due to the CoVID-19 situation. The outcomes of these reports are required to prepare the final comprehensive joint committee report. Therefore, the committee requests Hon'ble NGT to grant three months time for submission of the comprehensive joint committee report considering the quantum of field

Item Nos. 01 to 03

Court No. 1

**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI**

(By Video Conferencing)

Original Application No. 23/2017 (EZ)

(With report dated 21.09.2020)

Syed Arshad Nasar

Applicant(s)

Versus

Union of India & Ors.

Respondent(s)

WITH

Original Application No. 776/2018

Ramchandra Chaurasia

Applicant(s)

Versus

State of Jharkhand

Respondent(s)

WITH

Original Application No. 373/2019

Pradeep Kumar Singh

Applicant(s)

Versus

State of Jharkhand

Respondent(s)

Date of hearing: 23.09.2020

**CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON
HON'BLE MR. JUSTICE S. P. WANGDI, JUDICIAL MEMBER
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER**

Respondent(s): Mr. Kumar Anurag Singh, Advocate with Mr. R.L. Bakshi, MS,
JSPCB
Mr. Mukesh Kumar, Advocate for CPCB

ORDER

1. This matter is being taken up in continuation of order dated 05.12.2019 relating to enforcement of environmental norms in the operation of quarrying and crushing units in Rajmahal hills of the Vindhya Mountains, District Sahebganj, Jharkhand. All the three matters involve identical issues and are being dealt with together.

2. The Tribunal, in its last order, noted that the area is rich in mineral resources. The mining companies or other entities are indulging in indiscriminate mining and operating stone crushers without due regard to the environmental norms. In this process, the hills are blown up. To remedy the problem, the Tribunal passed several orders in the last three years, including prohibiting illegal mining and non compliant stone crushing activities vide order dated 06.07.2017 followed by order dated 17.04.2018. Finally, a Committee was constituted comprising (a) Senior Scientist/ Engineer from CPCB; (b) Regional Office, EZ, MoEF&CC, Bhubneswar and, (c) Experts from SEIAA and Jharkhand State PCB to undertake study and give a report as follows: -

- “i) Undertake Carrying Capacity Assessment of the area viz-a-viz stone mines and stone crushing units.***
- ii) Undertake Ambient Air Quality Assessment in at least 10 representative locations of the area.***
- iii) Assess (a) the pollution control devices of the stone mining and stone crushing units in the area and the environmental damage caused and (b) the cost of restoration of such damage.***
- iv) Any other relevant studies cognate to the above.***

In undertaking the task, the Committee may co-opt expert/experts from any institution identified by it.”

3. The Tribunal noted vide order dated 07.05.2019 that the State PCB had failed to take adequate remedial action against illegal mining and crusher units and also failed to realize Environmental Compensation on 'Polluter Pays' principle. The Committee constituted by the Tribunal filed its report in O.A. 23/2017 (EZ) finding wide scale flouting of norms and also recommended that only compliant mining should be allowed purported the Bio-diversity of the area. On 11.09.2019, the Member Secretary, State PCB appeared in person and made a statement that there are 407 stone crushers and 300 stone mines. The specific detail of non-conforming stone crushers and mines were directed to be complied. Further, as per information given by the Member Secretary, 508 units had applied for Consent to Operate out of which 445 had been granted and the case of 24 had been rejected, while in the case of 39, applications for grant of Consent to Operate were under consideration. 293 stone crusher units and stone mining units had been found to be non-compliant during the inspections between 11.11.2019 to 17.11.2019 and, therefore, show cause notices had been issued. 106 units had been imposed with interim environmental compensations. Total environmental compensation of ₹6,33,57,000/- had been imposed by the State PCB cumulatively on the stone mines and stone crusher units out of which ₹2,36,25,000/- was upon 55 stone mines and ₹3,97,32,000/- against 141 stone crushing units. The District Task Force had demolished 34 illegal crusher units and sealed and demolished another 107 where illegal storage, processing and dispatch of minerals were being indulged in. 70 such illegal processing units (stone crushers) had been sealed and demolished. Apart from lodging FIRs, further 47 numbers of illegal stone crushers were also sealed and demolished as observed during the inspection undertaken on January, 2019.

4. Vide order dated 05.12.2019, the Tribunal observed:-

“18. Upon consideration of the entire facts and circumstances borne out of the record of O.A. No. 23/2017/EZ and O.A. No. 776/2018, it is more than evident that the State machinery and the regulatory authorities had allowed a free run to the operation of mines and crusher units resulting in the present sordid condition. Even after the present cases were filed, they had been reluctant in dealing with the matters as directed by the Tribunal. They had to be perforce made to discharge their responsibilities and perform the duties. The actions taken by them are as a result of repeated orders passed by the Tribunal from time to time. The reports filed by the regulatory authorities are found to be far from satisfactory, mutually conflicting, bereft of clarity and inconsistent. The Member Secretary, State PCB who had appeared before the Tribunal was unable to answer questions put by the Tribunal and chose to be adamant in not furnishing the requisite information with clarity. As would be quite apparent from what had been noted earlier, the State PCB and the District authorities including the District Mining Officer did not appear to be clear as to how many stone mines and stone crusher units are in operation. The Member Secretary was also unable to answer on the distance maintained between the stone crusher units as well as the individual leases granted for stone mines. Taking the figure provided by the Member Secretary on 11.09.2019, there are more than 407 stone crushers and 300 stone mines operating in the area notwithstanding the fact that actual figures have not been provided as admittedly detailed inventORIZATION of all such units have not been undertaken thus far.

19. The photographs placed before us by the Applicant demonstrate an alarming situation where hills had been found to have been flattened due to mining out of the stones. The terms of reference which had been referred to the Committee vide order dated 19.01.2019 have also not been considered by the Committee so far except to give general recommendations in the report filed through the CPCB on 30.04.2019.

20. As regards undertaking carrying capacity assessment, ambient air quality assessment and effectiveness of pollution control devices, it has been stated in a note of the Committee as follows:

“Regarding Carrying Capacity Assessment, Ambient Air Quality Assessment and effectiveness of Pollution Control Devices is a study of one year to arrive at a certain conclusion. This in-depth study requires ‘Secondary Data Base’ of at least last five years and one ‘Primary Data Base’ to arrive at a meaningful conclusion through ‘Time Series’ analysis. Already in the World Bank project-National Ganga River Basin Authority (NGRBA) a project on industrial monitoring and assessment is given to Jadavpur University. Considering the gravity, similar study may be awarded to Department of Environmental Engineering, Jadavpur University or any other reputed Institute.”

We find the observation of the Committee to be unreasonable and an attempt to delay the entire process.

21. The Member Secretary instead of answering the questions upfront chose to hedge around to deflect the questions posed to him. Considering the obvious ineptitude of the Member Secretary, option before this Tribunal is either to take coercive measures for failure and negligence of the Member Secretary or to require the Chief Secretary to look into the matter and take decision whether such important office as Member Secretary, State PCB should be headed by any other suitable, technically sound person with the ability of effective environmental governance. Such decision may be taken at the earliest so that public service functions assigned to such high office are discharged in a responsible manner.”

5. Finally, the Tribunal directed as follows:-

“26. We direct the Committee constituted vide order dated 22.01.2019 to place before us a table giving the details of the stone mines and the stone crushers separately containing the following particulars:

- a) Name of the mines and crusher units and its locational depiction on the map of appropriate scale.*
- b) Dates of grant of Consent to Establish, Consent to Operate and, also Environmental Clearance (EC) in respect of stone mines. The area of stone mines and distance with adjoining mine(s) may clearly be stated.*
- c) Adequacy of pollution control devices of stone crushing units.*
- d) Details of individual violations of conditions of EC/Consent to Operate w.r.t. mining units and details of violation of Consent to Operate w.r.t. Stone Crushing units.*
- e) Action taken against those which do not have EC and Consent to Operate and against those which have violated the conditions of EC/Consent to Operate w.r.t. mining units.*
- f) The amount of environmental compensation assessed and recovered along with the individual computation sheets indicating period of default.”*

6. Accordingly, a joint inspection report dated 12.03.2020 has been filed on 21.09.2020 which is signed by the representatives of State PCB, CPCB and MoEF&CC. It is stated that the SEIAA is not in existence in

State of Jharkhand as its tenure expired on 08.11.2019 and no new body has been constituted.

7. We have perused the report and heard the Member Secretary who is present in person. The report gives details of some of the crushing units and mining units inspected. All the crushing units and mines have not been inspected. In respect of the units inspected, the observations are as follows:-

“A brief description of the mines and crushers and inspected by committee members on 16.01.2020.

*The committee members visited the crushers and Mines in Bakudi. Details of inspected mines and crushers are given in table B & A respectively. Details of violations of the EC & CTO conditions in inspected mines and CTO conditions of the inspected crushers are provided in table 7 photo no. 1 to 20 is also provided in annexure for depiction of the conditions prevailing in mines & crushers. **Most of the crushers violated the rules of EC and CTO. No boundary wall or metal sheet was found in the boundary but Jial Das unit these were present. Scanty plantation in all the unit. Presence and effectiveness of pollution control equipments especially water sprayers were present but their implementation is poor . Stone mines visited in Bakudi Sahebganj by the committee and revealed that almost all the mines bench height and width was not proper. Unscientific and unsystematic mining was being done in all mines visited . Haul roads were kutcha inadequate arrangement for water spraying on haul road.***

A brief description of the mines and crushers and inspected by committee members on 17.01.2020.

I. *The committee members visited Mundli area in Mizrachowki, Sahebganj district. There were large number of crushers (approx 40-50 crushers) in that area (see photos 31 to 35). **Most of the crushers had no boundary wall or metal sheet boundary around their periphery (see photo 31 to 34). There was no plantation around the crushing units (see photo 31 to 35) except in a very few. The trees in the area were laden with dust. Roads were full of trucks (see photo 31 &32). Human habitation was not far away and appeared to be in impact zone of these crushers (see photo 31&34). There was mining activities carried out in the hills adjacent to these crusher units (see photo 32&33). Most of the crushers were not running and no officials/staff were present to explain***

the measures taken to comply the CTO conditions. Therefore presence and effectiveness of pollution control equipments especially water sprayers could not be ascertained.

One of the crusher units of M/s Maa Vaishnavi Stone works was visited. The crusher owners & staff were present and showed the status of compliance of CTO conditions. Water sprayers on some of the crusher transfer points in their unit were provided but they were not able to prevent dust emissions while running of crusher (see photos 24 & 25). Some plantations had been done (see photo 26 & 27). It was instructed to grow more plants/trees around the crusher periphery in all sides. **On one side metal sheet boundary has been provided but its height was not adequate (see photo 26). Rainwater harvesting/Groundwater recharge arrangements were not provided in the unit.** Some workers of the crushers units were provided dust mask and helmet (see photo 28).

A large number of crushers in Mundli, Mirzachaouki would have many adverse impacts on the environment of the area that are enumerated below:

- a) **Dust pollution and subsequently adverse impact on health of workers and nearby population (habitations & dwellings were not very far from the crusher area, see photo 31&34).**
- b) **There was no large water tank, water storage area in the crusher premises. Generally crusher units withdraw groundwater for water spraying, etc and therefore groundwater resources of the area may get depleted.**
- c) **Due to very large number of vehicles the roads gets chocked, traffic jams occurs i.e. roads are not wide for such high traffic load vehicular emissions also add to air pollution. Besides such large number of vehicles plying on road at night also may lead to noise pollution in the area and other sleep related problems.**

II. Some stone mines were also visited in Mundli & Bhutha Mauza in Mirzachouki by committee members on 17.01.2020. Details of mines are given in table B above Some of the observations are as given below:

- i. **In almost all the mines bench height and width was not proper. Bench height was very high compared to the loading equipment posing danger to man and machinery (see photo 21,22,29,30,37 & 38). Unsystematic, unscientific mining was being done in all mines visited.**

- ii. **Environmental & pollution control measures were inadequate or not followed such as: Sump/ rainwater storage area was not provided and if provided in one or two mines the sump is very small & water in them would finish within 1-3 months of end of rainy season(see photo 21). Haul roads were Kutcha and inadequate arrangement for water spraying on haul roads was done. Overburden/ waste material was also dumped improperly. Mine plan/drawing sections were not made available so it was difficult to ascertain whether the O/B dump is within the lease area or outside. O/B was dumped without any catch drain, siltation ponds & retaining wall in its periphery (see photo 36,40,44,45). No grassing and vegetation on O/B dump was done (see photo 36,40,44,45). There was no separate dump for top soil storage.**
- iii. **There was one illegal mine approximately 300 to 400 m from the Mines of M/s Star India Mines as reported by DMO, Sahebganj (see photo 43) where O/B was dumped improperly without catch drains, retaining wall.**
- III. **One of the crusher (of M/s Tarkershwar Jaiswal) could be observed from the hills of Bhutha Mauza. The waste material which was used to fill & make the landfill was very improper thrown and lead to destruction of green belt in the surrounding, in fact the land fill was destroying the green belt in periphery (see photo 43). In the further low lying side there were two ponds and silt of O/B materials from mines and the M/s Tarkeshwar Jaiswal crusher would flow into these ponds in rainy season.**
- IV. **The committee members visited Kirtania, Mirzachowki where again there was a large number of crushers). Due to such large number of crushers there were numerous trucks moving, standing in the area which resulted in traffic jams, air pollution, noise pollution, etc. The details of mines and crushers inspected in this area in Mirzachowki is given in table A & B. Mining was done in hills. In almost all the mines bench height and width was not proper Bench height was very high compared to the loading equipment posing danger to man and machinery. Unsystematic, unscientific mining was being done, sump/ rainwater storage area was not provided and if provided (in one mine of CTS industries ltd.) the sump is small & water in them would finish within 3-4 months of rainy season. Haul roads were Kutcha and there was no arrangement for water spraying on haul roads. Overburden water material was also dumped im-**

properly. Mine plan/drawing sections were not made available so it was difficult to ascertain whether the O/B dumped is within the lease area or outside. O/B was dumped without any catch drain, siltation ponds & retaining wall in its periphery (see photo 63,67). No grassing and vegetation on O/B dump was done (see photo 63,67). There was no separate dump for top soil storage. Illegal mines of Md. Yashin was visited (see photo 55&56) in Belbhadri Mauza (details in table B). Illegal Mines adjacent to mine of M/s S.S Blackstone can also be seen(see photo 66). District Mining Officials & JSPCB members were not aware of the person responsible for illegal mining at that place (i.e adjacent to M/s S.S Blackstone Mine in Belbhadri Mouza). Thick dust layers seen on the floor of the Crusher units (see photo 54,62) would lead to dust propagation wherever wind blows. Housekeeping should be improved & floor should be cleared of dust regularly.

- V. One important point of observation at that place at other places in Sahebganj district was that crushers are established on the hill, hill slopes and therefore they are at higher altitude. The metal sheet used for boundary in the periphery become useless since it is in the lower portion of these crushers & therefore useless in control in propagation of dust to far areas.**

Crushers should be located in the bottom of the hills, in low altitude or else the brick wall should be high enough to prevent the dust from propagation to flung areas.

- VI. Objectionable location of crusher resulting in close cluster causing accumulation of pollution in excess of carrying capacity. Such close clusters of stone crusher should not be established in the first place , if at all necessary or unavoidable ,prior EIA with appropriate EMP is essential.**

A brief description of the mines and crushers and inspected by committee members on 18.01.2020.

- I. Some crushers were observed adjacent to the road in the Badi Kodarjana,Pratapganj, Dt: Sahenganj(see table 9 and see photo 68to 76). The crushers were within a distance of 50-100 m from the road. A railway line was also seen within 75-125m from the above crushers(68,72,76). Crushers were not running during inspection. One old fort was observed within 100-200 distance from one the crushing unit(see photo 76). Trees near these crushers were laden with dust (see photo 71,73 & 74). **There was no wall/metal sheet at****

the boundary of these crushers. No/negligible plantation was observed in the periphery of these crushers. Other details of these crusher units are given in table 9 District Mining officer & Regional Officer JSPCB informed that these crushers were sealed and FIR has been lodged against these crushers. Since these were illegal units, action had been taken on these crusher units (see table 9). However, during inspection it was observed that all the equipments & installations were in place & the crushers were operational before inspections. At some crushers the water was warm in tanks, DG set was in place in some other, etc. which indicated that even though action had been taken by district administration the crushers units have not stopped working implying that the closure action taken by authority has not been fully effective.

- II. *The committee member visited the Hill in Sundre Mauza. On the way to the hill one small mine pit was observed (see photo 77). DMO Sahebganj informed that it was on illegal mines. (see table above for lat,long) On the top of hill two legal mines of Shri Patru Singh & Shri Ramsewak Tiwary were observed (see table above). **Scientific & systematic mining was not observed in these mines** (see photo 79,81,82 &83). Bench height was too high which posed danger to men and machinery. Bench width was not proper/very less/negligible. There was no storage of water in the mines for water sprinkling to minimize/control dust emissions. **Green belt development was not done. Overburden/waste material was dumped without any Catch drain, siltation ponds & retaining wall in its periphery. No grassing & vegetation on O/B dump was done. There was no dump for top soil storage. No water tanker or fixed water sprinklers was observed for water sprinkling system for control of dust emissions. Roads were kutcha roads. Mine plan/drawing/sections were not made available so it was difficult to ascertain whether the O/B dump is within the lease area or outside.***

Near the mines of Shri Ram Sewak Tiwary O/B material/waste was thrown over a natural nala flowing in the hills (see photo 84& 85). Even though water was passing through the waste material but it carried silt with it and ultimately silt would reach the main drainage system/river of the area. Below the hills there was a large lake (see photo86). Mines projects there should follow the conditions of EC and CTO so as to prevent pollutions in the lakes/rivers nearby.

On the hills near Sundre Mauza there were illegal mining also being carried out (see photo 87& 89). DMO, Sahebganj informed that action has been taken on the owners of some of the illegal mines

(see table 8). At one place of illegal mines different people mined different portions of the hills adjacent to each other (see photo 89) without any systematic & scientific approach. Between the low lying areas of two hills there was a local nala (jharna) as reported by some local people (see photo 88) but it had turned dry due to mining in the hills. The committee members also observed signs of many illegal mining operations that were carried out on that hill and tried to approach those portions for closer look. However at one place a truck blocked the road (see photo 91) and the members had to return from that place since driver of the truck could not be found and the truck covered the whole road.

- III. The committee members visited some illegal crushers near Mirzachowki Railway station (approx 0.5 km to 1 km from Mirzachowki Railway Station). **There were a 12-14 different crushers units at that place (see photo 92 &93). DMO Sahebganj informed that 12 crushers at that location (Bartalla in Mirzachawki) had been sealed and FIR lodged vide letter no. 551 dated 11.5.2019 on 01.03.2019 in Mirzachawki P.S but once again the user agency have made it operational violating the closure.**

An enlistment of environmental protection and pollution control measures, norms and good practices meant for stone crushers in Sahebganj, which have not been followed in general.

1. Location of crusher point. **Crushers should be located in the bottom of the hills, in low altitude or else the brick wall should be high enough to prevent the dust from propagation to far flung areas.**
2. Mostly the crusher units that were visited have installed some water spraying arrangements but the sprayers were ineffective. Dust emissions took place when the crushers were in running conditions. Some of the measures that can be taken up for minimizing the dust emissions are:
 - a. **Fogging/Misting arrangement at the hopper (where trucks unload the large stones) and other transfer points/loading/unloading points should be installed.** Although the system is bit expensive than general water sprayers it is very effective method for dust control. Also **consumption of water would be considerably reduced through the use of this system.**
 - b. **Use of G.I water pipes instead of plastic pipes that break with the rocks/boulders.**
 - c. **Mist guns should be kept/utilised in the crusher area so that even after fogging, water**

spraying some dust generates & emission occurs there mist guns suppress them.

- d. Roads should be made pucca within the crusher premises & the approach road from mine to crushers should also be made pucca.
 - e. **Availability of enough water for water spraying/sprinkling should be ensured. Large storage tanks may be constructed within the crusher area, Rainwater harvesting measures, accumulation of rainwater must be done so that there is no/negligible dependency on the groundwater, local rivers.**
3. Green belt development should be done in and around the crusher area.
 4. CGWB/State Ground Water Board should be consulted and measures taken for groundwater recharge/rainwater harvesting.
 5. Housekeeping should be done regularly, layers of dust should not be allowed to accumulate on floor of the crusher premises.
 6. Almost in all the premises of Crushers there is a huge accumulation of fines very small size crushed stones, huge dumps of such fines/ fine chips could be observed at many places (see photos 5,15,35,54). **The dumps of these fines/fine chips are very steep and there can be slope failures posing risk to man & machinery, etc. If the demand of those fines/fine chips in the market is very less/negligible they can be used for backfilling in the nearby mines. This can prove to be win-win situation for both mine owners and crusher owners.**
 7. JSPCB has made PM10 analyzers mandatory for the crushing units. It is recommended that stringent action including closure should be taken on these units that don't install PM10 analysers within one month/stipulated time given by JSPCB. JSPCB has given show cause to 340 Crushers during the month of November 2019 after their inspections. **After that Environmental Compensation have also be done on many crusher units in November 2019. Still during inspections on 16, 17, 18 Jan 2020 most of the CTO conditions are partially complied or are not complied. In such a case units can be given closure notice after hearing.**
 8. **JSPCB should not give CTE/CTO to large number of crushers in an area** (for example Mundli (30-40 crushers), Kirtania (more than 60 crushers) without proper carrying capacity study, cluster EIA-EMP (either by JSPCB or by Project proponents in the cluster).
 9. Mass awareness program should be conducted by JSPCB & District Administration explaining the adverse effects of dust on the lungs, human body, irreversible nature of diseases like silicosis, etc. Local people, workers, crushers owners should be the target audience of such mass awareness program. Awareness program should also include best practices/techniques to control dust in

crushers with photographs, scarcity of groundwater & methods to recharge it, greenbelt development & their use.

10. **Some of the illegal units in which action has been taken by district administration have again started to operate as was observed during inspection. It is recommended that for such illegal units demolition of crusher units & other penalties levied be done.**

An enlistment of environmental protection and pollution control measures, norms and good practices meant for stone mines in Sahebganj, which have not been followed in general

1. Mines should strictly follow mine plans. Bench height, width should be as per the mine plan approved. In any case bench height should not be more than boom height of the loading equipment. Bench width should not be less than the bench height. In almost all the mines bench height was more than stipulated posing danger to man & machinery. DGMS (Directorate **General of Mines Safety**) should look into the matter and actions may be taken for not following the Metal Mining regulations, Mine Rules, DGMS guidelines.
2. **Pillars should be installed to demarcate the mine boundary.** No O/B or waste material should be dumped outside the lease boundary. **Surface plan/drawing/sections should be made available to the inspecting officers (DMO, JSPCB, MoEFCC, DGMS, etc.) by mine owners during inspections**
3. Catch drains, siltation ponds, retaining walls in the periphery of O/B dumps should be made. Grassing and vegetation on the O/B dumps should also be done.
4. Sump/lower portion in a mine where rainwater can be stored in plenty so that it caters to all seasons should be made and water stored in it. This accumulated rainwater could be used for water sprinkling on haul roads & other places in mines and also used for green belt development, etc.
5. **At least two water tankers should be kept in the mines. A log book of water tanker should be filled/maintained mentioning registration number, running hours, kilometer reading, place of water sprinkling, shift wise. Log book of water tanker should be signed by competent person in the mine. Copy of log book should be sent with six-monthly compliance reports.**
6. Green belt development should be done in and around the mine.
7. Approach roads to and from the mine should be made black top.
8. Top soil should be stored on a site as submitted on the mine plan.
9. Backfilling should be practiced as per the approved mine plan. **Mine owners should keep in view that mine closures have to be done as per the progressive & final closure plan. DMO should also**

keep in mind that mine closure is extremely important aspect for sustainable and environment friendly mining and ensure that it takes place as provided in mine plan.

10. **The committee member visited Mundli, Bakudi, Sundre, etc. and observed that most mines were in the hills & were located near to each other. Mine leases were given adjacent to other/adjoning mine which means hill may be excavated altogether at one go(see table B and map. Fig 1). A decision may be taken by State Government/ District administration after discussion with experts in environment, ecology, as to whether mining is essential in the hills . If mining in hills is very essential the mine lease should be so given that mining is done in one portion of mine, mine operated, mine closure plan implemented and then other lease adjacent to previous mine lease executed. In such a manner the hills may not plundered haphazardly and DMO also can ensure implementation of mine plan/mine closure plan effectively.**
11. **Mass awareness program should be made including knowledge about mine plans, mine safety rules (involving DGMS), affect of dust on workers & local, affect of silt on nearby rivers/nallas, depletion of groundwater resource, systematic & scientific mining, etc., targeting mine owners and works, local people. JSPCB, DMO should conduct such awareness program taking the help of Indian Bureau of Mines and Directorate General of Mines safety. Model Mines following the condition of EC& CTO may be developed in all the tehsils where mining activity is taking place. Capacity enhancement of District mining officials and JSPCB RO should be done (both quantitatively & qualitatively) to ensure the implementation of conditions of EC& CTO.**

All the above stipulations are generally provided in EC & CTO but they were not found to be implemented in any of the mines visited by committee members. JSPCB has issued show case notices to 111 Mines in Sahebganj District. Also they have charged Environmental Compensation to Mines. But still the conditions of EC&CTO are not complied as can be seen from tables (B) and photos annexed with this report.”

8. Apart from the above report, the State PCB has filed an undated report under the heading ‘Additional information for the Hon’ble Tribunal w.r.t. the measures taken by the Jharkhand State Pollution Control

Board for curbing the air pollution caused by the stone mines/crushers in Sahebganj district' which states that Source Apportionment Study, Carrying Capacity Assessment and preparation of Clean Air Action Plan for Sahebganj district has been awarded to Centre for Environment and Energy Development (CEED), New Delhi. The preliminary Clean Air Action Plan for Sahebganj district has been submitted by them and the final report is expected by January 2021. It is further stated that total Environmental Compensation of INR 6,33,57,000/- had been imposed by JSPCB cumulatively on the stone mines and stone crusher units out of which INR 2,36,25,000/- was upon 55 stone mines and INR 3,97,32,000/- against 141 stone crushing units. An Environmental Compensation amounting to INR 1,66,71,000/- has been collected by JSPCB cumulatively from the stone mines and stone crusher units. Due to Covid-19 pandemic the Occupiers have requested for some extra time to deposit the Environmental Compensation. Accordingly, time has been granted till December, 2020 with a clause that interest as per the guidelines of CPCB will be charged on the Units till the deposition of the Compensation to the Board.

9. From the above, it is patent that the violation of environmental norms is rampant and in spite of orders passed by the Tribunal in the last three years, the situation has only deteriorated on account of failure of the statutory regulator in taking adequate action. The State PCB appears either to be in collusion or incompetent in performing its duties of taking stringent action against rampant violation of law. The damage to the environment and public health cannot be brushed aside and effective measures are required to be taken for realizing the guaranteed Fundamental Right to clean environment which is part of Right to life. The Tribunal has to enforce the principle of "Sustainable Development",

the “Precautionary Principle” and the “Polluter Pays” principle under Section 20 read with Section 15 of the National Green Tribunal Act, 2010. The environmental compensation assessed is highly inadequate, in spite of the parameters being clearly laid down, the State PCB has chosen to assess compensation equal to violation on or before 30 days though violation is more than three years in flagrant violation of the mandate of ‘Polluter Pays’ principle, to the benefit of the law violators. Thus, there is patent incompetence and /or collusion which needs to be looked into at appropriate level. If situation is not remedied, the State itself may have to be held accountable for causing huge loss to the environment. The loss apparently is to the extent of hundreds of crores. The agency hired is not shown to be having requisite credentials. The exercise falls short of the requirements. Such exercise must be done with the involvement of CPCB

10. In view of above, to enforce the rule of law and for protection of environment and public health, we are of the view that a scientific action plan is required to be prepared after in-depth study of the problem with a clear road map. For this purpose, we constitute a four-member Committee to be headed by an officer of the rank of Joint Secretary in the MoEF&CC, Government of India. The other three members will be the nominees of Indian Institute of Technology (IIT), Dhanbad, a Senior Officer of CPCB and Secretary Environment, Government of Jharkhand. The State PCB and the District Magistrate, Sahebganj will provide all logistic support to the Committee to undertake their task. It will be open to the Committee to co-opt any other Expert or Institution and to conduct the proceedings in such manner as may be found viable. CPCB will be the nodal agency for compliance. First meeting of the Committee may be held within one month. Restoration plan and mode of execution

may also be proposed. The report may be furnished within three months by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/ OCR Support PDF and not in the form of Image PDF.

11. There is a need to examine as to how many stone crushers and mining units can be allowed and subject to what special conditions, having regard to the existing scenario already noted and to what extent the existing activities need to be regulated. It is made clear that in the light of joint Committee and observations of the Tribunal, with a view to protect environment, the State PCB must perform its duties of maintaining necessary vigil and close polluting activities not complying with the norms and permit them only when norms are achieved. The 'Polluter Pays' principle should be implemented effectively having regard to the cost of restoration, extent of damage and the deterrent element. The Chief Secretary may in light of the above observation to take steps to revamp the State PCB and file his own affidavit of compliance, failing which this Tribunal may have to take stringent action for enforcing the law.

12. A copy of this order be forwarded to the Secretary, MoEF&CC, Government of India, IIT, Dhanbad, CPCB, the Chief Secretary of Jharkhand and the District Magistrate, Sahebganj. The State PCB is already represented during the hearing and has been apprised of the order.

List for further consideration on 01.02.2021.

Adarsh Kumar Goel, CP

S. P. Wangdi, JM

Dr. Nagin Nanda, EM

September 23, 2020
Original Application No. 23/2017 (EZ)
and connected matters.
SN



केन्द्रीय प्रदूषण नियंत्रण बोर्ड

(पर्यावरण वन, एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार)

CENTRAL POLLUTION CONTROL BOARD

(Ministry of Environment, Forests & Climate Change, Government of India)

Eastern Regional Directorate

502, Southend Conclave, 1582, Rajdanga Main Road, Kolkata - 700 107

File No. EZO/JHR/COR/F-751/Court Matter/NGT/365

Date: 20.11.2020

OFFICE MEMORANDUM

Subject: Minutes of Meeting of the Committee constituted by Hon'ble NGT vide its order dated 23.09.2020 in the matter of Syed Arshad Nasar Vs Union of India with Ramchandra Chaurasia Vs State of Jharkhand in O.A. No. 23/2017(EZ) with O.A. No 776/2018 held on 12.11.2020 at 4:30 PM through Video Conference (VC)

A copy of Minutes of the meeting as approved by the competent authority (File No. L-11011/54/2017-IA-II(M)pt), on preparation of scientific action plan after in depth study of the problem to enforce the rule of law and for protection of environment and public health in compliance to Hon'ble NGT order dated 23.09.2020 held through Video Conference on 12.11.2020 at 4:30 PM under the chairmanship of Joint Secretary (MoEF&CC, GoI) is forwarded herewith for kind information/necessary action.

M.K. Biswas
Regional Director

Encl: As above.

To:

- i. Sh A.P.Singh, Principle Secretary, MoEF&CC
- ii. Sh R L Bakshi, Member Secretary, JSPCB
- iii. Sh Sundeep, Director, MoEF&CC
- iv. Sh Pankaj Verma, Additional Director, MoEF&CC
- v. Sh Rajeev Ranjan, Additional Director, MoEF&CC, Regional Office (ECZ)-Ranchi
- vi. Sh S.K.Gupta, AD & Div. Head, CPCB, Delhi
- vii. Dr. M.K. Jain, Professor, IIT (ISM), Dhanbad
- viii. Sh. Ramniwash Yadav, District Magistrate, Sahibganj

Copy for kind information to:

- i. PS to Economic Advisor/Joint Secretary Level (Sh Yashvir Singh), MoEF&CC
- ii. PS to Member Secretary, CPCB

M.K. Biswas

Minutes of Meeting of the Committee constituted by Hon'ble NGT vide its order dated 23.09.2020 in the matter of Syed Arshad Nasar Vs Union of India with Ramchandra Chaurasia Vs State of Jharkhand in O.A. No. 23/2017(EZ) with O.A. No 776/2018 held on 12.11.2020 at 4:30 PM through Video Conference (VC)

With reference to matter of Syed Arshad Nasar Vs Union of India with Ramchandra Chaurasia Vs State of Jharkhand in O.A. No. 23/2017(EZ) with O.A. No 776/2018, three reports dated-30/04/2019, 30/10/2019 & 21/09/2020 were submitted to Hon'ble NGT by the joint committee with members from MoEF&CC, SEIAA, JSPCB and CPCB. In this regard, Hon'ble NGT vide order dated 23/09/2020 had again constituted a Committee comprising the following members:

- a. Joint Secretary, MoEF&CC, Gol (Head of the committee)
- b. Nominees of Indian Institute of Technology (IIT), Dhanbad (Committee Member)
- c. Senior Officer of CPCB (Nodal Agency & Committee Member)
- d) Secretary, Environment, Government of Jharkhand (Committee Member)

2. Hon'ble NGT has stated in its order that the State PCB and the District Magistrate will provide all logistic support to the Committee to undertake their task. It will be open to the Committee to co-opt any other expert or institution.

3. This Committee was constituted to enforce the rule of law and for protection of environment and public health. The first meeting of the Committee was held through VC on 12.11.2020 at 4:30 pm where all nominated members along with Member Secretary, JSPCB and District Magistrate of Sahebganj District were present. List of the officials who attended the meeting is enclosed as **Annexure I**.

4. Shri M. K. Biswas, Regional Director, CPCB Regional Directorate Kolkata welcomed all the members of the Committee and briefed about the matter regarding Enforcement of Environmental Norms in Operation of Quarrying and Crushing units in Rajmahal hills of Vindhya Mountains, Dist: Sahebganj, Jharkahnd. He also briefed about the case along with important observations made by Hon'ble NGT in its relevant orders. Shri R L Bakshi Member Secretary (MS), Jharkhand State Pollution Control Board (JSPCB) also apprised the Committee about the action taken and action required to be taken in view of the latest order. He also shared his experiences collected through personal appearances in the Tribunal.

5. Member Secretary, JSPCB informed that regular air quality monitoring is being carried out in Sahebganj District and Air Quality Index (AQI) in the area is found satisfactory in majority of the areas. It was also stated that actions have been taken including closure of illegal mining, imposing penalties on defaulters. It was highlighted that the illegal mining and the allied problems are only restricted to few pockets of the area, which needed to be targeted. However, Joint Secretary, MoEF&CC, Chairman of the Committee emphasized that focus should be given on the area mentioned by the Petitioner to improve the Air Quality.

6. DM, Sahebganj was requested to regulate District Mining Task Force (DMTF) to

ensure closure of illegal mines and crushers as well as to take necessary actions on the mines and crushers who are not following Standard Operating Protocol (SOP). The DMTF is required to take immediate action and prepare a report on its action.

7. It was also decided that final report of Source Apportionment Study, Carrying Capacity Assessment and Clean Air Action Plan, which has already been awarded to Centre for Environment and Energy Development (CEED), Delhi to be submitted by January, 2021 would be considered by the Committee for further action.

8. Shri Sundeep, Scientist F, MoEF&CC stressed about verification of individual units and operational status of existing APCDs with specific units to prepare a comprehensive report.

9. Based on the deliberations held, the Committee decided as follows:

- I. Approach shall be holistic in nature.
- II. Inventorization of all activities shall be carried out along with compliance verification status by individual units w.r.t. EC & CTO.
- III. The units being operated illegally shall be targeted first and action including issuance of closure order by JSPCB be issued and closure be ensured through District Mining Task Force.
- IV. The units which are not following SOP as per CTO & EC, penalties may be imposed on them.
- V. AQI data from 14/02/2017 to till date shall be compiled by JSPCB and time series analysis of the trend shall be carried out in consultation with IIT ISM Dhanbad, to show the improvement in air quality since the date of filling petition.
- VI. Monitoring of the transportation system to ensure transportation of goods in covered vehicles of hard body or appropriate covers to avoid dust pollution and to take necessary action against the defaulters.
- VII. The Jharkhand State Pollution Control Board shall prepare a comprehensive report in consultation with ERD Kolkata.
- VIII. The report to be submitted by CEED would be considered by the Committee for further action
- IX. Next meeting of the committee be conducted in the mid of the December 2020.

The meeting ended with a vote of thanks to the chair.

Annexure-I

| SI No | Name of Officer | Organization | Designation | E-mail id |
|--------------|------------------------|---------------------|--|---------------------|
| 1 | Shri Yashvir Singh | MoEF&CC | Economic Advisor/Joint Secretary level | yashvir@nic.in |
| 2. | Sh. A.P.Singh | Jharkhand Govt. | Principal Secretary | cs-jharkhand@nic.in |

| | | | | |
|----|--------------------------|---|------------------------|-----------------------------|
| 4 | Sh RLBakshi | JSPCB | Member Secretary | ranchijspcb@gmail.com |
| 5 | Sh Sundeep | MoEF&CC | Scientist-F | sundeep.cpcb@nic.in |
| 6 | Sh Pankaj Verma | MoEF&CC | Scientist-E | pankaj.verma@nic.in |
| 7 | Sh Rajeev Ranjan | MoEF&CC, Regional Office (ECZ)- Ranchi | Scientist-E | ranjan.rajeev@nic.in |
| 8 | Sh S.K.Gupta | CPCB, Delhi | AD & Div. Head | skgupta110@yahoo.com |
| 9 | Dr. M.K. Jain | IIT (ISM),Dhanbad | Professor | manish@iitism.ac.in |
| 10 | Sh. Ramniwas Yadav | Sahibganj District, Government of Jharkhand | District Magistrate | dc-sah@nic.in |
| 11 | Sh M.K. Biswas | CPCB, ERD- Kolkata | Regional Director | biswasmrinal@gmail.com |
| 12 | Dr. G.P. Singh | CPCB, ERD- Kolkata | Sc-D | singh.gyanprakash@gmail.com |



केन्द्रीय प्रदूषण नियंत्रण बोर्ड

(पर्यावरण वन, एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार)

CENTRAL POLLUTION CONTROL BOARD

(Ministry of Environment, Forests & Climate Change, Government of India)

Eastern Regional Directorate

502, Southend Conclave, 1582, Rajdanga Main Road, Kolkata - 700 107

File No. EZO/JHR/COR/F-751/Court Matter/NGT/1219

Date: 05.01.2021

OFFICE MEMORANDUM

Subject: Minutes of 2nd Meeting of the Committee constituted by Hon'ble NGT vide its order dated 23.09.2020 in the matter of Syed Arshad Nasar Vs Union of India with Ramchandra Chaurasia Vs State of Jharkhand in O.A. No. 23/2017(EZ) with O.A. No 776/2018 held on 30.12.2020 at 11:00 AM through Video Conference (VC)

A copy of Minutes of the meeting as approved by the competent authority (L-11011/54/2017-IA-II(M)pt) on preparation of scientific action plan after in depth study of the problem to enforce the rule of law and for protection of environment and public health in compliance to Hon'ble NGT order dated 23.09.2020 held through Video Conference on 30.12.2020 at 11:00 AM under the chairmanship of Joint Secretary (MoEF&CC, GoI) is forwarded herewith for information/necessary actions.


(M.K. Biswas)

A.D.&Regional Director

Encl: As above.

To:

- i. Sh A.P.Singh, Principle Secretary, MoEF&CC
- ii. Sh R L Bakshi, Member Secretary, JSPCB
- iii. Sh Sundeep, Director, MoEF&CC
- iv. Sh Pankaj Verma, Additional Director, MoEF&CC
- v. Sh Rajeev Ranjan, Additional Director, MoEF&CC, Regional Office (ECZ)-Ranchi
- vi. Sh S.K.Gupta, Additional Director & Div. Head, CPCB, Delhi
- vii. Dr. M.K. Jain, Professor, IIT (ISM), Dhanbad
- viii. Sh. Ramniwash Yadav, District Magistrate, Sahibganj
- ix. Sh. M.K. Biswas, A.D. & Regional Director, CPCB, ERD-Kolkata
- x. Sh. G.P Singh, Sc-D, CPCB, ERD-Kolkata

Copy for kind information to:

- i. PS to Joint Secretary (Sh Naresh Pal Gangwar, MoEF&CC)
- ii. PS to Member Secretary, CPCB


(M.K. Biswas)

Minutes of 2nd Meeting of the Committee constituted by Hon'ble NGT vide its order dated 23.09.2020 in the matter of Syed Arshad Nasar Vs Union of India with Ramchandra Chaurasia Vs State of Jharkhand in O.A. No. 23/2017(EZ) with O.A. No 776/2018 held on 30.12.2020 at 11:00 AM through video conferencing

With reference to matter of Syed Arshad Nasar Vs Union of India with Ramchandra Chaurasia Vs State of Jharkhand in O.A. No. 23/2017(EZ) with O.A. No 776/2018, 1st Joint Committee Meeting was held on 12.11.2020, where it was decided to review the progress in the 2nd Joint Committee Meeting to be held in December 2020. In this regard, the second meeting of the committee was held through Video Conferencing (VC) on 30.12.2020 at 11:00 am where all nominated members along with Member Secretary (MS), JSPCB, District Magistrate (DM) Sahebganj and District Forest Officer (DFO) Sahebganj were present.

*List of the officials attended the meeting is enclosed at **Annexure I**.*

1. Shri M. K. Biswas, Regional Director, Kolkata member convenor of the committee welcomed the Chairman (Sri. Naresh Pal Gangwar, Joint Secretary- CP Division) and introduced all the committee members. He requested Member Secretary (MS), JSPCB to apprise the committee about the case.
2. Shri R L Bakshi MS, JSPCB informed about the matter regarding Enforcement of Environmental Norms in Operation of Quarrying and Crushing units in Rajmahal hills of Vindhya Mountains, Dist: Sahebganj, Jharkhand. He also briefed about history of the case along with important observations made by Hon'ble NGT in its relevant orders. Further, he appraised the committee about the action taken with respect to the decision of the 1st Joint committee meeting. He also mentioned the collection of approx. 2 Cr. as Environmental Compensation from the non-complying units.
3. It was informed that the Source Apportionment Study, Carrying Capacity Assessment and Clean Air Action Plan report was expected to be submitted by Jan 2021 by Centre for Environment and Energy Development (CEED), Delhi, as per the work order, but due to COVID situation, it is expected to be submitted by March 2021. Some site studies is required to be performed. The report will help the committee to take a scientifically sound approach in preparation of final measurable action plans.
4. Shri. Ramnivas Yadav, DM, Sahibganj highlighted the action taken during this period. He stated that a four member committee with member from Regional Office, JSPCB, District Mining Office, Sub-Divisional Office and District Forest Office was constituted for the inspection of the stone crushers and stone

mines. The inspections are carried out according to the comprehensive format given by CPCB, ERD Kolkata. Out of total 212 stone mines and 402 stone crushers, 94 mines and 91 crushers were already inspected till date. Even Sh. Manish Tiwari, District Forest Officer, Sahebganj highlighted that cluster approaches for mines and restoration plans considered in the area.

5. Shri. Naresh Pal Gangwar, Joint Secretary, MoEF&CC asked the DM & District Mining Task Force (DMTF) Sahebganj, to categorize the stone mines and stone crushers into 3 classes as I) Illegal mines or crushers who have no Environment Clearance (EC) II) mines or crushers who have EC but not following the norms stipulated by the concerned authorities III) mines or crushers who have EC and also following the norms stipulated by the concerned authorities. He also stressed to focus on the Hon'ble NGT order dt. 23.09.2020 regarding the aspect of illegal mining and take necessary action with respect to it. He highlighted the responsibility to be fixed for individual units, collective responsibility of units in same cluster, and assign responsibility to concerned government agencies (such as Transport Dept., JSPCB, DM Office, District Mining Office, District Forest Office, etc) to enforce effective implementation of applicable rules and regulations. Progress made so far by the 40-member district committee should also be articulated and submitted to this committee. The recommendation for restoration planning should be monitorable and implementable. He also pointed out that the reasons for rejection of the earlier reports by Hon'ble NGT are to be assessed properly and the short coming identified or highlighted are to be addressed.
6. Shri. Sundeep, MoEF&CC stressed about preparation of progress report on the activities completed till now. He also emphasized on classification of crushers based on the capacity and area and compliance status of major conditions imposed through CTO by each industries. These information along with action taken by DMTF and other agencies shall form part of progress report and can be submitted to hon'ble NGT for their consideration, before the final report is prepared and submitted based on the outcome of Carrying capacity study.
7. Based on the deliberation held, following were decided;
 1. 1st Draft committee report to be prepared by Dr. M.K. Jain, committee member, IIT-ISM Dhanbad and member from JSPCB.

The report shall cover the following:

 - a. Highlights of the previous reports along with the reasons for rejection as per the Hon'ble NGT order. Also, the shortcomings in the earlier reports need to be identified and addressed.
 - b. Action taken till date with respect to Hon'ble NGT order, dated 23.09.2020.
 - c. Categorization of stone crushers and mines in three classes as I) Illegal mines or crushers who have no Environment Clearance (EC) II) mines or crushers who have EC but not following the norms stipulated by the concerned

- authorities III) mines or crushers who have EC and also following the norms stipulated by the concerned authorities
- d. Categorization of stone crushers based on capacity and area.
 - e. Compliance status of each industries/mines/Stone crusher in the region to the major conditions imposed in CTO by JSPCB.
 - f. Details of responsibility designated for: i) individual units; ii) collective responsibility of units in Cluster and iii) government agencies (such as Transport Dept., JSPCB, DM Office, District Mining Office, District Forest Office, etc)
 - g. Timeline for enforcement, compliance and providing the suggestive measures for prevention, control and abatement of pollution against the identified responsibility assigned to stakeholders
 - h. Budget for completion of these responsibilities, if required.
 - i. Recommendations for improvement of environment to achieve a substantial outcome within a fixed timeline.
 - j. The recommendations shall be quantifiable and monitorable and practice for its implementation
 - k. The data and information available with JSPCb, DM-Sahebgunj, DMTF may be provided to Dr. M. K. Jain, who with assistance of concern RO of JSPCB will prepare the draft report. CPCB, ERD Kolkata shall also extend all necessary help as and when required, including visit to the area. The draft report shall be prepared and circulated before 20 Jan 2021 to all members for suggestions/inputs.CPCB-ERD will compile the inputs from all members and finalized the draft report for finals approval of Chairman of the committee before finalizing the progress report to Hon'ble NGT.
- II. The action taken w.r.t Hon'ble NGT order and proposed restoration plans to be presented before committee by Dr. M. K. Jain, IIT-ISM Dhanbad.
- III. The Principle investigator (P.I) of the study "Source Apportionment Study, Carrying Capacity Assessment and Clean Air Action Plan" from Centre for Environment and Energy Development (CEED), Delhi is co-opted by the committee as a member and to be invited in the next joint committee meeting to give their input.
- IV. Field visit by the committee members to be scheduled after preparation of 1st draft report for verification of the stone mines and crushers.
- V. The committee members were of the opinion that the final report on action plan and other assessment for reporting to Hon'ble NGT may require another 3 months considering the submission of carrying capacity report. It was decided that a progress report on the action taken and the verification report on the compliance assessment made till 30 Jan 2020 shall form part of a request to Hon'ble NGT for granting extension of time of another 4 months, i.e. 30 April 2021. CPCB-ERD may co-ordinate and prepare necessary documents in this regard. The 1st draft committee report to be filed before the next date of hearing i.e. 01.02.2021.
- VI. Next meeting of the committee be conducted in the end of Jan 2020.

The meeting ended with thanks to and from the chair.

Annexure-I

| SI No | Name of Officer | Organization | Designation | E-mail id |
|-------|-----------------------|---|-------------------------|-----------------------------|
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| 8 | Sh S.K.Gupta | CPCB, Delhi | AD & Div. Head | skgupta110@yahoo.com |
| 9 | Dr.M.K. Jain | IIT (ISM),Dhanbad | Professor | manish@iitism.ac.in |
| 10 | Sh. RamniwashYadav | Sahibganj District, Government of Jharkhand | District Magistrate | dc-sah@nic.in |
| 11 | Sh. Kamlakant Pathak | RO, JSPCB | Regional Officer | |
| 12 | Sh. Manish Tiwari | DFO, Sahibganj | District Forest Officer | |
| 13 | Sh. Sunil Kumar | OSD Forest, Environment, Gov. of Jharkhand | OSD | |
| 14 | Sh M.KBiswas | CPCB, ERD-Kolkata | Regional Director | biswasmrinal@gmail.com |
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केन्द्रीय प्रदूषण नियंत्रण बोर्ड

(पर्यावरण वन, एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार)

CENTRAL POLLUTION CONTROL BOARD

(Ministry of Environment, Forests & Climate Change, Government of India)

Eastern Regional Directorate

502, Southend Conclave, 1582, Rajdanga Main Road, Kolkata - 700 107

File No. EZO/JHR/COR/F-751/Court Matter/NGT/OA23/1863

Date: 10.02.2021

OFFICE MEMORANDUM

Subject: Minutes of 3rd Meeting of the Joint Committee constituted by Hon'ble NGT vide its order dated 23.09.2020 in the matter of Syed Arshad Nasar Vs Union of India with Ramchandra Chaurasia Vs State of Jharkhand in O.A. No. 23/2017(EZ) with O.A. No 776/2018 held on 01.02.2021 at 4:30 PM through video conferencing

A copy of Minutes of the meeting as approved by the competent authority on preparation of scientific action plan after in depth study of the problem to enforce the rule of law and for protection of environment and public health in compliance to Hon'ble NGT order dated 23.09.2020 held through Video Conference on 01.02.2020 at 4:30 PM under the chairmanship of Joint Secretary (MoEF&CC, GoI) is forwarded herewith for information/necessary actions.


(M.K. Biswas)

AD & Regional Director

Encl: As above.

To:

- i. Sh A.P.Singh, Principle Secretary, MoEF&CC
- ii. Sh R L Bakshi, Member Secretary, JSPCB
- iii. Sh Sundeep, Director, MoEF&CC
- iv. Sh Pankaj Verma, Additional Director, MoEF&CC
- v. Sh Rajeev Ranjan, Additional Director, MoEF&CC, Regional Office (ECZ)-Ranchi
- vi. Sh S.K.Gupta, AD & Div. Head, CPCB, Delhi
- vii. Dr. M.K. Jain, Professor, IIT (ISM), Dhanbad
- viii. Sh. Sh Ramapati Kumar, CEO, CEED, Delhi
- ix. Sh. Ramniwash Yadav, District Magistrate, Sahibganj
- x. Sh. M.K. Biswas, Regional Director, CPCB, ERD-Kolkata
- xi. Sh. G.P Singh, Sc-D, CPCB, ERD-Kolkata

Copy for kind information to:

- i. PS to Joint Secretary (Sh Naresh Pal Gangwar, MoEF&CC)
- ii. PS to Member Secretary, CPCB


(M.K. Biswas)

Minutes of 3rd Meeting of the Joint Committee constituted by Hon'ble NGT vide its order dated 23.09.2020 in the matter of Syed Arshad Nasar Vs Union of India with Ramchandra Chaurasia Vs State of Jharkhand in O.A. No. 23/2017(EZ) with O.A. No 776/2018 held on 01.02.2021 at 4:30 PM through video conferencing

With reference to matter of Syed Arshad Nasar Vs Union of India with Ramchandra Chaurasia Vs State of Jharkhand in O.A. No. 23/2017(EZ) with O.A. No 776/2018, 1st and 2nd Joint Committee Meeting was held on 12.11.2020 & 30.12.2020, where it was decided to review the progress in the 3rd Joint Committee Meeting. In this regard, the third meeting of the committee was held through Video Conferencing (VC) on 01.02.2021 at 4:30 pm under the chairmanship of Joint Secretary, MoEF&CC, with all nominated members along with Member Secretary (MS), JSPCB and District Magistrate (DM) Sahebganj, Jharkhand.

*List of the officials attended the meeting is enclosed at **Annexure I**.*

1. Dr. G.P Singh, Scientist-D, CPCB, ERD-Kolkata on behalf of CPCB welcomed all the members of the committee and participants in the meeting. He requested Dr. M.K Jain, Professor, IIT (ISM) Dhanbad with due permission of the Chairman to make the presentation on the action taken w.r.t Hon'ble NGT order till date and proposed restoration plans as discussed in the previous meeting.
2. Dr. M.K Jain made presentation on action taken till date as per the status provided by the concerned authorities, major issues in the Sabeganj area, air quality analysis (based on the preliminary report submitted by Centre for Environment and Energy Development (CEED), Delhi, assigned responsibilities for individual unit as well as government authorities and restoration action plans. A action plan according to the cluster approach was proposed. Jharkhand State Pollution Control Board (JSPCB) was requested to propose the timeline and budget of the recommended action plans. He also requested the detailed compliance verification status report of the individual units w.r.t. EC & CTO from JSPCB.
3. Joint Secretary, MoEF&CC emphasized that the matter is due for hearing on 12.03.2021 as per the order of Hon'ble NGT and the committee shall prepare the report as earliest. He requested Dr. M.K Jain to circulate the draft report to all the committee members

for their recommendation including Sh. Rajeev Ranjan AD, Regional Office Ranchi, MOEF&CC and Dr. G.P Singh, Sc. D, ERD-Kolkata. He asked Department of Environment, Govt of Jharkhand, JSPCB and concerned State authorities to look into the matter and give their constructive suggestions to improvise the action plan within 7 days. He also asked DM Sahebganj and JSPCB to submit the report on action taken on the stone mines/crushers without valid EC & CTO. He proposed to include the action plan for future in the draft report.

4. Sh. Ramapati Kumar, Principal Investigator (PI) & Chief Executive Officer(CEO), CEED, Delhi stated that preliminary report consisting of the source profiling, air quality analysis has already been submitted to JSPCB by CEED and final scientific report consisting of the carrying capacity can be submitted by next month.

He highlighted that since industrial pollution is only 7.5%, therefore immediate closure of all the stone mines or crushers is not suggested. In spite, check should be on the other sources which are responsible for the pollution in the area. Field visit of the stone crusher units in the hill top should be in priority basis. Implementation of online monitoring station for ambient air quality is also suggested by him.

5. Dr. G.P Singh, ERD-Kolkata, informed the committee that he has been informed that during the visit of stone crushers by inspection teams, the operators of many stone crushers ran away from the site and there is no one available in the area to discuss and collect the information. This has been one of the main reasons that inspections of units are getting delayed. It has been reported that the main reason behind this is that many of the stone crushers do not have valid CTO and are running without proper approval. He also insisted to know how such stone crushers which are not having proper CTO get electricity from Jharkhand Bijli Vitran Nigam Limited (JBVNL). He requested DMTF to complete the inspection of all the units as earliest.
6. Sh. Ramnivas Yadav, DM, Sahebganj also endorsed the same problem highlighted by Dr. G.P Singh and informed the committee that the inspection of stone mines and crushers are in progress. He stated that closure actions have already been taken for the units with invalid CTO & EC. He highlighted that in-spite of so

many inspection a clear cut idea about the inventorization of the crushers/mines is not clear.

7. Sh. Sundeep, Scientist-F/Director MoEF&CC stressed that the information regarding exact number of total stone crushers and stone mines along with units running with or without valid CTO should be provided in tabular format by JSPCB as desired by Hon'ble NGT. He also focused on the inventorization of all activities along with compliance verification status of individual units w.r.t. EC & CTO by DM Sahebganj by 15th Feb 2021.

He insisted that CEED, Delhi which have been assigned the task of the study and doing the work since long must have completed the inventory of all activities and stated that CEED should provide the inventory of the area prepared by them to all the concerned authorities to complete the inspection and report. He also requested to complete the scientific study of carrying capacity by 15th Feb 2021.

He requested JSPCB, Govt. of Jharkhand and D.M Sahebganj to give their practical and feasible recommendations for improvement of environment by 10th Feb 2021 to Dr. M. K. Jain. He asked IIT (ISM) Dhanbad with the help of CPCB-ERD Kolkata to rephrase of the 1st draft report with all the recommendations and suggestions from the concerned authorities and finalize the report by 15th Feb 2021. He also stated that the roadmap for implementation of the action plan should be clearly specified in the report.

Generic recommendation for control of point sources and non-point source (such as haulage of overloaded trucks, crushed material storage facilities) should be given by JSPCB, DM Sahebganj, environment department, transportation department and other concerned government authorities. The stone crusher units/ mines which need regular monitoring are to be detailed in the report.

8. Based on the deliberation held, following were decided;
 - I. Inventorization of all activities shall be carried out along with compliance verification of individual units w.r.t. EC & CTO by JSPCB and DM Sahebganj by 15.02.2021.

- II. Jharkhand State Pollution Control Board should provide the information about the units (stone crushers/mines) in Rajmahal hills of the Vindhya mountains, District Sahebganj in a tabular format consisting the following details:
 - a. Total number. of units
 - b. Number of units without CTO and/or EC
 - c. Number of units with valid CTO and/or EC
 - d. Number of units for which the CTO has expired and renewal awaited
- III. Moreover, action taken against the stone mines/ crushers, which do not have EC and CTO as well as amount of environmental compensation imposed with respect to Hon'ble NGT order, dated 23.09.2020 is to be reported to the committee by 15.02.2021 for preparation of the draft comprehensive report.
- IV. The inventory available with CEED, Delhi shall be provided to Dr. M. K. Jain at the earliest.
- V. The final comprehensive report on the study "Source Apportionment Study, Carrying Capacity Assessment and Clean Air Action Plan" from Centre for Environment and Energy Development (CEED), Delhi is required to be submitted by 15.02.2021.
- VI. The 1st draft report presented in the meeting is to be communicated to all the concerned authorities as well as Environment Department of Jharkhand by IIT (ISM) Dhanbad and CPCB, ERD-Kolkata.
- VII. The generic recommendation and modification for betterment of the environment restoration plan should be given by all the concerned authorities such as environment department, transportation department, District Mining Task Force (DMTF), DM Sahebganj, JSPCB and other concerned government authorities within 10.02.2021. JSPCB shall coordinate with the respective state departments for obtaining the recommendations.
- VIII. 1st draft joint committee report including contents should be finalized by IIT (ISM) Dhanbad by 10.02.2021.
- IX. The input given by all the concerned authorities is to be complied and the rephrasing of the 1st draft joint committee report should be done by IIT (ISM) Dhanbad. Dr. M.K Jain may seek help from CPCB, ERD-Kolkata for redrafting the report.

- X. The draft report should be finalized by incorporating the information from the report submitted by CEED, Delhi, DMTF, DM, Sahebganj and JSPCB by IIT (ISM) Dhanbad by 15.02.2021. The same is to be discussed in the next meeting for further improvement.
- XI. Field visit by the committee members may be scheduled during February,2021 after preparation of 1st draft report for verification of the stone mines and crushers.
- XII. Next meeting of the committee be conducted during 3rd week of February, 2021.

The meeting ended with thanks to and from the chair.

Annexure-I

| SI No | Name of Officer | Organization | Designation | E-mail id |
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| 1 | Sh Naresh Pal Gangwar | MoEF&CC | Joint Secretary | jsnpg.mefcc@gov.in |
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| 9 | Sh. Kamlakant Pathak | RO, JSPCB | Regional Officer | kkpathak1964@gmail.com |
| 10 | Sh. Nirala Bakshey | RO, JSPCB and DMTF | Executive Consultant | |
| 11 | Sh Ramapati Kumar | CEED, Delhi | CEO | rkumar@ceedindia.org |
| 13 | Sh. G.P Singh | CPCB, ERD-Kolkata | Sc-D | singh.gyanprakash@gmail.com |

Progressive Report

Of

**The Joint Committee constituted by
Hon'ble NGT**

(Order dated 23.9.2020 in OA No. 23/2017 (EZ) and OA No. 776/2018)

in the matter of

Syed Arshad Nasar Vs Union of India

with

Ramchandra Chaurasia Vs State of Jharkhand

-Submitted by-

Central Pollution Control Board (Nodal Agency)

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Joint Committee Progressive Report

in the matter of

**Syed Arshad Nasar Vs Union of India with Ramchandra Chaurasia Vs State of Jharkhand
(NGT order dt. 23.09.2020 in O.A. No. 23/2017(EZ) with O.A. No 776/2018)**

1.0 Introduction

With reference to matter of Syed Arshad Nasar (Applicant) Vs Union of India (Respondent) (O.A. No. 23/2017), Ramchandra Chaurasia (Applicant) Vs State of Jharkhand (Respondent) (O.A. No. 776/2018) and Pradeep Kumar Singh (Applicant) Vs State of Jharkhand (Respondent) (O.A. No. 373/2019), Hon'ble NGT passed several orders relating to enforcement of environmental norms in the operation of quarrying and crushing units in Rajmahal hills of the Vindhya Mountains, District Sahebganj, Jharkhand.

The companies/industries excavate the minerals, crushed the stones and manufacture stone chips in this area. In this process, the mining companies or other entities are indulged in indiscriminate mining, operate stone crushers without due regard to environmental norms. Therefore, hills had been found to have been flattened due to mining out of the stones. To remediate the problem Hon'ble NGT passed several orders to prohibit illegal mining and non-compliant stone crushing activities.

With reference to the latest order of Hon'ble NGT dated. 23/09/2020, for preparation of comprehensive scientific plan, the holistic approaches with respect to the identification of the pollution sources and the respective pollution control system recommended by the Joint committee are detailed below.

2.0 Source of Air Pollution

- The source of pollutants from the stone mining and crushing activities are broadly categorized as:

| Sl. No | Activity | Pollutant Source |
|--------|----------------|---------------------|
| 1 | Mining | Drilling |
| | | Blasting |
| | | Loading and Hauling |
| 2 | Transportation | Haul Roads |
| 3 | Stone Crushing | Crushing |
| | | Screening |
| | | Conveying |

- **Mining Operation:** The drilling, blasting, excavation, loading and hauling are the primary source of pollutant in the mining operation.
- **Transportation through Haul Roads:** The movement of heavy vehicles for transportation of the stones from mines to crushers led to fugitive dust emission.

- **Crushing Operation:** The primary (Jaw Crushers), secondary and tertiary crushers used for crushing of stoned mines into desirable size generates a huge amount of particulate matter. The emissions are recorded more at the crusher feed and discharge points.
- **Screening Operation:** The agitation of dry stone in the screening operation emits dust. The screening after tertiary crushing produces higher emissions than the screening of coarse sizes after primary and secondary screening.
- **Conveying:** The transportation of the material from one point to another emits a huge amount of dust. The transfer points include transfers from a conveyor on to another, into a hopper and on to a storage pile.
- Apart from these operations, **the storage of the materials in the stock pile and transportation of finished product** also contribute to the pollution.
- Apart from the stone mining and crushing activities, pollutants in the area are also attributed to other following other sources:
 - **Household:** Contribution of domestic cooking, space heating, water heating, and lighting.
 - **PP and DGS:** Contribution of power plants (PP) and Diesel Generator Sets (DGS)
 - **Open fires:** Contribution of open biomass burning (both in agricultural lands and forest areas)
 - **Waste burning:** Contribution of open waste burning
 - **Dust erosion:** Contribution of wind-blown dust from dry and arid regions, dependent on hourly meteorological conditions
 - **Others:** Contribution of anthropogenic emissions from outside (and within the modelling domain) and natural emissions

3.0 Present Scenario of the Stone Mines and Crushers

The district has many stone mines and also excavates minor minerals such as Black stone, Kaolin, China clay etc. The district records **a total of 120 mines in operation and 282 mines in non-operational condition** as per the “District Survey Report of Sahibganj” provided by District Environment Impact Assessment Authority (DEIAA) (*Annexure 1*). The details of the mines as provided by Jharkhand State Pollution Control Board (JSPCB) as on 4.3.2021 are as follow (Table 1).

Table 1. Details of Stone Mines

| Stone Mine | Number of Units |
|---|-----------------|
| Number of units without CTO and EC | - |
| Number of units with valid CTO and EC | 132 |
| Number of units for which the CTO has expired and renewal awaited | 21 |
| Total Stone Mines | 153 |

The district has 27 potential blocks with a total area of 36601 Ha and 77764.27 Million tonne of mineral reserve (Table 2). (Source: District Survey report provided by DC Sahebganj)

Table 2. Details of the mining blocks and calculated reserve

| Sl. No. | Name of Block | No. of Potential Blocks identified | Total Area (Ha) | Calculated Reserve in Million Tton |
|---------|---------------|------------------------------------|--|------------------------------------|
| 1 | Barhait | 6 | 6410 | 14251.53 |
| 2 | Taljhari | 4 | 9791 | 22558.05 |
| 3 | Borio | 4 | 7582 | 17678.95 |
| 4 | Mandro | 4 | 10228 | 20787.12 |
| 5 | Pathna | 4 | 2466 | 2457.62 |
| 6 | Barharwa | 3 | 41 | 9.18129492 |
| 7 | Rajmahal | 2 | 83 | 21.81537444 |
| | Total | 27 | 36601 | 77764.26667 |
| 8 | Udhwa | NIL | Has not been considered due to existence of Bird Sanctuary | |
| 9 | Sahibganj | NIL | Has not been considered due to presence of Ganges river in the north and north-east and habilitation area. | |

The stone excavated from the mines are crushed in the crushing units, which resized large stone into specified acceptable ranges using mechanical crushing. This is then screened to specified sizes and transported to market. These activities give rise to substantial quantity of fine fugitive dust emissions that create health hazards to the workers as well as surrounding population by way of causing respiratory diseases. Therefore, proper environmental management is done to reduce the impact of pollution. The details of the stone crushers as provided by JSPCB as on 4.3.2021 are as follow (Table 3):

Table 3. Details of Stone Crushers

| Stone Crushers | Number of Units |
|---|-----------------|
| Number of units without CTO | - |
| Number of units with valid CTO | 190 |
| Number of units for which the CTO has expired and renewal awaited | 103 |
| Total Stone Crushers | 293 |

4.0 Environmental Status

The preliminary report on emission inventory & assimilative carrying capacity by Centre for Environment and Energy Development (CEED) affirmed that due to various control and administrative measures air quality index of the area is improving from high of 180 in 2015 to 113.33 in 2019 (*Annexure 2*).

A detailed inspection has been carried out by District Mining Task Force (DMTF), Sahebganj to check the environmental status of the stone mines and crushers.

The individual inspection reports as per the formats provided by CPCB, ERD Kolkata have been submitted by District Mining Task Force (DMTF) in hand written format and are being compiled.

5.0. Action Taken

1. The district mining task force (DMTF) has already taken action against the illegally operated stone mines, stone crushers, storage and transportation. As per the report of District Commissioner, dated 20.01.2021 the DMTF has taken the following actions since 2018 to till date:
 - I. lodged 136 FIR
 - II. sized 537 trucks
 - III. demolished 161 crushers
 - IV. sealed 44 crushers
 - V. reported for criminal proceeding against 29 boats
 - VI. arrested 53 accused persons who were involved in illegal operations
 - VII. sealed 17 illegal mines
 - VIII. seized 13 JCB Equipment
 - IX. Requested for CTO cancellation of 39 units
 - X. Directed to Ex. Engineer Electricity for disconnection of 69 Illegal Crushing Plant's electricity.

The detailed report of the illegally operated stone crushers and stone mines is provided in **Annexure 3**.

2. Apart from these actions, JSPCB has also taken actions against the non-complying units as following:
 - I. No fresh CTE is being accorded in the Sahebganj district till the result of Carrying Capacity Study is obtained.
 - II. CTO of the Crushers/mines are being renewed only when the Units are found compliant.
 - III. Special Inspection Drive was launched by the Regional Office, Dumka in the Sahebganj district. The team had inspected **293** nos. of Stone Crushers/Mines between 11.11.2019 till 17.11.2019.
 - IV. In light of the inspection, show cause was issued to the non-complying units and **Rs.6,33,57,000.00/-** has been imposed as **Environment Compensation against the 225 nos. of non-complying Stone Mines and Crushers.**

- V. Again a committee was appointed by the Board to conduct an inspection for verification of CTO compliance. 170 units were inspected between 02.11.2020 to 07.11.2020 by the Committee and a show cause notice was issued on site to the defaulters
- VI. As the compliance status was not found fully satisfactorily so a second show cause notice was issued to the 170 non-compliant Units.
- VII. Lastly a third and **final show cause has been issued against the non - compliant stone mines and crushers** and they were **given one month time to file their reply which was till 02/03/2021**. The reply is being analyzed, after analysis of the reply further action/closure direction will be taken against the non-complying Units.
- VIII. Center for Environment and Energy Development (CEED), Delhi has been appointed for Emission Inventory, Source Apportionment Study and for preparation of Clean Air Action Plan. The preliminary Clean Air Action Plan has already been submitted before the Hon'ble Tribunal.

6.0 Key Issues & Suggested Measures

6.1. Key Issues

It has been also observed that all units are distributed in 5 separate pockets of district Sahebganj and effect of one cannot be isolated from others in each pocket. Committee observed following key issues in the area.

- i. The units are located in the close vicinity of each other. Therefore, impacts of one cannot be separated from others. 5 separate zones of operation is seen from location map (Fig. 1).
- ii. Improper siting of crushers (crushers are established on the hill, hill slopes and therefore they are at higher altitude. The metal sheet used for boundary in the periphery become useless since it is in the lower portion of these crushers & therefore useless in control in propagation of dust to far areas)
- iii. Poor maintenance towards dust emission and other soil, water and noise pollution.
- iv. Unscientific mining.
- v. Improper dump management.
- vi. Improper handling of waste water and ground water.
- vii. Poor traffic compliance for movement of trucks and road maintenance.
- viii. Thick dust layers seen on the floor of the Crusher units would lead to dust propagation wherever wind blows.
- ix. Untreated water allows to flow in nearby surface bodies.

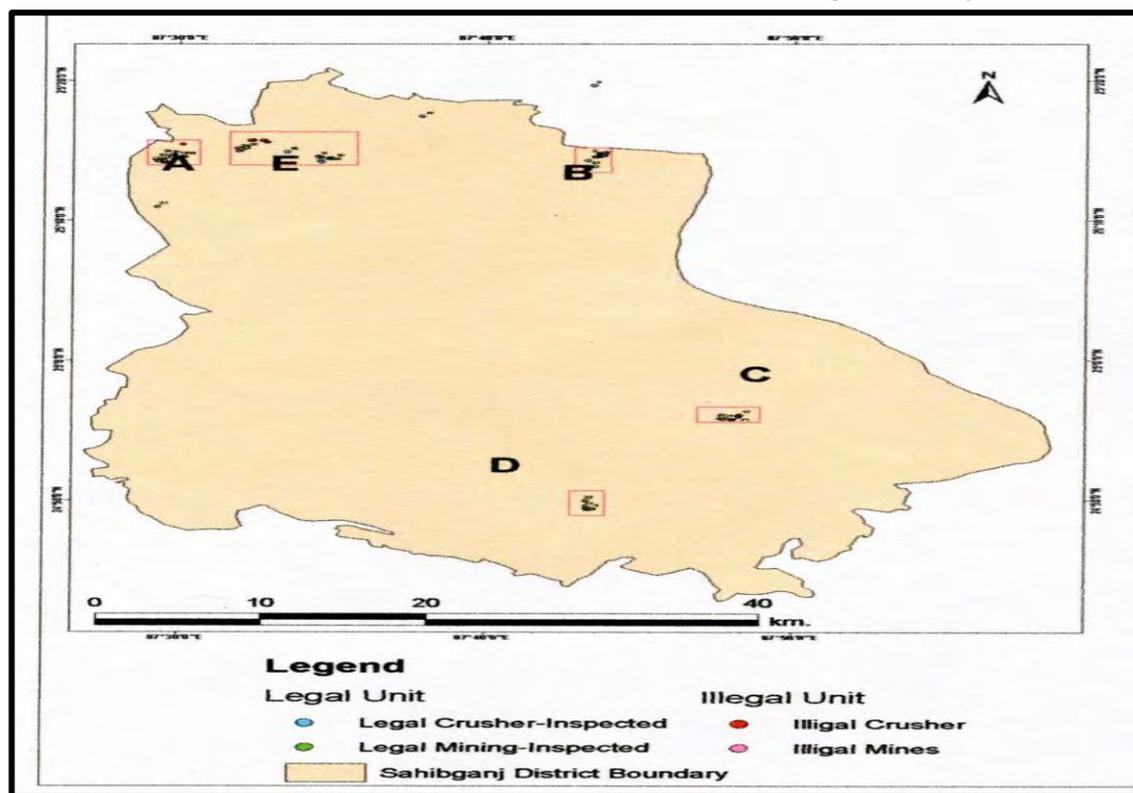


Fig. 1 Proposed 5 Cluster

6.2. Suggested Measures

Based on above fact committee is recommending following measures:

- i. Immediate closure of stone mines and crushers operating without valid EC and CTO.
- ii. Closure of the stone mines and crushers who have valid EC and CTO, but do not comply all norms stipulated by the concerned authorities.
- iii. The sitting of the stone mines and crushers with respect to the nearby human settlement, highways etc. should comply the criteria specified by CPCB.
- iv. JSPCB in consultation with district mining task force to distribute all mines in 5 clusters as per Fig. 1 with in a time frame of six months.
- v. Fresh Environmental Clearance to all Mines under cluster approach in one-year time frame. It has to be implemented by JSPCB in association with DMTF. District Commissioner of Sahibganj will be responsible to implement this, being a default chairman of District-Level Environment Impact Assessment Authorities (DEIAA).
- vi. JSPCB will distribute all crushers in respective cluster based on their location within six months' time frame.
- vii. Reissue of CTO to all crushers with undertaking of environmental management of own operation and cluster in which they fall. District industry department will be responsible for this.

- viii. Running of such crusher will also require environmental clearance from District-Level Environment Impact Assessment Authorities (DEIAA) in one year time frame. JSPCB have to ensure that after transition period of one year no such crusher will operate.
- ix. Mine owner and crusher owner will be responsible for environmental management of its operation inside the lease and own cluster also. Common area work will also be monitored by JSPCB in association with district task force on day to day basis.
- x. Movement of loaded trucks will be monitored by District transport authority for compliance of covering of truck and movement only in night hrs. (10.00 PM TO 6 AM).
- xi. 5 Continuous monitoring station in (one in each) proposed cluster maintained and monitored by JSPCB. No Air Monitoring by each unit.
- xii. JSPCB also formulate Feasibility study for separate road for movement of Heavy earth moving machineries such as loaded truck and dumper used in mining and crushing activities by separate dedicated road. Such study may be conducted in two-year time frame.

In addition to above committee also proposed the following control measures to be implemented during industrial operations under cluster approach and monitored by JSPCB.

7.0 General Guidelines for Abatement of Pollution

7.1. Preventive Measures for Crushers

The pollution can be reduced if it is controlled at the source by taking adequate pollution abatement measures, preventive planning and protective strategies. The measures that can be taken to reduce emission from the crushing units are as follow:

1. The crushers shall be not allowed to be installed or operate within the limits of
 - a. 1000 m from any human settlement
 - b. 500 m from National or State Highways
 - c. 500 meter between two such units
 - d. Any other local concern as specified by SPCBs
2. The Pollution Control Equipment's should be implemented at the crushing units according to the capacity:
 - a. Sprinkler operation for the small crushing units (<25TPH)
 - b. Sprinkler operation and bag house implementation in the medium (25-100 TPH) and large (>100 TPH) crushing units.
3. Mostly the crusher units that were visited / inspected by last committee have installed some water spraying arrangements as **single water tap**, which were ineffective. Dust emissions took place when the crushers were in running conditions. Some of the measures that can be taken up for minimizing the dust emissions are:

- a. The scientifically designed sprinklers with adequate hydraulic pressure should be interlocked with the crushers and the screens. The sprinklers should be in adequate number to maintain a water curtain along the periphery of the process units. To avoid muddy condition, necessary arrangement should be made to operate alternate sprinklers at 10 -15 minutes interval. The height of sprinklers should be in the range of 5 -7 meters with 360 degree dispersion of water.
 - b. Mist guns should be kept/ utilized in the crusher area so that even after fogging, water spraying some dust generates & emission occurs there mist guns suppress them.
 - c. Fogging/Misting arrangement at the hopper (where trucks unload the large stones) and other transfer points/loading/unloading points should be installed. Consumption of water would be considerably reduced through the use of this system.
 - d. Use of G.I water pipes instead of plastic pipes that break with the rocks/boulders.
 - e. Roads should be made paved within the crusher premises & the approach road from mine to crushers should also be made paved.
 - f. Availability of enough water for water spraying/sprinkling should be ensured. Large storage tanks may be constructed within the crusher area, Rainwater harvesting measures, accumulation of rainwater must be done so that there is no/negligible dependency on the groundwater, local rivers.
4. Dust Control Equipment's like Multi-cyclones & Bag filter if applicable as per EC.
- The dusts collected in bag house, which are of more than 5 um size have market value. The dust should be collected in bags and should be sold. The unit should not be allowed to dispose the collected materials as solid waste. In case, disposal of such waste is necessary, adequate facility for disposal with earmarked area and proper designed disposal pit duly approved by SPCB should be made by the unit.
5. The crushing units should be placed in a covered section with proper pollution control equipment as mentioned.
 6. Crushers should be located in the bottom of the hills, in low altitude or else the brick wall should be high enough to prevent the dust from propagation to far flung areas.
 7. Proper house-keeping should be maintained for the crushing units placed in the covered section. Layers of dust should not be allowed to accumulate on floor of the crusher premises. Scrapers could be utilized for dust accumulation at a place which can be disposed subsequently.
 8. The crushed stones or finished products should be stored in silo or the height of finished goods should be kept lower than the height of wind breaking walls. Strong structural base and framing should be provided for wind breaking wall to withstand in strong wind conditions. In addition, proper sprinkling arrangement should be provided all around the stock piles.

9. Avoid long term storage of fines/fine chips in for of dump. They must be send back to mines/mining companies for filling of voids/already exhausted pits.
10. All the conveyor belts should be covered from nod to nod points adequately without side gaps in enclosure and belts.
11. Boundary wall along the lease boundary
12. The connecting roads between the units should be metalled /pucca to avoid the dust emission.
13. Wheel washing system can be designed at the vehicle entry/exit point.
14. All the trucks & dumpers should have proper cover so that fugitive dust from loaded material can be entrapped at source itself.
15. All units should have a scientifically designed Rain Water Harvesting system which may be either of storage or ground water recharging type. Units desired to have storage type to ensure proper and hygienic storage of water and its suitable use.
16. Green belt development area along the periphery with minimum for 3 - 5 rows of trees and creepers (vegetation curtain) should be provided to arrest the fugitive dust movement
17. Used Oil generated from the DG Sets and other machinery/vehicles forms part of Hazardous Waste and should be regulated as per the provision of HW (MH&TBM) Rules 2008. All such units should be asked to take authorization for management of such waste as per the provision of the Rules.
18. The stack height of the DG sets should be as per the guidelines of CPCB
19. Mass awareness program should be conducted by JSPCB & District Administration explaining the adverse effects of dust on the lungs, human body, irreversible nature of diseases like silicosis, etc. Local people, workers, crushers owners should be the target audience of such mass awareness program. Awareness program should also include best practices/techniques to control dust in crushers with photographs, scarcity of groundwater & methods to recharge it, greenbelt development & their use.

7.2. Preventive Measures for Mines

1. The drilling machine should have following specifications to control the dust generation:
 - a. leakage free
 - b. equipped with wet drilling arrangement and sharp drill bits.
2. Blasting should be carried out as:
 - a. Controlled blasting: use of millisecond delay detonators
 - b. at a specific time
 - c. optimization of use of explosive energy
 - d. use of 'water ampoules' during blasing

- e. Over charging of blast holes should be avoided
3. Mines should strictly follow mine plans.
4. All unit operations and transfer points must be enclosed.
5. Transportation emits a huge amount of particulate matter, which can be reduced by
 - a. Overloading of dumpers should be avoided to prevent spillage on the roads
 - b. Stone carrying trucks should be covered.
 - c. The emissions from the diesel engines of the machinery can be controlled by proper maintenance and monitoring of machines.
6. The haul roads should be kept wide, leveled, compacted and properly maintained.
7. Approach roads to and from the mine should be made black top
8. Regular Compaction and grading of haul roads to clear accumulation of loose material.
9. At least two water tankers should be kept in the mines. A log book of water tanker should be filled/maintained mentioning registration number, running hours, kilometer reading, place of water sprinkling, shift wise. Log book of water tanker should be signed by competent person in the mine. Copy of log book should be sent with six-monthly compliance reports.
10. Water sprinklers should be installed at regular interval to suppress dust. Fixed nozzle type water spraying system as only truck operated spraying system (tankers) were only observed at some places during inspection.
11. Separate storage of top soil.
12. Storage of the overburden and the stones should be covered and maintained as follow:
 - a. Catch drain, siltation ponds & retaining wall around the periphery of dumps.
 - b. Covering of top soils as temporary measures and plantation of herbaceous species if kept for prolonged time.
13. Green belt development should be done in and around the mine. Avenue plantation along the roads should be done.
14. Ground water recharge by all units through rain water harvesting. Sump/lower portion in a mine where rainwater can be stored in plenty so that it caters to all seasons should be made and water stored in it. This accumulated rainwater could be used for water sprinkling on haul roads & other places in mines and also used for green belt development, etc.
15. No untreated water in open drain and surface water bodies
16. Backfilling should be practiced as per the approved mine plan. Mine owners should keep in view that mine closures have to be done as per the progressive & final closure plan. DMO should also keep in mind that mine closure is extremely important aspect for sustainable and environment friendly mining and ensure that it takes place as provided in mine plan.

17. Issue of personnel protectors to each workers such as Mask and Ear Plug
18. Yearly medical checkup of all workers – implanted by District Medical Officer – Monitored by District Industry department and mining department for respective units.
19. Mass awareness program should be made including knowledge about mine plans, mine safety rules (involving DGMS), effect of dust on workers & local, effect of silt on nearby rivers/nallas, depletion of groundwater resource, systematic & scientific mining, etc., targeting mine owners and works, local people. JSPCB, DMO should conduct such awareness program taking the help of Indian Bureau of Mines and Directorate General of Mines safety. Model Mines following the condition of EC&CTO may be developed in all the tehsils where mining activity is taking place. Capacity enhancement of District mining officials and JSPCB RO should be done (both quantitatively & qualitatively) to ensure the implementation of conditions of EC& CTO.

7.3. Preventive Measures for Transportation

1. Covered Transportation
2. Time Bound Transportation mainly in night hours
3. Feasibility study for separate road for industry transportation
4. Road maintenance by Public works department (Fund may be generated by group of industry in terms of District Mineral Fund)
5. Water sprinkling along the Road network through DMF by fixed sprinklers.
6. Road side Planation through DMF – Monitored and implemented by District Forest Department

7.4. Preventive Measures for Common Area in each cluster

1. No open dumping outside the lease area.
2. No untreated water in open drain and surface water bodies
3. Periodic monitoring of water level in the area

8.0 Some Glimpse of Best Practices

ENCLOSURES AROUND PROCESS EQUIPMENT



BOUNDARY WALL



WATER SPRINKLERS IN CRUSHING OPERATION



WATER SPRINKLING

STOCKPILES



HAULAGE ROADS



SPRIKERS ALONG ROAD SIDE





Photo : Photo of plantations in rows



Photo: Photo of retaining wall at the toe of OB dump



Photo: Photo of grader/scrapper used for leveling,
Cleaning of road



Photo: Photo of catch drain around OB dump



Photo: Photos of rain gun for suppression of dust near a crusher.

श्री संदीप सिंह (भा0प्र0से0), अध्यक्ष DEIAA-सह-उपायुक्त, साहेबगंज की अध्यक्षता में दिनांक-25.08.2018 को DSR के संबंध में DEIAA एवं DSR के गठित सदस्यों के साथ की गई संयुक्त बैठक की कार्यवाही :-

01.उपस्थिति :-

पंजी के अनुसार।

02.कार्यवाही संख्या 01 :-

सर्वप्रथम अध्यक्ष DEIAA-सह-उपायुक्त, साहेबगंज द्वारा बैठक में आये DEIAA एवं DSR के सदस्यों का स्वागत करते हुए बैठक की कार्यवाही प्रारम्भ करते हुए Sathi Planners Pvt. Ltd. को साहेबगंज जिले के लघु खनिज (बालू घाटों को छोड़कर) का तैयार किये गये जिला सर्वेक्षण प्रतिवेदन (DSR) का Presentataion देने का निदेश दिया गया है।

03.कार्यवाही संख्या 02 :-

Sathi Planners Pvt. Ltd. के द्वारा साहेबगंज जिले के DSR का Presentataion दिया गया है।

04.कार्यवाही संख्या 03 :-

Presentataion के दौरान जिला सर्वेक्षण प्रतिवेदन (DSR) के संबंध में प्राप्त मार्गदर्शन के आलोक में विभिन्न बिन्दुओं पर विस्तार से चर्चा की गई :-

सर्वसम्मति से DSR को स्वीकृति देते हुए निम्नलिखित निर्णय लिये गये:-

1. DSR को अविलम्ब NIC Sahibganj के website (sahibganj.nic.in) पर अपलोड कर दिया जाय।
2. जिला जन-सम्पर्क पदाधिकारी, साहेबगंज द्वारा इस संबंध में एक प्रेस विज्ञप्ति दो मुख्य समाचार-पत्रों में प्रकाशित करा दी जाय कि "साहेबगंज के लघु खनिजों से संबंधित DSR NIC Sahibganj के website (sahibganj.nic.in) पर अपलोड कर दिया गया है, अगर किन्हीं व्यक्ति को कोई आपत्ति हो तो इस संबंध में वे अपना आपत्ति 21 दिनों के अन्दर अपनी आपत्ति जिला खनन कार्यालय अथवा DEIAA कार्यालय में दे सकते हैं।"
3. DSR की एक-एक प्रति (Hard Copy) DEIAA कार्यालय, साहेबगंज/वन प्रमण्डल कार्यालय, साहेबगंज/जिला खनन कार्यालय, साहेबगंज में उपलब्ध रहेगी, ताकि इच्छुक व्यक्ति कार्यालय अवधि में उसका अवलोकन कर सके।

अन्त में धन्यवाद ज्ञापन के साथ बैठक की कार्यवाही समाप्त की गई।

डॉ0 बी0 के0 तिवारी
सदस्य DEIAA,
साहेबगंज।

Ashok
25.08.18
सदस्य सचिव DEIAA,
-सह-
अनुमण्डल पदाधिकारी,
साहेबगंज।

Manoj
सदस्य DEIAA,
-सह-
वन प्रमण्डल पदाधिकारी,
साहेबगंज।

25/8/18
अध्यक्ष DEIAA,
-सह-
उपायुक्त, साहेबगंज।

ज्ञापांक...224.../ DEIAA, साहेबगंज,दिनांक- 25/08/18

हेतु प्रेषित।

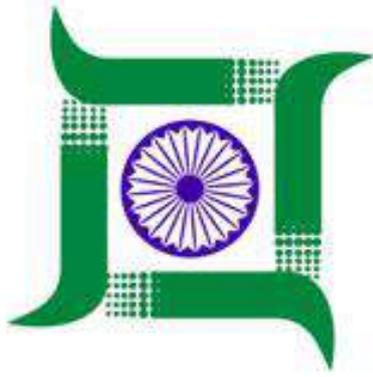
प्रतिलिपि-सभी संबंधित पदाधिकारी, DEIAA एवं DSR के सदस्यों को सूचनार्थ एवं आवश्यक कार्रवाई हेतु

प्रेषित।

प्रतिलिपि-जिला जन सम्पर्क पदाधिकारी, साहेबगंज को सूचनार्थ एवं अविलम्ब आवश्यक कार्रवाई हेतु

प्रतिलिपि-उपायुक्त-सह-अध्यक्ष, DEIAA, साहेबगंज को सूचनार्थ एवं आवश्यक कार्रवाई हेतु प्रेषित।

Ashok
25.08.18
सदस्य सचिव DEIAA,
-सह-
अनुमण्डल पदाधिकारी,
साहेबगंज।

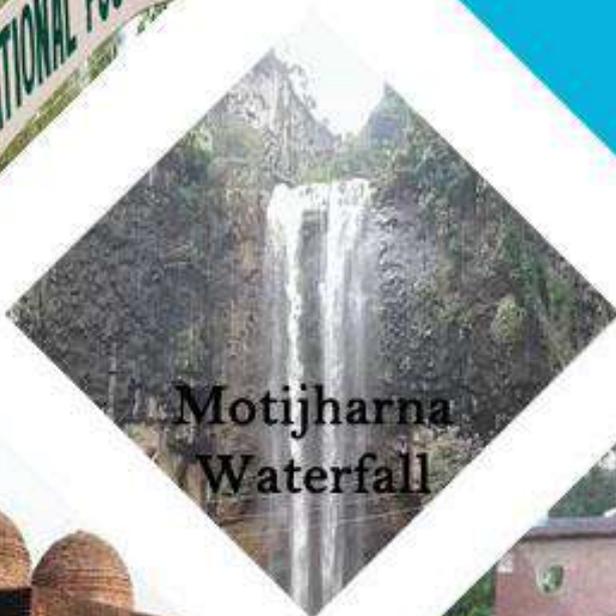


District Survey Report Of Minor Minerals (Other Than Sand Mining) Sahibganj District

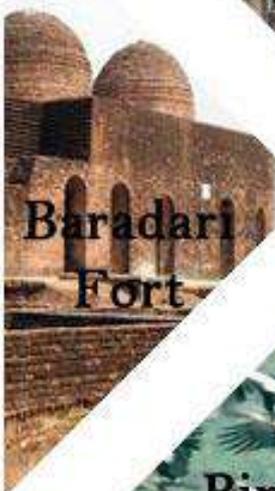
Prepared by DEIAA, Sahibganj
Govt. of Jharkhand

Prepared in accordance with
Para 7 (iii) of S.O.141 (E)

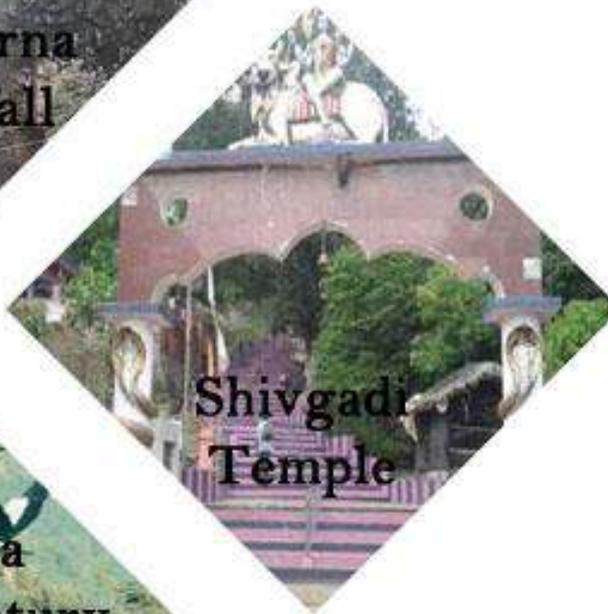
Dated 15th January 2016 as ammended
on S.O. 3611 (E) Dated 25th July, 2018 of
Ministry of Environment, Forest
and Climate Change Notification.



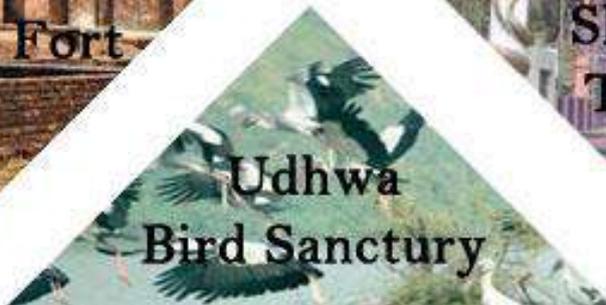
Motijharna
Waterfall



Baradari
Fort



Shivgadi
Temple



Udhwa
Bird Sanctuary

District Mining Officer

Executive Engineer, Road.

Executive Engineer, Minor Irrigation.

Dy. Dir. Geology

Member Secretary DEIAA/S.D.O.

Divisional Forest Officer

Dr. B.K. Tiwary

Expert Member, DEIAA

APPROVED

Dy. Commissioner/Chairman DEIAA, Sahibganj

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Annexure I : Jharkhand Minor Minerals (Auction) Rules, 2017

Annexure II : Jharkhand Minor Minerals (Evidence & Mineral Contents) Rules, 2018

Acknowledgment

In pursuance of MOEF&CC Notification S.O. 141(E) dated 5th Jan 2016, District Environment Impact Assessment Authority (DEIAA) & District level Expert Appraisal Committee (DEAC) has been formed for Category -B2 Minor Minerals having area less than or equal to 5 ha.

In line with above guideline Chief Secretary of Government of Jharkhand issued a letter to all Deputy Commissioner's Vide letter No. -1874/Cs dated 01-08-2017 & Notification No. Khani(vivid) -67/2017/L905 dated 16-08-2017 by Secretary, Department of Industries, Mines & Geology, Government of Jharkhand, to prepare a District Survey Report for all minor minerals as per guideline of sustainable Sand Mining guidelines with the assistance of Irrigation department (Minor), Forest department, Mining & Geology Departments. The District Survey Report (DSR) for sand had already been prepared and submitted to the Government.

The District Survey Report of Minor Mineral (Other than Sand) is prepared in accordance with Para 7 (iii) of S.O. 141 (E) Dated 15th January, 2016 as amended on S.O. 3611 (E) Dated 25th July, 2018 of Ministry of Environment, Forest And Climate Change Notification.

Considering the extent of deposit of stone in Sahibganj, it is very difficult to prepare DSR in a very short while with the available resources. The effort made by the DEIAA committee to engage outside party for compiling the departmental information & Field data to M/S Sathi Planners Pvt. Ltd, Ranchi and with the constant support from Forest Department Sahibganj, Mining Office Sahibganj, Executive Engineers from road and Minor irrigation to prepare this DSR in short while is commendable. This is an interim report prepared to meet the requirement of minor minerals for the state and same shall be reviewed time to time to updated the data bank of DSR.

It is clear from the report that most of the existing operative mines are having a lease period up to year 2022 to 2025 and the livelihood of Sahibganj district is dependent on mining and its related industries.

Hence, it is recommended to initiate the process of auctioning in accordance with the existing rules/laws to meet the requirement of stone for the state and earn the revenue and support the livelihood of Sahibganj District, even after the 2025.

I wish that DEIAA will make all the efforts to complete the DSR in all respect in near future.

With Warm Regards

Dy. Commissioner/ Chairman DEIAA, Sahibganj

PREAMBLE

Prior to the formation of Jharkhand Minor Mineral Concession Rule 2004, (JMMCR -2004) the mining operation for minor mineral were carried out in unscientific manner. Identifying this fact in exercise of power, Conferred by Section 15 by Mines and Minerals (Development and Regulation) Act 1957 as amended in 2015 and all other powers enabling it in that behalf, the industry Mines & Geology Department, Govt. of Jharkhand framed the aforementioned rule, which has been amended with period of times in the year 2007, 2010, 2014, 2015 and 2017.

Keeping in view of experience gained in period of one decade, the MOEF&CC came out with Environmental Impact Assessment Notification S.O.-1533(E) dated 14th Sept.2006. It has been made mandatory to obtain environmental clearance for different kinds of development projects as listed in Scheduled -1 of notification.

Further, pursuance of the order of Hon'ble Supreme Court Petition (C) No. 19628-19629 of 2009, dated 27th Feb. 2012 In the matter of Deepak Kumar etc., Vs State of Haryana and others etc., prior environmental clearance has now become mandatory for Mining of Minor Minerals irrespective of the area of Mining Lease.

And also in view of the Hon'ble National Green Tribunal, order dated the 13th Jan.2015 the matter regarding Sand, Brick earth, & burrowed earth cutting for Road Construction has to take prior E.C. For Mining Lease irrespective of the fact that whether the area involved is more or less than 5 hectares. They also suggested to make a policy on E.C for sand including other minor minerals mining lease in cluster.

In pursuance MOEF&CC Notification S.O. 141(E) dated 15th Jan. 2016, District Environment Impact Assessment Authority (DEIAA) & District level Expert Appraisal Committee (DEAC) has been formed for Category –B2 Minor Minerals having area less than or equal to 5 ha.

MOEF&CC in consultation with State Government has prepared Guidelines on Sustainable Sand Mining & other Minor minerals mining in 2016, detailing the provisions on Environmental Clearance for cluster. Creation of District Environmental Impact Assessment Authority (DEIAA) & proper monitoring of Minor Minerals Mining using Information Technology to track the mineral out material from source to destination.

DEAC will scrutinize and recommend the prior environmental clearance of Mining of Minor Mineral to DEIAA on basis of District Survey report. This will model and guiding document which is a compendium of available mineral resources, geographical setup, environmental and ecological set up of the district and replenishment of minerals and is based on data of various departments, published reports, Journal and websites. The District Survey report will form the basis for application for environmental clearance, preparation of reports and appraisal of projects. District Survey Reports are to be reviewed once in every five years as per statue, however this is an interim report, which will be updated at regular intervals.

In line with above guideline Chief Secretary of Government of Jharkhand issued a letter to all Deputy Commissioner's Vide letter No. -1874/Cs dated 01-08-2017 & Notification No.

Khani(vivid) -67/2017/1905 dated 16-08-2017 by Secretary Government Department of Industries, Mines & Geology, Government of Jharkhand, to prepare a District Survey Report as per guideline of sustainable Sand & Minor Mineral Mining guidelines with the assistance of Irrigation department (Minor), Forest department , Mining & Geology Departments, considering the recent amendment S.O. 3611 (E) dated 25th July, 2018.

The Main objective of the preparation of District Survey Report is to ensure the following:-

1. Identification of Mineral Resources in the district.
2. Identification of areas of minor minerals having the potential where mining can be allowed. And
3. Identification of area and proximity to infrastructure and installations where mining should be prohibited.

1. INTRODUCTION

SAHIBGANJ AT A GLANCE:-

1.1 Location and Geographical Area

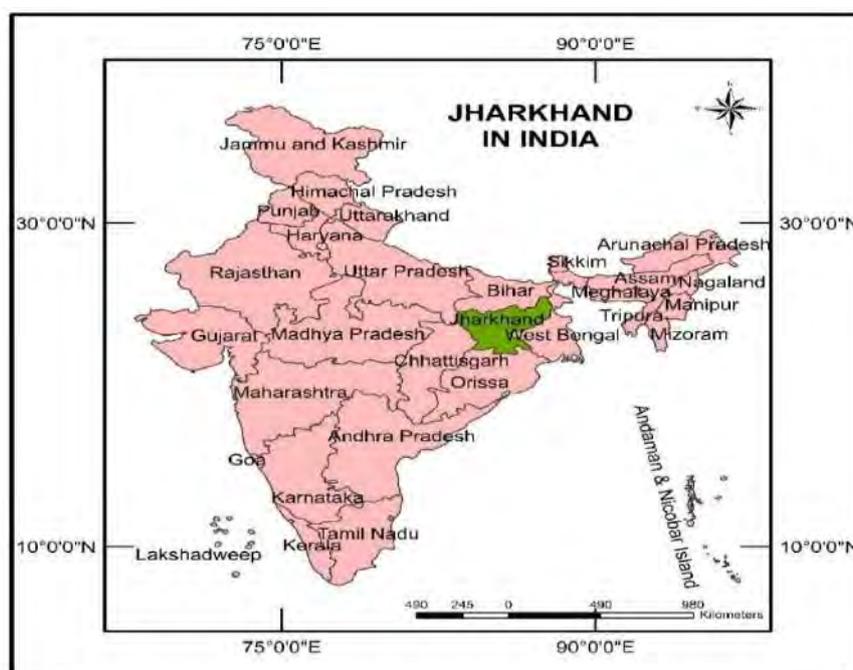
Sahibganj district is one of the twenty-four districts of Jharkhand state, India, and Sahibganj is the administrative headquarters of this district. The district is located in the north eastern most tip of Jharkhand State. Sahibganj district is bounded by the river Ganges and Katihar district of Bihar in the north on the south Pakur district of Jharkhand, on the east by Maldah and Murshidabad district of West Bengal and on the west by Godda district. The district is situated roughly between 25° 50' 00" North and 24° 42' 52" North latitude and 87° 27' 35" East and 87° 53' 56" East longitude, having an area of 1599 km². The district covers Survey of India toposheets nos. **72 O/ 7, 72 O/ 8, 72 O/ 11, 72 O/ 12, 72 O/ 16, 72 P/5, 72 P/ 9, 72 P/10, 72 P/13 and 72 P/14**. The district has a total population of 1,150,567 with a population density of 558/km² having sex ratio of 952 (Census 2011).

1.2 Administrative Units:-

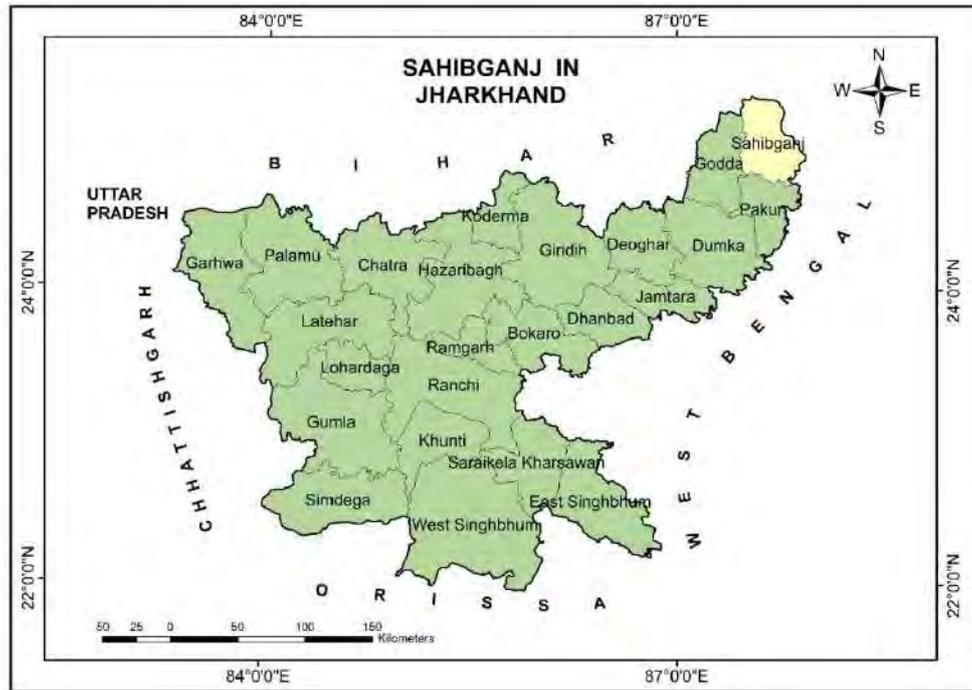
The district is divided into two subdivisions: **Sahibganj** subdivision and **Rajmahal** subdivision. It is further subdivided into nine Community development blocks: (Sahibganj subdivision) **Sahibganj, Mandro, Borio, Barhait**; (Rajmahal subdivision) **Taljhari, Rajmahal, Udhwa, Pathna** and **Barharwa**. The district has 6 Census Towns and 1,813 Villages (Inhabited-1,349 & Uninhabited-464). Moti Jharna Waterfall, Shivgadi Temple, Udhwa Bird Sanctuary and National Fossil Park are some of the important historical monuments of Sahibganj district.

1.3 Connectivity facilities in Sahibganj District:-

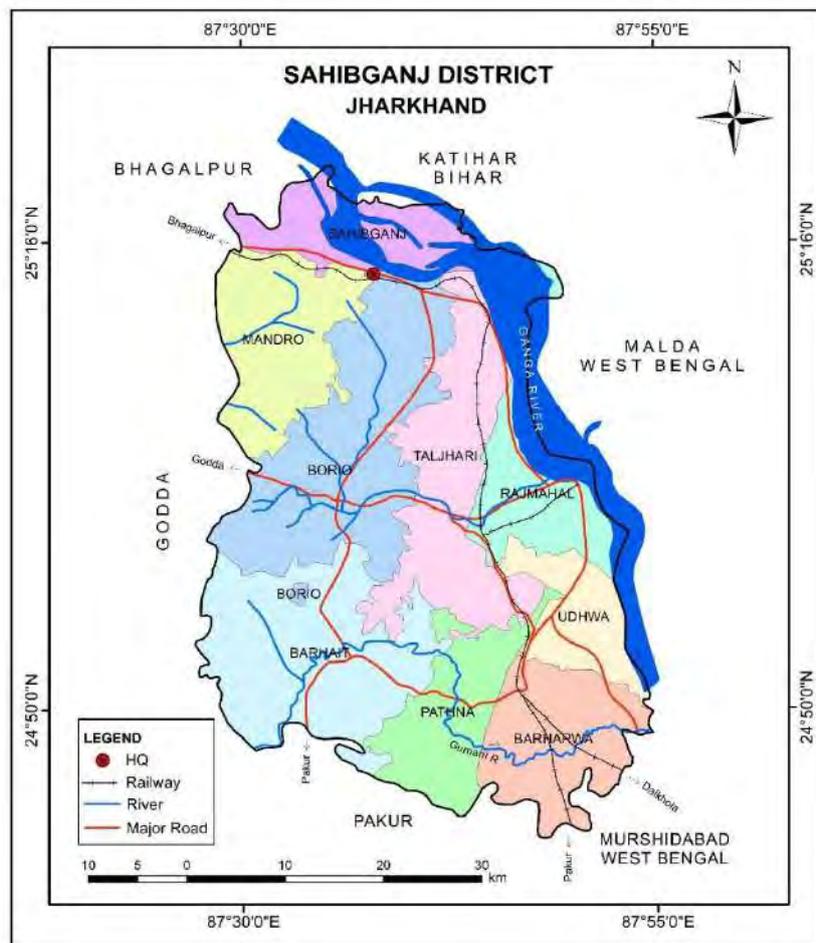
The area is approachable by train from Bhagalpur (Bihar) and Dhanbad (Jharkhand) via West Bengal by north-south running Howrah-Bhagalpur loop of Eastern Railway. The district can be approached from all sides by a network of metaled road. The National Highway 33 passes through the district. Nearest airport is Bagdogra Airport (Siliguri), approximately at a distance of 173 km.



District Survey Report of Sahibganj, Jharkhand



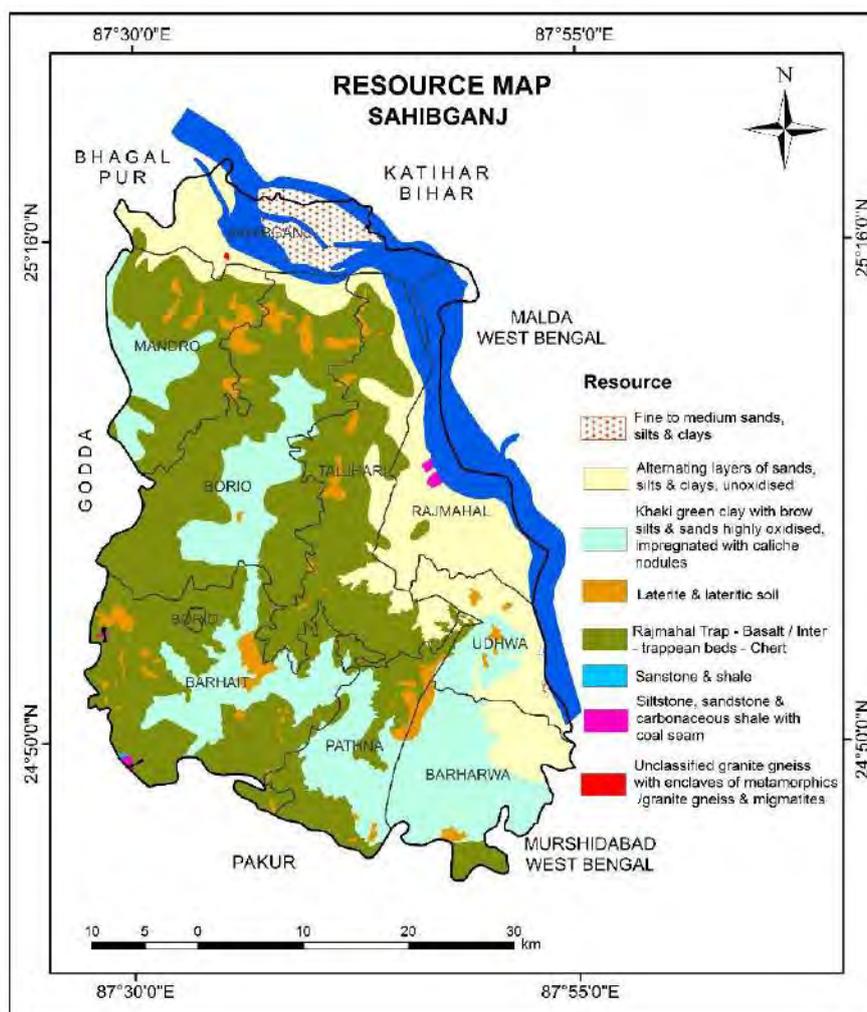
Map showing Location of Sahibganj District In Jharkhand



Representative Map of Sahibganj District (Source: Geological Survey of India)

2. OVERVIEW OF MINING ACTIVITY IN THE DISTRICT

Mainly the following minerals are found in the district: Coal, China Clay, Bentonite, Black Stone, Sand Stone, Silica Sand, Quartz, Kaolin, Flint Stone.



Representative Resource Map (Source: Geological Survey of India)

There are 120 operating stone mines and 282 non-operating mines and 3 operative china clay and flint mines presently (August 2018), in the district. This district provides approximately 5000 employment in the Mineral based industries, such as Fly Ash Bricks, Kiln Bricks, Mineral Grinding specially soap stone & Quartz, De-Hydrated Lime etc., which involves investment of approx. Rs. 809.97 Lakh. The Rajmahal Hills are the source of building and road stones. Most of the quarrying is done by the side of the loop line of the Eastern Railway. Kaolin is found near Mangal Hat in Rajmahal subdivision. Bentonite is also available in some places, used as "Multani Mitti" and has great scope of export to other parts of the state of Jharkhand.

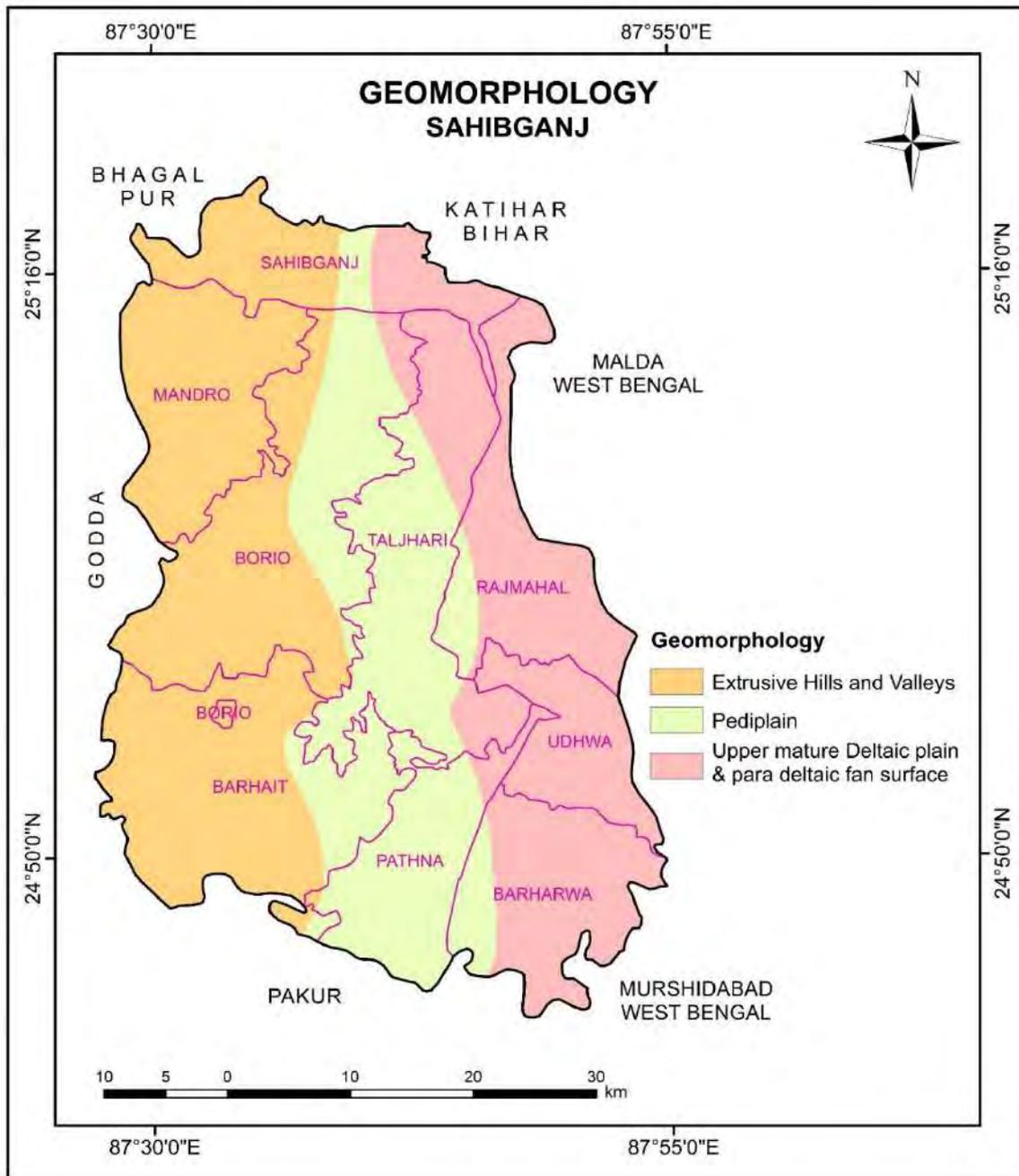
3. GENERAL PROFILE OF THE DISTRICT

3.1 River System



The river Ganges forming the northern boundary of the district enters into it along the north – west corner and flow eastward upto Sakrigali. Here it takes a turn to the south and then forward forming the eastern boundary of the district upto a little beyond Radhanagar in Rajmahal sub division. The other rivers of the district are Gumani and Morang. The river Gumani flows SW to NE direction upto Barhait then it turn to east direction. The river Morang flows from north to south direction and join river Gumani near Barhait. The drainage pattern of the district is dendritic. All these rivers are seasonal in nature except the river Ganges.

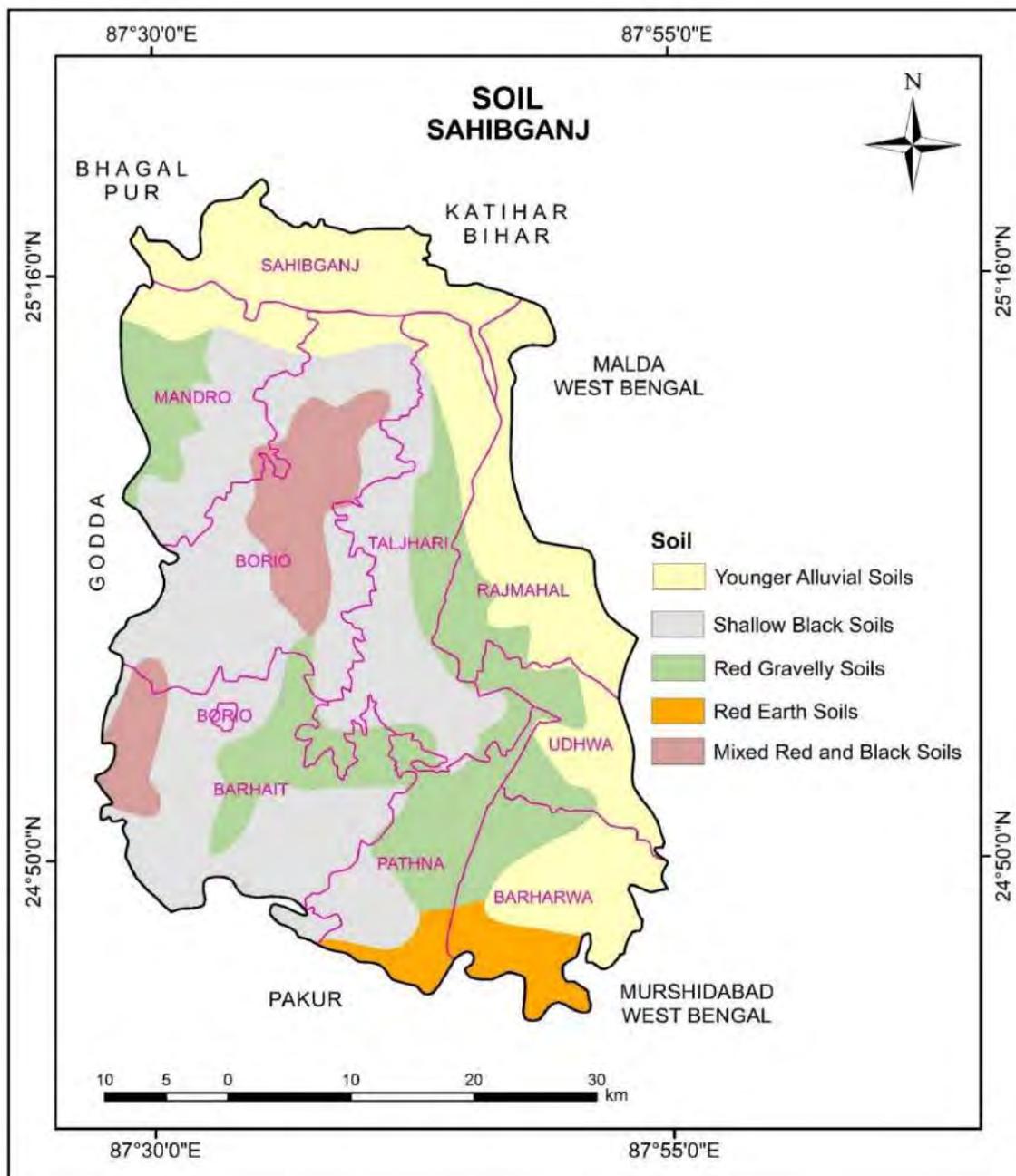
3.2 Geomorphology



(Source: Geological Survey of India)

Major part of the district is characterized by undulating topography covered by basaltic flows of Rajmahal Trap. The district is mainly drained by the rivers Ganges, Gumani and Morang. All these rivers are seasonal in nature except the river Ganges. The river Gumani and Morang contribute to the major surface run – off during monsoon. The main geomorphological features of the district are scarp on the northern part of the area, flat alluvial terrain in the eastern fringe of the district and resistant lava plateau of Rajmahal which rises above the general level and occupies major part of the district. The general evaluation of the hills and plateaus varies from 57 to 375 m above msl.

3.3 Soil:



(Source: Geological Survey of India)

The major soil type of the district is the Rajmahal type soil which derived from basaltic lava. These soils are black in colour, very fertile and restricted to Rajmahal lava areas. The other soil type of the district are red soil, eroded scarp soil, foothill soils, Tal soil and alluvial soil. The red soils are light to medium and are red to yellow or light grey in colour. The eroded scarp soil occurs in transverse section of dissected, descending scarp land at various altitude of upland. The yellowish red foothill soils occur in the eastern fringe of the district. The Tal soil is found in the back water belt of the Ganga around Barharwa when the rain water remains stagnant in the rainy season. The clayey loam type alluvial soil occurs near Sahebganj plains.

3.4 Physiography

Hilly terrains and extensive verdant landscapes is the main feature of Sahibganj. Based on the land resource and geographical condition, the district can be broadly sub-divided into two parts, i.e. the slopes and hills of this region which mainly forms the forested area and a part of Damin-I-Koh. The major blocks forming a part of this category are Borio, Pathna, Mandro, Taljhari and Barhait, blocks with major inhabitants being the Santhal Tribes, Mal Paharia clan and other Paharia Tribes. The Barharwa block, Udhwa block and the famous Rajmahal hills forms the second type of geographical division consists of plain land with multiple uplands, depression and ridges.

3.5 Demography

| Census - 2011 | |
|-------------------------|-----------|
| Total population | 1,150,567 |
| Male Population | 5,89,391 |
| Female Population | 5,61,176 |
| Rural Population | 9,90,901 |
| Urban Population | 1,59,666 |
| SC Population | 72,341 |
| ST Population | 3,08,343 |
| Population Growth | 24.01% |
| Area Sq. Km | 1599.00 |
| Density/km ² | 558 |

| | |
|---------------------------------------|----------|
| Proportion to Jharkhand Population | 3.49% |
| Sex Ratio (Per 1000) | 952 |
| Child Sex Ratio (0-6 Age) | 960 |
| Average Literacy | 42 % |
| Male Literacy | 49 % |
| Female Literacy | 35 % |
| Total Child Population (0 - 6) Years | 2,21,955 |
| Male Population (0-6 Age) | 1,13,220 |
| Female Population (0-6 Age) | 1,08,735 |
| Literates | 4,83,263 |
| Male Literates | 2,87,303 |
| Female Literates | 195,960 |
| Child Proportion (0-6 Age) | 19.29% |
| Boys Proportion (0-6 Age) | 19.21% |
| Girls Proportion (0-6 Age) | 19.38% |

Source: Census Data, 2011

3.6 Forest

Total area covered under forest in Sahibganj district is about 767440 Acres or 30882 hectares, which is mostly barren. Owing to large scale unscrupulous felling the region once known for its thick and extensive forests is now bereft of much of its jungle wealth. The Forest department has under taken afforestation of these areas to some extent.

The most common tree found in the district is sal (*Shorea robusta*). Some teak of inferior variety is also found. Some tree found are jackfruit, murga, simal, bamboos, asan and satsal. Sal and simal logs and jackfruit are exported in large quantities to the neighboring districts and also to the places outside Jharkhand. Stray cattle are a common site in the district.

District-wise Forest Cover Area in Jharkhand (Area in Km²)

| District | Geographical Area Km ² | 2011 Assessment | | | Total | Percent of GA | Change | Scrub |
|--------------------|-----------------------------------|-------------------|------------------------|---------------|---------------|---------------|-----------|------------|
| | | Very Dense Forest | Moderate. Dense Forest | Open Forest | | | | |
| Bokaro | 1,929 | 64 | 244 | 252 | 560 | 29.03 | 0 | 48 |
| Chatra | 3,732 | 251 | 863 | 663 | 1,777 | 47.62 | -5 | 15 |
| Deoghar | 2,479 | 0 | 84 | 85 | 169 | 6.82 | 0 | 5 |
| Dhanbad | 2,996 | 0 | 50 | 155 | 205 | 6.84 | 0 | 17 |
| Dumka | 6,212 | 0 | 314 | 323 | 637 | 10.25 | 0 | 58 |
| Garhwa | 4,092 | 124 | 406 | 835 | 1,365 | 33.36 | 0 | 55 |
| Giridih | 4,963 | 98 | 422 | 344 | 864 | 17.41 | 10 | 8 |
| Godda | 2,110 | 15 | 268 | 116 | 399 | 18.91 | 0 | 25 |
| Gumla | 9,077 | 324 | 919 | 1,414 | 2,657 | 29.27 | 0 | 33 |
| Hazaribagh | 5,998 | 272 | 626 | 1,164 | 2,062 | 34.38 | 9 | 44 |
| Koderma | 1,435 | 68 | 321 | 207 | 596 | 41.53 | -4 | 0 |
| Lohardaga | 1,491 | 174 | 219 | 110 | 503 | 33.74 | 0 | 10 |
| Pakur | 1,571 | 3 | 172 | 108 | 283 | 18.01 | 0 | 19 |
| Palamu | 8,657 | 529 | 1,809 | 1,189 | 3,527 | 40.74 | 0 | 88 |
| West Singhbhum | 9,907 | 453 | 1,559 | 1,829 | 3,841 | 38.77 | 6 | 81 |
| East Singhbhum | 3,533 | 53 | 621 | 404 | 1,078 | 30.51 | 67 | 38 |
| Ranchi | 7,698 | 141 | 684 | 1,079 | 1,904 | 24.73 | 0 | 67 |
| Sahebganj | 1,834 | 21 | 336 | 193 | 550 | 29.99 | 0 | 72 |
| Grand Total | 79,714 | 2,590 | 9,917 | 10,470 | 22,977 | 28.82 | 83 | 683 |

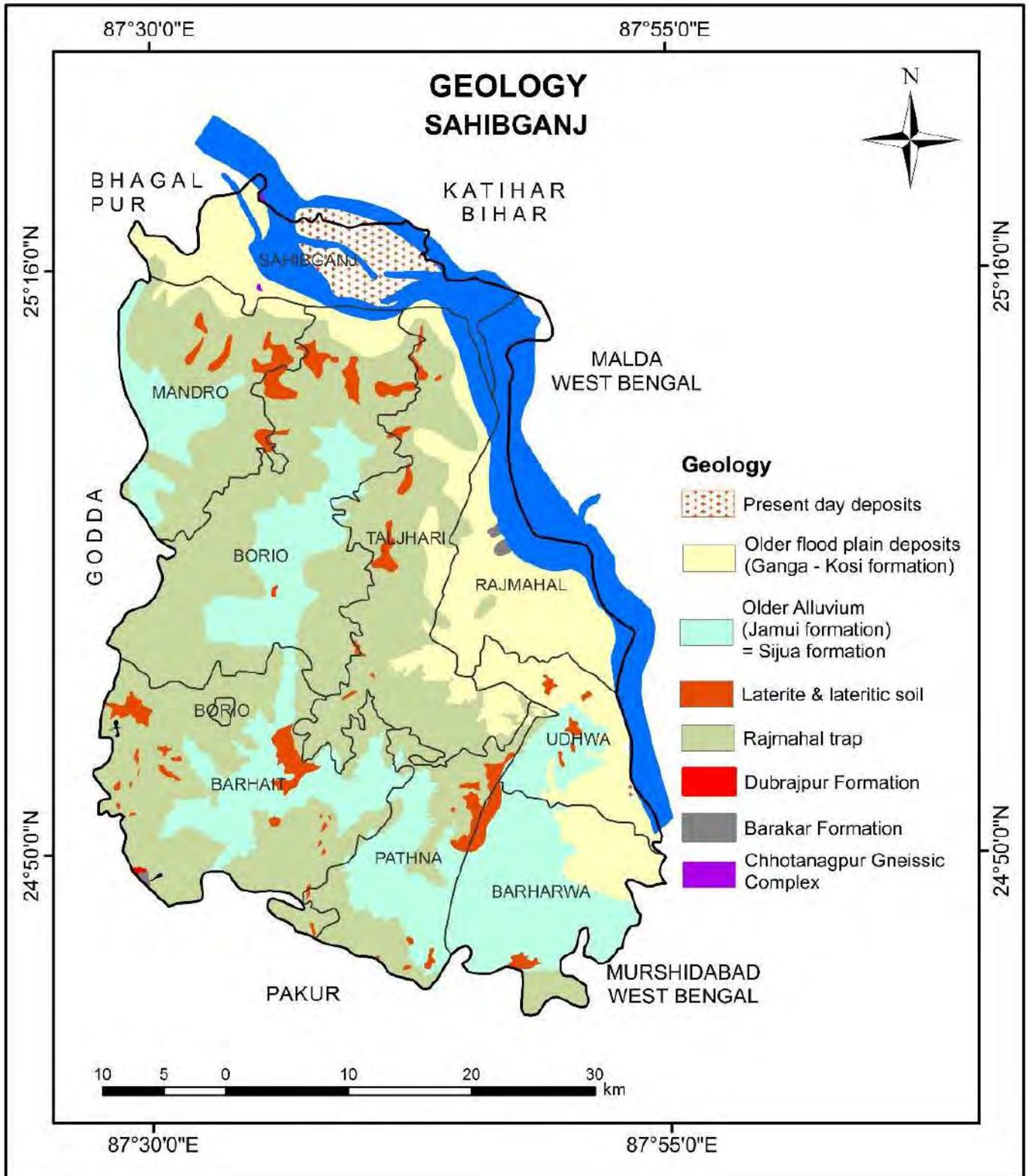
(Source: India state of forest report 2011-Jharkhand)

4. GEOLOGY OF THE DISTRICT

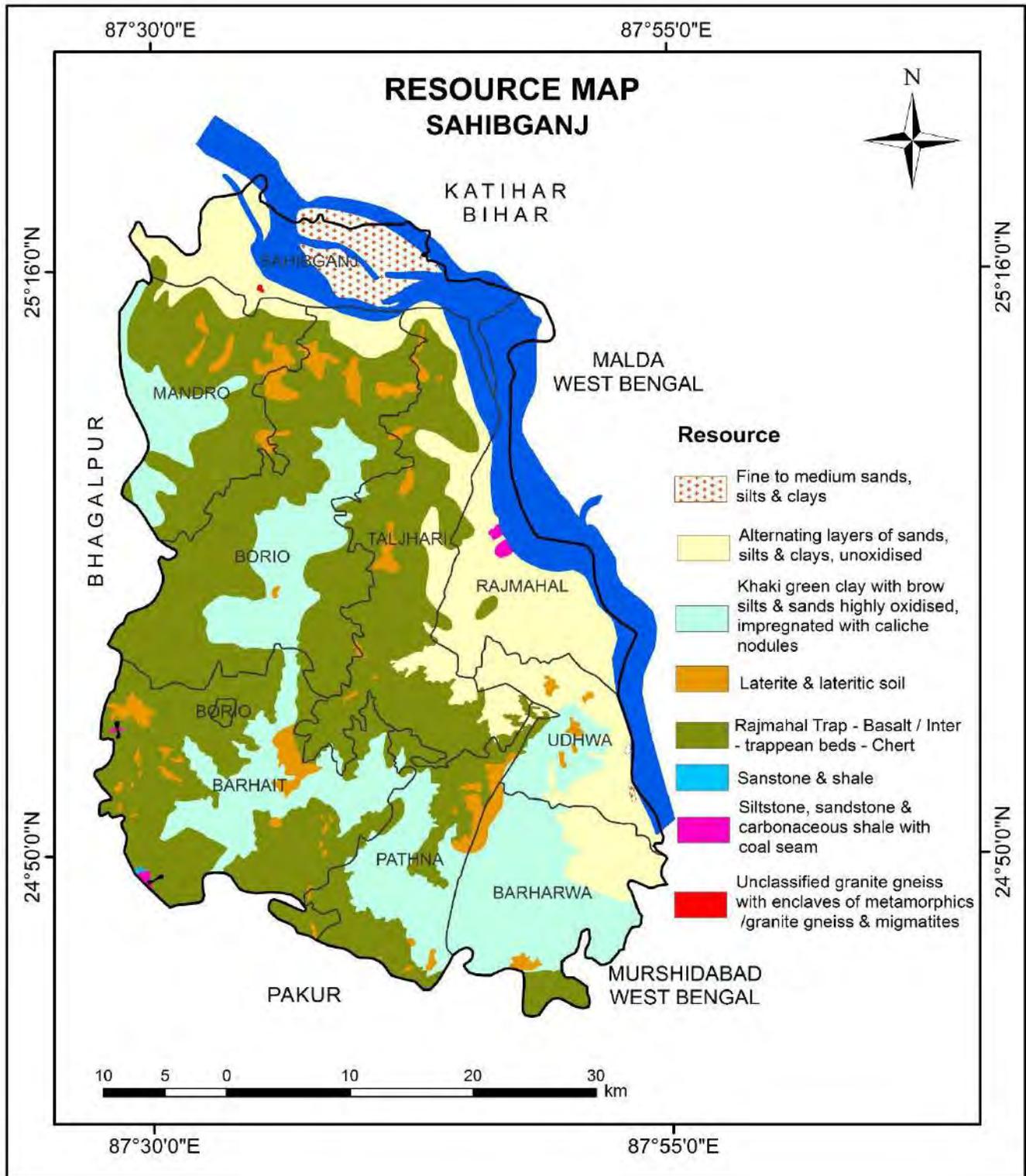
The major part of the district is represented by Rajmahal traps (volcanics) having a huge thickness of lava flows. It has been observed that at least seven successive flows of basalt in the area each flow ranging in thickness between 20m to 75m. The rocks are basaltic lava ranging in thickness from 450m to 550m. In basalt the intratrapeans are represented by tuffs, claystones and siltstone. Some of the rocks are silicified and porcelanide with quartz, Agate and Chalcedony. These intratrapeans are 40m thick. The rocks are of Jurassic to Cretaceous age. Radiometric age of these rocks varies from 11.8 to 70 million years. These rocks are extended for 125Km in Sahibganj near the river Ganges. Patchy occurrences of Chhotanagpur granite gneissic complex associated with granite gneiss and migmatites and Barakar formation of Gondwana super group consisting of siltstone, sandstone and carbonaceous shale with coal seam are found to occur in the western sector of the district. A continuous band of older alluvium with clay impregnated with caliches nodules is very much conspicuous in the eastern part of the area. In the eastern and northern margin of the area recent alluvium of the Ganga fringes the older rocks which is constituted by sands, silt and clays.

The generalised stratigraphic succession of the area, established by GSI is as follows :-

| AGE | FORMATION | LITHOLOGY |
|---|---|--|
| Recent Quarternary / Tertiary | Alluvial undifferentiated surfacial depth | Loose soil, silt & clay, laterites, lateritic soil, lateritic gravel with petrified wood & china clay |
| Middle Jurassic to lower creataceous | Unconformity Rajmahal Traps and intertrapeans | Flow of basalt and intertrappean sediments (sandstone, shale etc) |
| Lower Jurassic (Upper Triassic) | Unconformity Dubrajpur | Conglomerates, coarse to medium grained sand stone, grey siltstone, molted shale and thin coal bands. |
| Lower Permian | Unconformity Barakar | Coarse to medium grained sand stone, carbonaceous shale & c coal seam, greenish sandstone, siltstone, green shale. |
| Upper Carboniferous to lower Permian (Permocarbiniferous) | Talchir | Granites and granitoids gneiss, pegmatite quartz veins and metabasic dykes. |
| Precambrian | Metamorphics | ----- |

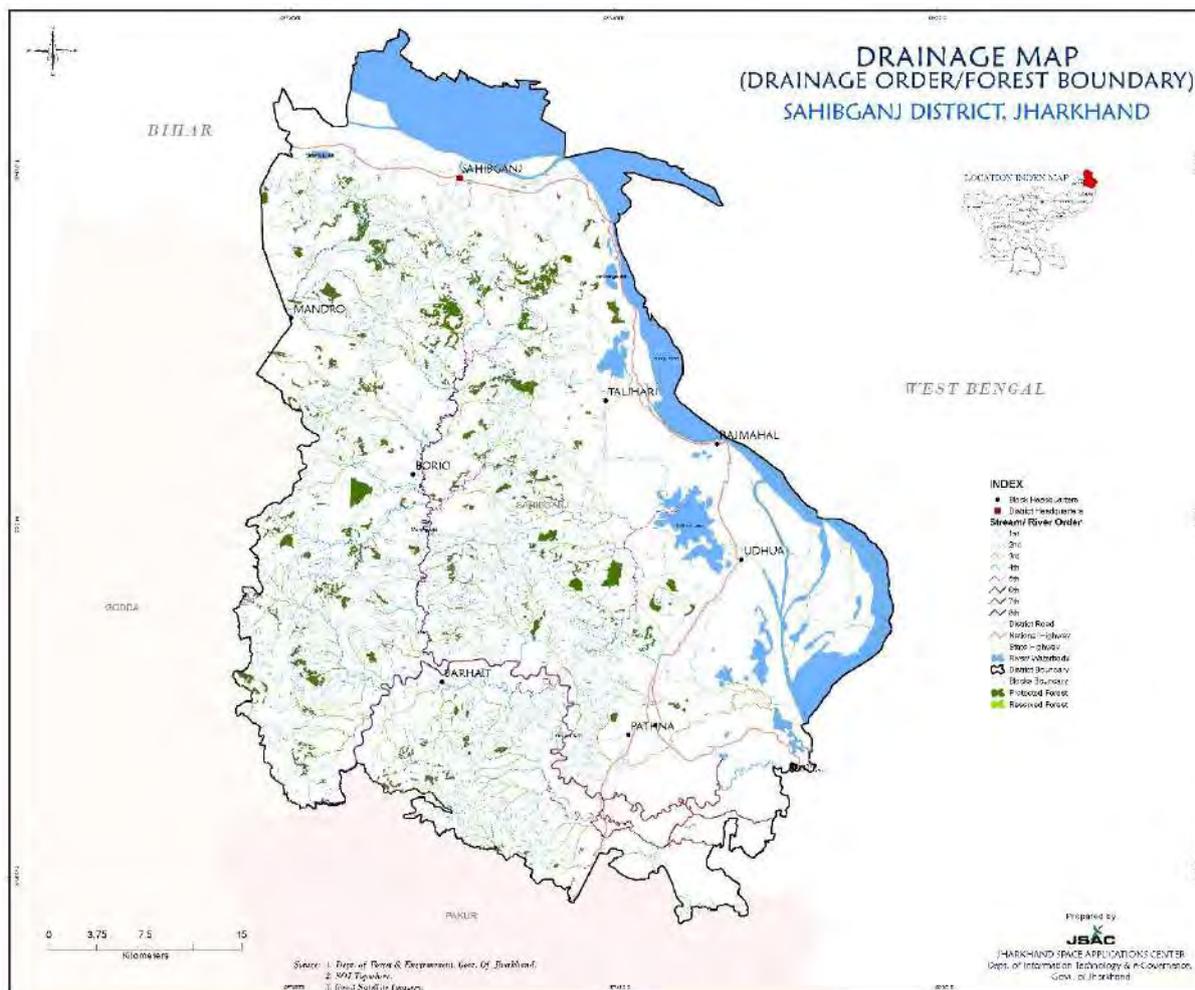


(Source: Geological Survey of India)



(Source: Geological Survey of India)

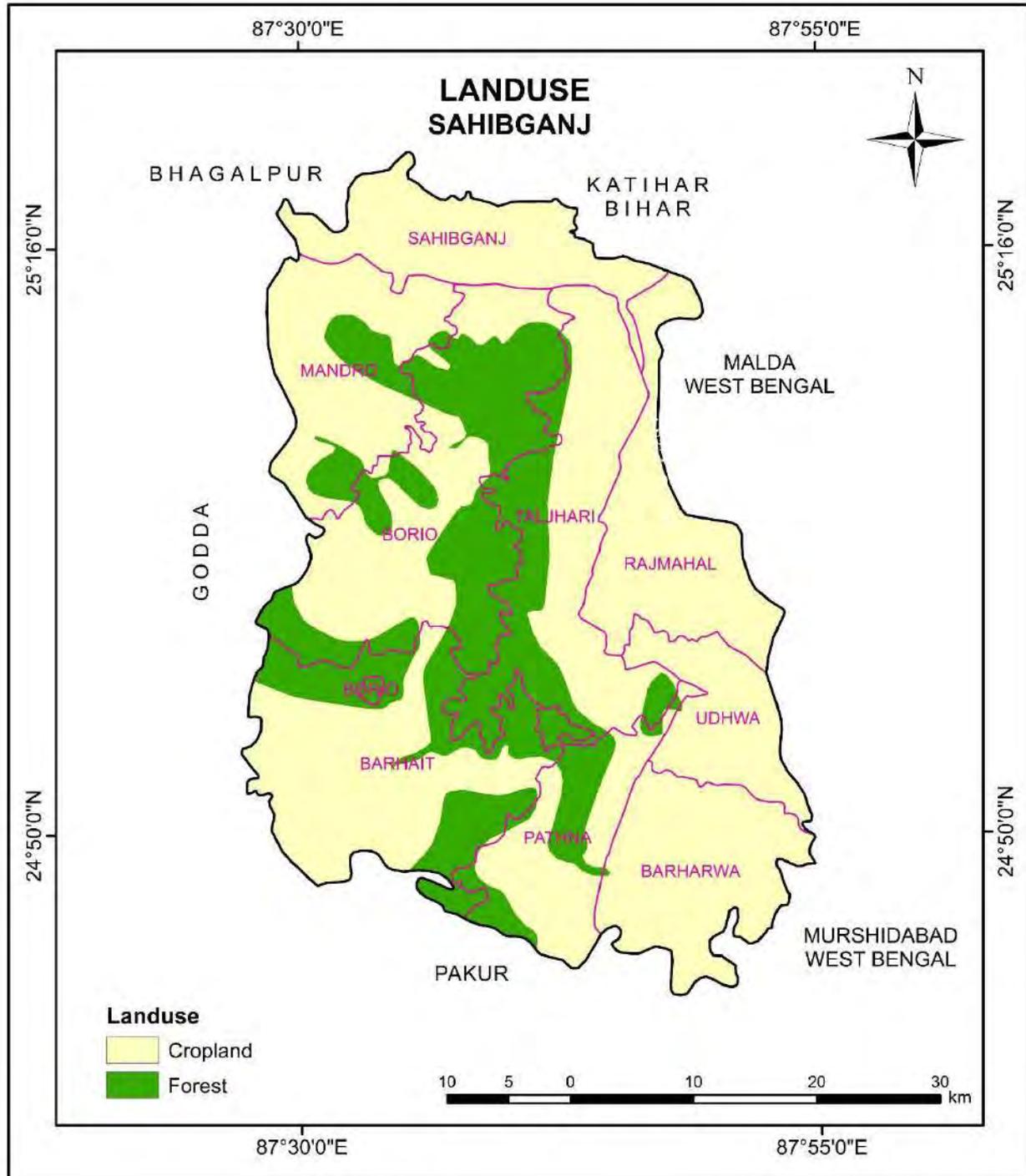
5. DRAINAGE OF IRRIGATION PATTERN



Paddy and maize are important crops grown in the district. Linseed, groundnuts, sweet potatoes and khesari are other crops grown widely in Rajmahal and its adjoining areas. Irrigational facilities are not adequate in this district. The most common source is the dug well, but this is not a very dependable source of irrigation. The major part of the district being rocky in nature, it is difficult to dig wells. The undulating nature of land makes it possible to store rain water by bunding. Apart from being dependent upon rains, these are by no means adequate. The result is that failure of rains invariably involves failure of crops except in small pockets.

| IRRIGATION BY DIFFERENT SOURCES (Areas and Number of Structures) | Nos. | Area(Ha) |
|---|------|----------|
| Dugwell | 1361 | 906 |
| Tube wells /Bore wells | 187 | 672 |
| Tanks / Ponds | 133 | 225 |
| Canals | Nil | - |
| Other Sources | 797 | 1261 |
| Net irrigated area | | |
| Gross irrigated area (Ha) | | 3066 |

6. LAND UTILIZATION PATTERN IN THE DISTRICT



(Source: Geological Survey of India)

| LAND USE (Sq Km.) | |
|--------------------------|--------|
| a) Forest area: | 427.4 |
| b) Net area sown: | 414.6 |
| c) Cultivable area: | 473.10 |

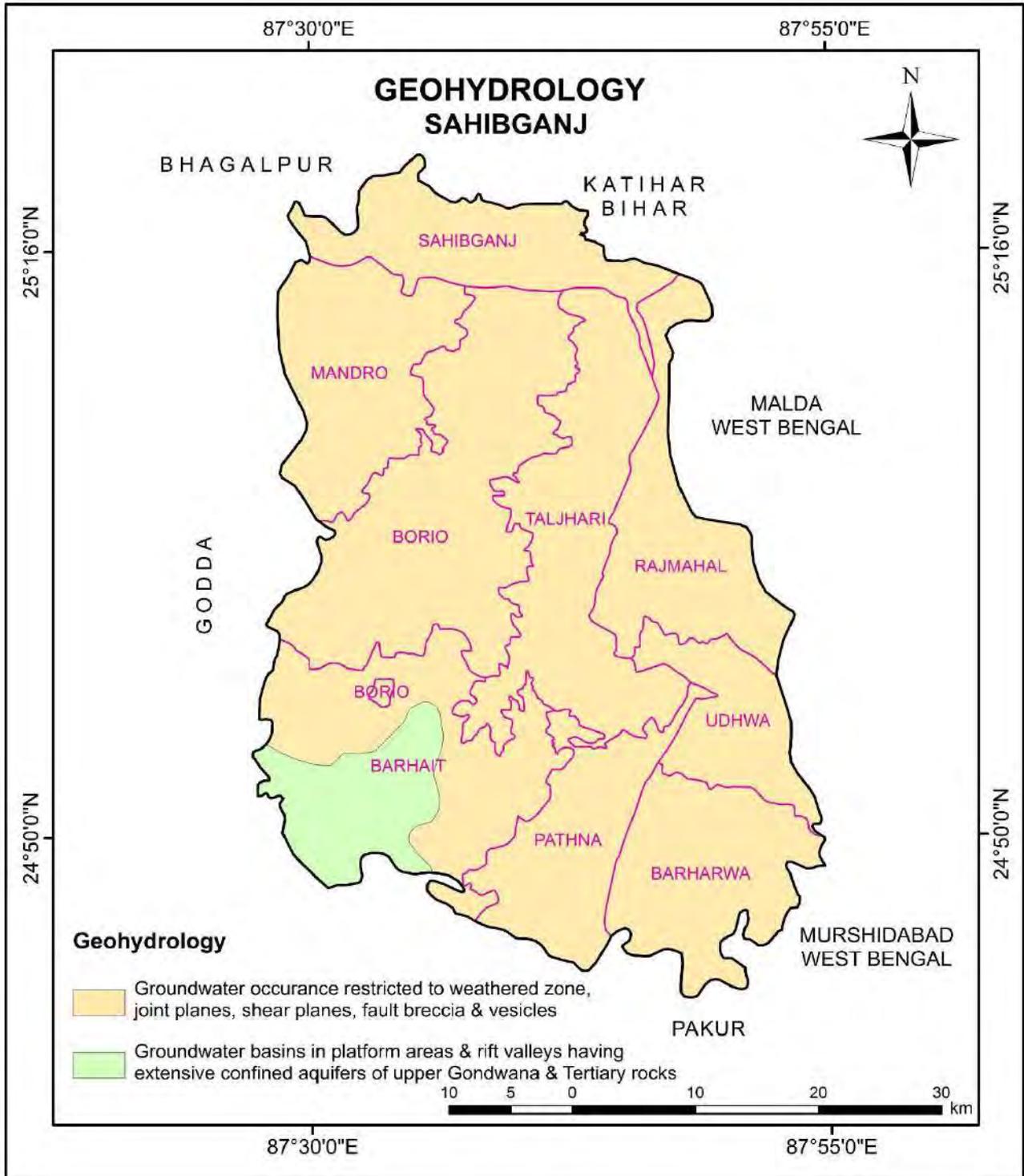
A large part of the district is hilly. The vast tract of land enclosed between hill ranges. The region on the bank of the Ganges is fertile and richly cultivated. The Ganges, Gumani and Bansloi rivers flow through this region. This area has plenty of fertile lands and is richly cultivated.

| | Sahibganj | Jharkhand |
|----------------------------------|------------------|------------------|
| 1. Forest | 21.18 % | 29.2 % |
| 2. Net sown area | 22.85 % | 22.7 % |
| 3. Barren and unculturable waste | 7.77 % | 7.2 % |
| 4. Non agricultural use | 8.04 % | 9.9 % |
| 5. Orchards | 1.46 % | 2.5 % |
| 6. Pasture | 1.39 % | |
| 7. Culturable wasteland | 3.25 % | 3.5 % |
| 8. Current and other fallow | 34.06 % | 25.0 % |

Source: Fertilizer and Agriculture Statistics, Eastern Region (2003-2004)

7. SURFACE WATER AND GROUND WATER SCENARIO OF THE DISTRICT

7.1 Hydrogeology



(Source: Geological Survey of India)

Rajmahal Trap is the major rock type in the district. The other geological formations of the district are alluvium and Laterite.

The alluvium occurs in the northern and eastern boundary of the district, which is composed mainly of sand and sub ordinate clay. Laterites are mainly of insitu origin and have been formed by sub-aerial erosion of underlying basalts under favorable climatic conditions. Laterites provide a productive ground water reservoir due to its very good porous and permeable in nature.

Rajmahal traps having a large thickness of basaltic lava flows occurs in the major part of the district. The different units of the lava flows are the main water bearing horizons in basaltic formation. The basic properties such as the ability to receive recharge, holding capacity of water to take into storage and transmit it as ground water by gravity are different for different litho units of the trappean flows. The massive basaltic unit is hard and compact in nature with negligible primary porosity and permeability. But the process of weathering and development of secondary porosity such as joints and fractures makes it to act as good ground water reservoir. The vesicular units have abundant vesicles that contribute towards hydrogeological properties and thus have high degree of porosity and permeability to serve as potential aquifers. The ground water occurs in near surface in weathered, jointed and fractured basalts zone under water table conditions. The water bearing zone occurring between depths of 15-40 m are either interflow weathered shear zones and directly connected to shallow aquifer in widely spaced major joints and fractures and forms semi confined aquifer. Below the depth of 40 m, where the fracture porosity is insignificant, the weathered flow contacts are completely cut-off from lower aquifer on account of intervening high impermeable massive basalts and intertrappean beds and thus give rise to confining conditions.

Exploratory wells:

To understand the sub – surface geology, identify the various water bearing horizons including their depth, thickness and compute the hydraulic characteristics such as transmissivity and storativity of the aquifers, exploratory drilling programme was carried out by Central Ground Water Board during AAP 1982 – 83 and 05 exploratory wells and 04 observation wells were drilled in the district. In addition, 3 exploratory wells and one observation well drilled during 2012. The depth of exploratory wells ranges between 44.20 to 100.00 mbgl. The static water level of these exploratory wells varies from 5.53 to 9.30 mbgl. The Transmissivity value varies from 32.30 to 176.00 m²/ day while the Storativity value varies from 07.00 X 10⁻⁵ to 07.70 X 10⁻⁵. The detail of exploratory wells drilled by Central Ground Water Board in Sahebganj district is given in table – 2.

7.2 Depth to Water Level: -

There are eight numbers of permanent observation well (HNS) of Central Ground Water Board is located in the district for monitoring of ground water regime. During the year 2012, the pre monsoon depth to water level was monitored between 4.60 to 12.00 mbgl. while the post monsoon water level observed between 2.85 to 7.93 mbgl. The pre monsoon and post monsoon depth to water level maps (2012) of the district prepared and shown in Figure 1 and 2 respectively.

7.3 Seasonal Fluctuation: -

From the pre monsoon and post monsoon depth to water level data collected during May 2012 and November 2012 respectively, water level fluctuation were computed for all the HNS located in the district. The water level fluctuation of the district varies from 0.28 to 9.15 m.

7.4 Long term water level trend: -

Water level of an area depends upon various factors like the storage of ground water development and variation in rainfall over a long period, recharge from rainfall and different sources. Central Ground Water Board has established eight National Hyrdograph Stations (NHS) for the study of water level behavior in the district. The water level data of each station has been analyzed. Pre monsoon and post monsoon long term water level trend has been calculated for the period of 2002 – 2011 (Table 4). The long term water level trend is showing rising trend between 0.006 – 0.530 m/year, 0.116 – 0.274 m/ year and 0.086 – 0.264 m/ year for pre monsoon, post monsoon and all season respectively. Similarly, the long term water level trend is showing falling trend between 0.018 – 0.404 m/year, 0.026 – 0.561 m/year and 0.018 – 0.413 m/ year for pre monsoon, post monsoon and all period respectively. About 37.5% of NHS showing rising trend of ground water while 25% of NHS showing falling trend for pre and post monsoon period. Similarly, about 37.50% of NHS shows rising trend and rest 62. 50% show declining trend for all seasons.

7.5 Ground Water Resources

Based on the recommendation of the Ground Water Estimation Committee – 1997 (GEC – 1997), block wise the ground water resource assessment has been carried out for all the blocks of the district. The net ground water availability of the district is 11613.70 ham. The gross ground water draft for all uses of the district is 2606.09 ham. The average stage of ground water development in the district is 22.44 %. All blocks of the district are falling under “Safe” category. The stage of ground water development varies from 8.20% to 46.26% (Table – 6, Fig. 4). The net ground water availability for future irrigation development for the district is 8513.63 ham. The State of Development map is shown in Figure 4.

7.6 Ground Water Quality

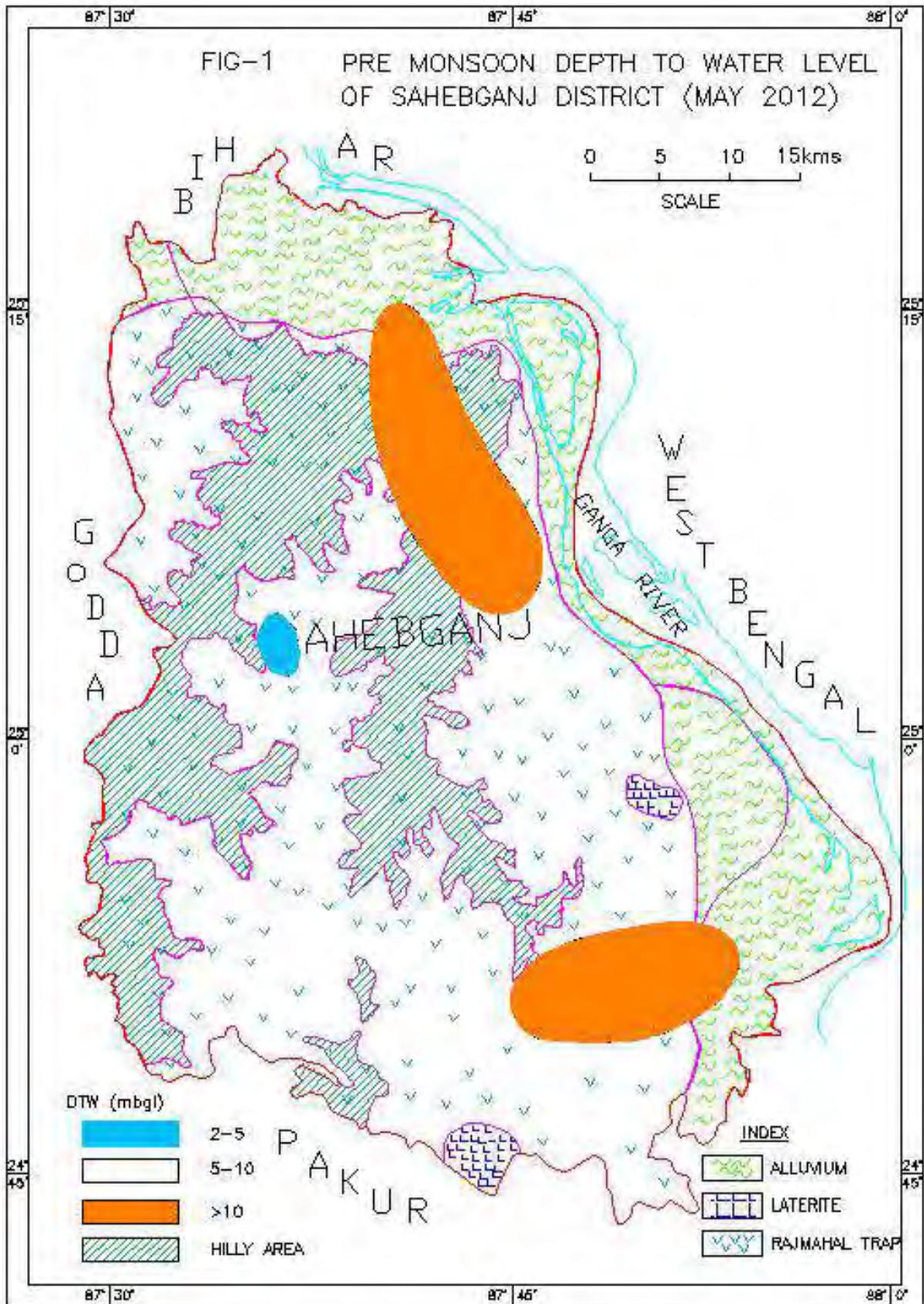
To evaluate the quality of ground water, samples have been collected from 5 representative HNS during the May – 2011. These samples were analyzed to assess the chemical quality of ground water and its suitability for drinking and irrigation purposes. The samples represent the quality of phreatic zone or the shallow zone. The ground water samples were analysed for major chemical constituents by using standard procedure at chemical laboratory in CGWB, MER, Patna. Analysed results are given in Table 5.

The results of ground water samples were analyzed in accordance with the standard (ISI – 1993) for drinking purpose. In general the quality of ground water in the phreatic aquifer is suitable for drinking and irrigation purpose except few samples, which shows nitrate concentration more than permissible limit. The EC value ranges from 193 – 1687 micro Siemens/cm at 250c. During the Ground Water Management Studies (AAP 2006 – 07), 60 acidified samples were collected from Gangetic alluvium of the district for the study of Arsenic in ground water. As per

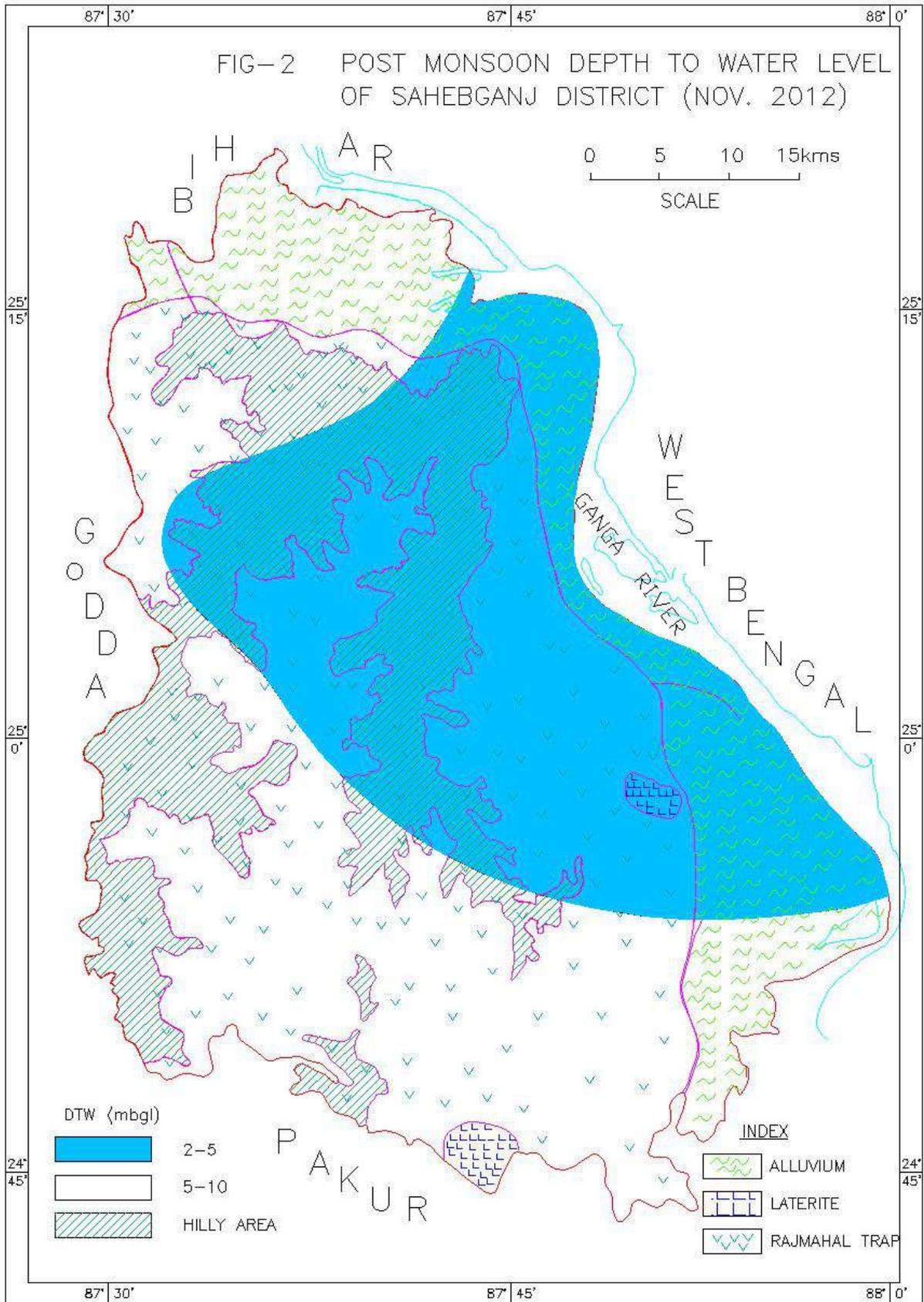
the analytical results of these samples, the Arsenic concentration is found more than 50 ppb in 20% of the samples and in 16.66% of the samples Arsenic value ranges between 10 – 50 ppb.

7.7 Status of Ground Water Development

There is sufficient scope for ground water development through shallow as wells deep bore wells. State Govt. department has been constructed a large number of bore wells to mitigate the drinking water problem in the district. Central Ground Water Board has drilled 8 exploratory wells 5 observation wells in the district. The depth of bore wells ranges between 44.20 – 200.00 mbgl. The yield of bore wells ranges from 1.08 to 30.00 m³/hr. The Transmissivity and Storativity value ranges from 32.30 to 176.00 m²/day and 01.40 x 10⁻⁴ to 07.30 x 10⁻⁵ respectively (Table 2). The stage of ground water development of the district is only 22.44%.

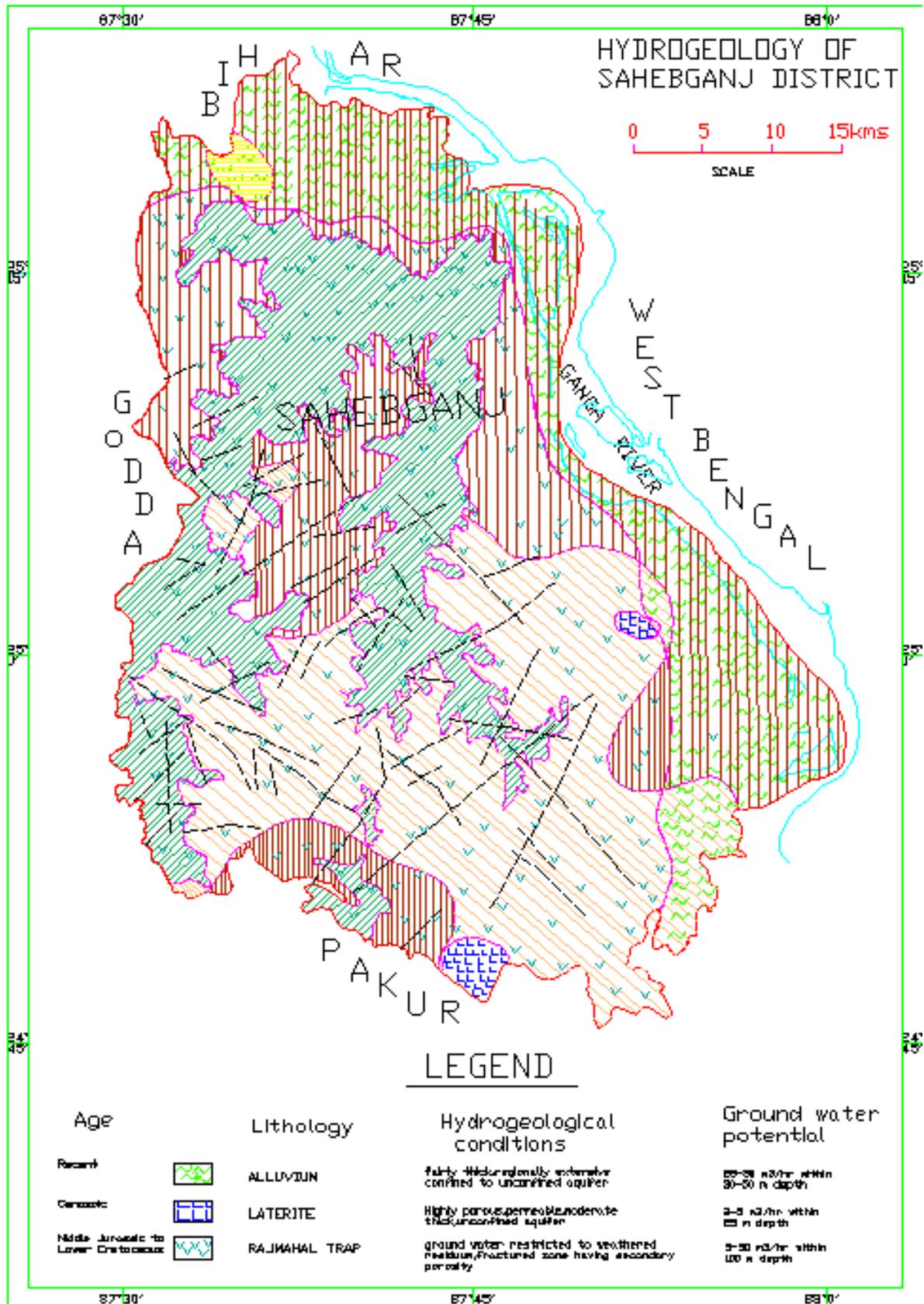


Map Showing Pre-Monsoon Depth of Water Level of Sahibganj District
(Source: Central Ground Water Board Report)

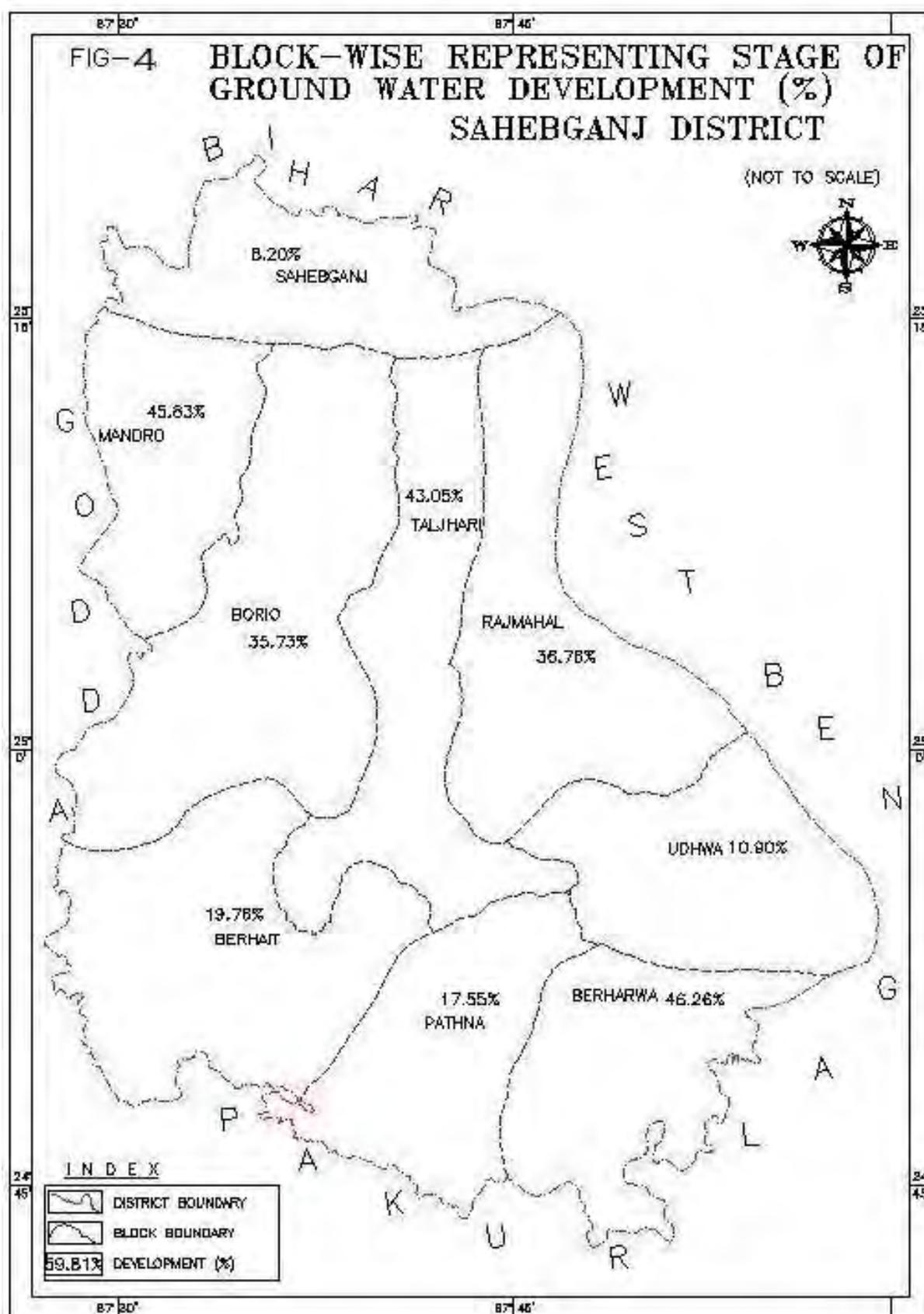


Map Showing Post-Monsoon Depth of Water Level of Sahibganj District

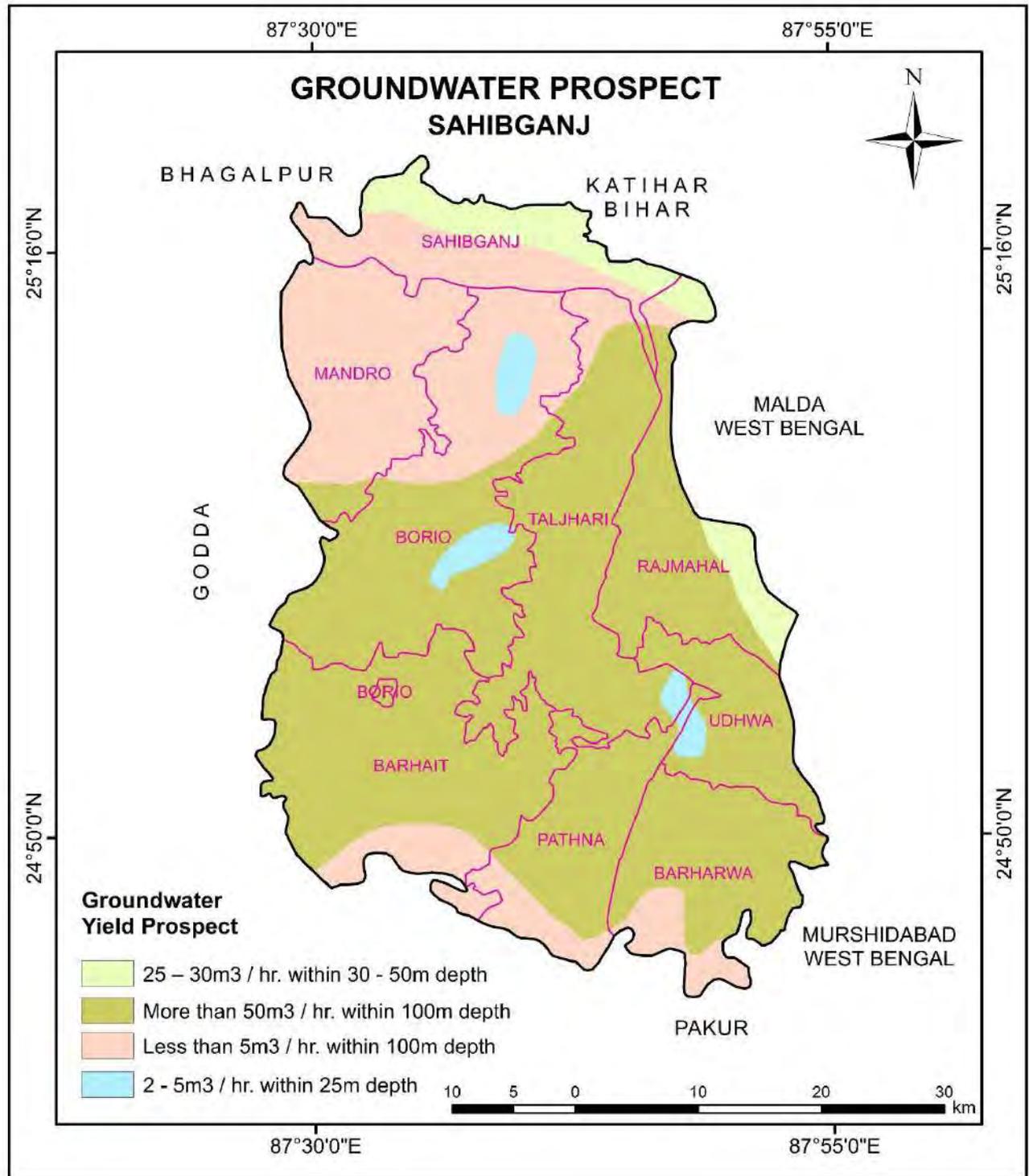
(Source: Central Ground Water Board Report)



(Source: Central Ground Water Board Report)



(Source: Central Ground Water Board Report)



(Source: Geological Survey of India)

7.8 Ground Water Development

Dug wells and shallow to medium depth (upto 50 m) bore wells are the main ground water extraction structures in the area to meet the increasing demand of domestic water supply and irrigation. The overall stage of ground water development of the district is 22.44% only. Thus, there is sufficient scope for development of ground water through dug wells, shallow and medium deep bore wells.

Construction of dug cum bore well structure is also suitable for enhancing the yield of dug wells, which will be cost effective. The ground water development varies in different places depending on the availability of favorable potential zones / aquifer. For the construction of ground water structures, knowledge of the local as well as regional hydrogeological condition of the area is necessary.

Ground water potential available for future development, considering the present ground water draft has been worked out as per norms of Ground Water Estimation Committee – 1997 (GEC – 1997) and the details of ground water recharge, net annual ground water availability, annual draft, net ground water balance and stage of ground water development has been assessed.

7.9 Water Conservation and Artificial Recharge

In view of the increasing thrust on development of ground water resources, there is urgent need to augment the depleting ground water resources. This gets augmented through natural recharge and can be augmented in an increased scale through artificial recharge. From hydrogeological point of view, rain water conservation is needed to arrest decline in ground water levels and to improve ground water quality by dilution. The construction of water conservation structures, artificial recharge structures, depends on the topographic features, hydrological and hydrogeological conditions of the area. From this point of view, the Sahebganj district may be divided into two parts – 1) the hard rock area i.e. basaltic terrain is undulating topographic setting with hills is suitable for check dam, gabion structures, percolation tank, contour bunding and trenching 2) the alluvial area is suitable for recharge shaft and percolation tank.

7.10 Ground Water Related Issue and Problems

The Arsenic concentration has been found more than permissible limits in some villages like Hazipur Bihta, Dihari, Bari Kudarjana, Nadhi Dera, Reza Nagar, Baluadiara and Chanan of Sahebganj block.

Awareness and Training Activity

THE MASS AWARENESS PROGRAMME (MAP) BY CGWB - Nil

Participation in Exhibition, Mela, Fair etc. - Nil

Presentation and Lecture deliver in public forum / Radio / T.V / Institution of repute / Grassroots association / NGO / Academic institution etc. – Nil

7.11 Area Notified by CGWB

As per the ground water resource assessment report of Jharkhand state, all blocks of the district fall under the safe category. Thus, the authority has not been notified any of the blocks.

7.12 RECOMMENDATION:-

1. Flouride concentration in ground water (bore well) exceeds the permissible limits in/around villages Dharampur Morh, Amrapara, Bannawgram, Dhekiduba, Jatang

- Khakhsa and Rajdaha. In fluoride affected area, the ground water must be used after defluoridation through fluoride removal plants. Alternative source may be identified. The existing fluoride affected sources may be sealed.
2. Nitrate concentration in shallow aquifer (dug well) is found more than permissible limit in/around villages Bannawgram (Pakuria Block), Kairachhatar (Maheshpur Block) and Litipara (Litipara Block). The bore well may be a better alternate option for the drinking water purposes for the above villages.
 3. The exploration data indicates the poor percentage of successful bore wells in the district. Thus the geophysical surveys may be adopted for selection of suitable sites for ground water exploration.
 4. In order to conserve run – off water during monsoon, the water conservation and recharge structure may be constructed in and around Barharwa, Barhait, Borio, Sahebganj and Sakrigali villages where the long term (2002 – 2011) water level trend shows declining trend during post monsoon.

DETAILS OF EXPLORATORY WELLS DRILLED BY CGWB IN SAHEBGANJ DISTRICT

| Sr. No | Location/ Block | Depth Drilled (mbgl) | Length of casing pipe/ Depth const. (m) | Static Water Level (mbgl) | Dis-charge (m ³ /hr) | Draw-down (m) | Specific Capacity (m ³ /hr/m) | Trans-missivity (m ² /day) | Storativity |
|--------|-----------------|----------------------|---|---------------------------|----------------------------------|---------------|--|---------------------------------------|--------------------------|
| 1 | Barharwa | 100.00 | 44.70 | 9.30 | 51.60 | 8.92 | 5.78 | 176.00 | 01.40 X 10 ⁻⁴ |
| | OW | 90.70 | -- | -- | -- | -- | -- | -- | -- |
| 2 | Barhait | 90.65 | 16.00 | 7.65 | 21.10 | 15.34 | 1.70 | 44.00 | -- |
| | OW | 100.00 | -- | -- | -- | -- | -- | -- | -- |
| 3 | Borio | 75.00 | 14.20 | 5.53 | 21.00 | 9.65 | 2.17 | 32.30 | 07.00 X 10 ⁻⁵ |
| | OW | 44.20 | -- | -- | -- | -- | -- | -- | -- |
| 4 | Rajmahal | 74.45 | 24.30 | 6.90 | 6.12 | 3.67 | 1.66 | 88.00 | 07.30 X 10 ⁻⁵ |
| | OW | 74.45 | -- | -- | -- | -- | -- | -- | -- |
| 5 | Sahebganj | 54.15 | -- | Abandoned | | | | | |
| 6 | Borio | 200.00 | 29.70 | Abandoned | | | | | |
| 7 | Mandro | 200.00 | 32.00 | Abandoned | | | | | |
| 8 | Taljhari | 200.00 | 31.00 | 7.92 | 47.88 | 25.14 | 1.90 | 12.00 | -- |

| | | | | | | | | |
|----|--------|-------|------|-------|-------|------|-------|--------------------------|
| OW | 200.00 | 32.00 | 7.84 | 47.88 | 11.76 | 4.07 | 17.50 | 01.25 X 10 ⁻³ |
|----|--------|-------|------|-------|-------|------|-------|--------------------------|

DEPTH TO WATER LEVEL OF EXISTING HYDROGRAPH NETWORK STATIONS OF SAHEBGANJ DISTRICT (2012)

| Sr. No. | Location | Depth to water level (mbgl) | | | |
|---------|-----------|-----------------------------|-----------|-----------|-----------|
| | | May 2012 | Aug. 2012 | Nov. 2012 | Jan. 2013 |
| 1 | Sahenganj | 10.00 | 8.52 | 7.93 | 8.00 |
| 2 | Rajmahal | 6.00 | 4.45 | 3.00 | 5.22 |
| 3 | Taljhari | 12.00 | 2.25 | 2.85 | 4.81 |
| 4 | Berhait | 9.00 | 8.20 | 7.63 | 8.15 |
| 5 | Barharwa | 10.80 | 7.20 | 5.55 | 6.08 |
| 6 | Borio | 4.60 | 4.45 | 4.32 | 4.38 |
| 7 | Mandro | 6.90 | 1.60 | 5.08 | 3.55 |
| 8 | Sakrigali | 7.10 | 7.70 | 4.09 | 4.62 |

LONG TERM WATER LEVEL TREND FOR EXISTING HYDROGRAPH NETWORK STATIONS IN SAHEBGANJ DISTRICT (2002 – 2011)

| Sl. No. | Location | Pre monsoon trend (m/year) | | Post monsoon trend (m/year) | | All period trend (m/year) | |
|---------|-----------|----------------------------|-------|-----------------------------|-------|---------------------------|-------|
| | | Rise | Fall | Rise | Fall | Rise | Fall |
| 1 | Barhrwa | 0.006 | -- | -- | 0.115 | -- | 0.036 |
| 2 | Barhait | -- | 0.018 | -- | 0.561 | -- | 0.270 |
| 3 | Borio | 0.530 | -- | -- | 0.026 | 0.201 | -- |
| 4 | Mandro | -- | -- | -- | -- | 0.260 | -- |
| 5 | Rajmahal | -- | 0.404 | 0.116 | -- | -- | 0.104 |
| 6 | Sahebganj | -- | 0.379 | -- | 0.387 | -- | 0.413 |
| 7 | Sakrigali | -- | 0.072 | -- | 0.058 | -- | 0.018 |
| 8 | Taljhari | 0.484 | -- | 0.274 | -- | 0.086 | -- |

CHEMICAL ANALYSIS RESULT OF WATER SAMPLES COLLECTED FROM SELECTED HYDROGRAPH NETWORK STATIONS OF SAHEBGANJ DISTRICT (May 2011)

| Well No. | Location | Block | EC in micro siemens/ cm at 25°C | pH | TH as CaCO ₃ | Ca | Mg | Na | K | HCO ₃ | Cl |
|----------|-----------|----------|---------------------------------|------|-------------------------|----|------|-----|-----|------------------|--------|
| | | | | | | | | | | | |
| 1 | Rajmahal | Rajmahal | 1667 | 8.32 | 360 | 68 | 46.2 | 126 | 140 | 442.8 | 109.89 |
| 2 | Berhait | Berhait | 313 | 8.22 | 30 | 4 | 4.9 | 30 | 38 | 98.40 | 14.18 |
| 3 | Barharwa | Barharwa | 193 | 8.28 | 45 | 16 | 1.21 | 17 | 3.2 | 98.40 | 14.18 |
| 4 | Borio | Borio | 1687 | 8.30 | 380 | 60 | 55.9 | 124 | 87 | 221.4 | 439.58 |
| 5 | Sakrigali | Taljhari | 1404 | 8.14 | 260 | 48 | 34 | 187 | 6.5 | 332.1 | 166.61 |

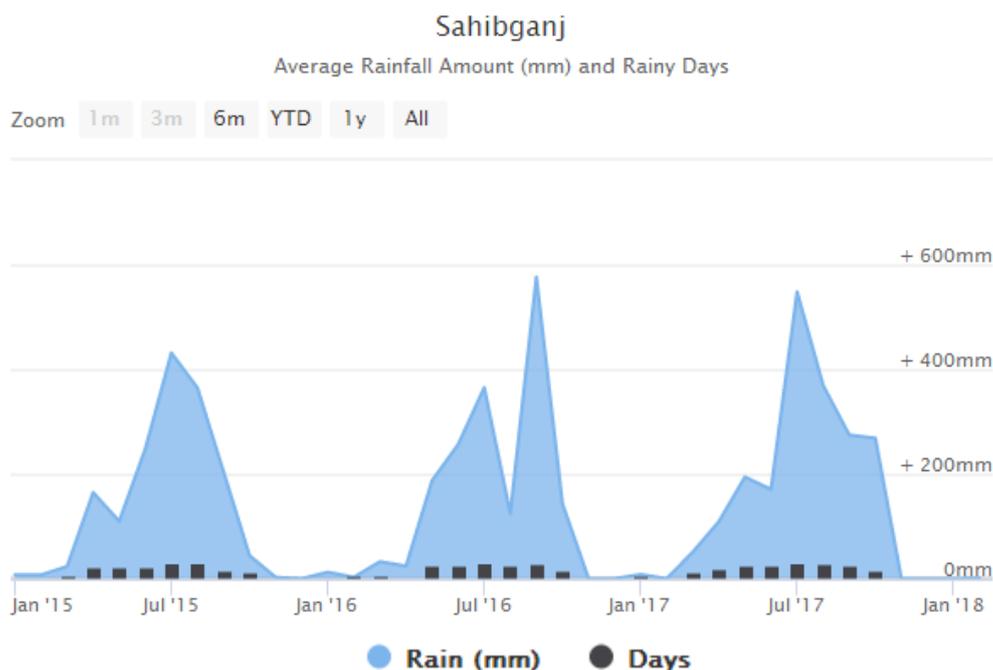
DETAILS OF GROUND WATER RESOURCES AND STAGE OF GROUND WATER DEVELOPMENT OF SAHEBGANJ DISTRICT AS ON 31st MARCH 2009 (in hectare meters)

| Sr. No. | Assessment Unit/ District | Net Annual Ground Water Availability | Gross Ground Water Draft for Irrigation | Gross Ground Water Draft for Domestic and Industrial water Supply | Gross Ground Water Draft for all Uses (10+11) | Allocation for Domestic and Industrial Requirement supply upto next 25 years | Net Ground Water Availability for future irrigation development (9 – 12 – 13) | Stage of Ground Water Development (12/9)*100 (%) | Categorisation for future ground water development (safe/ critical/ over - exploited) |
|---------|---------------------------|--------------------------------------|---|---|---|--|---|--|---|
| 1 | 2 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 11 |
| 1 | Sahebganj | 2365.41 | 25.056 | 168.99 | 194.05 | 225.30 | 2115.06 | 8.20 | Safe |
| 2 | Mandro | 462.87 | 111.36 | 100.79 | 212.15 | 217.14 | 1194.18 | 45.83 | Safe |
| 3 | Borio | 787.12 | 142.912 | 138.31 | 281.23 | 459.81 | 1785.75 | 35.73 | Safe |
| 4 | Taljhari | 386.78 | 58.464 | 108.06 | 166.52 | 144.06 | 184.26 | 43.05 | Safe |
| 5 | Rajmahal | 747.22 | 68.316 | 206.37 | 274.69 | 275.14 | 403.76 | 36.76 | Safe |
| 6 | Udhwa | 1978.59 | 31.552 | 219.49 | 251.04 | 292.62 | 906.10 | 10.90 | Safe |
| 7 | Pathna | 1292.89 | 112.752 | 114.19 | 226.94 | 1027.90 | 1219.05 | 17.55 | Safe |
| 8 | Barharwa | 1334.42 | 375.512 | 241.82 | 617.33 | 322.40 | 636.51 | 46.26 | Safe |
| 9 | Barhait | 1934.22 | 197.664 | 184.48 | 382.14 | 245.95 | 1490.60 | 19.76 | Safe |
| | Total | 11613.70 | 1123.59 | 1482.50 | 2606.09 | 1976.48 | 8513.63 | 22.44 | |

8. RAINFALL OF THE DISTRICT AND CLIMATE CONDITION

8.1 Monthwise rainfall:

The driest month is December. There is on average 1 mm of precipitation in December. In July, the precipitation reaches its peak, with an average of 323 mm.

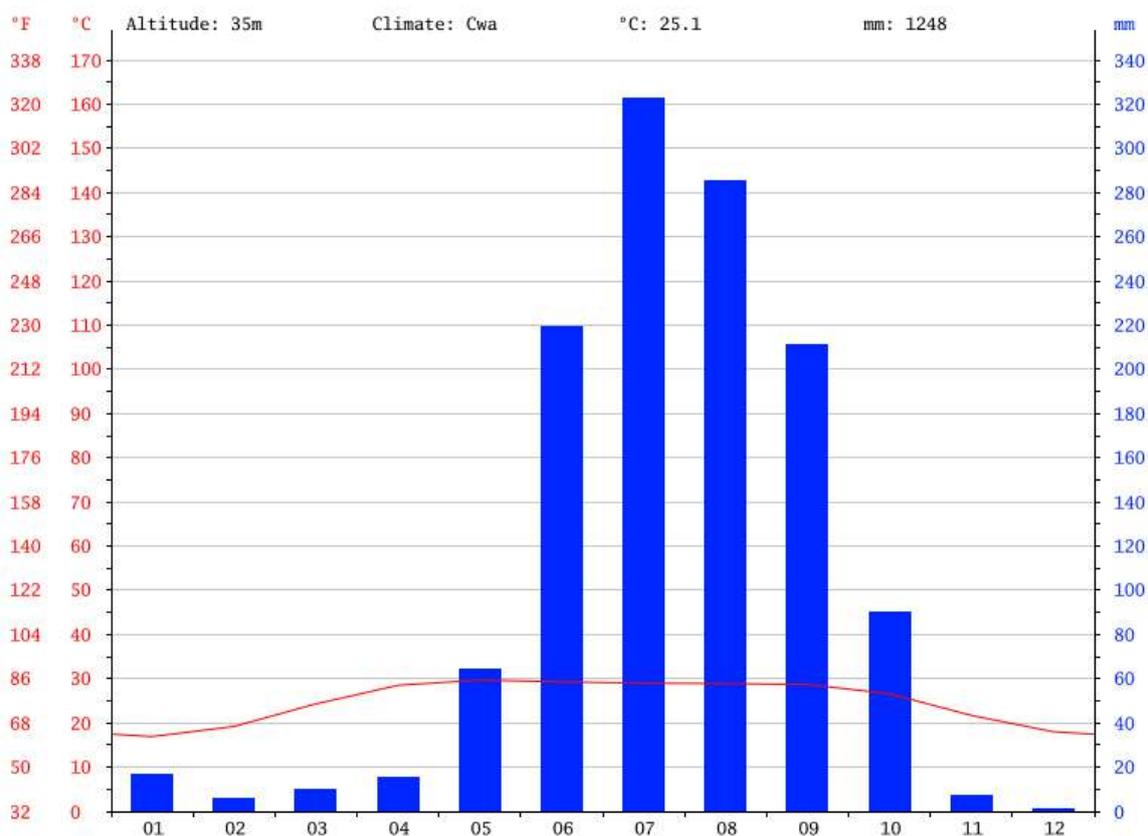


| Year | | 2012 | 2013 | 2014 | 2015 | 2016 |
|---------|-------|---------|---------|---------|---------|---------|
| Sl. No. | Month | Avg(mm) | Avg(mm) | Avg(mm) | Avg(mm) | Avg(mm) |
| 1 | Jan | 381.80 | 0.00 | 2.00 | 12.40 | 6.40 |
| 2 | Feb | 217.00 | 8.60 | 62.80 | 12.80 | 0.00 |
| 3 | Mar | 415.40 | 0.30 | 2.00 | 11.60 | 8.40 |
| 4 | Apr | 0.00 | 14.20 | 29.60 | 112.20 | 12.60 |
| 5 | May | 168.40 | 180.80 | 312.60 | 120.20 | 66.60 |
| 6 | Jun | 210.20 | 331.40 | 160.00 | 425.20 | 240.60 |
| 7 | Jul | 365.60 | 188.40 | 508.00 | 397.40 | 317.80 |
| 8 | Aug | 381.80 | 419.20 | 107.20 | 397.40 | 162.80 |
| 9 | Sep | 217.00 | 237.20 | 198.60 | 162.00 | 310.20 |
| 10 | Oct | 415.40 | 210.80 | 30.60 | 28.00 | 19.60 |
| 11 | Nov | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 12 | Dec | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

(Source: Indian Meteorological Department)

The Indian Meteorological Department, Nagpur, vide letter No. NAGPUR RMC/CS-312, dated 18th January, 2016 has provided the period of Rainy Season viz. Normal dates of Onset and Withdrawal of South West Monsoon over India as state-wise. The duration for the period is 10th June to 15th October.

8.2 Climate



Climograph – Sahibganj

The driest month is December. There is 1 mm of precipitation in December. In July, the precipitation reaches its peak, with an average of 323 mm. The district is characterized by humid to sub-humid climate. During summer the hot spell prevails from March to middle of June. Rainy season started from middle of June to end to September. Winter starts from the middle of November and continues till the end of February. With an average of 29.7 °C, May is the warmest month. At 16.9 °C on average, January is the coldest month of the year.

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| | January | February | March | April | May | June | July | August | September | October | November | December |
|-------------------------------|---------|----------|-------|-------|------|------|------|--------|-----------|---------|----------|----------|
| Avg. Temperature (°C) | 16.9 | 19.2 | 24.3 | 28.5 | 29.7 | 29.3 | 29 | 28.9 | 28.7 | 26.6 | 21.7 | 18 |
| Min. Temperature (°C) | 9.4 | 11.6 | 16.2 | 21 | 24.1 | 25.4 | 26 | 26 | 25.4 | 21.9 | 14.8 | 10.5 |
| Max. Temperature (°C) | 24.4 | 26.8 | 32.4 | 36.1 | 35.4 | 33.3 | 32 | 31.8 | 32.1 | 31.4 | 28.6 | 25.5 |
| Avg. Temperature (°F) | 62.4 | 66.6 | 75.7 | 83.3 | 85.5 | 84.7 | 84.2 | 84.0 | 83.7 | 79.9 | 71.1 | 64.4 |
| Min. Temperature (°F) | 48.9 | 52.9 | 61.2 | 69.8 | 75.4 | 77.7 | 78.8 | 78.8 | 77.7 | 71.4 | 58.6 | 50.9 |
| Max. Temperature (°F) | 75.9 | 80.2 | 90.3 | 97.0 | 95.7 | 91.9 | 89.6 | 89.2 | 89.8 | 88.5 | 83.5 | 77.9 |
| Precipitation / Rainfall (mm) | 17 | 6 | 10 | 15 | 64 | 219 | 323 | 285 | 211 | 90 | 7 | 1 |

Source: Indian Meteorological Department

9. DETAILS OF MINING LEASE IN THE DISTRICT

9.1 List of Mines in operation in the district-

(Source: <http://www.jharkhandminerals.gov.in>, List as on 03/08/2018)

| Sl# | Lessee Name | Location | Mineral |
|-----|------------------------------|-------------------------|----------------------------------|
| 1 | ABDUL RAJJAK | BOARNA | STONE |
| 2 | AKASH ALI | MALITOK | STONE |
| 3 | BHAGWAN STONE WORKS | BORNA | STONE |
| 4 | BIHAR BENTONITE SUPPLY CO | BANAPARA AND MOTIYANI | STONE (CHIPS), STONE DUST, STONE |
| 5 | BIHAR BENTONITE SUPPLY CO | BARA BANAPARA | STONE |
| 6 | BIKASH STONE WORKS | BUNDABEDO BARAGHATI | STONE |
| 7 | BUDHAWA PAHARIA | MUNDLI | STONE, STONE (CHIPS), STONE DUST |
| 8 | KAISHER RABBANI | BARHAIT | SAND |
| 9 | MD JAHID ABBAS | DHATAPARA AND FATEHPUR | STONE |
| 10 | MD SAMIM ALAM | GANGOPARA BEDO | STONE |
| 11 | MD. MOJIBUR REHMAN | BORNA | STONE |
| 12 | MD. TAUHIR ALAM | BORNA | STONE |
| 13 | MS R.P SINGH STONE WORKS | BANSKOLA | STONE |
| 14 | MS ABBAS AND SONS | DHAMDHAMIA | STONE |
| 15 | MS ADARSH GROUP | JOKMARI | STONE |
| 16 | MS ANSARI STONE WORK | GANGOPARA BEDO | STONE |
| 17 | MS AYACHI ENTERPRISES | GILAMARI | STONE |
| 18 | MS B.B.A STONE WORKS | TALMI | STONE |
| 19 | MS BABA PROJECT PVT.LTD | PACHRUKHI | STONE |
| 20 | MS BAGRANJBALI STONE WORKS | GANGOPARA MAKO | STONE |
| 21 | MS BAJRANG BALI STONE WORKS | GANGOPARA MACO AND BEDO | STONE |
| 22 | MS BANDANA STONE WORKS | LOHANDA MACO | STONE |
| 23 | MS BHAGWAN STONE WORKS | BORNA | STONE |
| 24 | MS BHAGWAN STONE WORKS | BORNA | STONE |
| 25 | MS BHAI BHAI STONE WORKS | BANSPAHAR | STONE |
| 26 | MS BIHAR BENTONITE SUPPLY CO | CHALPAHAR AND PATNIBONA | STONE, STONE (CHIPS), STONE DUST |
| 27 | MS BLACK STONE WORKS | DESHPOKHRIA AND AMJHOR | STONE |
| 28 | MS BOBY STONE WORKS | GADAITUNGI | STONE |
| 29 | MS CTS INDUSTRIES LTD | CHOTA DAMINBHITA | STONE, STONE (CHIPS), STONE DUST |

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| | | | |
|----|--|-------------------------------|--------------------------------------|
| 30 | MS CTS INDUSTRIES LTD | JOKMARI MAHADEGANJ | STONE, STONE (CHIPS), STONE DUST |
| 31 | MS DALMIA AGENCIES PVT.LTD. | KASBA | CHINACLAY, SILICA SAND, SANDSTONE |
| 32 | MS DEV BLACK STONE WORKS | BORNA | STONE |
| 33 | MS DOKNIA STONE WORKS | CHAPANDE | STONE |
| 34 | MS DOKNIA STONE WORKS | CHAPANDE | STONE |
| 35 | MS G.D.STONE COMPANY | TELO | STONE |
| 36 | MS GANGA STONE WORKS | TELO | STONE |
| 37 | MS GHOSH STONE WORKS | GANGOPARA BEDO | STONE, STONE (CHIPS), STONE DUST |
| 38 | MS HARILAL AJOY AND CO. | GODAITUNGI | STONE (CHIPS), STONE DUST, STONE |
| 39 | MS HARILAL AJOY AND CO. | PATANIBONA AND CHAWKIPAHAR | STONE |
| 40 | MS HARILAL AJOY AND COMPANY | PATNIBONA | STONE |
| 41 | MS HARILAL AJOY AND COMPANY | GADAITUNGI | STONE |
| 42 | MS HILL MOVEMENT | GUDWA | STONE, STONE (CHIPS), STONE DUST |
| 43 | MS HINDUSTHAN INDUSTRIES AND MINING CORPORATION | BAKUDIHI | STONE, STONE DUST |
| 44 | MS JAI BAGRANG WALEE STONE WORKS | GUDWA | STONE |
| 45 | MS JAI MAA BHAGWATI STONE WORKS | BELBHADRI | STONE |
| 46 | MS JIAL DAS COMPENY | PAKTURI | STONE, STONE (CHIPS), STONE DUST |
| 47 | MS JIAL DAS AND CO | PAKTURI | STONE, STONE (CHIPS), STONE DUST |
| 48 | MS JINDAL STONE WORKS | LOHANDA BEDO | STONE |
| 49 | MS K.P. AND G. SONS | AAMDANDA | STONE |
| 50 | MS KARAMBI STONE WORKS | KARAMBI | STONE, STONE (CHIPS), STONE DUST |
| 51 | MS KWALITY STONE PRODUCT | DHATPARA AND FATHPUR | STONE |
| 52 | MS MAA AMBA STONE WORKS | DEMBA | STONE |
| 53 | MS MAA BASNAVI STONE WORKS | MUNDLI | STONE |
| 54 | MS MAA CHINAMASTIKA STIL INDIA PVT LTD | CHAGJO AND BUNDA BARAGHATI | STONE |
| 55 | MS MAA DURGE STONE WORKS | GILAMARI | STONE |
| 56 | MS MAA GAYATRI STONE WORKS | BAKUDIHI | STONE |

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| | | | |
|----|--|------------------------|---|
| 57 | MS MAA KALIKA STONE WORKS | AMBADE | STONE |
| 58 | MS MAA R.K. CONSTRUCTION | BASKO | STONE |
| 59 | MS MAA VAISHNAVI STONE WORKS | MUNDLI | STONE |
| 60 | MS MAHAVEER ENGICONS PVT LTD | DEMBA | STONE |
| 61 | MS MAYUR MACHINE PVT LTD | MOTIJHARNA | STONE, STONE (CHIPS), STONE DUST |
| 62 | MS MD ALAM AND BROTHER | GODIATUNGI | STONE |
| 63 | MS MINERAL INDIA | GUDWA | STONE |
| 64 | MS MIRA PAHAR STONE MINES | MIRAPARA | STONE |
| 65 | MS MOHAN AND SANJAY STONE WORKS | GUDWA | STONE |
| 66 | MS NARSINGH LAGHIR | PATNIBONA | STONE, STONE DUST, STONE (CHIPS) |
| 67 | MS NEHA BLACK STONE WORKS | GANGOPARA BEDO | STONE |
| 68 | MS NETURAL MINING AND CONSTRUCTION PVT LTD | GANGOPARA BEDO | STONE |
| 69 | MS PATNIBONA STONE QUARRY | PATNIBONA | STONE |
| 70 | MS PIXI STONE WORK | SUNDRE | STONE |
| 71 | MS PRATIK STONE WORKS | GILAMARI | STONE |
| 72 | MS RAJA MINERAL AND COMAPNY | SEDPUR BUJRUG | CHINACLAY, SANDSTONE |
| 73 | MS RAJAN STONE WORKS | BORNA | STONE |
| 74 | MS RAJAN STONE WORKS | BORNA | STONE |
| 75 | MS RATAN BLACK STONE | SAHIBGANJ TOWN | STONE |
| 76 | MS S S BLACK STONE WORKS | MIRZACHOUKI | STONE |
| 77 | MS S.S. ENTERPRESES | BORNA | STONE |
| 78 | MS SHAH STONE | BARA PANCHKULI | STONE |
| 79 | MS SHAKTI STONE WORKS | SAHEBGANJ | STONE |
| 80 | MS SHIV INDRA PATHOR UDOGE | CHATROGOGA | STONE, STONE (CHIPS), STONE DUST |
| 81 | MS SHIV SHAKTI STONE WORK | BARHARWA | STONE |
| 82 | MS SHIV SHAKTI STONE WORKS | BORNA | STONE |
| 83 | MS SINGH STONE WORKS | BUNDAMOCO | STONE |
| 84 | MS SIYRAM ENTERPRISES | MARIKUTI, DESIPOKHARIA | STONE |
| 85 | MS SRI RAM STONE WORKS | PAKRIA | STONE |
| 86 | MS STANDARD MERCANTILE COMPANY M D PVT LTD | RAIBAZAR | CHINACLAY, SILICA SAND, SANDSTONE, QUARTZ |
| 87 | MS STAR INDIA INDUSTRIES | CHOTA DAMINBHITA | STONE |

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| | | | |
|-----|--|--------------------------|----------------------------------|
| 88 | MS STAR INDIA MINING MINERALS | MIRZACHOUKI | STONE, STONE (CHIPS) |
| 89 | MS SWASTIK MINERAL AGENCY | TALJHARI | STONE |
| 90 | MS SWASTIK MINERAL AGENCY | KARIGONIA | STONE, STONE (CHIPS), STONE DUST |
| 91 | MS SWASTIK MINERAL AGENCY | CHALPAHAR | STONE |
| 92 | MS USHA STONE WORKS | LOHANDA MAKO | STONE |
| 93 | MS VANSLA GRANITE | CHALPAHAR | STONE |
| 94 | MS VANSLA GRANITE | PATNIBONA AND CHALPHAHAR | STONE |
| 95 | MS VEESHNAV STONE WORKS | DAMIN BHITA | STONE |
| 96 | MS VIDHYARTHI STONE WORKS | GADWA | STONE |
| 97 | MS YASHRAJ BLACK STONE WORKS | DEMBA, MAHADEVGANJ | STONE |
| 98 | MS ZEON EARTH MINERAL RESOURCE PVT LTD | BANSHPAHAR,RANGA | STONE, STONE (CHIPS), STONE DUST |
| 99 | NAJRUL HAQU | DAHUJOR | SAND |
| 100 | NETINCON MARKETING PVT LTD | AMBADE | STONE |
| 101 | RAMESH KUMAR DOKANIA | IDPE | STONE |
| 102 | RIPLEY AND COMPANY STEVEDORING AND HANDING PVT LTD | AMBADE,BADE,IDPE | STONE |
| 103 | SAHIN RABANI | BERHET | SAND |
| 104 | SAHIN RABBANI | GOPLADIH | SAND |
| 105 | SHREE SHANKAR AND CO | BAKUDI | STONE |
| 106 | SHRI SATYNATH SAH | BINDARI BANDAR KOLA | STONE |
| 107 | SMT MIRU SOREN | BORNA | STONE |
| 108 | SMT NAJNIN BIBI | MARGARO | STONE |
| 109 | SOMNATH GHOSH | PATHARIA | STONE |
| 110 | SRI CHAMAN TULSYAN | JOKMARI | STONE |
| 111 | SRI CHANDRESWAR PRASAD SINHA | KORDAR | STONE |
| 112 | SRI KRISHNA KUMAR SAHA | BORNA | STONE |
| 113 | SRI KRISHNA KUMAR SAHA | CHAPANDEY | STONE |
| 114 | SRI KRISHNA KUMAR SAHA | BORNA | STONE |
| 115 | SRI MADAN KANT | KIROKURIA | STONE |
| 116 | SRI MANOJ KUMAR SAH | MUNDLI | STONE |
| 117 | SRI RAM SAWARE TIWARI | DAMINBHITA | STONE |
| 118 | SRI SHANKAR KUMAR | BORNA | STONE |
| 119 | SRI TARKESHWAR JAISHWAL | MUNDLI | STONE |
| 120 | SWASTIK MINERAL AGENCY | PATNIBONA AND CHALPHAHAR | STONE, STONE (CHIPS), STONE DUST |

9.2 List of Mines not in operation in the district -

(Source: <http://www.jharkhandminerals.gov.in>, List as on 03/08/2018)

| Sl# | Lessee Name | Location | Mineral |
|-----|--|-------------------|---------|
| 1 | SRI HIRALAL BHGAT | NA | STONE |
| 2 | ABDUL FATTAH AND SUNITA MURMU | CHOTA PANCHRUKHI | STONE |
| 3 | ABDUL KADIR | FATEHPUR | STONE |
| 4 | ASERA KHATUN | NA | STONE |
| 5 | BHAGWAN STONE WORKS | BORNA | STONE |
| 6 | GOOLAM KEEWARIYA BISHWAS | NA | STONE |
| 7 | JHARKHAND STATE MINERAL DEVELOPMENT CORP. LTD. | CHANDOLA | STONE |
| 8 | JHARKHAND STATE MINERAL DEVELOPMENT CORP. LTD. | SIMALGODA | STONE |
| 9 | KRISHNA STONE WORKS | AMBADE | STONE |
| 10 | M.S.C.S.R. CONS. | BINDRI BANDARKOLA | STONE |
| 11 | M/ MAA KALI STONE WORKS | NA | STONE |
| 12 | M/S A.D. STONE WORK | NA | STONE |
| 13 | M/S A.K. BHGAT & R.K.BHGAT | NA | STONE |
| 14 | M/S A.R.J STONE WORK | NA | STONE |
| 15 | M/S AADERSH STONE WORKS | NA | STONE |
| 16 | M/S AANANDMAY STONE WORK | NA | STONE |
| 17 | M/S AARYAN STONE WORKS | NA | STONE |
| 18 | M/S AMBA STONE WORKS | NA | STONE |
| 19 | M/S ANBARUL HAK | NA | STONE |
| 20 | M/S ANSARI STONE WORK | NA | STONE |
| 21 | M/S ASHOKA ENGINIYARING STONE | NA | STONE |
| 22 | M/S B.S.M.D.C | NA | STONE |
| 23 | M/S BADAL STONE WORKS | NA | STONE |
| 24 | M/S BINA STONE WORKS | NA | STONE |
| 25 | M/S BIRSA MUNDA STONE MINES | NA | STONE |
| 26 | M/S BISHWKARMA MARCHENT | NA | STONE |
| 27 | M/S BLACK STONE WORKS | NA | STONE |
| 28 | M/S D. & BHGAT & COMPANY | NA | STONE |
| 29 | M/S D.T.C. MINRALS PVT. | NA | STONE |
| 30 | M/S DEV STONE WORK | NA | STONE |
| 31 | M/S DEV STONE WORKS | NA | STONE |
| 32 | M/S DURGA STONE WORKS | NA | STONE |
| 33 | M/S F.A. STONE | NA | STONE |
| 34 | M/S G.H. STONE WORKS | NA | STONE |
| 35 | M/S GANGA & KUMAR STONE WORKS | NA | STONE |
| 36 | M/S GOOURI STONE WORKS | NA | STONE |
| 37 | M/S GOPE STONE WORKS | NA | STONE |
| 38 | M/S GURUDEV STONE WORKS | NA | STONE |
| 39 | M/S HIND STONE WORK | NA | STONE |

District Survey Report of Sahibganj, Jharkhand

| | | | |
|----|-------------------------------------|----|-------|
| 40 | M/S HINDUSTAN CONS. COMPANY LIMITED | NA | STONE |
| 41 | M/S HINDUSTAN CONS. COMPANY LIMITED | NA | STONE |
| 42 | M/S HINDUSTHAN STONE WORKS | NA | STONE |
| 43 | M/S JAGDAMBA STONE WORKS | NA | STONE |
| 44 | M/S JAI BAJRANG BALI STONE WORKS | NA | STONE |
| 45 | M/S JAI JHARKHAND STONE WORKS | NA | STONE |
| 46 | M/S JAI MAA BHAWANI STONE WORK | NA | STONE |
| 47 | M/S JAI MAA TARA STONE WORKS | NA | STONE |
| 48 | M/S JAI MATA DI STONE WORKS | NA | STONE |
| 49 | M/S JAI MATA DI STONE WORKS | NA | STONE |
| 50 | M/S K.G.N. STONE WORKS | NA | STONE |
| 51 | M/S K.G.N. STONE WORKS | NA | STONE |
| 52 | M/S KAMALUDDEN | NA | STONE |
| 53 | M/S KAMALUDDEN | NA | STONE |
| 54 | M/S KARAN STONE WORKS | NA | STONE |
| 55 | M/S KHAWAJA STONE WORKS | NA | STONE |
| 56 | M/S KOHINOOR STONE WORKS | NA | STONE |
| 57 | M/S KOSHALYA STONE WORK | NA | STONE |
| 58 | M/S KRISHNA STONE WORKS | NA | STONE |
| 59 | M/S LAKSHMI STONE WORKS | NA | STONE |
| 60 | M/S M. ALAM & BROTHERS | NA | STONE |
| 61 | M/S MAA BHAGWATI STONE WORKS | NA | STONE |
| 62 | M/S MAA BINDVASHNI STONE WORK | NA | STONE |
| 63 | M/S MAA KALI STONE WORKS | NA | STONE |
| 64 | M/S MAA KALI STONE WORKS | NA | STONE |
| 65 | M/S MAA KALIKA STONE WORK | NA | STONE |
| 66 | M/S MAA PADMINI STONE WORK | NA | STONE |
| 67 | M/S MAA SADHNA STONE WORKS | NA | STONE |
| 68 | M/S MAA STONE WORKS | NA | STONE |
| 69 | M/S MAA STONE WORKS | NA | STONE |
| 70 | M/S MAA TARA STONE WORKS | NA | STONE |
| 71 | M/S MAA TARA STONE WORKS | NA | STONE |
| 72 | M/S MADINA STONE WORKS | NA | STONE |
| 73 | M/S MAMTA STONE WORK | NA | STONE |
| 74 | M/S MANISH KUMAR BROTHERS | NA | STONE |
| 75 | M/S MAYA STONE WORKS | NA | STONE |
| 76 | M/S MUMTAZ STONE WORKS | NA | STONE |
| 77 | M/S NARSINGH LAGDHIR | NA | STONE |
| 78 | M/S NILKANTH PATHER UDDOGE | NA | STONE |
| 79 | M/S NURANI & BROTHER | NA | STONE |
| 80 | M/S OM SHANTI STONE WORKS | NA | STONE |
| 81 | M/S OM STONE WORKS | NA | STONE |
| 82 | M/S OM STONE WORKS | NA | STONE |

District Survey Report of Sahibganj, Jharkhand

| | | | |
|-----|---|----|-------|
| 83 | M/S PANDEY STONE WORKS | NA | STONE |
| 84 | M/S PARWATI STONE WORKS | NA | STONE |
| 85 | M/S PATNIBONA STONE KYAVARI | NA | STONE |
| 86 | M/S PATNIBONA STONE KYAVARI | NA | STONE |
| 87 | M/S PUJA STONE WORKS | NA | STONE |
| 88 | M/S PUSPANJALI STONE WORK | NA | STONE |
| 89 | M/S RAJA INRAL & COMPANY | NA | STONE |
| 90 | M/S RAJMAHAL STONE COMPENY | NA | STONE |
| 91 | M/S RAM JANKI STONE WORKS | NA | STONE |
| 92 | M/S RAM RAHIM STONE WORKS | NA | STONE |
| 93 | M/S S K TEKRIWAL & SRI VEER KUMAR TEKRIWAL | NA | STONE |
| 94 | M/S S.D. ENTERPRISES | NA | STONE |
| 95 | M/S S.P. STONE WORKS | NA | STONE |
| 96 | M/S S.P. STONE WORKS | NA | STONE |
| 97 | M/S S.S STONE WORKS | NA | STONE |
| 98 | M/S S.S STONE WORKS | NA | STONE |
| 99 | M/S S.S. STONE WORKS | NA | STONE |
| 100 | M/S SADHBHAWANA STONE WORKS | NA | STONE |
| 101 | M/S SANJAY MAINING & MINRAL | NA | STONE |
| 102 | M/S SARASWATI STONE WORK | NA | STONE |
| 103 | M/S SHIV BINOD & COMPANY | NA | STONE |
| 104 | M/S SHIV STONE WORKS | NA | STONE |
| 105 | M/S SHIV STONE WORKS | NA | STONE |
| 106 | M/S SHIVA STONE WORKS | NA | STONE |
| 107 | M/S SHIVAM STONE WORKS | NA | STONE |
| 108 | M/S SHOBHA TREDERS | NA | STONE |
| 109 | M/S SRI SANT STONE WORKS | NA | STONE |
| 110 | M/S STAR STONE WORKS | NA | STONE |
| 111 | M/S SUNNY STONE WORK | NA | STONE |
| 112 | M/S SWASTI STONE CHIPS | NA | STONE |
| 113 | M/S TAJ STONE WORKS | NA | STONE |
| 114 | M/S TAZ STONE WORKS | NA | STONE |
| 115 | M/S UNIK STONE MATERIARL | NA | STONE |
| 116 | M/S URMILA STONE WORKS | NA | STONE |
| 117 | M/S VIDHAYATHARI STONE WORKS | NA | STONE |
| 118 | M/S VIDHYARTHI STONE WORKS | NA | STONE |
| 119 | M/S YESRAJ BLACK STONE | NA | STONE |
| 120 | M/S YESRAJ BLACK STONE | NA | STONE |
| 121 | M/S- AATMA STONE WORKS | NA | STONE |
| 122 | M/S- BABA PROJECTS PRA. LTD. | NA | STONE |
| 123 | M/S- BLACK DAIMOND STONE WORKS | NA | STONE |
| 124 | M/S- BLACK DAIMOND STONE WORKS | NA | STONE |
| 125 | M/S- LAKHI STONE WORKS | NA | STONE |

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| | | | |
|-----|-----------------------------------|---------------------|-------|
| 126 | M/S- OM NAMHA SHIWAY STONE WORKS | NA | STONE |
| 127 | M/S- R.D. SINGH & D. N. SINGH CO. | NA | STONE |
| 128 | M/S- RAM STONE WORKS | NA | STONE |
| 129 | M/S-NAJIR | NA | STONE |
| 130 | M/S-NAJIR | NA | STONE |
| 131 | M/S-NEHAL STONE WORKS | NA | STONE |
| 132 | MD IQBAL | DHATAPARA | STONE |
| 133 | MD YASHIN ANSARI | NA | STONE |
| 134 | MD. FARSAD | NA | STONE |
| 135 | MD. JAHID ANSARI | NA | STONE |
| 136 | MD. MEENUL ANSARI | NA | STONE |
| 137 | MD. SAMIRUDDIN | NA | STONE |
| 138 | MD. VIHID SEKH | NA | STONE |
| 139 | MD. VIHID SEKH | NA | STONE |
| 140 | MD.GULAM ALI | NA | STONE |
| 141 | MD.GULAM ALI | NA | STONE |
| 142 | MD.IBRAHIM | NA | STONE |
| 143 | MD.JAFAR | NA | STONE |
| 144 | MS ABHI STONE WORKS | ROHRE | STONE |
| 145 | MS ABHISHEK STONE WORKS | TELO | STONE |
| 146 | MS ALFA MINING CORPORATION | CHAPANDEY | STONE |
| 147 | MS ALOK STONE WORKS | MANOHARPUR | STONE |
| 148 | MS ASTHA STONE WORKS | PATNIBONA | STONE |
| 149 | MS BABA PROJECT PVT LTD | CHATROGOGA | STONE |
| 150 | MS BAJRANG STONE | CHUBE | STONE |
| 151 | MS BIHAR BENTONITE SUPPLY CO | PATNIBONA | STONE |
| 152 | MS BIHAR BENTONITE SUPPLY CO | BARA BANAPARA | STONE |
| 153 | MS FARUK SEKH | MAYURKOLA | STONE |
| 154 | MS HANS STONE WORKS | BORNA | STONE |
| 155 | MS HINDUSTAN STONE BUILD | CHAPANDEY AND KUNDI | STONE |
| 156 | MS JAI BAJRANG WALEE STONE WORKS | SAKRIGALI | STONE |
| 157 | MS JAI MAA TARA STONE WORKS | BORNA | STONE |
| 158 | MS JHARKHAND MINRALRS | MIRAPARA | STONE |
| 159 | MS JIAL DAS AND CO | PAKTURI | STONE |
| 160 | MS KARAMBI STONE WORKS | KARAMBI | STONE |
| 161 | MS KOHITUR MAINING | MIRAPARA | STONE |
| 162 | MS MAA DURGE STONE WORKS | GILAMARI | STONE |
| 163 | MS MAA DURGE STONE WORKS | GILAMARI | STONE |
| 164 | MS MAA DURGE STONE WORKS | JOKMARI | STONE |
| 165 | MS MAA JAMNI STONE WORKS | JAMNI | STONE |
| 166 | MS MAA RAKSHA KALI STONE WORKS | MALITOK | STONE |
| 167 | MS MAA TARA STONE WORKS | GUDAITUNGI | STONE |
| 168 | MS MAHADEV BLACK STONE CO | KORDRA | STONE |
| 169 | MS MAHARANI STONE WORKS | DEMBA | STONE |

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| | | | |
|-----|------------------------------|----------------|----------------------------------|
| 170 | MS MAHAVEER ENGICONS PVT LTD | DEMBA | STONE |
| 171 | MS MINAKSHI STONE WORKS | DEMBA | STONE |
| 172 | MS P.L. STONE WORKS | GHOCHI MAKO | STONE |
| 173 | MS PAHARIA STONE WORKS | NA | STONE |
| 174 | MS PRIYA MINRAL | CHENGDO | STONE |
| 175 | MS R P SHARMA AND SONS | CHAPANDEY | STONE |
| 176 | MS S S BLACK STONE WORKS | MIRZACHOUKI | STONE |
| 177 | MS SHIV SHAKTI STONE WORKS | BORNA | STONE |
| 178 | MS SHIV SHAKTI STONE WORKS | BORNA | STONE |
| 179 | MS SHIV STONE WORKS | GANGOPARA BEDO | STONE |
| 180 | MS SINGH STONE WORKS | BUNDAMOCO | STONE |
| 181 | MS SKY STONE WORKS | MAYURKOLA | STONE |
| 182 | MS SRASWATI STONE WORKS | KIROKURIA | STONE |
| 183 | MS TRIDEV STONE WORKS | BEKCHURI | STONE |
| 184 | MS VIDHYARTHI STONE WORKS | GADWA | STONE |
| 185 | RAJESH KUMAR JAISWAL | MUNDLI | STONE |
| 186 | SEKH MD SIRAJ | BORNA | STONE, STONE (CHIPS), STONE DUST |
| 187 | SHARVSRI ASTHA STONE WORKS | NA | STONE |
| 188 | SHREE SHANKAR AND CO | BAKUDI | STONE |
| 189 | SHREE SHANKAR AND CO | BAKUDI | STONE |
| 190 | SHRI ANUPAM KUMAR | NA | STONE |
| 191 | SHRI ARUN KUMAR SAW | NA | STONE |
| 192 | SHRI BANSHIDHAR YADAV | NA | STONE |
| 193 | SHRI GAURABH KUMAR CHODHRY | NA | STONE |
| 194 | SHRI GAUTAM KUMAR SINGH | NA | STONE |
| 195 | SHRI RAM KISHUN MANDAL | NA | STONE |
| 196 | SHRI SUNIL KUMAR SINGH | NA | STONE |
| 197 | SHRI VEDANAND PANDEY | NA | STONE |
| 198 | SMT JEFSIN KISKU | NA | STONE |
| 199 | SMT. LAKSHMI DEVI | NA | STONE |
| 200 | SMT. PUNAM KUMARI | NA | STONE |
| 201 | SMT. SUSANA HEMBREM | NA | STONE |
| 202 | SMT. TALAMAY MURMU | NA | STONE |
| 203 | SRI ABHISHEK KUMSR CHOUDHARY | NA | STONE |
| 204 | SRI AMARNATH YADAV | NA | STONE |
| 205 | SRI AMARNATH YADAV | NA | STONE |
| 206 | SRI ANIL KUMAR | NA | STONE |
| 207 | SRI ANIL KUMAR | NA | STONE |
| 208 | SRI ANIL YADAV & OTHER | NA | STONE |
| 209 | SRI ARJUN YADAV | KIROKURIA | STONE |
| 210 | SRI ASHOK YADAV | NA | STONE |
| 211 | SRI ASHOK YADAV | NA | STONE |
| 212 | SRI ASHOK YADAV | NA | STONE |

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| | | | |
|-----|--|------------|-------|
| 213 | SRI AWAD KISHOR RAM | NA | STONE |
| 214 | SRI BASHUDEV RAY & OTHER | NA | STONE |
| 215 | SRI BASHUKI NATH YADAV AND YOGESH PRASAD YADAV | BARE PARTE | STONE |
| 216 | SRI BIJAY KUMAR | NA | STONE |
| 217 | SRI BIKRAM YADAV | NA | STONE |
| 218 | SRI BIMAL KUMAR SINHA | NA | STONE |
| 219 | SRI BIMAL KUMAR SINHA | NA | STONE |
| 220 | SRI BINOD BIHARI RANJAN | NA | STONE |
| 221 | SRI BINOD KUMAR JAISHWAL | NA | STONE |
| 222 | SRI CHATURANAND PANDEY | JOKMARI | STONE |
| 223 | SRI DHRMA PAHARIA, & OTHERS | NA | STONE |
| 224 | SRI DIGAMBAR KARMKAR | NA | STONE |
| 225 | SRI GANESH PRASAD YADAV | NA | STONE |
| 226 | SRI GOBHARDAN MANDAL | NA | STONE |
| 227 | SRI HARE NATH GUPTA | NA | STONE |
| 228 | SRI HARERAM YADAV | NA | STONE |
| 229 | SRI KAMAL KISHOR KUAR SAH | NA | STONE |
| 230 | SRI KAMLESHWARI MANDAL | NA | STONE |
| 231 | SRI KEDAR NATH MUKHARJI | NA | STONE |
| 232 | SRI KEDAR NATH MUKHARJI | NA | STONE |
| 233 | SRI KISHOR KUMAR | NA | STONE |
| 234 | SRI KISHOR KUMAR | NA | STONE |
| 235 | SRI KUMAR ABHISEKH | NA | STONE |
| 236 | SRI KUNDAN KUMAR | NA | STONE |
| 237 | SRI LAKHAN PANDIT | NA | STONE |
| 238 | SRI LALAN SINGH | NA | STONE |
| 239 | SRI LALAN SINGH AND DILIP TIWARI | CHENGDO | STONE |
| 240 | SRI MADAN KANT | KIROKURIA | STONE |
| 241 | SRI MADAN KANT | NA | STONE |
| 242 | SRI MAHESH MAHTO | NA | STONE |
| 243 | SRI MANIKANT MANDAL | NA | STONE |
| 244 | SRI MANOJ KUMAR YADAV | NA | STONE |
| 245 | SRI MANOJ KUMAR YADAV | NA | STONE |
| 246 | SRI MATLA HANSDA | NA | STONE |
| 247 | SRI MOHAN YADAV & OTHER | NA | STONE |
| 248 | SRI MUKESH YADAV | NA | STONE |
| 249 | SRI MUSHRAF HUSHEN | NA | STONE |
| 250 | SRI NIKHIL YADAV | NA | STONE |
| 251 | SRI PAWAN CHIRANIA | NA | STONE |
| 252 | SRI PINTU KUMAR SINGH & OTHER | NA | STONE |
| 253 | SRI PINTU KUMAR SINGH & OTHER | NA | STONE |
| 254 | SRI PINTU KUMAR SINGH & OTHER | NA | STONE |
| 255 | SRI PRADHAN MURMU & OTHER | NA | STONE |
| 256 | SRI R.P SINGH | NA | STONE |

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| | | | |
|-----|-----------------------------------|-------------------|----------------------------------|
| 257 | SRI RAJENDRA PRASAD CHODHARY | NA | STONE |
| 258 | SRI RAJESH CHIRANIYA | NA | STONE |
| 259 | SRI RAJESH CHIRANIYA AND OTHER | NA | STONE |
| 260 | SRI RAKESH KUMAR SINGH | NA | STONE |
| 261 | SRI RAKESH KUMAR SINHA | NA | STONE |
| 262 | SRI RAKESH KUMAR SINHA | NA | STONE |
| 263 | SRI RAM DEO MANDAL | NA | STONE |
| 264 | SRI RAMPHAL CHOUDHARY | DEMBA | STONE |
| 265 | SRI RAVI SHANKAR SINHA | NA | STONE |
| 266 | SRI SANJEEV KUMAR DEV | NA | STONE |
| 267 | SRI SANJHLA MURMU | NA | STONE |
| 268 | SRI SESH NATH YADAV | NA | STONE |
| 269 | SRI SHAMBHU NATH BHGAT | NA | STONE |
| 270 | SRI SHANKAR AND COMPANY | BAKUDIH | STONE, STONE (CHIPS), STONE DUST |
| 271 | SRI SHYAMAL KUMAR DAS | AMBADE | STONE |
| 272 | SRI SUNIL KUMAR | NA | STONE |
| 273 | SRI SUNIL KUMAR BHGAT | NA | STONE |
| 274 | SRI SUNIL KUMAR YADAV | NA | STONE |
| 275 | SRI SUNIL KUMAR YADAV | NA | STONE |
| 276 | SRI SURYA KUMAR MALTO | NA | STONE |
| 277 | SRI TARKESHWAR JAISWAL AND OTHERS | DAMDA DAMIN BHITA | STONE |
| 278 | SRI TERKESHWAR KUMAR JAISHWAL | NA | STONE |
| 279 | USMAN SEKH | DHATAPARA | STONE |
| 280 | VIKRAM PRATAP | BAKUDI | STONE |
| 281 | VIKRAM PRATAP | BAKUDI | STONE |
| 282 | VIKRAM PRATAP | BAKUDI | STONE |

10. DETAIL OF ROYALTY OR REVENUE RECEIVED IN LAST THREE YEARS

| Sl. No. | Year | Amount (Lakh) |
|---------|---------|---------------|
| 1 | 2015-16 | 4105.85 |
| 2 | 2016-17 | 5151.78 |
| 3 | 2017-18 | 6865.04 |

11. DETAIL OF PRODUCTION OF MINOR MINERALS IN LAST THREE YEARS

| Sl. No. | Year | Production (cft.) |
|---------|---------|-------------------|
| 1 | 2015-16 | 118,019,586 |
| 2 | 2016-17 | 140,699,287 |
| 3 | 2017-18 | 195,042,738 |

13. LIST OF LETTER OF INTENT (LOI) HOLDERS IN THE DISTRICT ALONG WITH ITS VALIDITY

(Source: Department of Mines, Sahibganj)

| Sl. No. | Name of the Mineral | Name of the Lessee | Address & Contact No. of Letter of Intent Holder | Letter of Intent Grant Order No. & date | Area of Mining lease to be allotted | Validity of Loi | Use (Captive/ Non-Captive) | Location of the Mining lease (Latitude & Longitude) |
|---------|---------------------|--------------------|--|---|-------------------------------------|-----------------|----------------------------|---|
| | | | | | | | | |
| | | | | | | | | |

14. TOTAL MINERAL RESERVE AVAILABLE IN THE DISTRICT

Sahibganj district is basically occupied by volcanic rock in general and basaltic rock in particular, where no mining activity has taken place, was selected for study and suitable area for mining has been selected along the running hill ranges, which may be considered as plateau with shrubs and bushes and may or may not be in forest area as per the field observation and toposheet. Selecting the area, we have also considered the approach of the proposed projects with some modification and alteration. It is proposed that the areas identified can be sub-divided into suitable blocks for mining operation, but not less than 5 hectare. It will always be better if bigger blocks in the range of 25 to 50 hectare is made in such cases losses of minerals will be reasonably less, keeping in view of conservation of mineral.

Parametres considered :

(i) *These blocks were identified based on geological studies through field observation.*

(ii) *Mineable resource was calculated by considering 60% of recovery factor, by Cross Sectional Method. Actual reserve may vary based on detail prospectig.*

(iii) Area calculated as per GPS co-ordinates and information obtained from local people. Land detail need to be verified from revenue record.

(iv) Since this is an interim report, as per the present requirement of minerals, more such blocks need to be identified and the data should be updated periodically, after certain intervals to update the data bank of DSR.

| Sl. No. | Name of Block | No. of Potential Blocks identified | Total Area (Ha) | Calculated Reserve in Million Tton |
|---------|---------------|------------------------------------|--|------------------------------------|
| 1 | Barhait | 6 | 6410 | 14251.53 |
| 2 | Taljhari | 4 | 9791 | 22558.05 |
| 3 | Borio | 4 | 7582 | 17678.95 |
| 4 | Mandro | 4 | 10228 | 20787.12 |
| 5 | Pathna | 4 | 2466 | 2457.62 |
| 6 | Barharwa | 3 | 41 | 9.18129492 |
| 7 | Rajmahal | 2 | 83 | 21.81537444 |
| | Total | 27 | 36601 | 77764.26667 |
| 8 | Udhwa | NIL | Has not been considered due to existence of Bird Sanctuary | |
| 9 | Sahibganj | NIL | Has not been considered due to presence of Ganges river in the north and north-east and habilitation area. | |

Block - Barhait

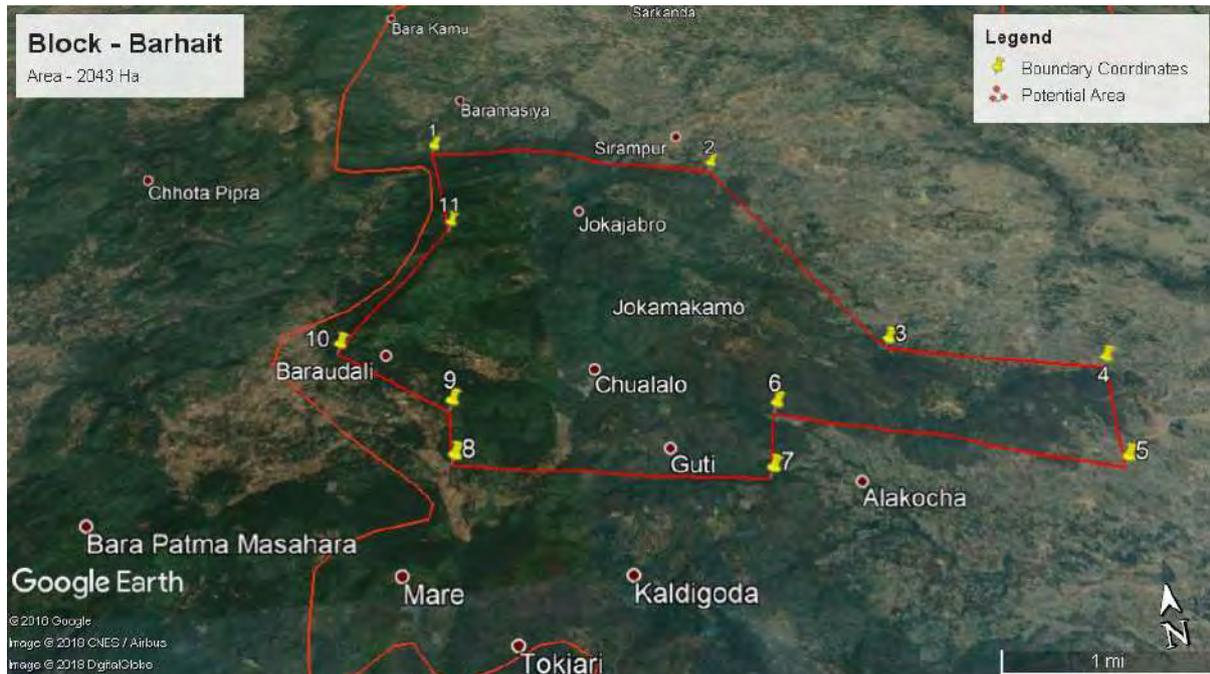
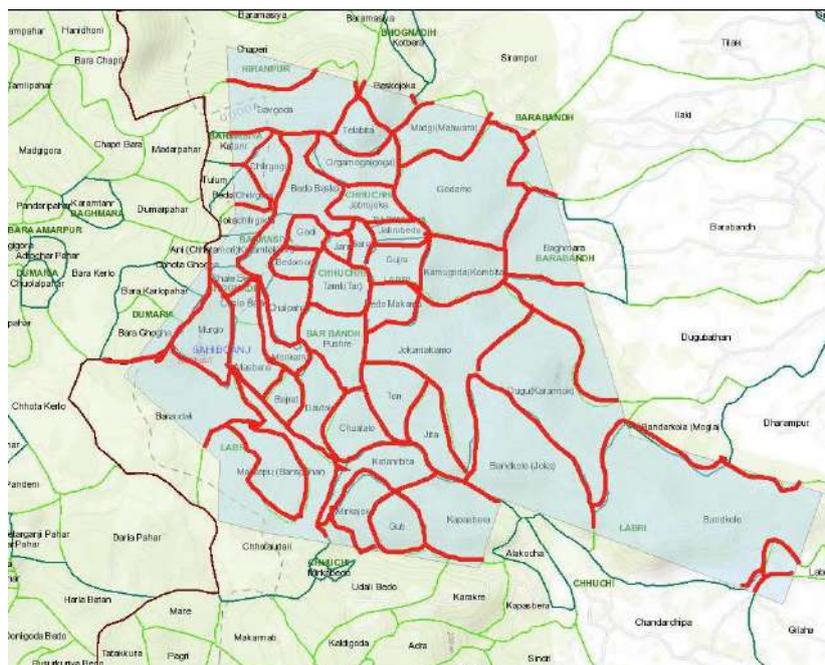


Image showing the Potential Area (Block – A, Mineral - Basalt) As Per KML Data

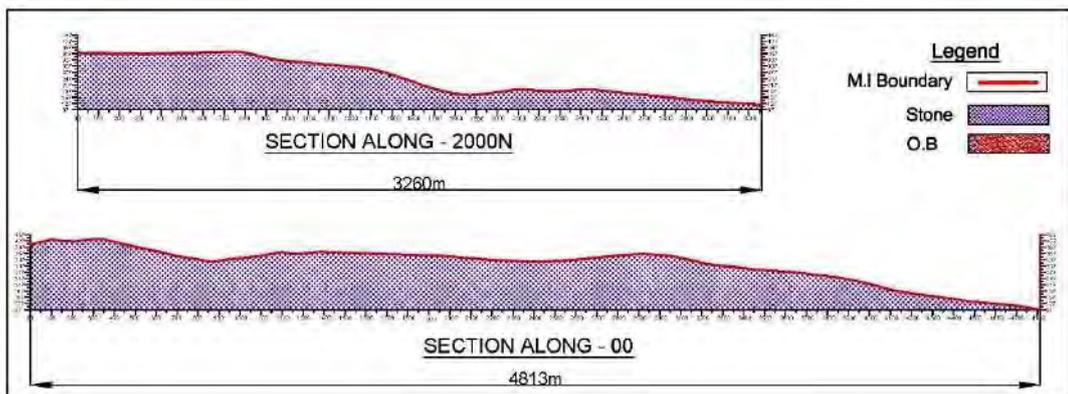
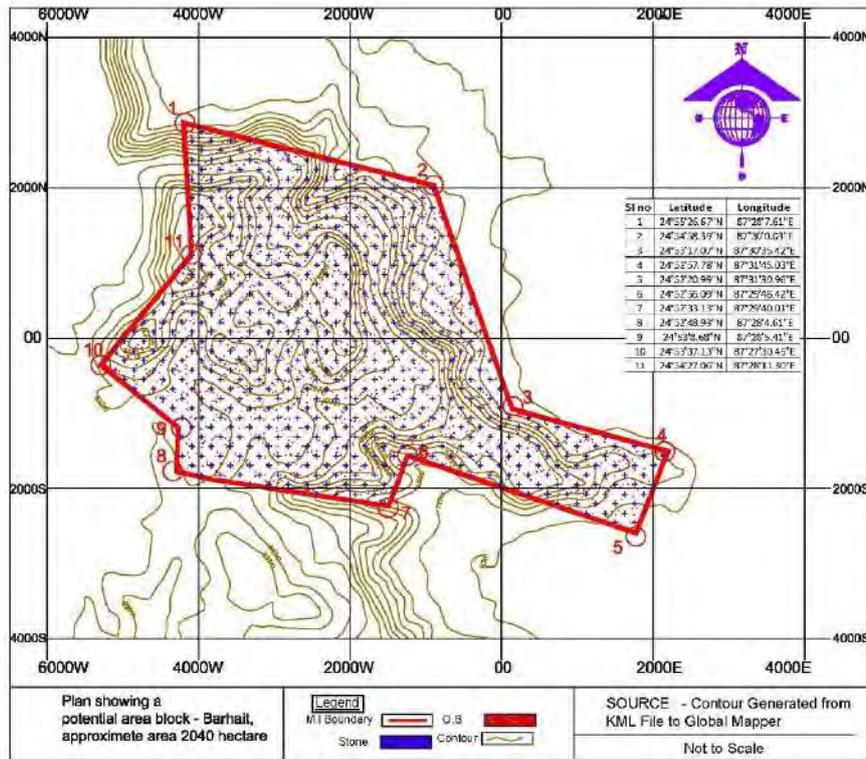
| Sl no | Latitude | Longitude |
|-------|---------------|---------------|
| 1 | 24°55'26.67"N | 87°28'7.61"E |
| 2 | 24°54'58.39"N | 87°30'0.03"E |
| 3 | 24°53'17.07"N | 87°30'35.42"E |
| 4 | 24°52'57.78"N | 87°31'45.03"E |
| 5 | 24°52'20.99"N | 87°31'30.96"E |
| 6 | 24°52'56.09"N | 87°29'48.42"E |

| Sl no | Latitude | Longitude |
|-------|---------------|---------------|
| 7 | 24°52'33.13"N | 87°29'40.01"E |
| 8 | 24°52'48.93"N | 87°28'4.61"E |
| 9 | 24°53'8.68"N | 87°28'5.41"E |
| 10 | 24°53'37.13"N | 87°27'30.45"E |
| 11 | 24°54'27.06"N | 87°28'11.30"E |



Villages lying inside the potential area:

Chaperi, Davgoda, Telabita, Madgi, Chitrgoda, Godamo, Orgamoga, Bedo Basko, Jabrojoka, Jokachitrgoda, Jabrojoka, Jani, Garia, Jokamakamo, Bedo Makaro, Talmi, Bedo Mako, Murgo, Chalpahar, Pusre, Mrikuti, Masbera, Dugu, Barauidali, Banspahar, Bajrat , Tori, Jita, Bandkolo, Chualalo, Mirkajok, Gutti, Kapasbera.



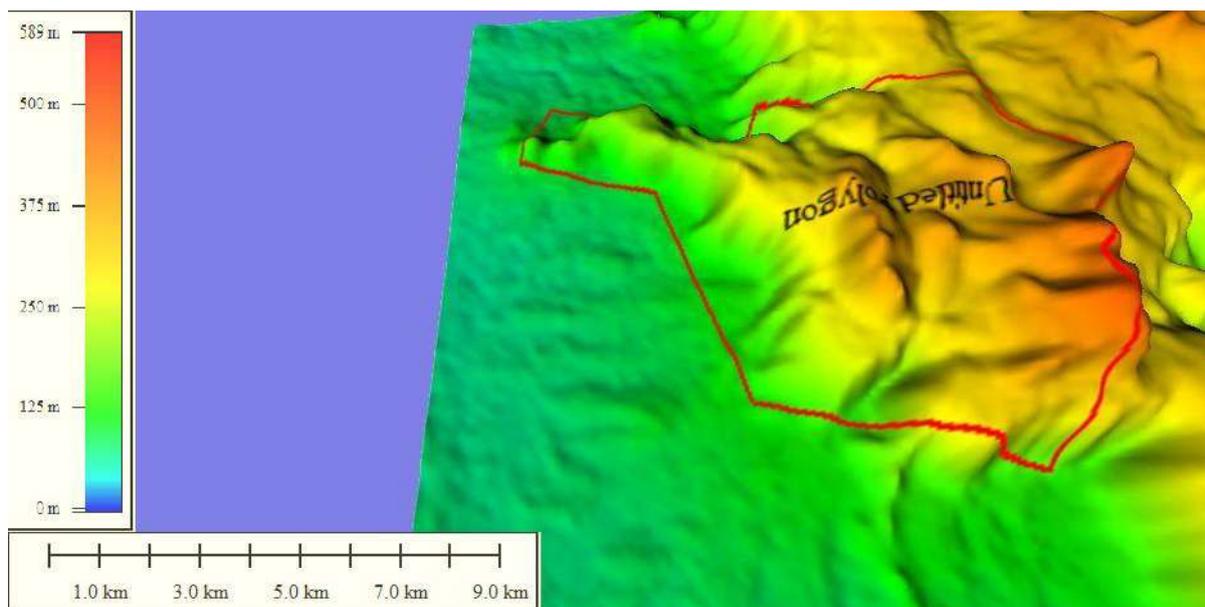


Image showing 3D Topographic view of the Potential Area

Volume of Potential Area - A, Block - Barhait, Area 2043 Hectare

| Section Proved 437 TO 97 | Cross sectional area of O.B in sqm | Total Cross Sectional area in sqm | Influence Length m | Total Volume of O.B in Cum situ (B) | Total Volume in Cum situ (A) | Total Volume of Stone Cum situ (A-B) | Recovery 60% in m cum situ | Million tons of Stone |
|--------------------------------|------------------------------------|-----------------------------------|--------------------|-------------------------------------|------------------------------|--------------------------------------|----------------------------|-----------------------|
| 2000N | 13164 | 504913.00 | 1700 | 22378800 | 858352100.00 | 835973300.00 | 2262.31608 | 6108.25 |
| 0.00 | 19400 | 1031315.00 | 2900 | 56260000 | 2990813500.00 | 2934553500.00 | | |
| Total | | | | 78638800 | 3849165600.00 | 3770526800.00 | | |

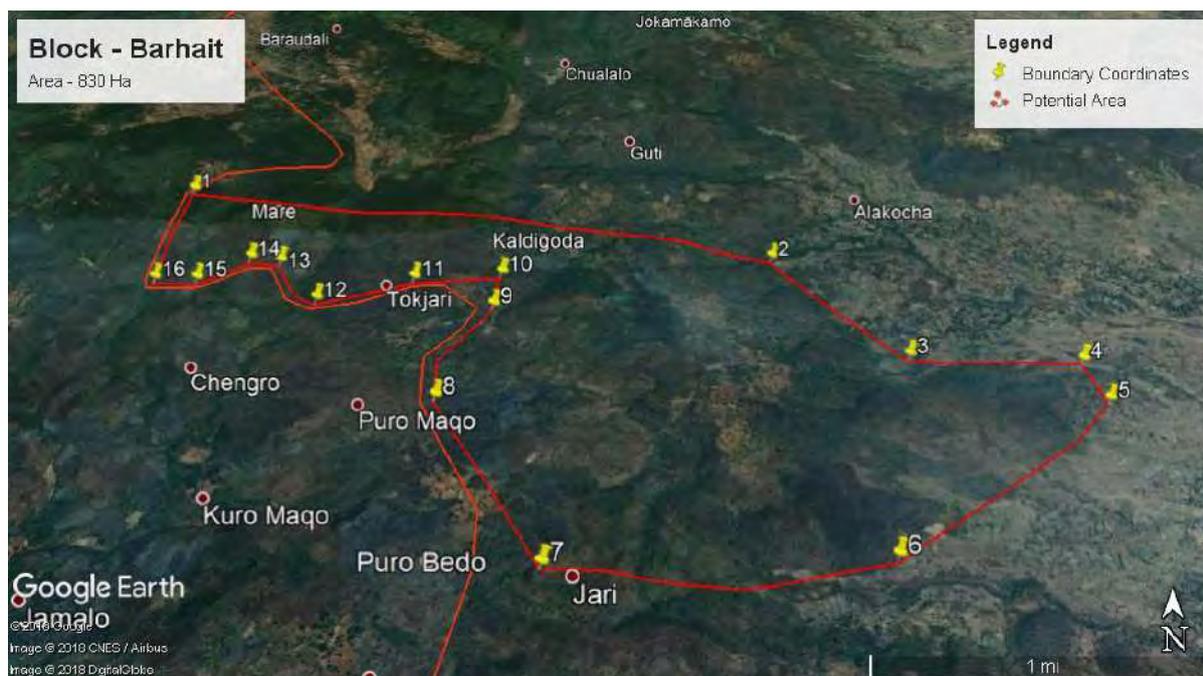


Image showing the Potential Area (Block – B, Mineral - Basalt) As Per KML Data

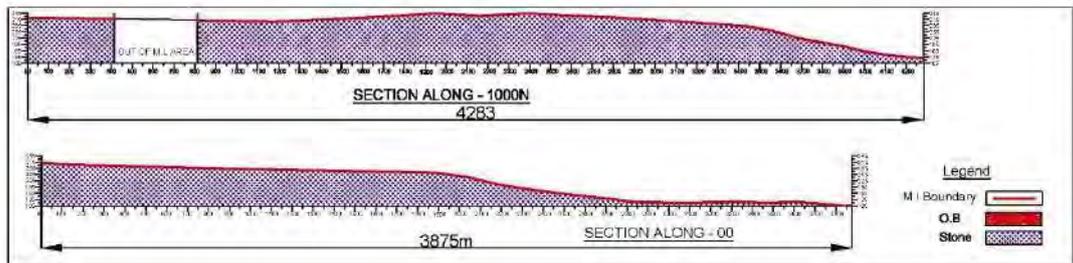
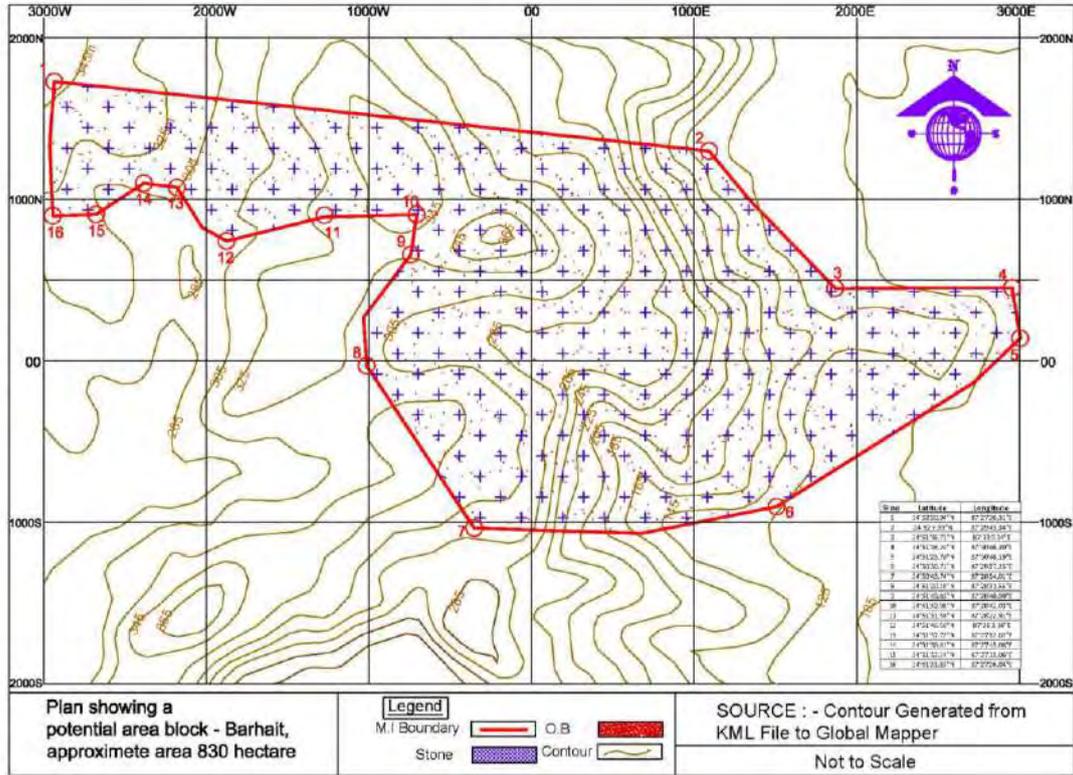
| Sl no | Latitude | Longitude |
|-------|---------------|---------------|
| 1 | 24°52'20.04"N | 87°27'26.31"E |
| 2 | 24°52'5.39"N | 87°29'43.34"E |
| 3 | 24°51'36.71"N | 87°30'9.34"E |
| 4 | 24°51'36.20"N | 87°30'46.30"E |
| 5 | 24°51'25.70"N | 87°30'48.19"E |
| 6 | 24°50'50.71"N | 87°29'57.25"E |
| 7 | 24°50'45.74"N | 87°28'54.01"E |
| 8 | 24°51'20.19"N | 87°28'31.55"E |

| Sl no | Latitude | Longitude |
|-------|---------------|---------------|
| 9 | 24°51'43.65"N | 87°28'40.90"E |
| 10 | 24°51'52.06"N | 87°28'42.03"E |
| 11 | 24°51'51.58"N | 87°28'22.91"E |
| 12 | 24°51'46.50"N | 87°28'2.36"E |
| 13 | 24°51'57.72"N | 87°27'52.02"E |
| 14 | 24°51'58.61"N | 87°27'45.08"E |
| 15 | 24°51'52.14"N | 87°27'35.06"E |
| 16 | 24°51'51.85"N | 87°27'26.04"E |



List of villages falling under the potential area

Mare, Tatakkuria, Pagri, Makamati, Tokjari, Kaldgoda, Adro, Lakmi, Jokahan, Rohni, Tamli, Jokhan, Mangu Sevn, Janbedo, Ketermao, Jaribedo, Jaribedo, Godapuli, Chhuchi.



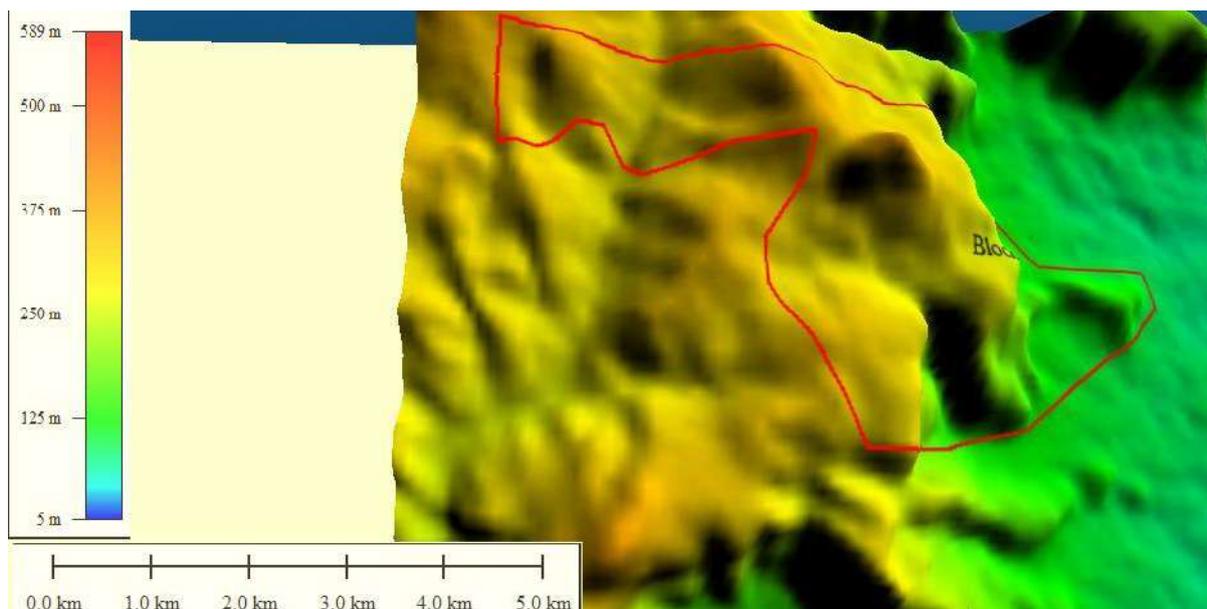


Image showing 3D Topographic view of the Potential Area

Volume of Potential Area - B, Block - Barhait, Area 830 Hectare

| Section Proved 325 TO 105 | Cross sectional area of O.B in sqm | Total Cross Sectional area in sqm | Influence Length m | Total Volume of O.B in Cum situ (B) | Total Volume in Cum situ (A) | Total Volume of Stone Cum situ (A-B) | Recovery 60% in m cum situ | Million tons of Stone |
|---------------------------|------------------------------------|-----------------------------------|--------------------|-------------------------------------|------------------------------|--------------------------------------|----------------------------|-----------------------|
| 1000N | 27914 | 721304.00 | 1100 | 30705400 | 793434400.00 | 762729000.00 | 839.8857984 | 2267.69 |
| 0.00 | 15447 | 419686.00 | 1576 | 24344472 | 661425136.00 | 637080664.00 | | |
| Total | | | | 55049872 | 1454859536.00 | 1399809664.00 | | |

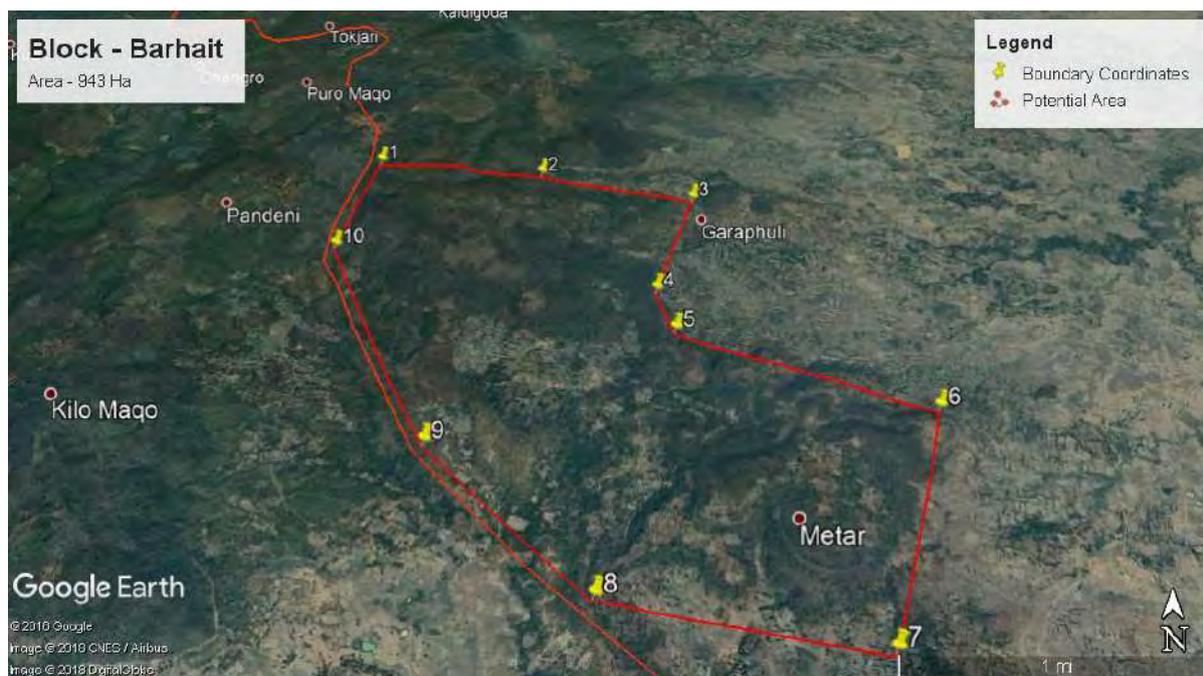


Image showing the Potential Area (Block – C, Mineral – Basalt & Granite Gneiss) As Per KML Data

| SI no | Latitude | Longitude |
|-------|---------------|---------------|
| 1 | 24°50'42.86"N | 87°28'45.46"E |
| 2 | 24°50'43.19"N | 87°29'29.48"E |
| 3 | 24°50'35.01"N | 87°30'11.09"E |
| 4 | 24°49'59.93"N | 87°30'0.11"E |
| 5 | 24°49'46.98"N | 87°30'4.31"E |

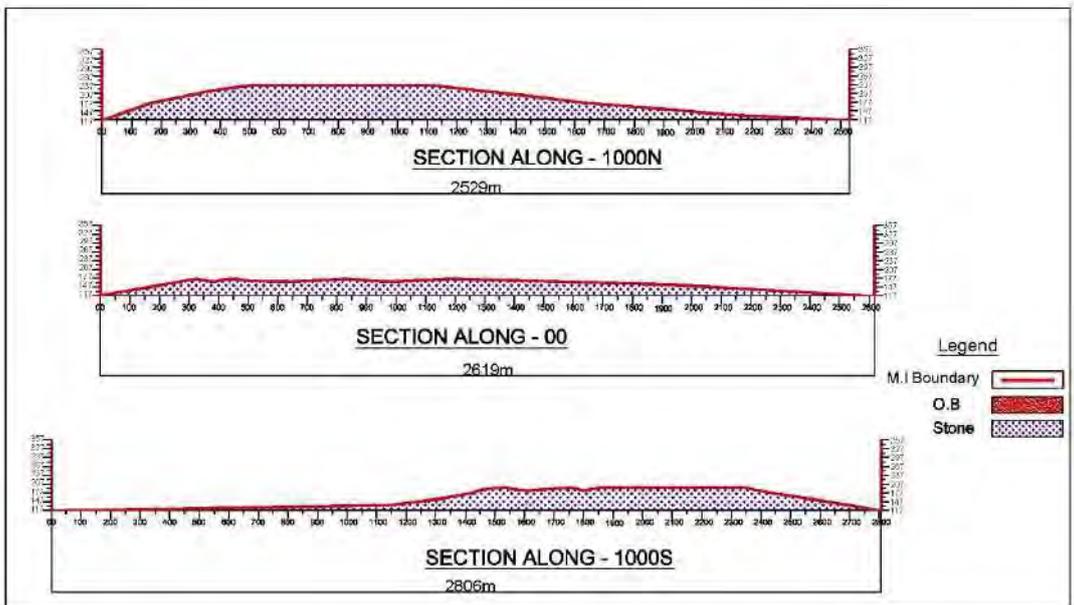
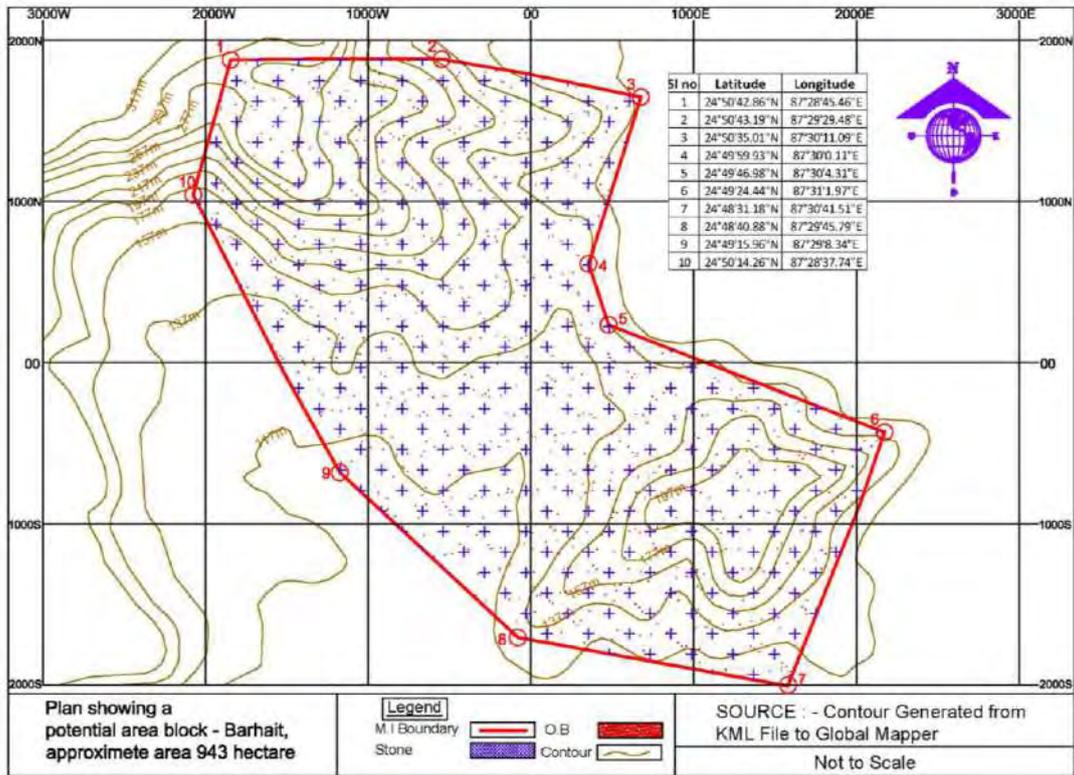
| SI no | Latitude | Longitude |
|-------|---------------|---------------|
| 6 | 24°49'24.44"N | 87°31'1.97"E |
| 7 | 24°48'31.18"N | 87°30'41.51"E |
| 8 | 24°48'40.88"N | 87°29'45.79"E |
| 9 | 24°49'15.96"N | 87°29'8.34"E |
| 10 | 24°50'14.26"N | 87°28'37.74"E |



List of villages falling under the potential area

Chhuchi, Jarl, Godapuli, Kamchi, Kosapuchi, Litipara, Kusma, Meter, Garapuchi, Mugdi, Rajapani.

District Survey Report of Sahibganj, Jharkhand



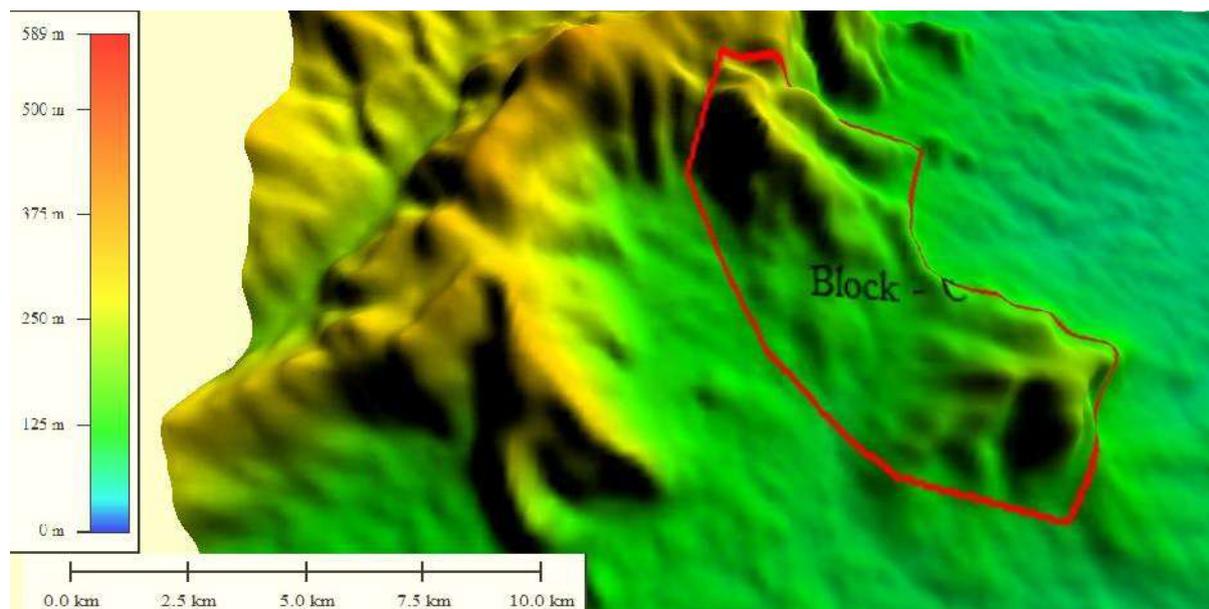


Image showing 3D Topographic view of the Potential Area

Volume of Potential Area - C, Block - Barhait, Area 943 Hectare

| Section Proved 325 TO 105 | Cross sectional area of O.B in sqm | Total Cross Sectional area in sqm | Influence Length m | Total Volume of O.B in Cum situ (B) | Total Volume in Cum situ (A) | Total Volume of Stone Cum situ (A-B) | Recovery 60% in m cum situ | Million tons of Stone |
|---------------------------|------------------------------------|-----------------------------------|--------------------|-------------------------------------|------------------------------|--------------------------------------|----------------------------|-----------------------|
| 1000N | 10010 | 169564.00 | 1400 | 14014000 | 237389600.00 | 223375600.00 | 262.42332 | 708.54 |
| 0.00 | 10383 | 98178.00 | 1000 | 10383000 | 98178000.00 | 87795000.00 | | |
| 1000S | 10785 | 100929.00 | 1400 | 15099000 | 141300600.00 | 126201600.00 | | |
| Total | | | | 39496000 | 476868200.00 | 437372200.00 | | |

District Survey Report of Sahibganj, Jharkhand

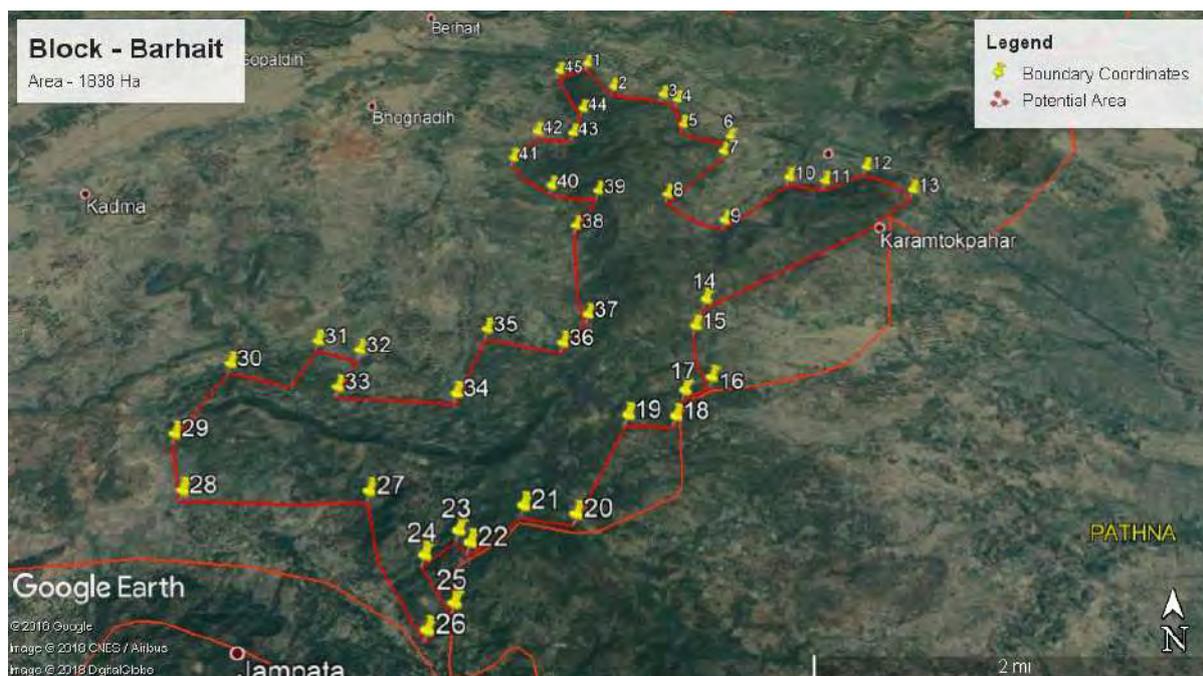
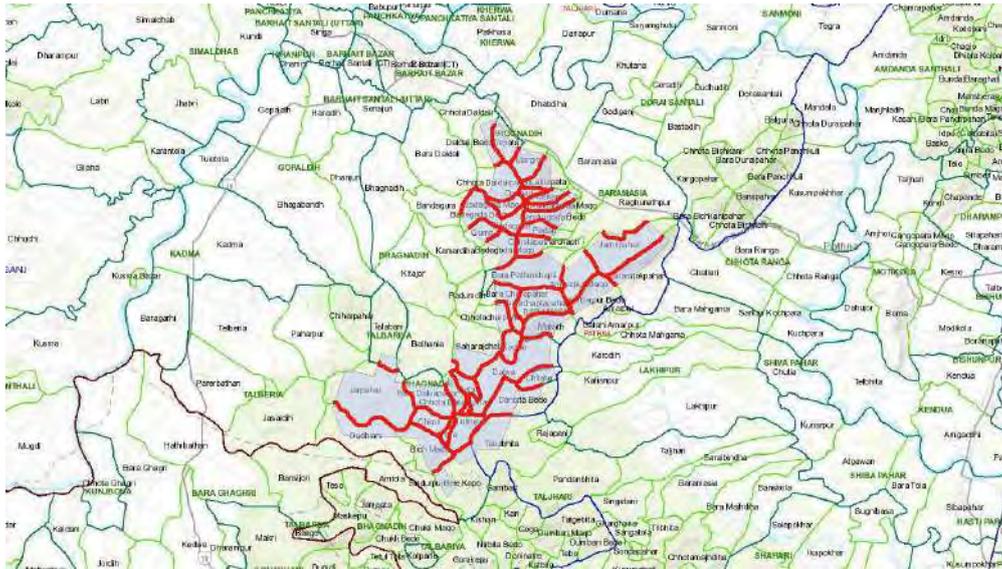


Image showing the Potential Area (Block – D, Mineral - Basalt) As Per KML Data

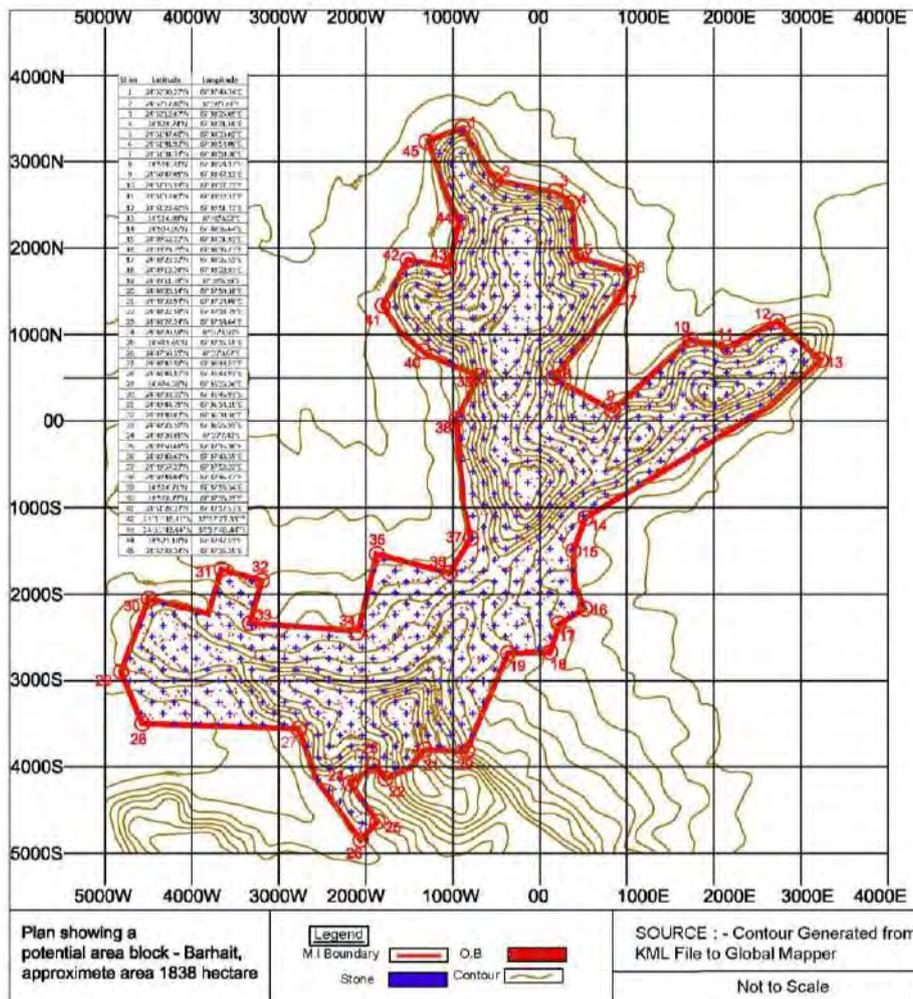
| Sl no | Latitude | Longitude |
|-------|---------------|---------------|
| 1 | 24°52'38.27"N | 87°37'48.74"E |
| 2 | 24°52'17.80"N | 87°38'1.61"E |
| 3 | 24°52'12.87"N | 87°38'25.09"E |
| 4 | 24°52'8.74"N | 87°38'31.58"E |
| 5 | 24°51'47.60"N | 87°38'33.02"E |
| 6 | 24°51'41.93"N | 87°38'54.00"E |
| 7 | 24°51'31.74"N | 87°38'50.30"E |
| 8 | 24°51'0.20"N | 87°38'24.17"E |
| 9 | 24°50'47.05"N | 87°38'47.12"E |
| 10 | 24°51'15.19"N | 87°39'17.21"E |
| 11 | 24°51'12.03"N | 87°39'32.13"E |
| 12 | 24°51'22.40"N | 87°39'51.72"E |
| 13 | 24°51'6.98"N | 87°40'8.52"E |
| 14 | 24°50'4.96"N | 87°38'36.64"E |
| 15 | 24°49'52.22"N | 87°38'31.91"E |
| 16 | 24°49'29.25"N | 87°38'36.41"E |
| 17 | 24°49'23.32"N | 87°38'26.51"E |
| 18 | 24°49'12.28"N | 87°38'22.91"E |
| 19 | 24°49'11.78"N | 87°38'6.59"E |
| 20 | 24°48'33.14"N | 87°37'50.18"E |
| 21 | 24°48'33.94"N | 87°37'34.08"E |
| 22 | 24°48'22.58"N | 87°37'18.79"E |
| | | |

| Sl no | Latitude | Longitude |
|-------|---------------|---------------|
| 23 | 24°48'27.24"N | 87°37'14.64"E |
| 24 | 24°48'20.58"N | 87°37'4.90"E |
| 25 | 24°48'5.65"N | 87°37'15.55"E |
| 26 | 24°47'58.55"N | 87°37'8.67"E |
| 27 | 24°48'42.18"N | 87°36'44.51"E |
| 28 | 24°48'44.13"N | 87°35'43.93"E |
| 29 | 24°49'4.56"N | 87°35'35.36"E |
| 30 | 24°49'33.31"N | 87°35'45.93"E |
| 31 | 24°49'44.75"N | 87°36'14.15"E |
| 32 | 24°49'40.83"N | 87°36'30.16"E |
| 33 | 24°49'23.50"N | 87°36'25.91"E |
| 34 | 24°49'20.85"N | 87°37'7.40"E |
| 35 | 24°49'50.66"N | 87°37'15.10"E |
| 36 | 24°49'43.63"N | 87°37'43.35"E |
| 37 | 24°49'57.23"N | 87°37'52.23"E |
| 38 | 24°50'44.04"N | 87°37'46.42"E |
| 39 | 24°51'0.71"N | 87°37'55.34"E |
| 40 | 24°51'8.77"N | 87°37'35.39"E |
| 41 | 24°51'28.23"N | 87°37'17.57"E |
| 42 | 4°51'46.41"N | 87°37'27.33"E |
| 43 | 4°51'43.64"N | 87°37'43.44"E |
| 44 | 24°52'1.18"N | 87°37'47.51"E |
| 45 | 24°52'33.24"N | 87°37'35.35"E |



List of villages falling under the potential area

Bedo Torpata, Margro, Daldalipahar, Lakiapata, Chapri, Koskera, Badegoda, Nandurgodadedo, Kangarogoda, Padri, Gumo, Chhotapatharchapri, Jamripahar, Karamtokpahar, Bara patharchapri, Badegoda Maqo, Jamri Pahar, Maklith, Chhotachapta Pahar, Amarpura Maqo, Bara Chura Pahar, Kocklo, Dalwa, Chailako, Danbita Bedo, Saharajdhab, Chimn, Tulmi, Tetulbhita, Bich Maqo, DudhianiJarpahar, Bara Dalupoahar, Dabra.



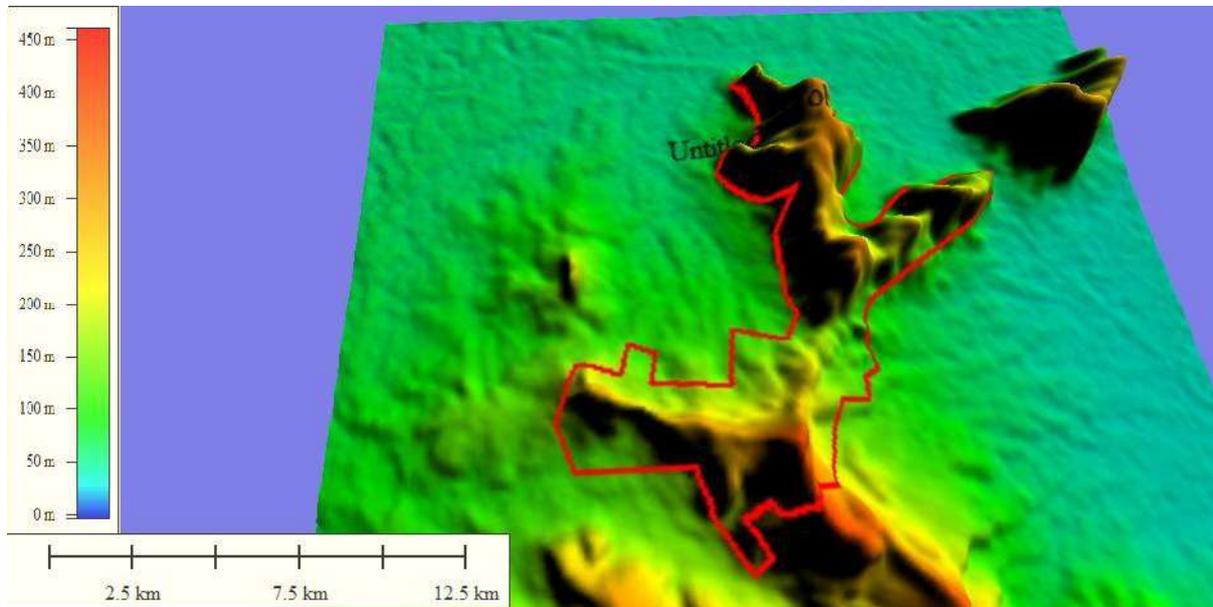
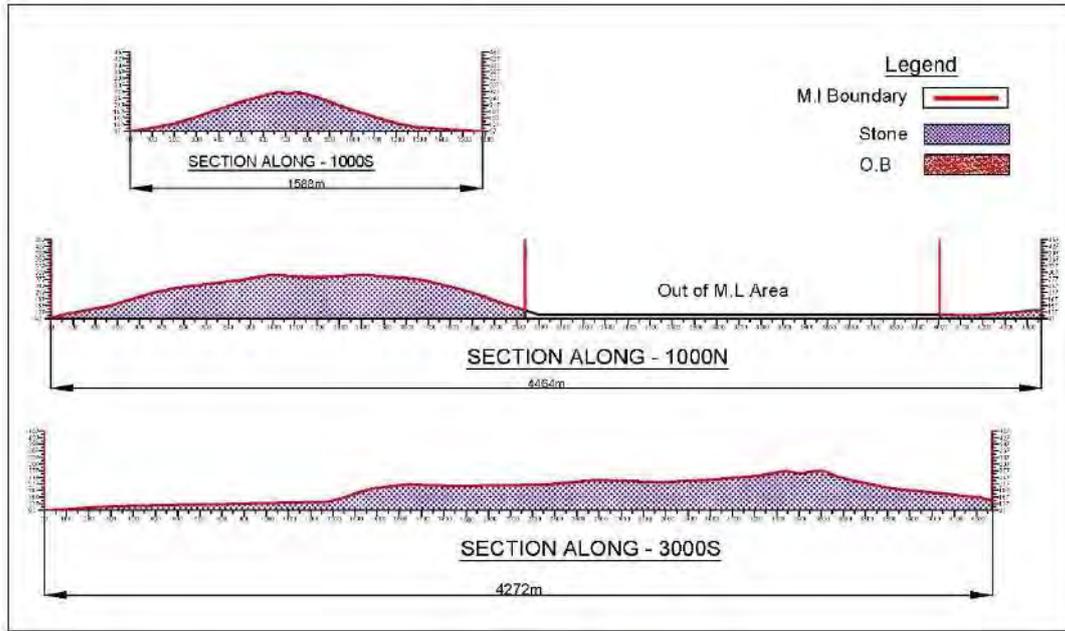


Image showing 3D Topographic view of the Potential Area

Volume of Potential Area - D, Block - Barhait, Area 1838 Hectare

| Section Proved 297 TO 97 | Cross sectional area of O.B in sqm | Total Cross Sectional area in sqm | Influence Length m | Total Volume of O.B in Cum situ (B) | Total Volume in Cum situ (A) | Total Volume of Stone Cum situ (A-B) | Recovery 60% in m cum situ | Million tons of Stone |
|--------------------------|------------------------------------|-----------------------------------|--------------------|-------------------------------------|------------------------------|--------------------------------------|----------------------------|-----------------------|
| 1000S | 6417 | 118474.00 | 1500 | 9625500 | 177711000.00 | 168085500.00 | 1378.0113 | 3720.63 |
| 1000N | 10565 | 297850.00 | 2400 | 25356000 | 714840000.00 | 689484000.00 | | |
| 3000S | 17094 | 376873.00 | 4000 | 68376000 | 1507492000.00 | 1439116000.00 | | |
| Total | | | | 103357500 | 2400043000.00 | 2296685500.00 | | |

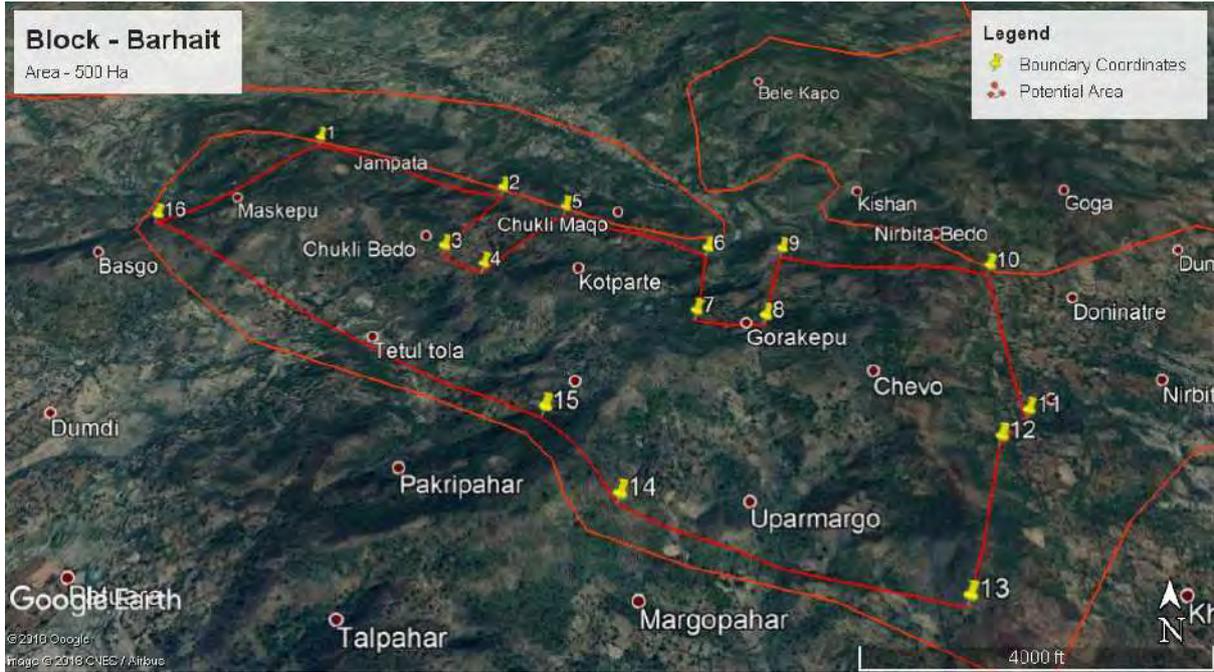


Image showing the Potential Area (Block – E, Mineral – Basalt & Granite Gneiss) As Per KML Data

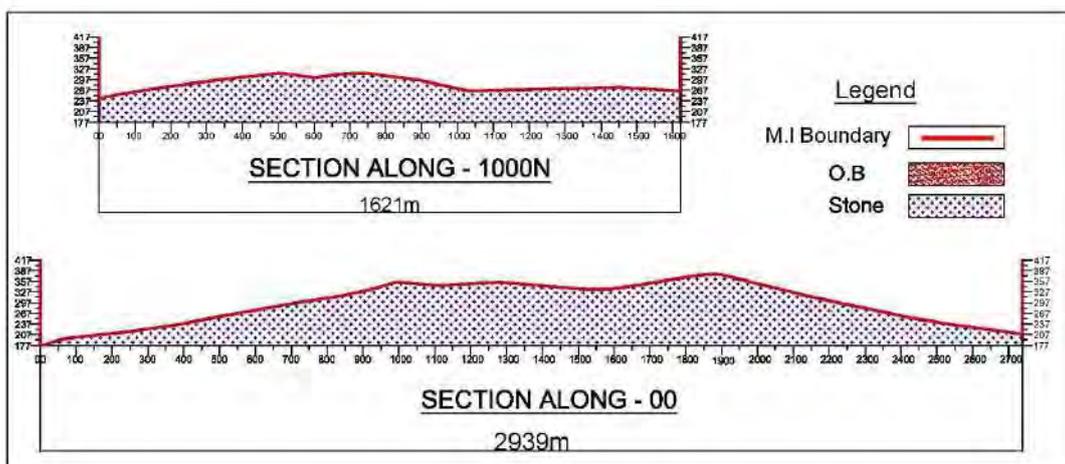
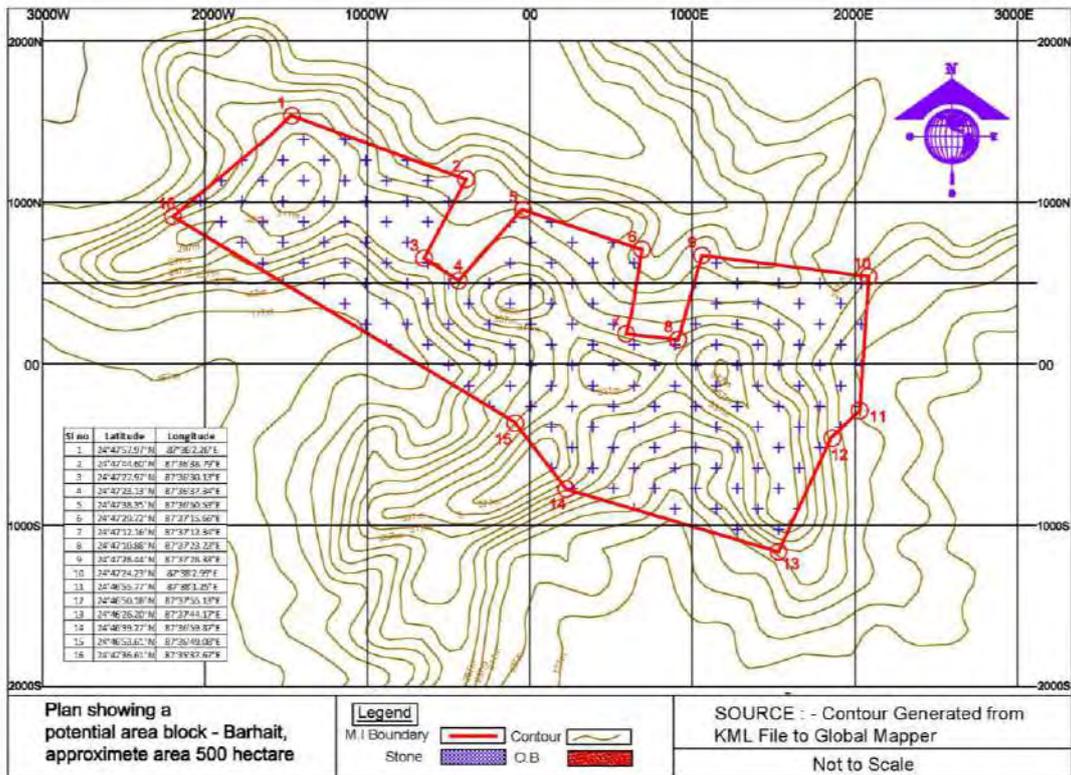
| Sl no | Latitude | Longitude |
|-------|---------------|---------------|
| 1 | 24°47'57.97"N | 87°36'2.26"E |
| 2 | 24°47'44.60"N | 87°36'38.79"E |
| 3 | 24°47'27.97"N | 87°36'30.13"E |
| 4 | 24°47'23.13"N | 87°36'37.34"E |
| 5 | 24°47'38.35"N | 87°36'50.53"E |
| 6 | 24°47'29.72"N | 87°37'15.66"E |
| 7 | 24°47'12.16"N | 87°37'12.34"E |
| 8 | 24°47'10.88"N | 87°37'23.23"E |

| Sl no | Latitude | Longitude |
|-------|---------------|---------------|
| 9 | 24°47'28.44"N | 87°37'28.33"E |
| 10 | 24°47'24.23"N | 87°38'2.99"E |
| 11 | 24°46'55.77"N | 87°38'1.25"E |
| 12 | 24°46'50.18"N | 87°37'55.13"E |
| 13 | 24°46'26.20"N | 87°37'44.17"E |
| 14 | 24°46'39.27"N | 87°36'59.87"E |
| 15 | 24°46'53.61"N | 87°36'49.08"E |
| 16 | 24°47'36.61"N | 87°35'37.67"E |



List of villages lying under the potential area:

Jampata, Maskepu, Chukli Bedo, Tetul Tola, Chukli Maqo, Gora Kepu, Kotparte, Uparmargo, Pakeri, Chevo, Nirbita Bedo, Tori, Karrobasa, Hajarpura, Margo pahar.



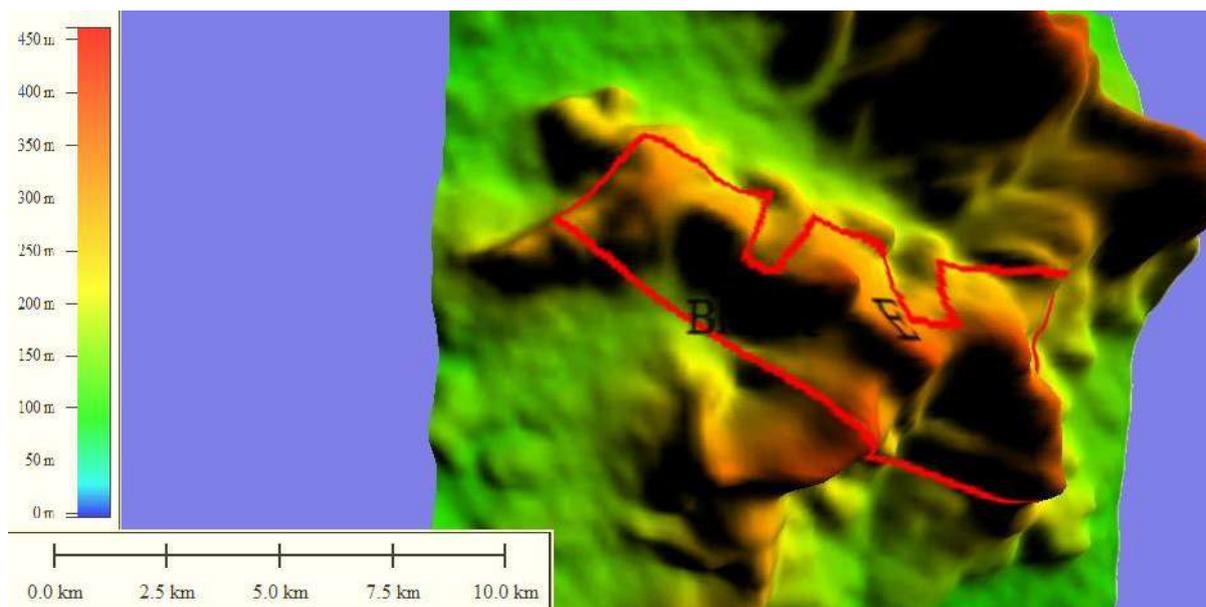
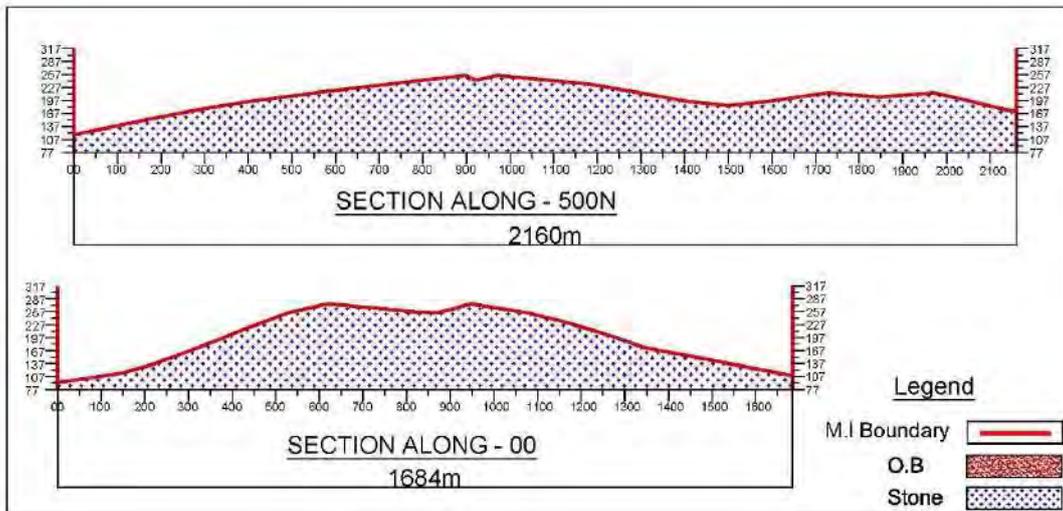
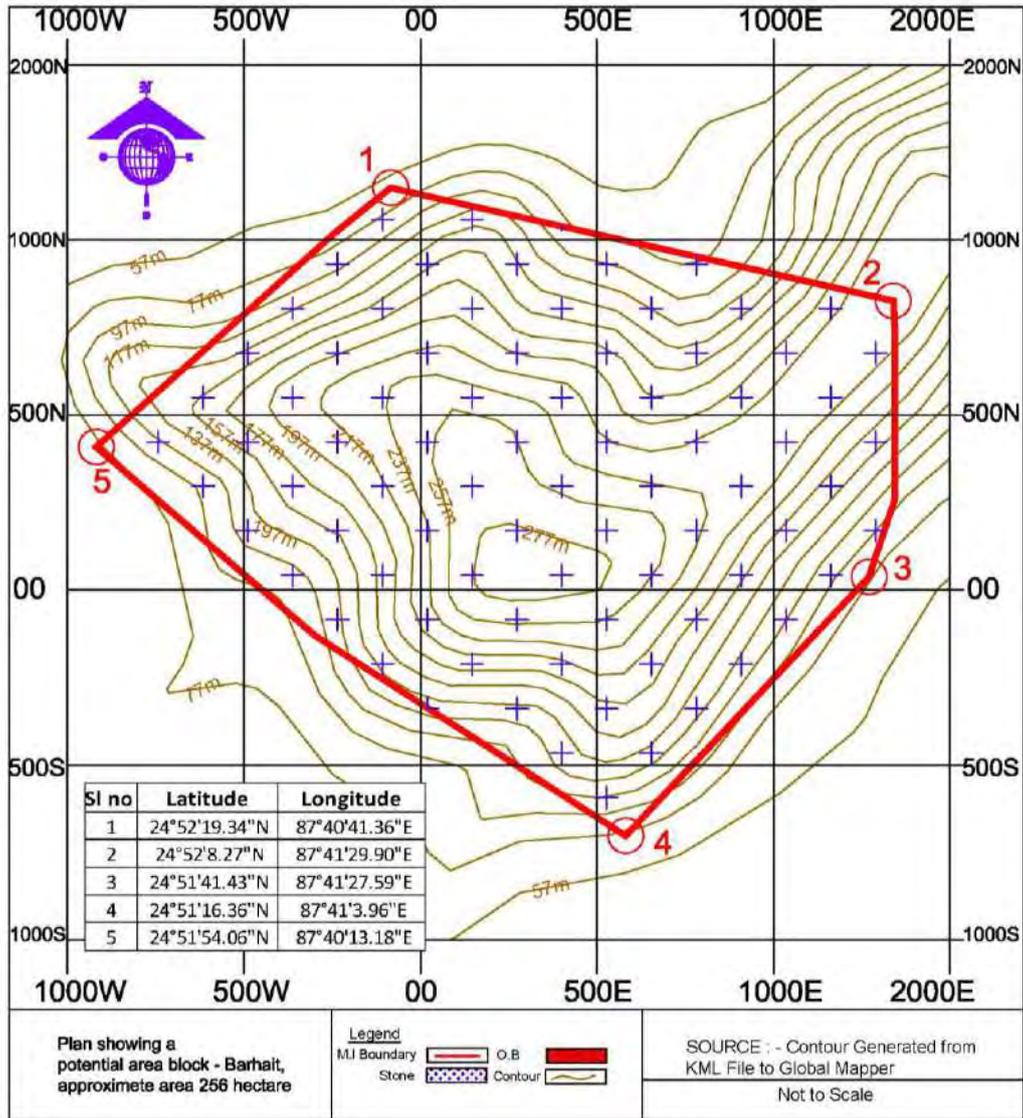


Image showing 3D Topographic view of the Potential Area

Volume of Potential Area - E, Block - Barhait, Area 500 Hectare

| Section Proved 377 TO 177 | Cross sectional area of O.B in sqm | Total Cross Sectional area in sqm | Influence Length m | Total Volume of O.B in Cum situ (B) | Total Volume in Cum situ (A) | Total Volume of Stone Cum situ (A-B) | Recovery 60% in m cum situ | Million tons of Stone |
|---------------------------|------------------------------------|-----------------------------------|--------------------|-------------------------------------|------------------------------|--------------------------------------|----------------------------|-----------------------|
| 1000N | 6534 | 170113.00 | 1000 | 6534000 | 170113000.00 | 163579000.00 | 303.21996 | 818.69 |
| 0.00 | 11088 | 321804.00 | 1100 | 12196800 | 353984400.00 | 341787600.00 | | |
| Total | | | | 18730800 | 524097400.00 | 505366600.00 | | |



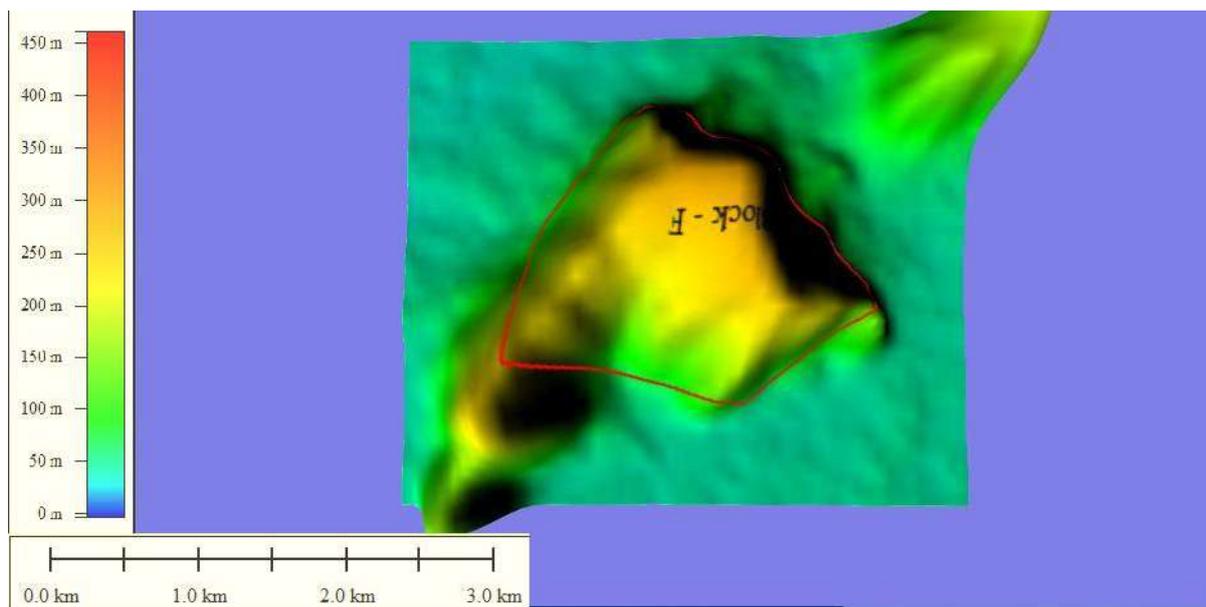


Image showing 3D Topographic view of the Potential Area

Volume of Potential Area - F, Block - Barhait, Area 256 Hectare

| Section Proved 277 TO 77 | Cross sectional area of O.B in sqm | Total Cross Sectional area in sqm | Influence Length m | Total Volume of O.B in Cum situ (B) | Total Volume in Cum situ (A) | Total Volume of Stone Cum situ (A-B) | Recovery 60% in m cum situ | Million tons of Stone |
|-----------------------------|------------------------------------|-----------------------------------|--------------------|-------------------------------------|------------------------------|--------------------------------------|----------------------------|-----------------------|
| 500.00 | 8750 | 273687.00 | 650 | 5687500 | 177896550.00 | 172209050.00 | 232.49271 | 627.73 |
| 0.00 | 6946 | 202654.00 | 1100 | 7640600 | 222919400.00 | 215278800.00 | | |
| Total | | | | 13328100 | 400815950.00 | 387487850.00 | | |

Block - Taljhari



Image showing the Potential Area (Block – A, Mineral - Basalt) As Per KML Data

| SI no | Latitude | Longitude |
|-------|---------------|---------------|
| 1 | 25°14'7.00"N | 87°42'18.75"E |
| 2 | 25°14'1.09"N | 87°42'38.39"E |
| 3 | 25°14'15.77"N | 87°42'58.65"E |
| 4 | 25°14'15.98"N | 87°43'22.15"E |
| 5 | 25°13'9.65"N | 87°43'33.67"E |

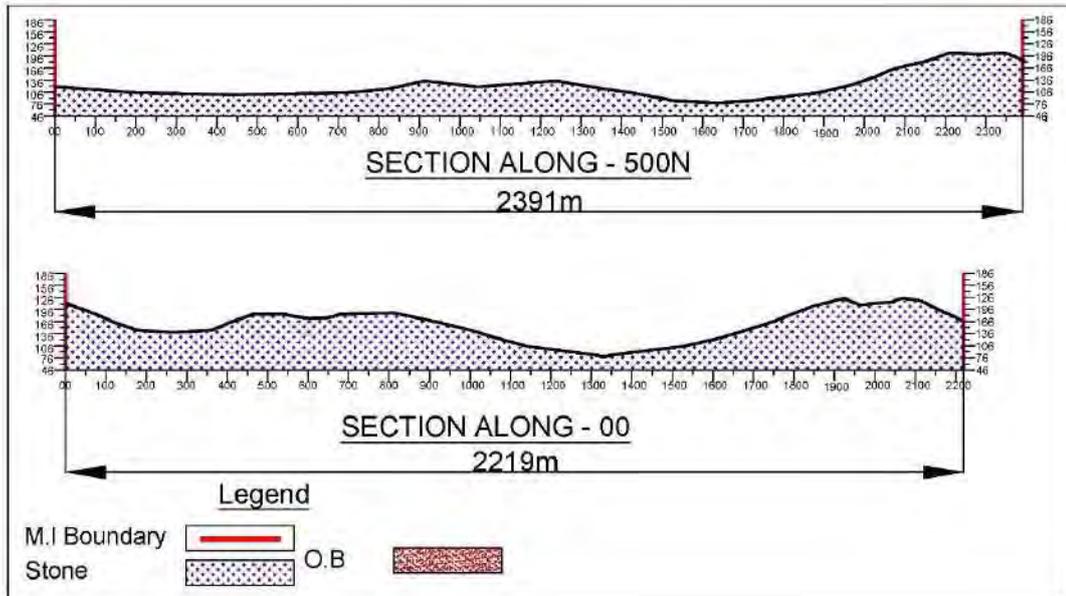
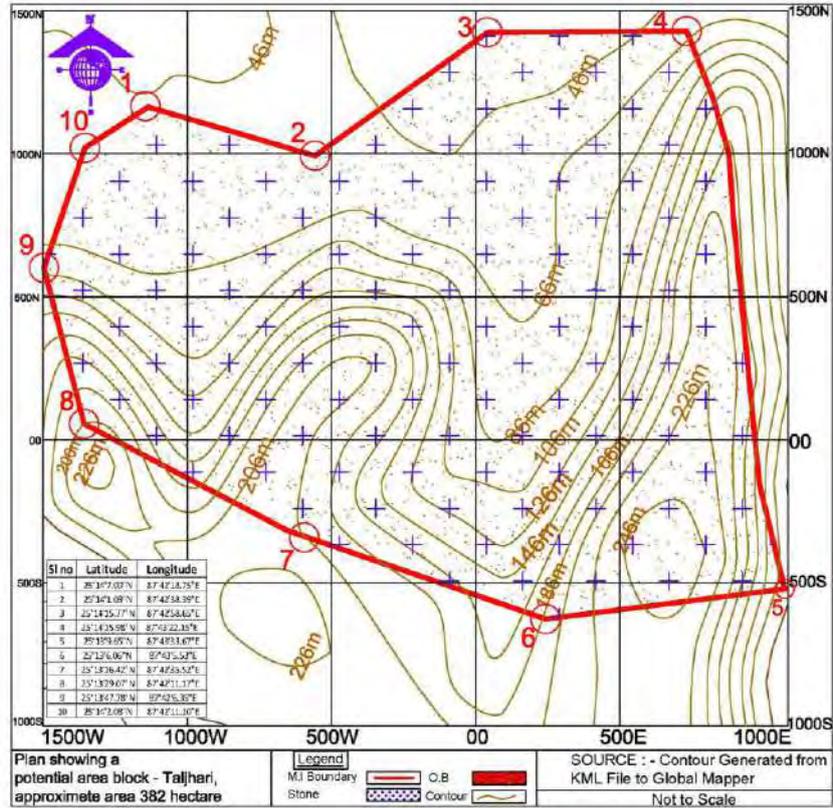
| SI no | Latitude | Longitude |
|-------|---------------|---------------|
| 6 | 25°13'6.06"N | 87°43'5.53"E |
| 7 | 25°13'16.42"N | 87°42'35.52"E |
| 8 | 25°13'29.07"N | 87°42'11.17"E |
| 9 | 25°13'47.78"N | 87°42'6.35"E |
| 10 | 25°14'2.08"N | 87°42'11.10"E |



List of villages falling under the potential area:

Chota Bhagamari, Korokuriya, Badi Bhogiamari, Baraparte, Chongro, Godwa, Jamni

District Survey Report of Sahibganj, Jharkhand



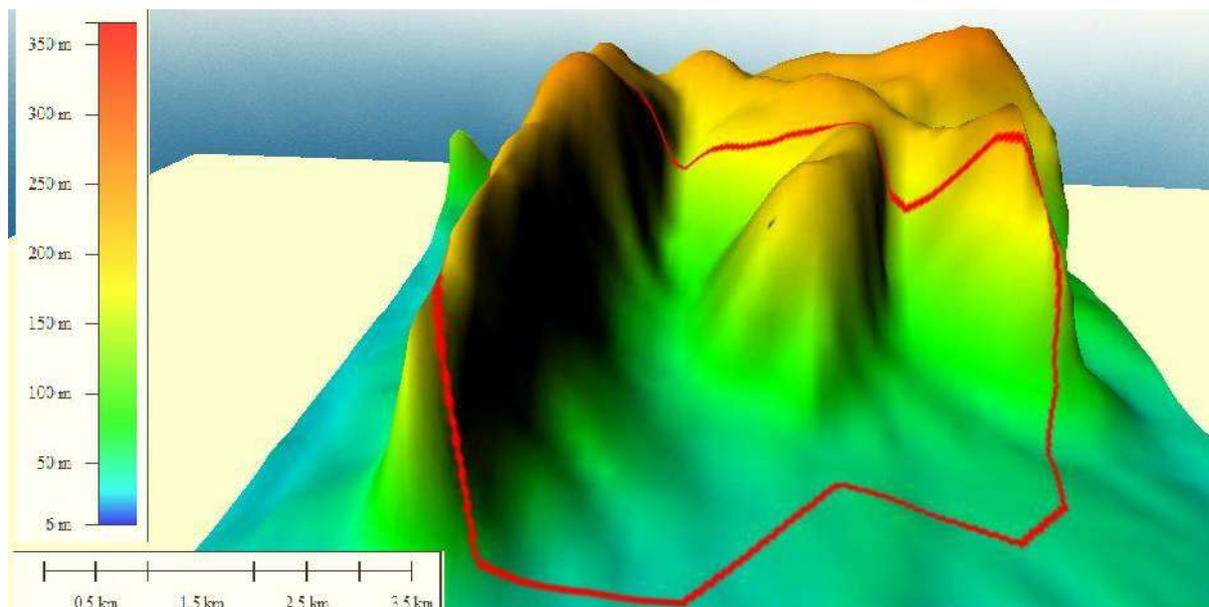


Image showing 3D Topographic view of the Potential Area

Volume of Potential Area - A, Block - Taljhari, Area 382 Hectare

| Section Proved 246 TO 46 | Cross sectional area of O.B in sqm | Total Cross Sectional area in sqm | Influence Length m | Total Volume of O.B in Cum situ (B) | Total Volume in Cum situ (A) | Total Volume of Stone Cum situ (A-B) | Recovery 60% in m cum situ | Million tons of Stone |
|--------------------------------|---|--|--------------------------|---|------------------------------------|--|----------------------------------|-----------------------------|
| 500N | 9686 | 172275.00 | 925 | 8959550 | 159354375.00 | 150394825.00 | 243.207735 | 656.66 |
| 0.00 | 9170 | 240944.00 | 1100 | 10087000 | 265038400.00 | 254951400.00 | | |
| Total | | | | 19046550 | 424392775.00 | 405346225.00 | | |

District Survey Report of Sahibganj, Jharkhand

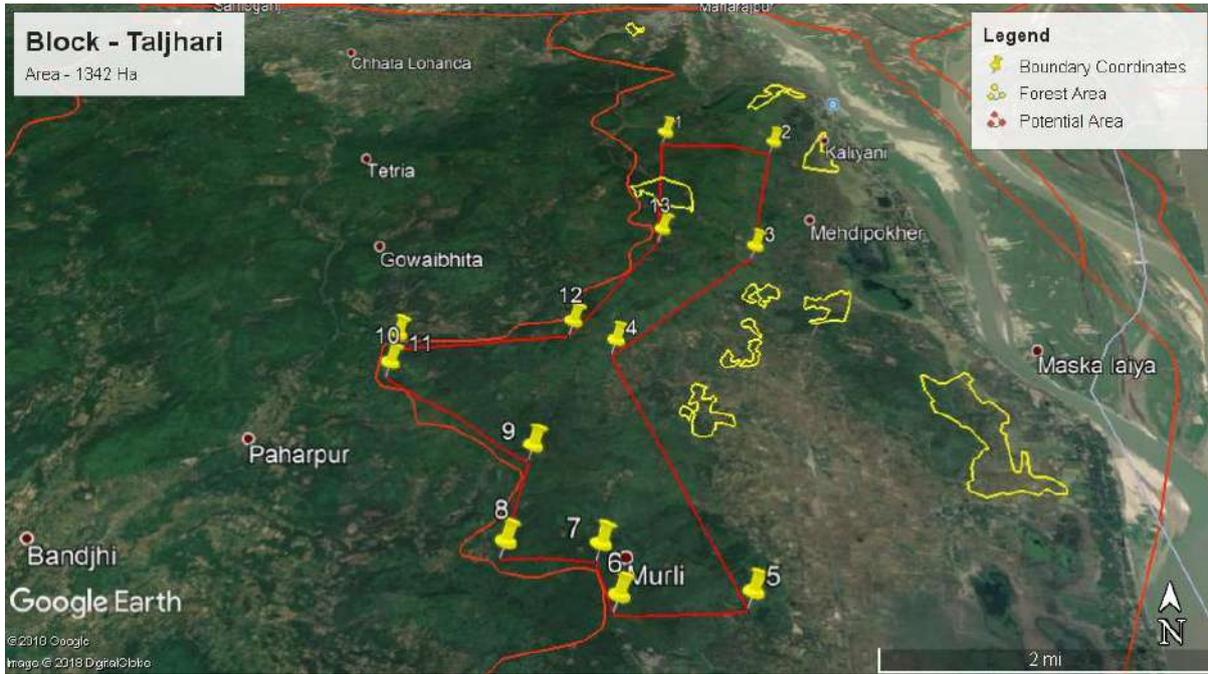


Image showing the Potential Area (Block – B, Mineral - Basalt) As Per KML Data

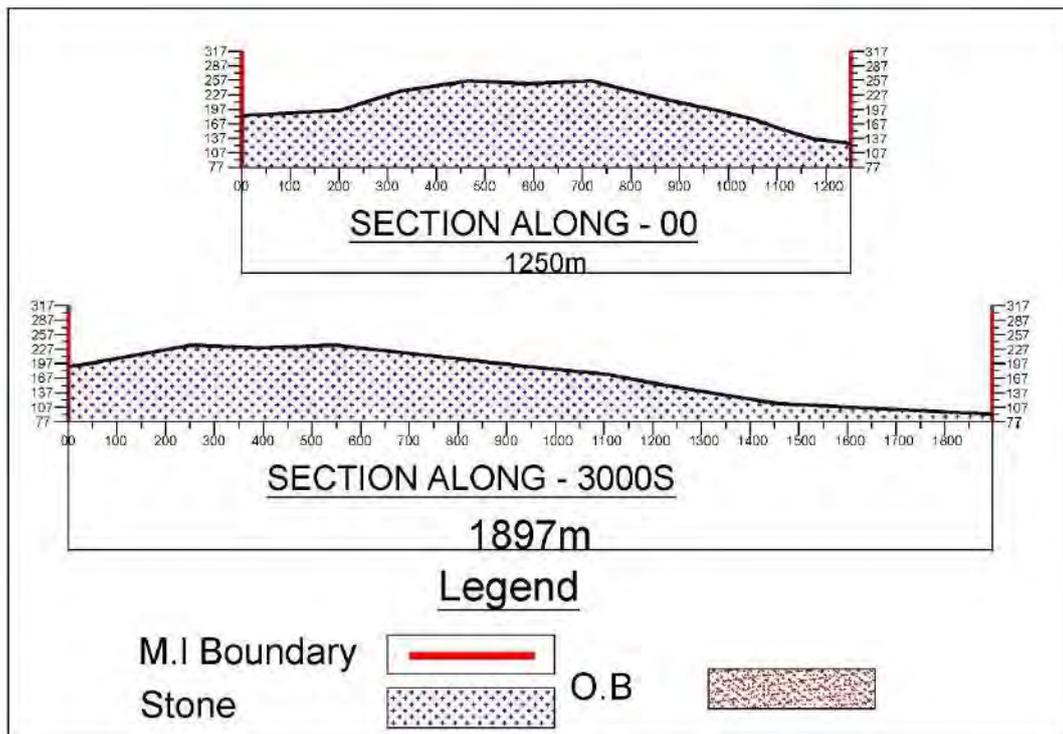
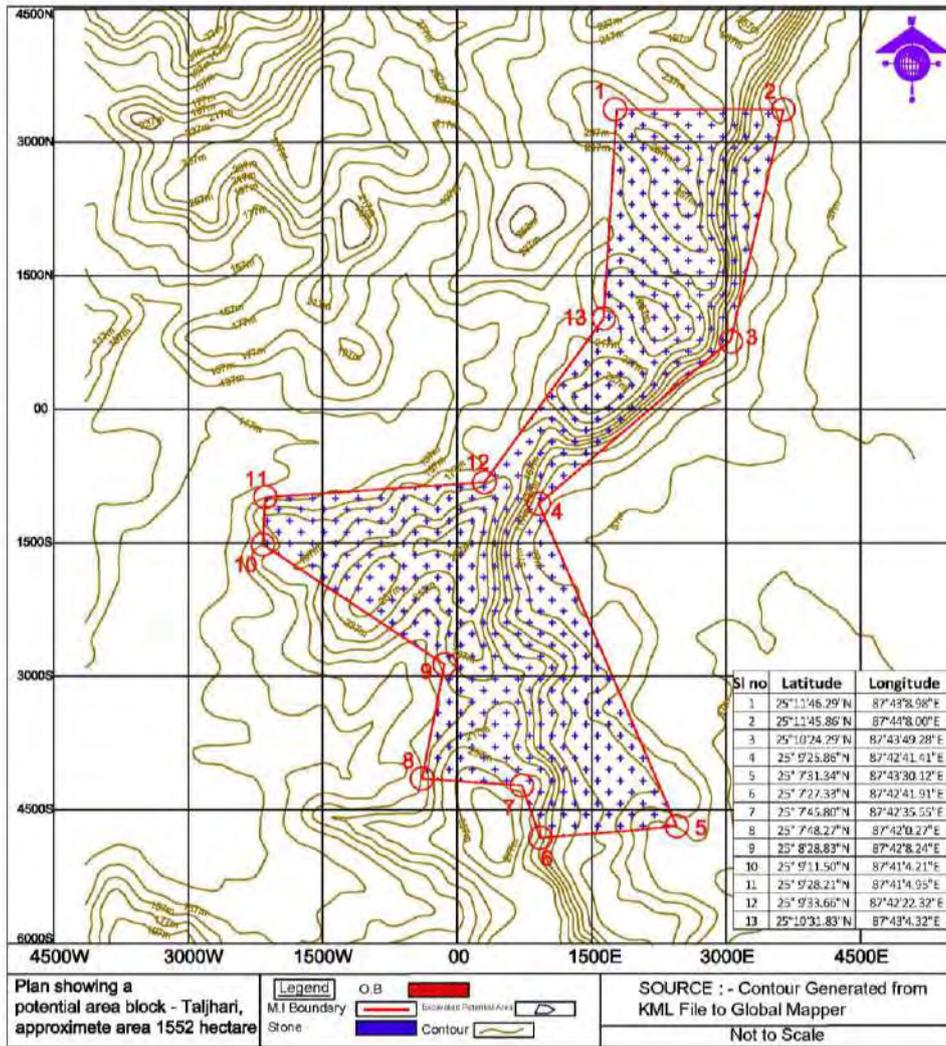
| Sl no | Latitude | Longitude |
|-------|---------------|---------------|
| 1 | 25°11'46.29"N | 87°43'8.98"E |
| 2 | 25°11'45.86"N | 87°44'8.00"E |
| 3 | 25°10'24.29"N | 87°43'49.28"E |
| 4 | 25° 9'25.86"N | 87°42'41.41"E |
| 5 | 25° 7'31.34"N | 87°43'30.12"E |
| 6 | 25° 7'27.33"N | 87°42'41.91"E |
| 7 | 25° 7'45.80"N | 87°42'35.55"E |

| Sl no | Latitude | Longitude |
|-------|---------------|---------------|
| 8 | 25° 7'48.27"N | 87°42'0.27"E |
| 9 | 25° 8'28.83"N | 87°42'8.24"E |
| 10 | 25° 9'11.50"N | 87°41'4.21"E |
| 11 | 25° 9'28.21"N | 87°41'4.95"E |
| 12 | 25° 9'33.66"N | 87°42'22.32"E |
| 13 | 25°10'31.83"N | 87°43'4.32"E |



List of villages falling under the potential area:

Saura, Banji, Kaldi Bitra, Chamdi Mago, Chamdi Bedo, Behra, Danga, Joya, Kakbita (Jhapsi), Ghoghi, Goga, Jamba, Kasari, Chatkihi, Bademe, Kachori Bedo, Kachori Mago, Muri, Kalhajhor, Joya, Ambori.



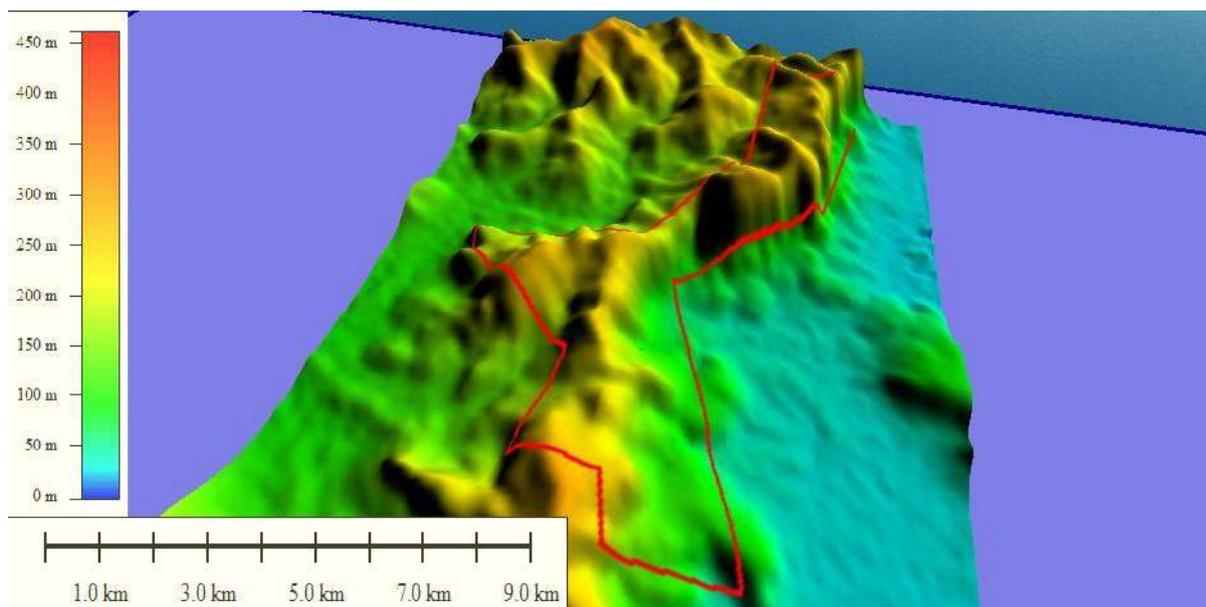


Image showing 3D Topographic view of the Potential Area

Volume of Potential Area - B, Block - Taljhari, Area 1342 Hectare

| Section Proved 265 TO 85 | Cross sectional area of O.B in sqm | Total Cross Sectional area in sqm | Influence Length m | Total Volume of O.B in Cum situ (B) | Total Volume in Cum situ (A) | Total Volume of Stone Cum situ (A-B) | Recovery 60% in m cum situ | Million tons of Stone |
|--------------------------------|---|---|-----------------------|---|---------------------------------|--|----------------------------------|-----------------------------|
| 0.00 | 5101 | 164622.00 | 3600 | 18363600 | 592639200.00 | 574275600.00 | 847.5804 | 2288.47 |
| 3000S | 7640 | 182298.00 | 4800 | 36672000 | 875030400.00 | 838358400.00 | | |
| Total | | | | 55035600 | 1467669600.00 | 1412634000.00 | | |

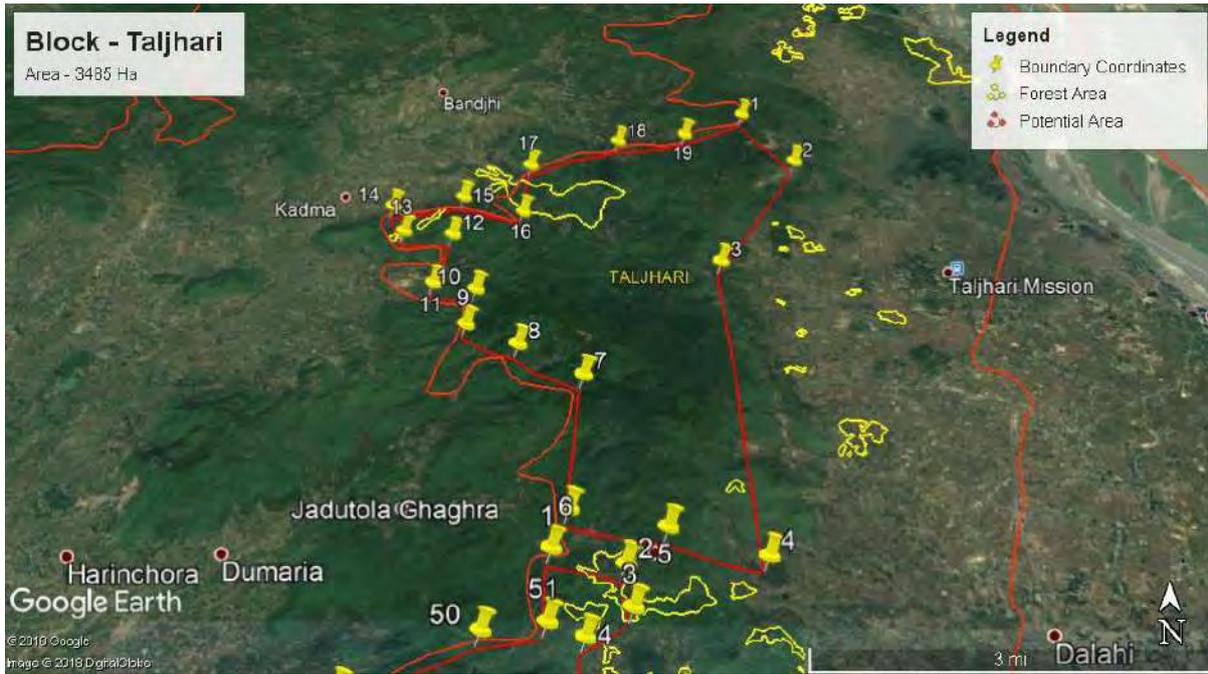
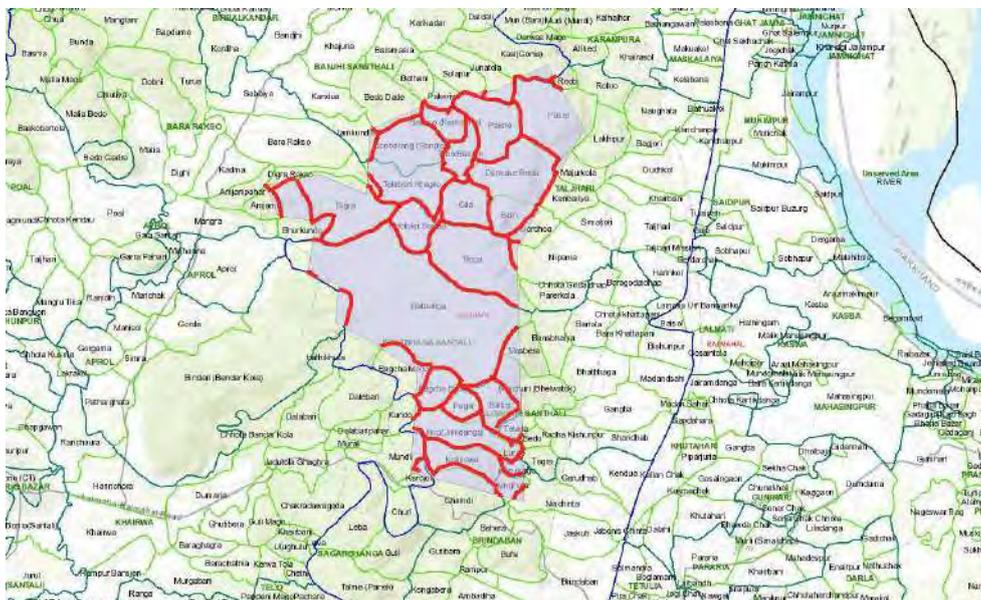


Image showing the Potential Area (Block – C, Mineral - Basalt) As Per KML Data

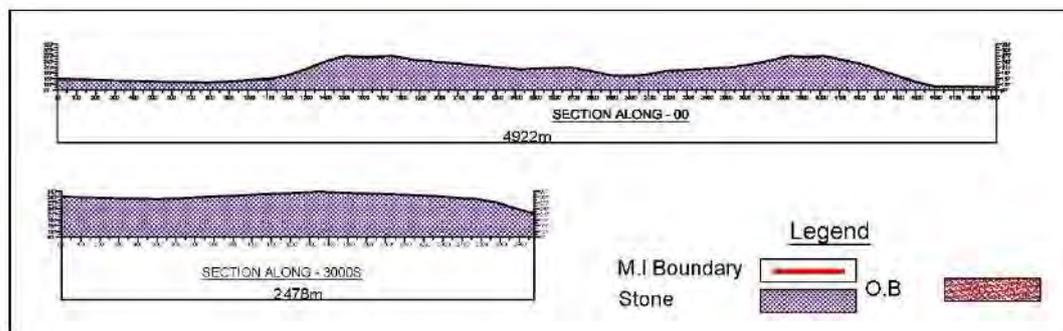
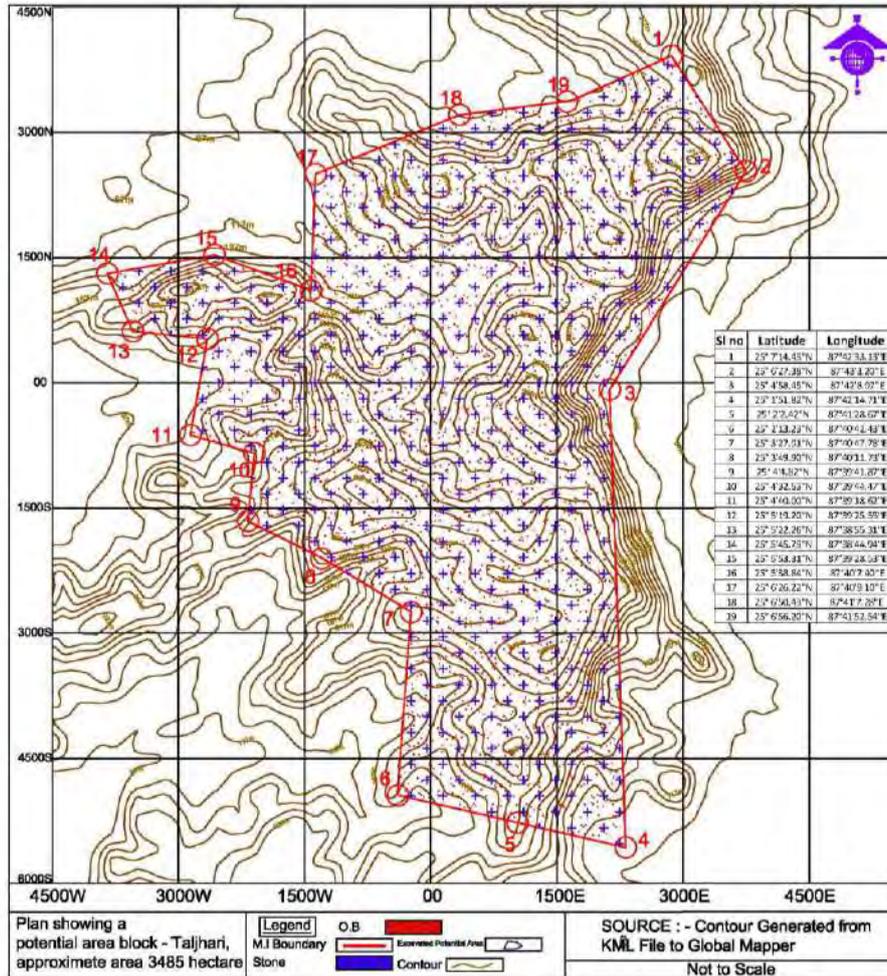
| Sl no | Latitude | Longitude |
|-------|---------------|---------------|
| 1 | 25° 7'14.43"N | 87°42'33.13"E |
| 2 | 25° 6'27.38"N | 87°43'3.20"E |
| 3 | 25° 4'58.45"N | 87°42'8.07"E |
| 4 | 25° 1'51.82"N | 87°42'14.71"E |
| 5 | 25° 2'2.42"N | 87°41'28.67"E |
| 6 | 25° 2'13.23"N | 87°40'42.43"E |
| 7 | 25° 3'27.91"N | 87°40'47.78"E |
| 8 | 25° 3'49.90"N | 87°40'11.73"E |
| 9 | 25° 4'4.82"N | 87°39'41.87"E |
| 10 | 25° 4'32.53"N | 87°39'44.47"E |

| Sl no | Latitude | Longitude |
|-------|---------------|---------------|
| 11 | 25° 4'40.00"N | 87°39'18.62"E |
| 12 | 25° 5'19.20"N | 87°39'25.55"E |
| 13 | 25° 5'22.26"N | 87°38'55.31"E |
| 14 | 25° 5'45.73"N | 87°38'44.94"E |
| 15 | 25° 5'53.31"N | 87°39'28.53"E |
| 16 | 25° 5'38.84"N | 87°40'7.40"E |
| 17 | 25° 6'26.22"N | 87°40'9.10"E |
| 18 | 25° 6'50.43"N | 87°41'7.28"E |
| 19 | 25° 6'56.20"N | 87°41'52.54"E |



List of villages falling under the potential area:

Pusru, Pakri, Badhua, Darwasi Bedo, Botri, Gila, Boga, Telabani Khaplo, Digra, Batbanga, Bagcha Mago, Bagcha Bedo, Jilkur, Katikewa, Tetaria, Balko, Chamdi, Mundli, Kerojoi, Kundo, Hathikhuta, Masbera, Gordhoa.



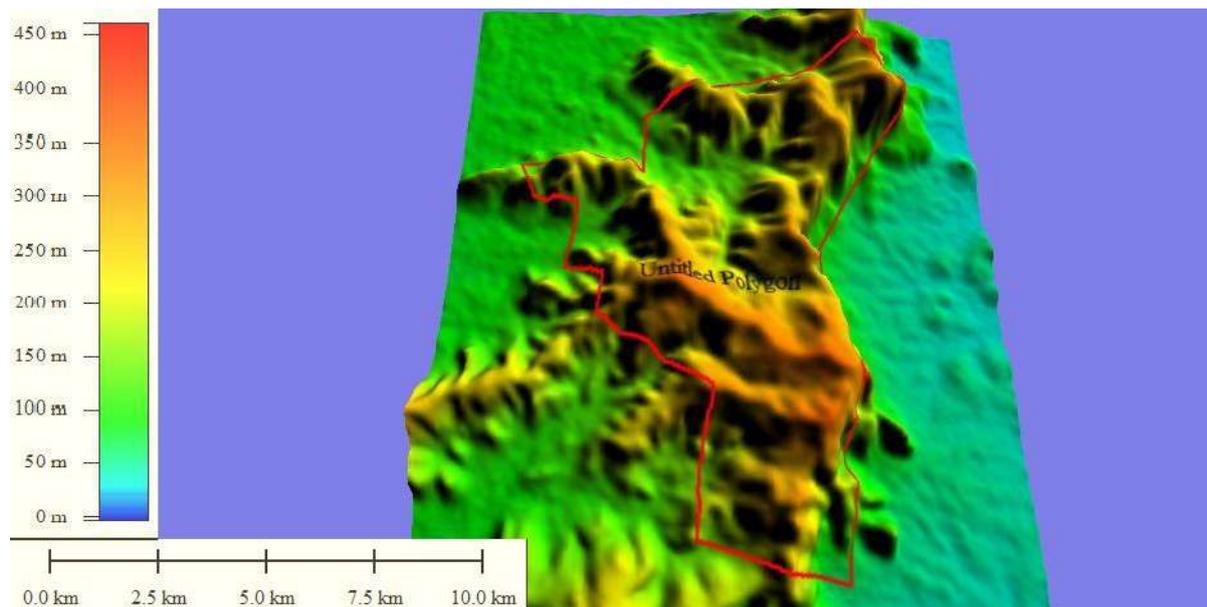


Image showing 3D Topographic view of the Potential Area

Volume of Potential Area - C, Block - Taljhari, Area 3485 Hectare

| Section Proved 277 TO 97 | Cross sectional area of O.B in sqm | Total Cross Sectional area in sqm | Influence Length m | Total Volume of O.B in Cum situ (B) | Total Volume in Cum situ (A) | Total Volume of Stone Cum situ (A-B) | Recovery 60% in m cum situ | Million tons of Stone |
|--------------------------|------------------------------------|-----------------------------------|--------------------|-------------------------------------|------------------------------|--------------------------------------|----------------------------|-----------------------|
| 0.00 | 19909 | 477448.00 | 4800 | 95563200 | 2291750400.00 | 2196187200.00 | 3349.53288 | 9043.74 |
| 3000S | 9962 | 515390.00 | 6700 | 66745400 | 3453113000.00 | 3386367600.00 | | |
| Total | | | | 162308600 | 5744863400.00 | 5582554800.00 | | |

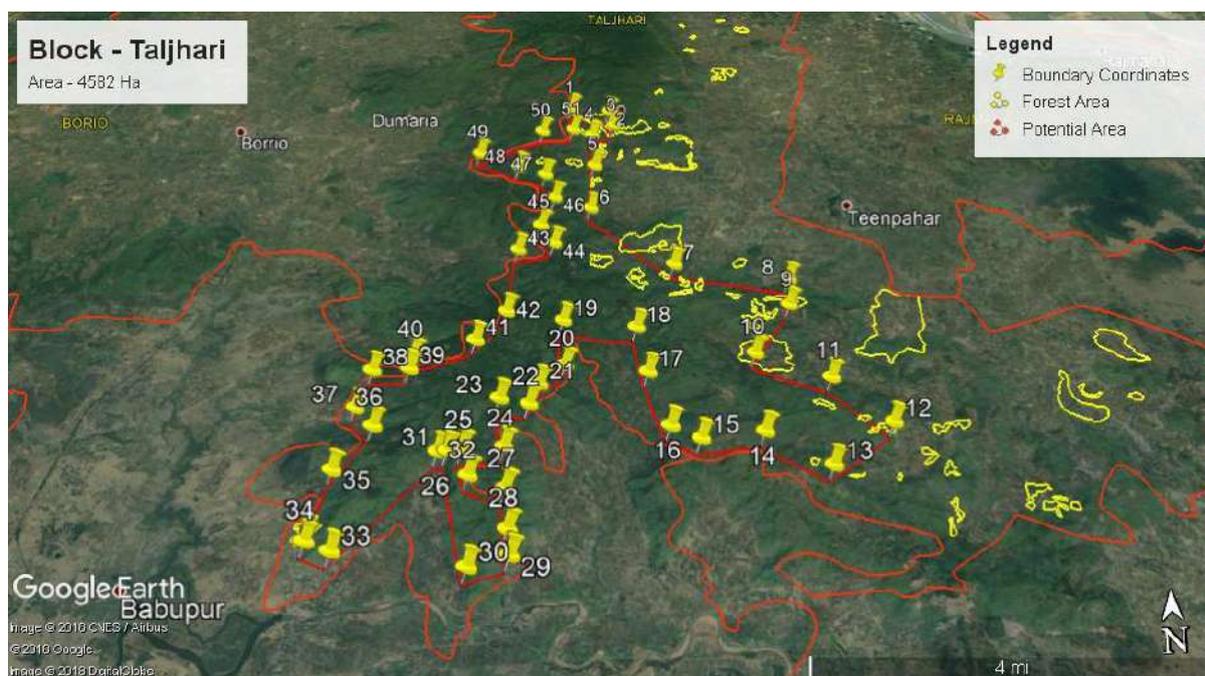
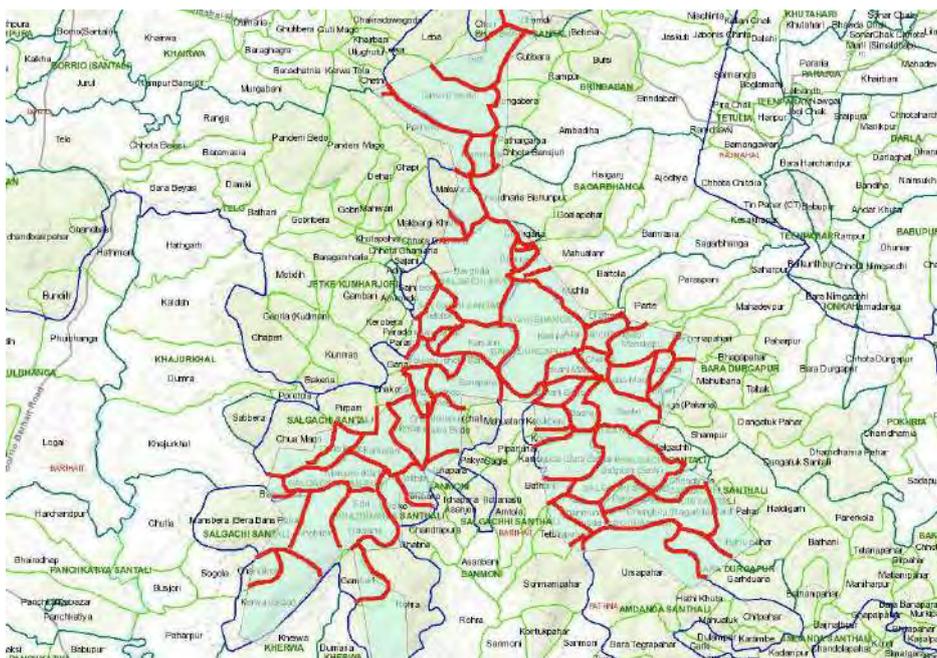


Image showing the Potential Area (Block – D, Mineral – Basalt & Granite Gneiss) As Per KML Data

| Sl no | Latitude | Longitude |
|-------|---------------|---------------|
| 1 | 25° 1'53.16"N | 87°40'34.74"E |
| 2 | 25° 1'45.87"N | 87°41'8.97"E |
| 3 | 25° 1'27.22"N | 87°41'12.11"E |
| 4 | 25° 1'13.84"N | 87°40'51.25"E |
| 5 | 25° 0'30.67"N | 87°40'51.16"E |
| 6 | 4°59'34.58"N | 87°40'44.09"E |
| 7 | 4°58'24.33"N | 87°41'46.69"E |
| 8 | 24°58'2.88"N | 87°43'14.26"E |
| 9 | 24°57'35.33"N | 87°43'9.07"E |
| 10 | 24°56'49.33"N | 87°42'34.50"E |
| 11 | 24°56'25.02"N | 87°43'24.72"E |
| 12 | 24°55'44.89"N | 87°43'58.56"E |
| 13 | 24°55'11.86"N | 87°43'8.76"E |
| 14 | 24°55'40.44"N | 87°42'28.72"E |
| 15 | 24°55'37.16"N | 87°41'44.72"E |
| 16 | 24°55'50.38"N | 87°41'25.72"E |
| 17 | 24°56'37.62"N | 87°41'15.10"E |
| 18 | 24°57'19.09"N | 87°41'10.66"E |
| 19 | 24°57'24.39"N | 87°40'16.47"E |
| 20 | 24°56'45.73"N | 87°40'16.09"E |
| 21 | 24°56'30.82"N | 87°39'57.49"E |
| 22 | 24°56'13.63"N | 87°39'50.09"E |
| 23 | 24°56'17.57"N | 87°39'29.70"E |
| 24 | 24°55'40.24"N | 87°39'32.98"E |
| 25 | 24°55'38.05"N | 87°39'5.39"E |
| | | |

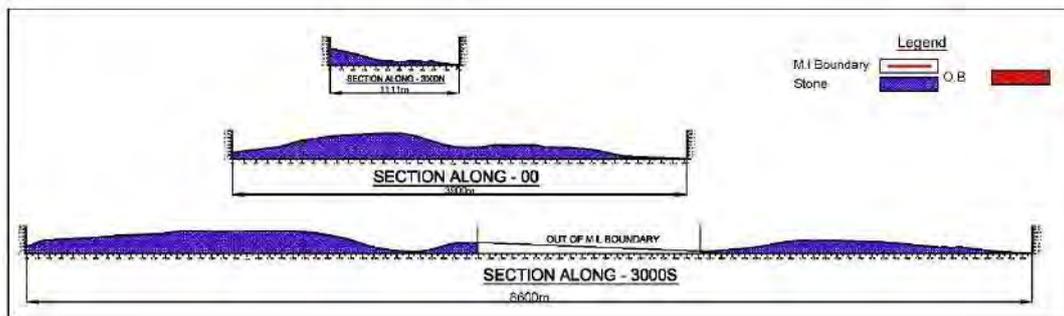
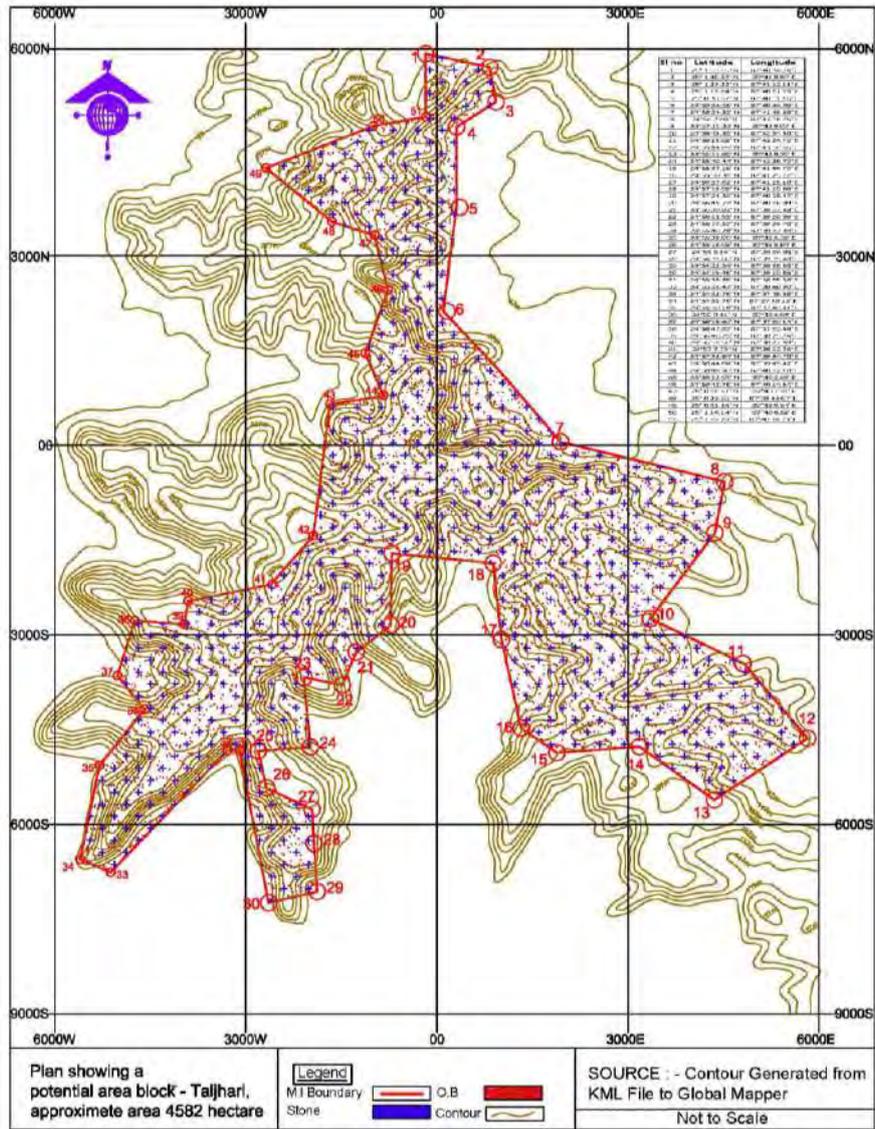
| Sl no | Latitude | Longitude |
|-------|---------------|---------------|
| 26 | 24°55'18.09"N | 87°39'9.84"E |
| 27 | 24°55'6.54"N | 87°39'34.05"E |
| 28 | 24°54'39.00"N | 87°39'35.49"E |
| 29 | 24°54'22.54"N | 87°39'36.63"E |
| 30 | 24°54'16.48"N | 87°39'10.85"E |
| 31 | 24°55'38.26"N | 87°38'55.38"E |
| 32 | 24°55'38.42"N | 87°38'48.90"E |
| 33 | 24°54'32.78"N | 87°37'46.58"E |
| 34 | 24°54'39.78"N | 87°37'30.13"E |
| 35 | 24°55'30.14"N | 87°37'40.41"E |
| 36 | 24°56'0.41"N | 87°38'4.44"E |
| 37 | 24°56'18.60"N | 87°37'50.14"E |
| 38 | 24°56'47.87"N | 87°37'59.46"E |
| 39 | 24°56'46.29"N | 87°38'25.74"E |
| 40 | 24°56'58.58"N | 87°38'27.89"E |
| 41 | 24°57'7.73"N | 87°39'12.24"E |
| 42 | 24°57'33.84"N | 87°39'34.70"E |
| 43 | 24°58'44.64"N | 87°39'43.47"E |
| 44 | 24°58'48.90"N | 87°40'12.18"E |
| 45 | 24°59'12.05"N | 87°40'2.43"E |
| 46 | 24°59'45.78"N | 87°40'14.54"E |
| 47 | 25° 0'15.51"N | 87°40'7.31"E |
| 48 | 25° 0'22.65"N | 87°39'44.67"E |
| 49 | 25° 0'51.55"N | 87°39'9.54"E |
| 50 | 25° 1'14.14"N | 87°40'6.52"E |
| 51 | 25° 1'19.29"N | 87°40'34.73"E |



List of villages falling under the potential area:

Guti, Talmi, Pachare, Mansbera, Pathargama, Chota Bansjuri, Makwara, Kongabera, Chaudharia Bishunpur, Makbargi Khuta, Davgoda, Sajni Bedo, Chaugaria, Dhangona, Kuchla, Mahuatanr, Chamdi, Telotok, Amlonde, Manskepu, Baga (Pakaria), Basko, Lokani Mako, Lokani Bedo, Banapara, Chakopara, Bara Bathani, Malibita, Edri, Chua Bedo, Dawana, Chabitok, Bera Bans Pahar, Gambari, Kerwa, Rohra, Ursapahar, Garhduara, Partu Pahar, Haldi Pahar, Chengbita (Nagarbita), Salgachi, Galgachhi, Ketekbera.

District Survey Report of Sahibganj, Jharkhand



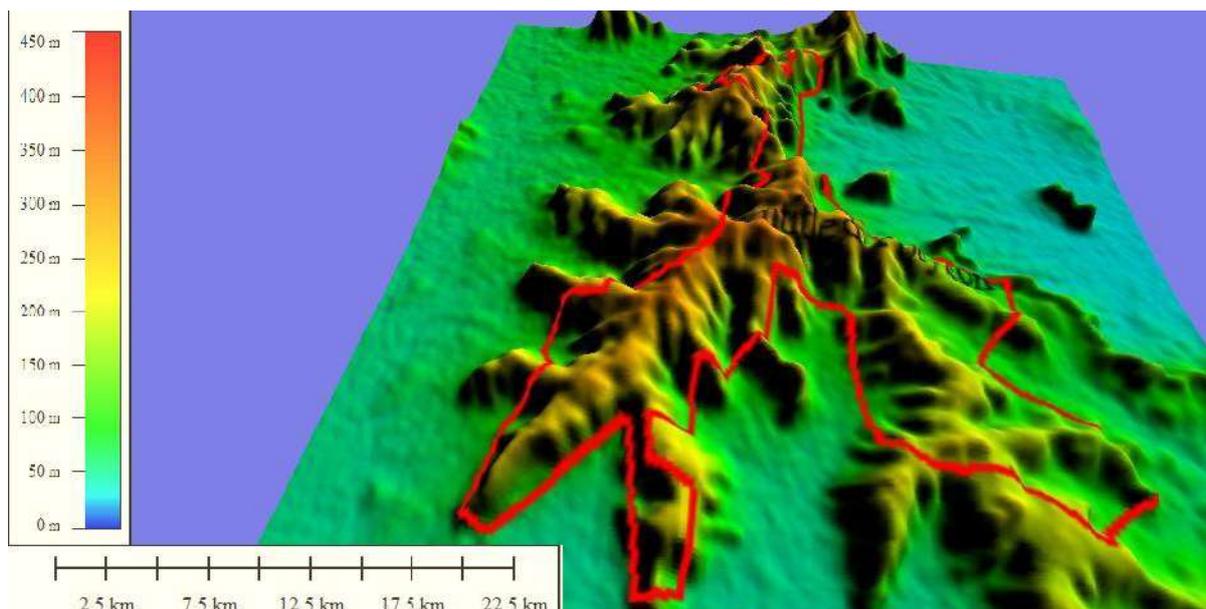


Image showing 3D Topographic view of the Potential Area

Volume of Potential Area - D, Block - Taljhari, Area 4582 Hectare

| Section Proved 317 TO 97 | Cross sectional area of O.B in sqm | Total Cross Sectional area in sqm | Influence Length m | Total Volume of O.B in Cum situ (B) | Total Volume in Cum situ (A) | Total Volume of Stone Cum situ (A-B) | Recovery 60% in m cum situ | Million tons of Stone |
|--------------------------|------------------------------------|-----------------------------------|--------------------|-------------------------------------|------------------------------|--------------------------------------|----------------------------|-----------------------|
| 3000N | 4515 | 56621.00 | 3100 | 13996500 | 175525100.00 | 161528600.00 | 3914.51016 | 10569.18 |
| 0.00 | 15769 | 429919.00 | 3000 | 47307000 | 1289757000.00 | 1242450000.00 | | |
| 3000S | 27290 | 709984.00 | 7500 | 204675000 | 5324880000.00 | 5120205000.00 | | |
| Total | | | | 265978500 | 6790162100.00 | 6524183600.00 | | |

Block - Borio



Image showing the Potential Area (Block – A, Mineral - Basalt) As Per KML Data

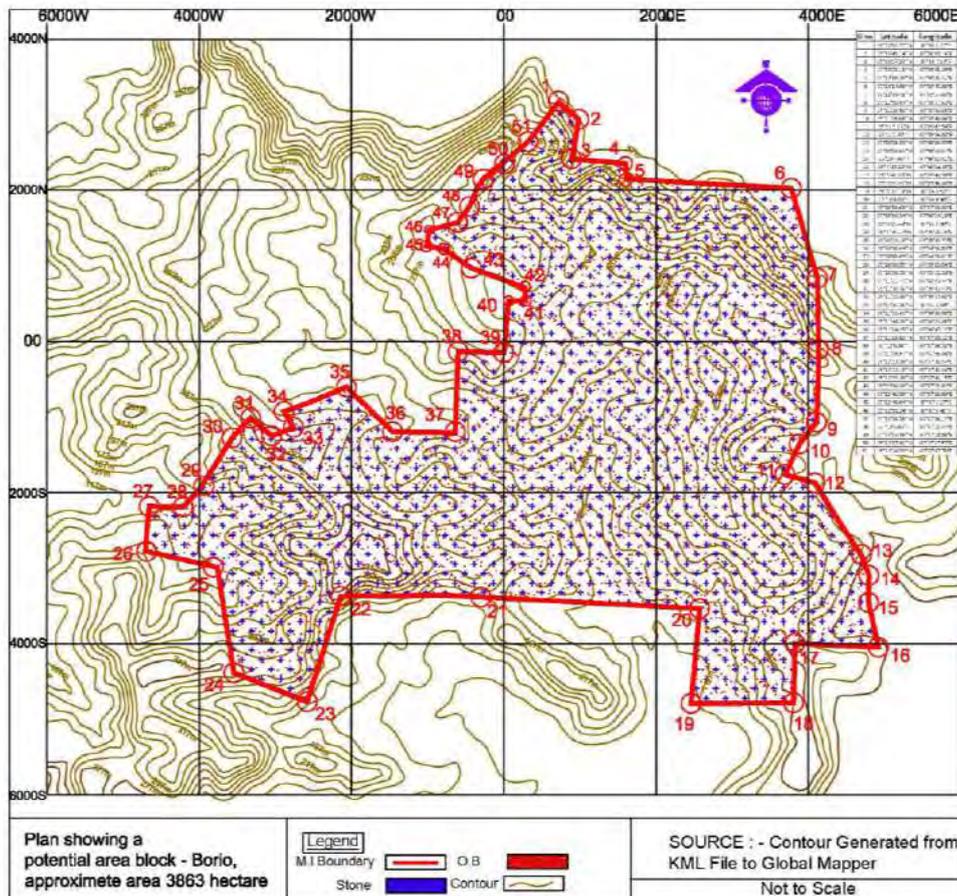
| Sl no | Latitude | Longitude |
|-------|---------------|---------------|
| 1 | 25°13'52.77"N | 87°38'1.27"E |
| 2 | 25°13'45.14"N | 87°38'10.16"E |
| 3 | 25°13'27.23"N | 87°38'7.14"E |
| 4 | 25°13'25.11"N | 87°38'31.29"E |
| 5 | 25°13'18.20"N | 87°38'31.51"E |
| 6 | 25°13'14.00"N | 87°39'45.30"E |
| 7 | 25°12'33.41"N | 87°39'57.03"E |
| 8 | 25°11'55.03"N | 87°39'57.63"E |
| 9 | 25°11'28.56"N | 87°39'56.65"E |
| 10 | 25°11'18.68"N | 87°39'48.86"E |
| 11 | 25°11'5.18"N | 87°39'42.54"E |
| 12 | 25°11'1.34"N | 87°39'56.02"E |
| 13 | 25°10'28.31"N | 87°40'16.93"E |
| 14 | 25°10'19.65"N | 87°40'20.07"E |
| 15 | 25°10'7.46"N | 87°40'19.91"E |
| 16 | 25° 9'47.22"N | 87°40'24.25"E |
| 17 | 25° 9'48.96"N | 87°39'46.99"E |
| 18 | 25° 9'22.31"N | 87°39'46.30"E |
| 19 | 25° 9'22.09"N | 87°39'0.53"E |
| 20 | 25°10'4.54"N | 87°39'4.40"E |
| 21 | 25°10'10.63"N | 87°37'10.92"E |
| 22 | 25°10'10.24"N | 87°36'24.18"E |
| 23 | 25° 9'22.83"N | 87°36'8.90"E |
| 24 | 25° 9'35.67"N | 87°35'36.15"E |
| 25 | 25°10'23.19"N | 87°35'28.73"E |

| Sl no | Latitude | Longitude |
|-------|---------------|---------------|
| 26 | 25°10'30.64"N | 87°34'56.53"E |
| 27 | 25°10'50.69"N | 87°34'58.31"E |
| 28 | 25°10'50.59"N | 87°35'13.54"E |
| 29 | 25°10'59.55"N | 87°35'21.53"E |
| 30 | 25°11'21.77"N | 87°35'35.47"E |
| 31 | 25°11'30.36"N | 87°35'43.73"E |
| 32 | 25°11'22.45"N | 87°35'53.06"E |
| 33 | 25°11'26.25"N | 87°36'2.84"E |
| 34 | 25°11'33.43"N | 87°35'58.55"E |
| 35 | 25°11'44.38"N | 87°36'26.40"E |
| 36 | 25°11'24.25"N | 87°36'47.12"E |
| 37 | 25°11'23.82"N | 87°37'15.12"E |
| 38 | 25°12'0.36"N | 87°37'16.52"E |
| 39 | 25°11'59.97"N | 87°37'36.88"E |
| 40 | 25°12'23.20"N | 87°37'38.97"E |
| 41 | 25°12'23.19"N | 87°37'46.64"E |
| 42 | 25°12'29.30"N | 87°37'46.15"E |
| 43 | 25°12'38.33"N | 87°37'21.82"E |
| 44 | 25°12'46.59"N | 87°37'10.09"E |
| 45 | 25°12'48.04"N | 87°37'2.27"E |
| 46 | 25°12'55.24"N | 87°37'3.41"E |
| 47 | 25°12'58.58"N | 87°37'16.17"E |
| 48 | 25°13'5.65"N | 87°37'21.47"E |
| 49 | 25°13'13.98"N | 87°37'24.88"E |
| 50 | 25°13'17.96"N | 87°37'27.57"E |
| 51 | 25°13'34.99"N | 87°37'47.70"E |



List of villages falling under the potential area:

Dorme, Kanri, Ladonri, Rpldih, Adore Bedo, Adore Mago, Gaude, Dule, Dapanmi, Jokani, Dhuliani, Chiharpari, Nargang, Khairsol, Gowaibhita, Tetria, Damdama, Mir, Ghogi, Lohanda Bedo, Lohanda Mako, Durgatola, Belra, Bijria, Bara Panchgarh Pahar, Panchgarh, Chapa, Sidhari, Daugoda, Gogi Bedo, Bagduma, Lachmi, Podiaha, Phulpahari, Gaude, Naugachi, Roldih, Banskola.



District Survey Report of Sahibganj, Jharkhand

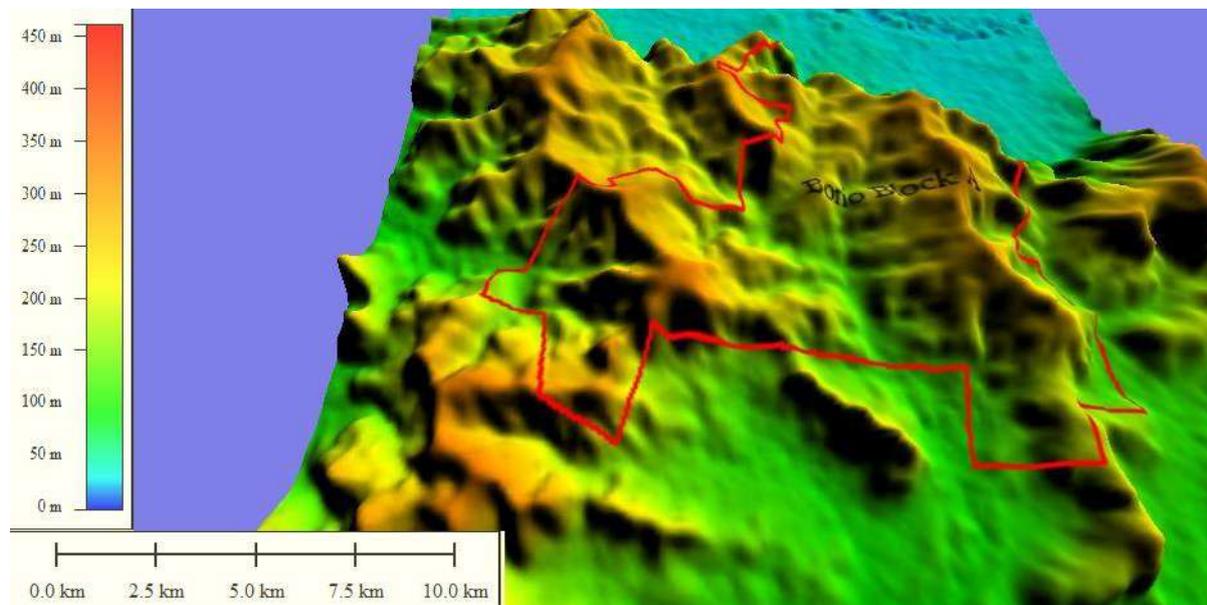
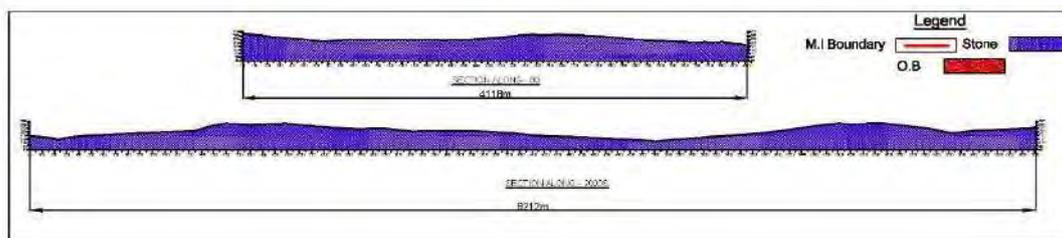


Image showing 3D Topographic view of the Potential Area

Volume of Potential Area - A, Block - Broio, Area 3863 Hectare

| Section Proved 237 TO 57 | Cross sectional area of O.B in sqm | Total Cross Sectional area in sqm | Influence Length m | Total Volume of O.B in Cum situ (B) | Total Volume in Cum situ (A) | Total Volume of Stone Cum situ (A-B) | Recovery 60% in m cum situ | Million tons of Stone |
|--------------------------------|------------------------------------|-----------------------------------|--------------------|-------------------------------------|------------------------------|--------------------------------------|----------------------------|-----------------------|
| 0.00 | 16519 | 744491.00 | 2400 | 39645600 | 1786778400.00 | 1747132800.00 | 4163.3175 | 11240.96 |
| 2000S | 33005 | 1240384.00 | 4300 | 141921500 | 5333651200.00 | 5191729700.00 | | |
| Total | | | | 181567100 | 7120429600.00 | 6938862500.00 | | |

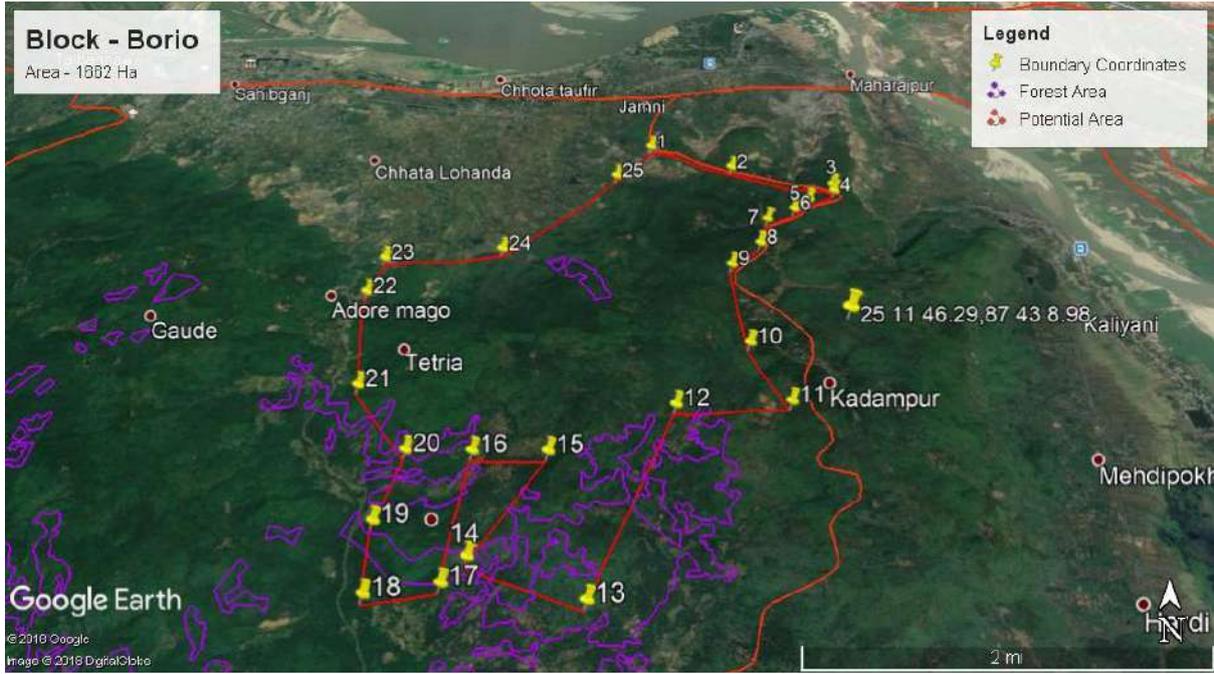
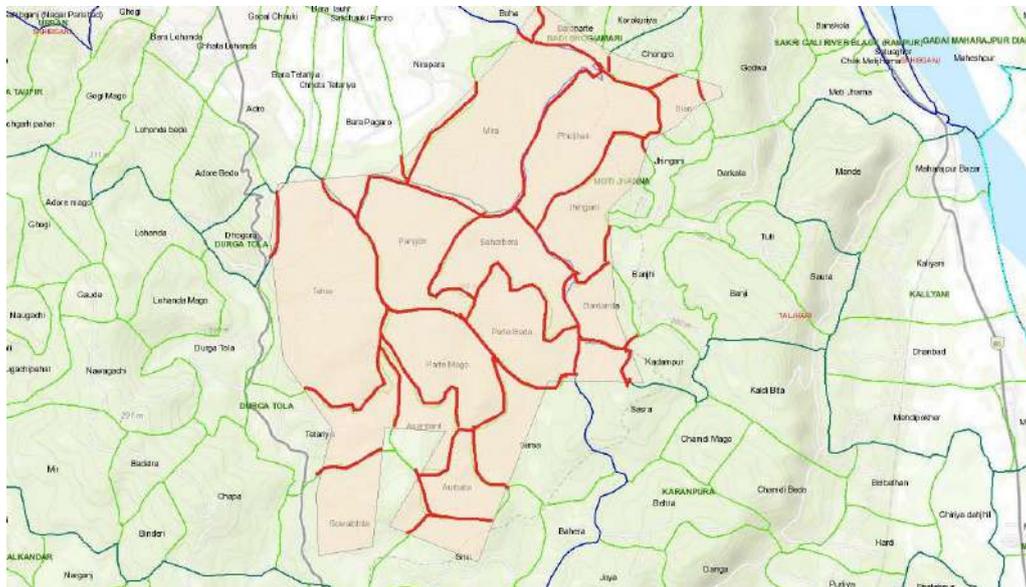


Image showing the Potential Area (Block – B, Mineral - Basalt) As Per KML Data

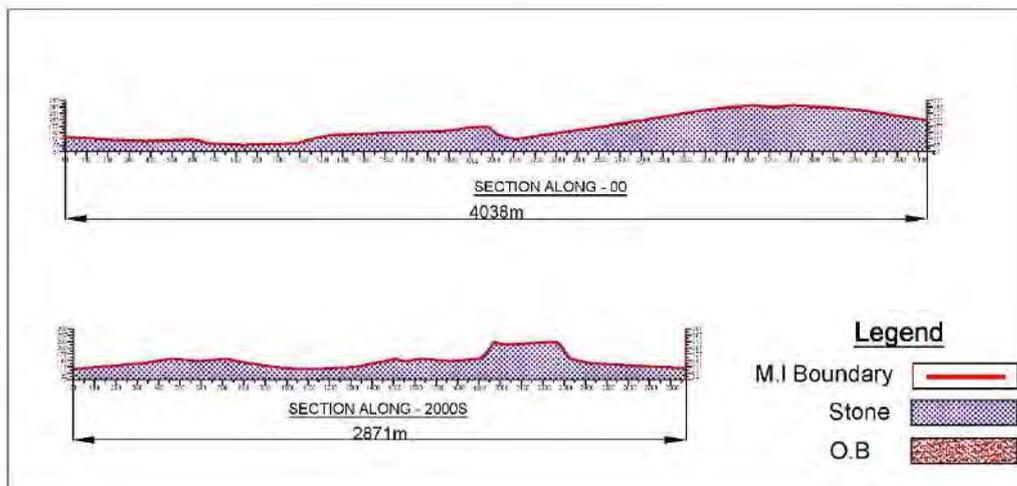
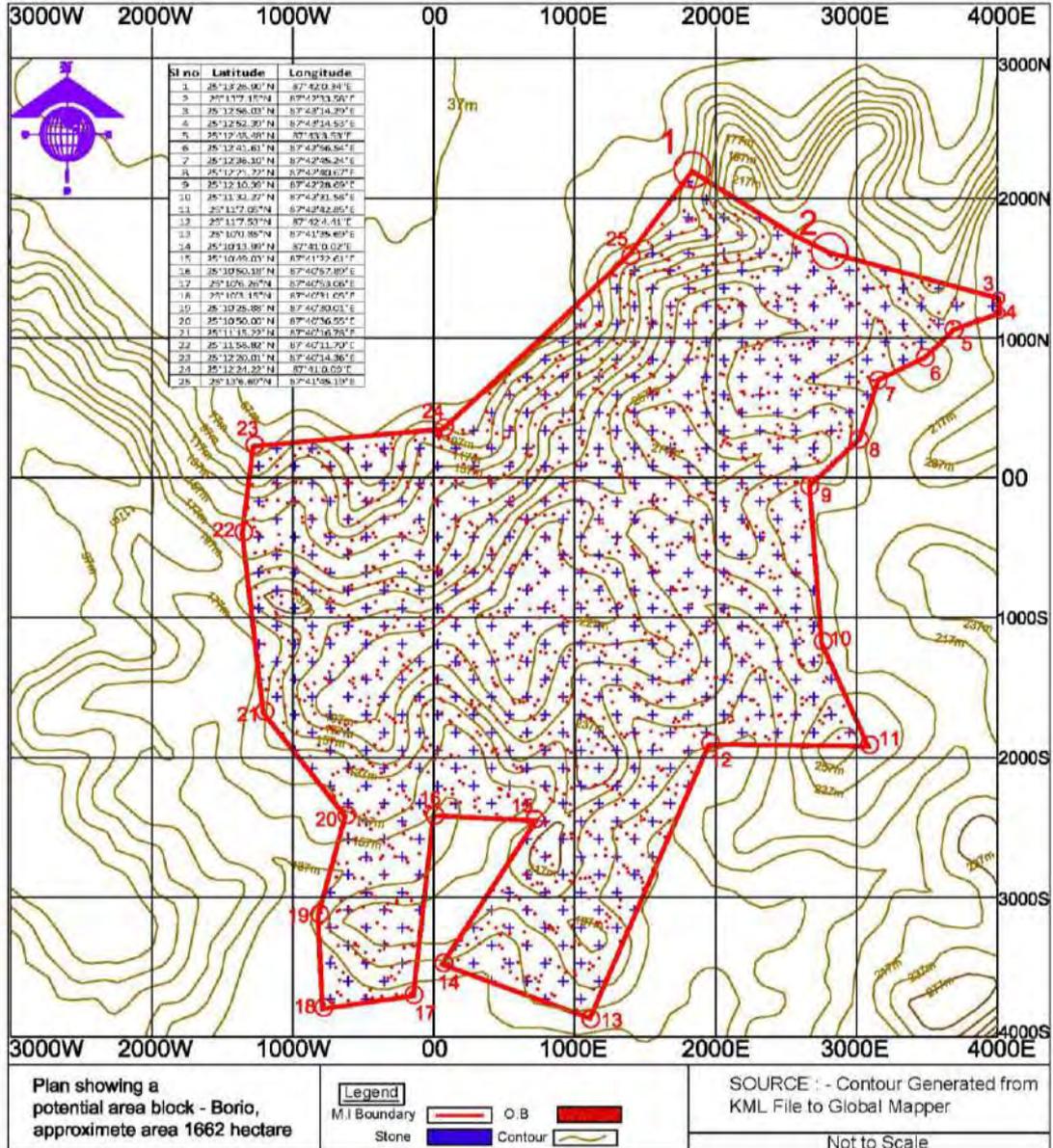
| Sl no | Latitude | Longitude |
|-------|---------------|---------------|
| 1 | 25°13'26.90"N | 87°42'0.34"E |
| 2 | 25°13'7.15"N | 87°42'33.58"E |
| 3 | 25°12'56.03"N | 87°43'14.29"E |
| 4 | 25°12'52.39"N | 87°43'14.53"E |
| 5 | 25°12'48.48"N | 87°43'3.53"E |
| 6 | 25°12'41.61"N | 87°42'56.54"E |
| 7 | 25°12'36.10"N | 87°42'45.24"E |
| 8 | 25°12'21.72"N | 87°42'40.67"E |
| 9 | 25°12'10.39"N | 87°42'28.69"E |
| 10 | 25°11'32.27"N | 87°42'31.58"E |
| 11 | 25°11'7.05"N | 87°42'42.85"E |
| 12 | 25°11'7.53"N | 87°42'4.41"E |
| 13 | 25°10'0.85"N | 87°41'35.69"E |

| Sl no | Latitude | Longitude |
|-------|---------------|---------------|
| 14 | 25°10'13.99"N | 87°41'0.02"E |
| 15 | 25°10'49.03"N | 87°41'22.61"E |
| 16 | 25°10'50.18"N | 87°40'57.89"E |
| 17 | 25°10'6.26"N | 87°40'53.06"E |
| 18 | 25°10'3.15"N | 87°40'31.05"E |
| 19 | 25°10'25.88"N | 87°40'30.01"E |
| 20 | 25°10'50.00"N | 87°40'36.55"E |
| 21 | 25°11'15.22"N | 87°40'16.78"E |
| 22 | 25°11'58.82"N | 87°40'11.70"E |
| 23 | 25°12'20.01"N | 87°40'14.36"E |
| 24 | 25°12'24.22"N | 87°41'0.09"E |
| 25 | 25°13'6.69"N | 87°41'45.19"E |



List of villages falling under the potential area:

Nirapara, Baraparte, Chongro, Diari, Phuljhari, Jhingani, Mira, Barapagaro, Saharbera, Pangdo, Adremago, Tetria, Parte Mago, Asanbani, Sarsa, Aurbata, Sihli, Gowaibhita, Durgatola.



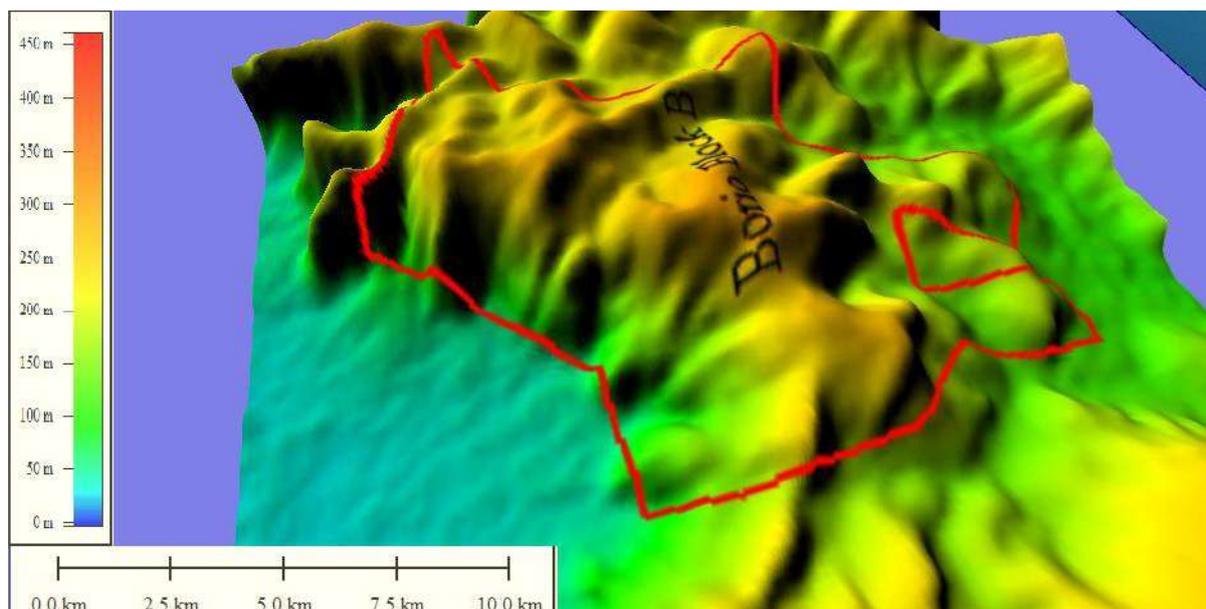


Image showing 3D Topographic view of the Potential Area

| Volume of Potential Area - B, Block - Broio, Area 1662 Hectare | | | | | | | | |
|--|------------------------------------|-----------------------------------|--------------------|-------------------------------------|------------------------------|--------------------------------------|----------------------------|-----------------------|
| Section Proved 237 TO 57 | Cross sectional area of O.B in sqm | Total Cross Sectional area in sqm | Influence Length m | Total Volume of O.B in Cum situ (B) | Total Volume in Cum situ (A) | Total Volume of Stone Cum situ (A-B) | Recovery 60% in m cum situ | Million tons of Stone |
| 0.00 | 16326 | 447808 | 2200 | 35917200 | 985177600.00 | 949260400.00 | 1073.2704 | 2897.83 |
| 2000S | 11863 | 245064.00 | 3600 | 42706800 | 882230400.00 | 839523600.00 | | |
| Total | | | | 78624000 | 1867408000.00 | 1788784000.00 | | |

District Survey Report of Sahibganj, Jharkhand

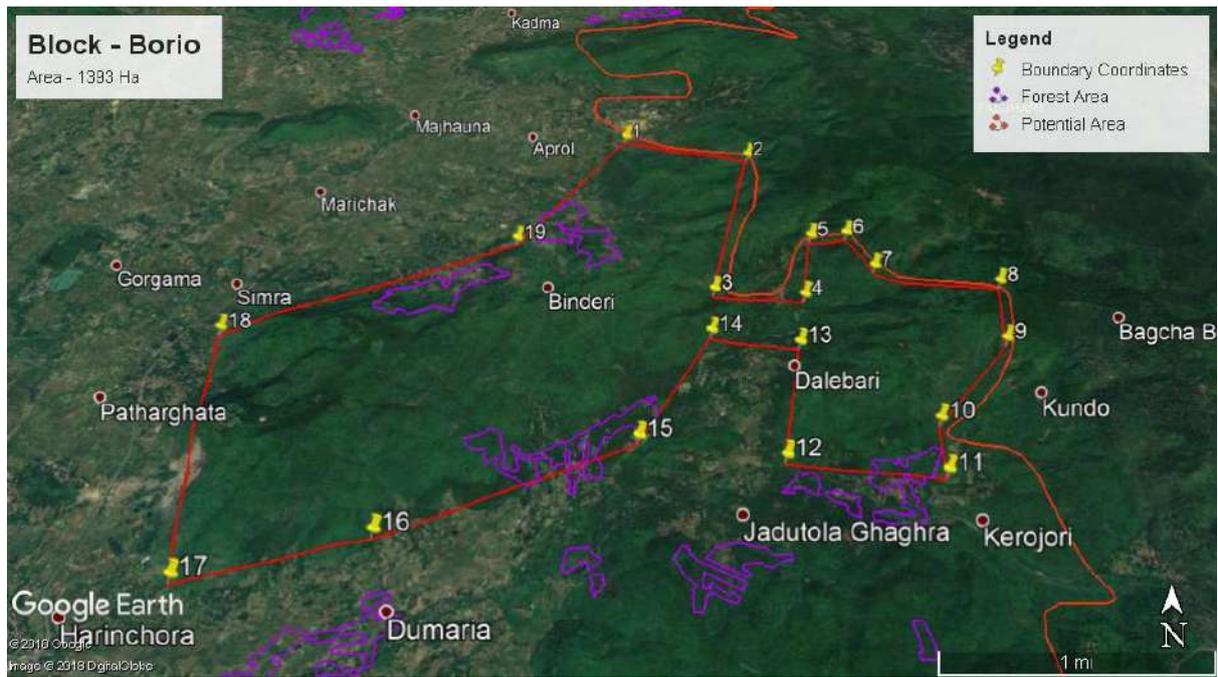
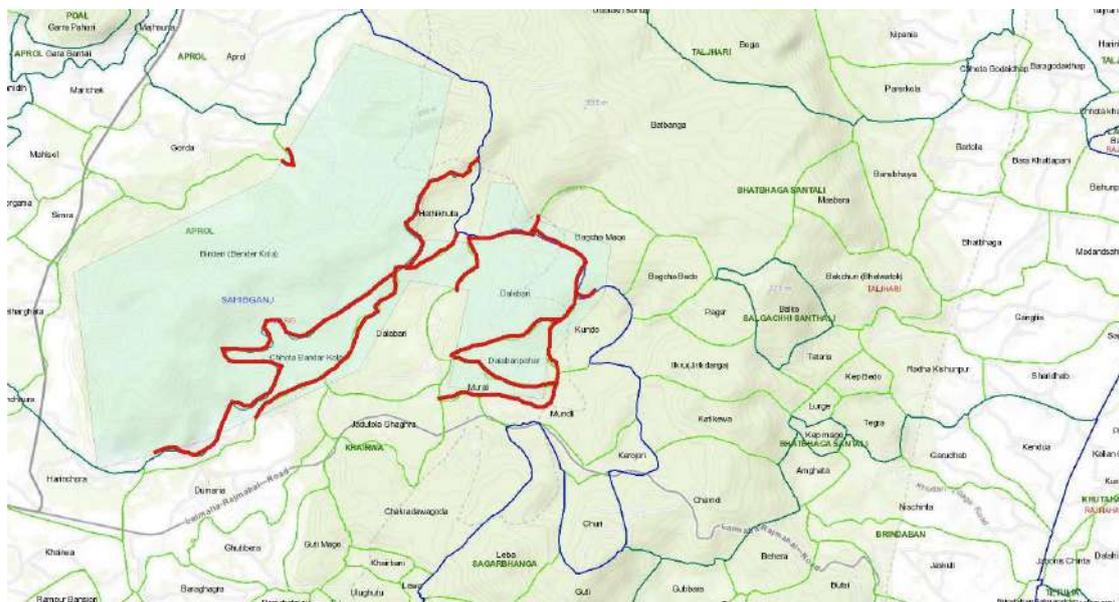


Image showing the Potential Area (Block – C, Mineral - Basalt) As Per KML Data

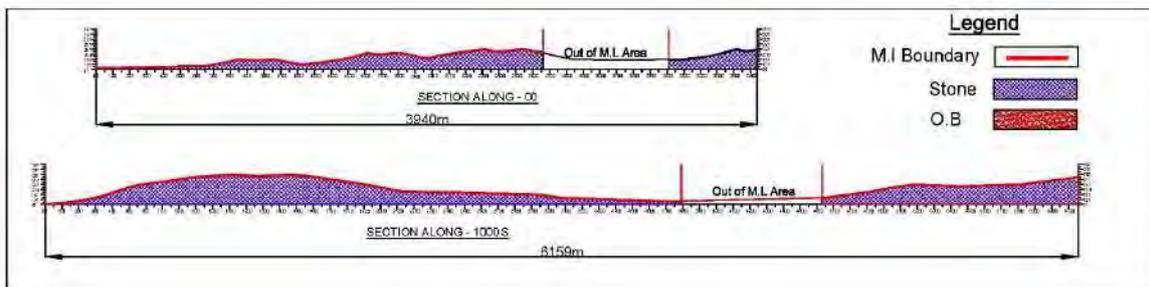
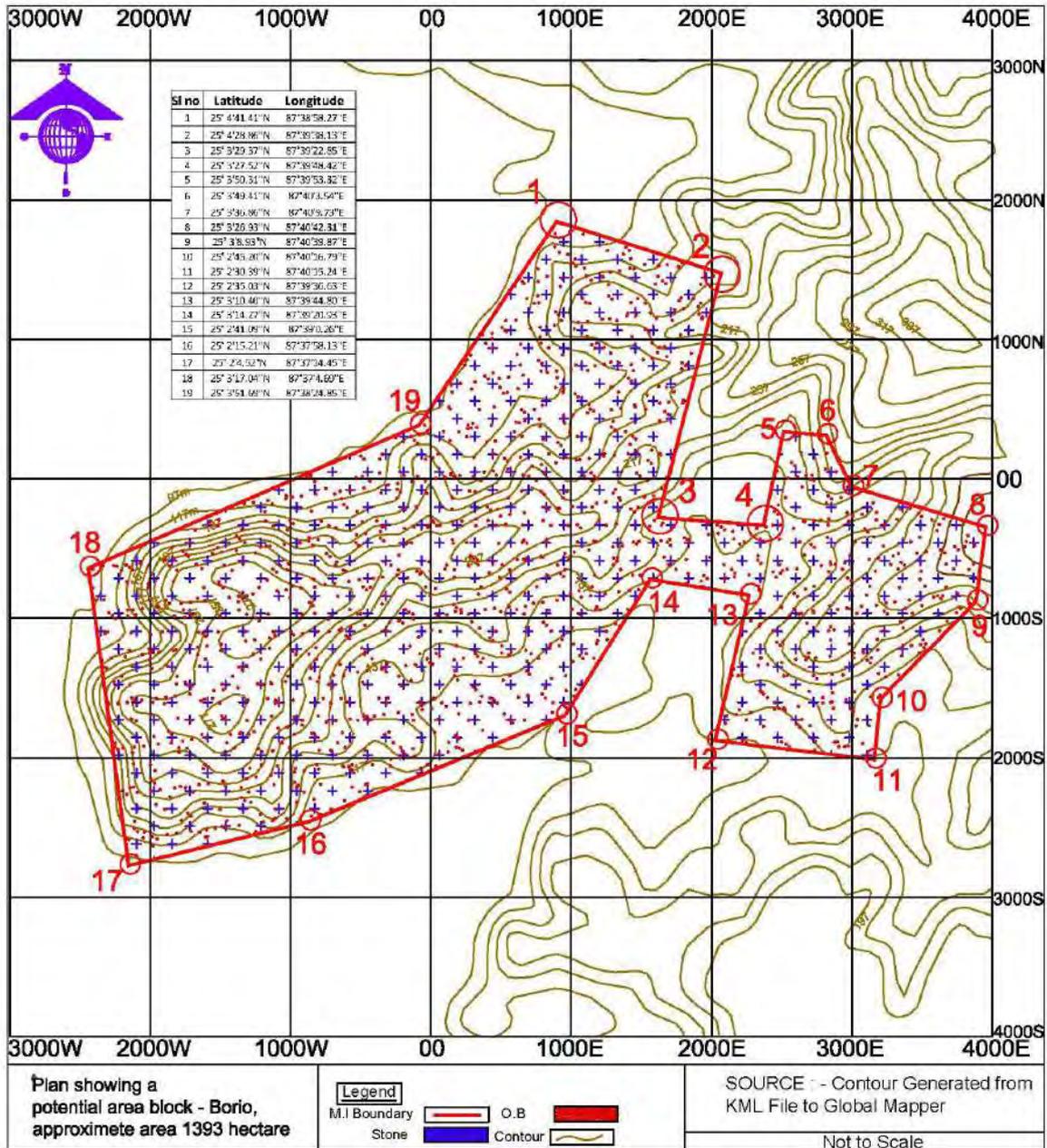
| Sl no | Latitude | Longitude |
|-------|---------------|---------------|
| 1 | 25° 4'41.41"N | 87°38'58.27"E |
| 2 | 25° 4'28.86"N | 87°39'38.13"E |
| 3 | 25° 3'29.37"N | 87°39'22.85"E |
| 4 | 25° 3'27.52"N | 87°39'48.42"E |
| 5 | 25° 3'50.31"N | 87°39'53.32"E |
| 6 | 25° 3'49.41"N | 87°40'3.54"E |
| 7 | 25° 3'36.86"N | 87°40'9.73"E |
| 8 | 25° 3'26.93"N | 87°40'42.31"E |
| 9 | 25° 3'8.93"N | 87°40'39.87"E |
| 10 | 25° 2'45.20"N | 87°40'16.79"E |

| Sl no | Latitude | Longitude |
|-------|---------------|---------------|
| 11 | 25° 2'30.39"N | 87°40'15.24"E |
| 12 | 25° 2'35.03"N | 87°39'36.63"E |
| 13 | 25° 3'10.40"N | 87°39'44.80"E |
| 14 | 25° 3'14.27"N | 87°39'20.93"E |
| 15 | 25° 2'41.09"N | 87°39'0.26"E |
| 16 | 25° 2'15.21"N | 87°37'58.13"E |
| 17 | 25° 2'4.52"N | 87°37'14.45"E |
| 18 | 25° 3'17.04"N | 87°37'4.69"E |
| 19 | 25° 3'51.69"N | 87°38'24.85"E |
| | | |



List of villages falling under the potential area:

Aprol, Binderi, Hathikhuta, Bagcha Maqo, Dalebari, Dalabaripahar, Kundo, Hatikhuta, Chhota bandar Kola, Simra.



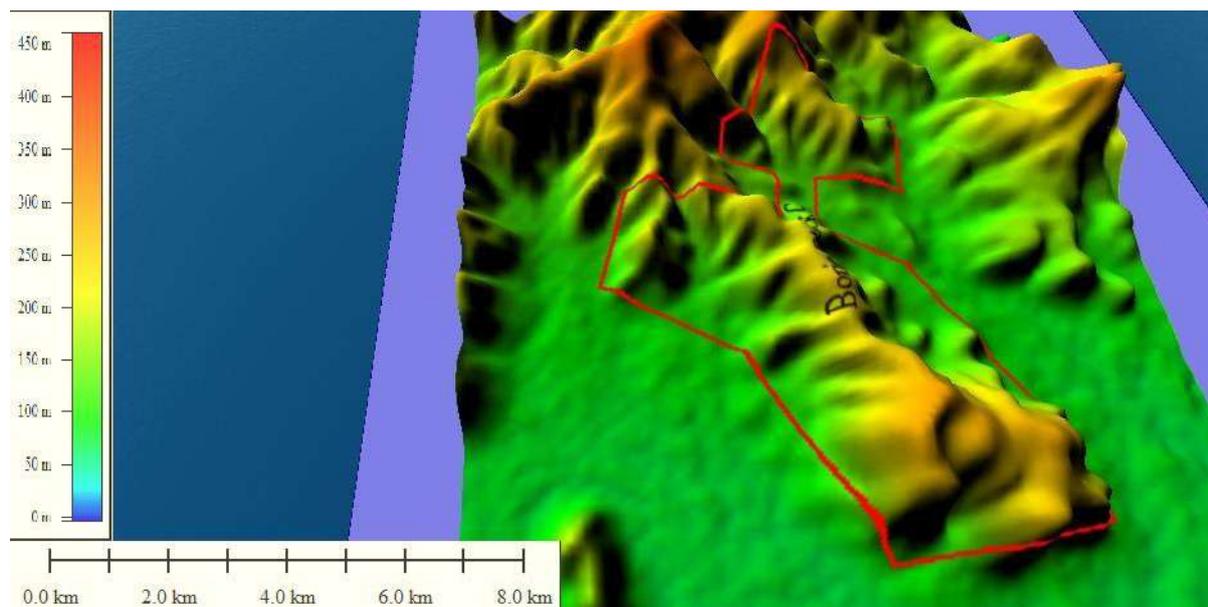


Image showing 3D Topographic view of the Potential Area

Volume of Potential Area - C, Block - Broio, Area 1393 Hectare

| Section Proved 277 TO 97 | Cross sectional area of O.B in sqm | Total Cross Sectional area in sqm | Influence Length m | Total Volume of O.B in Cum situ (B) | Total Volume in Cum situ (A) | Total Volume of Stone Cum situ (A-B) | Recovery 60% in m cum situ | Million tons of Stone |
|--------------------------------|---|---|--------------------------|---|------------------------------------|--|----------------------------------|-----------------------------|
| 0.00 | 12891 | 196380 | 1600 | 20625600 | 314208000.00 | 293582400.00 | 853.38576 | 2304.14 |
| 1000S | 21361 | 491664.00 | 2400 | 51266400 | 1179993600.00 | 1128727200.00 | | |
| Total | | | | 71892000 | 1494201600.00 | 1422309600.00 | | |

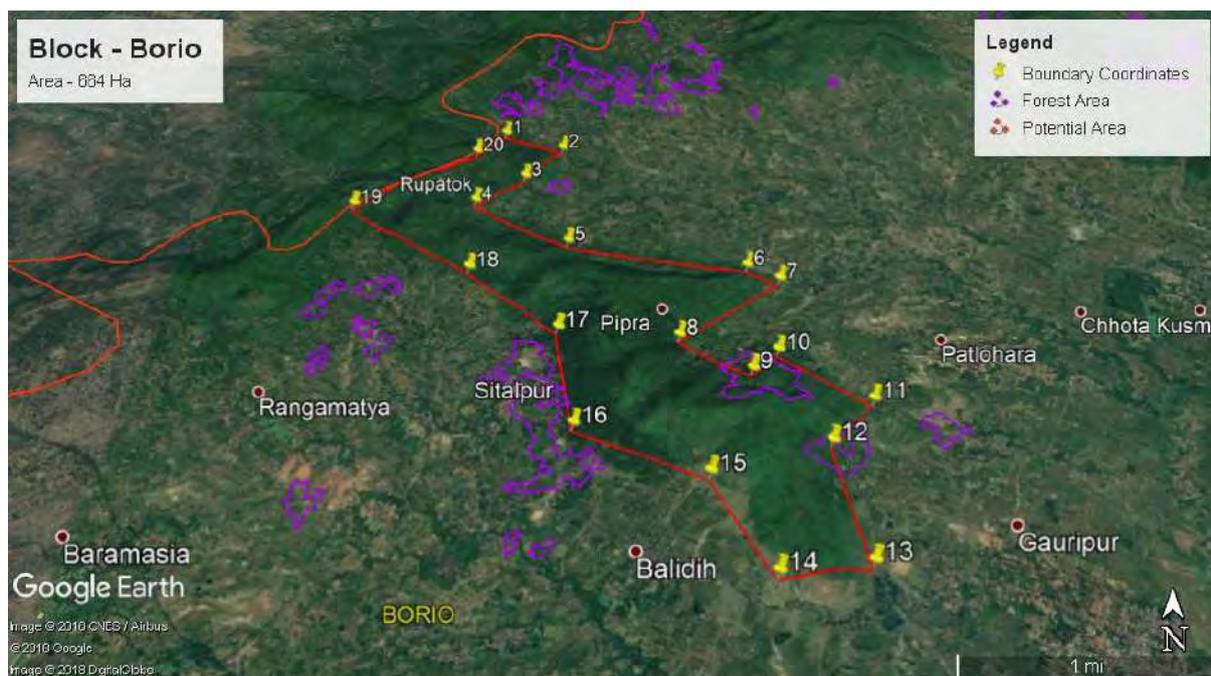
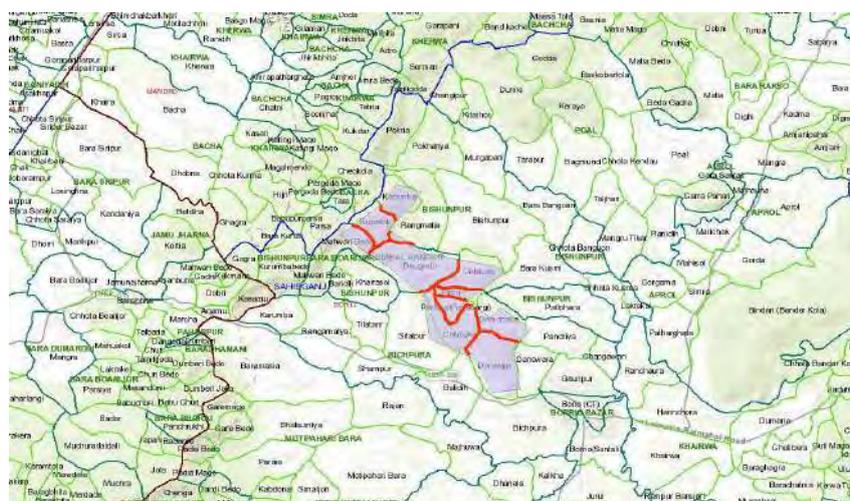


Image showing the Potential Area (Block – D, Mineral - Basalt) As Per KML Data

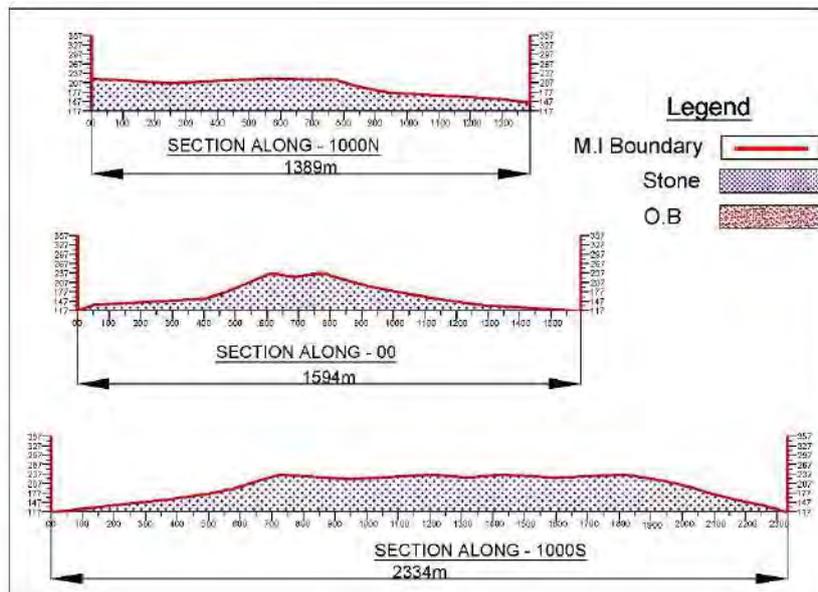
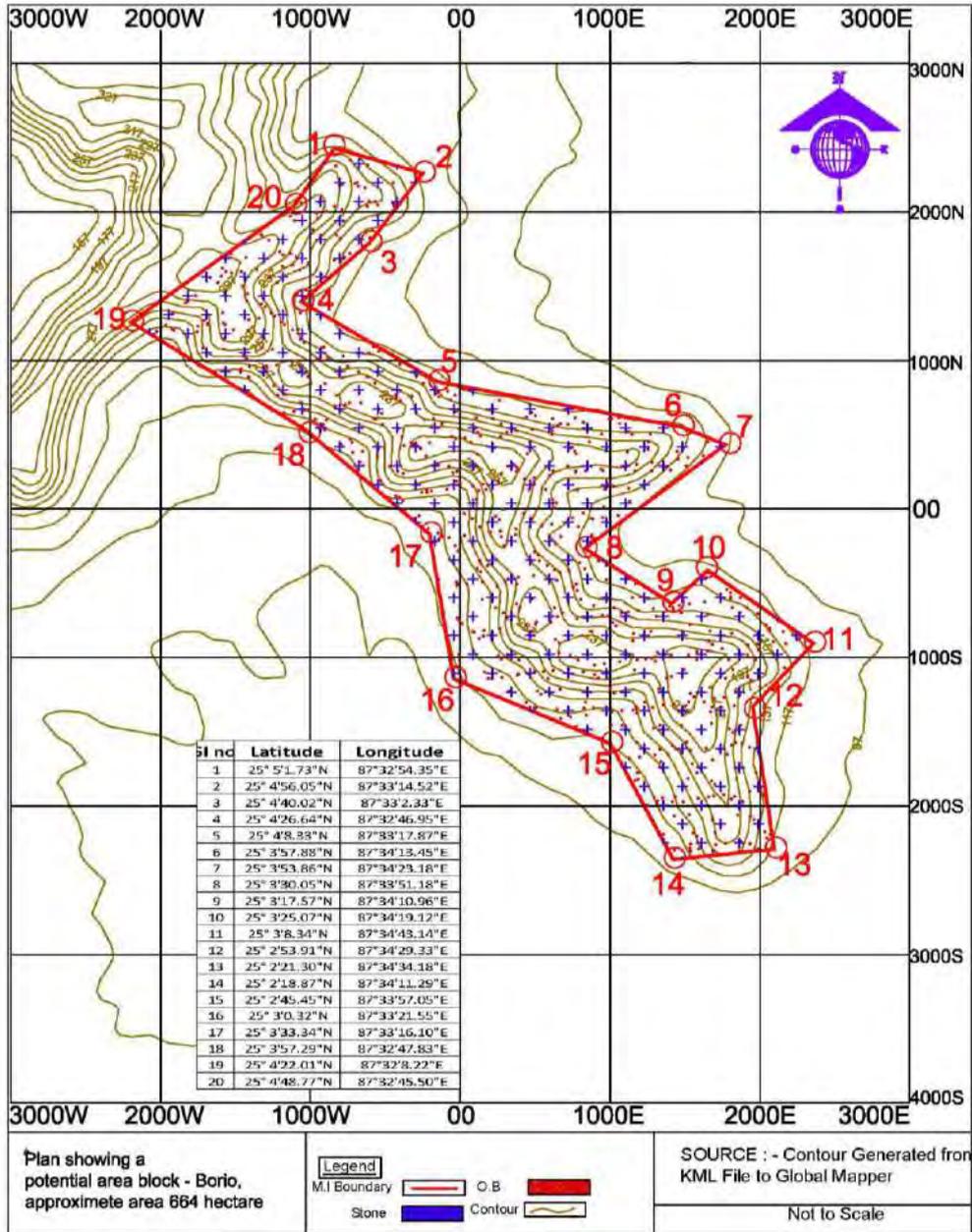
| Sl no | Latitude | Longitude |
|-------|---------------|---------------|
| 1 | 25° 5'1.73"N | 87°32'54.35"E |
| 2 | 25° 4'56.05"N | 87°33'14.52"E |
| 3 | 25° 4'40.02"N | 87°33'2.33"E |
| 4 | 25° 4'26.64"N | 87°32'46.95"E |
| 5 | 25° 4'8.33"N | 87°33'17.87"E |
| 6 | 25° 3'57.88"N | 87°34'13.45"E |
| 7 | 25° 3'53.86"N | 87°34'23.18"E |
| 8 | 25° 3'30.05"N | 87°33'51.18"E |
| 9 | 25° 3'17.57"N | 87°34'10.96"E |
| 10 | 25° 3'25.07"N | 87°34'19.12"E |

| Sl no | Latitude | Longitude |
|-------|---------------|---------------|
| 11 | 25° 3'8.34"N | 87°34'43.14"E |
| 12 | 25° 2'53.91"N | 87°34'29.33"E |
| 13 | 25° 2'21.30"N | 87°34'34.18"E |
| 14 | 25° 2'18.87"N | 87°34'11.29"E |
| 15 | 25° 2'45.45"N | 87°33'57.05"E |
| 16 | 25° 3'0.32"N | 87°33'21.55"E |
| 17 | 25° 3'33.34"N | 87°33'16.10"E |
| 18 | 25° 3'57.29"N | 87°32'47.83"E |
| 19 | 25° 4'22.01"N | 87°32'8.22"E |
| 20 | 25° 4'48.77"N | 87°32'45.50"E |



List of villages falling under the potential area:

Karambi, Rumatok, Mahwari Bedo, Daugoda, Gidakole, Pipra, Pertoki, Chitrtoke, Danware, Demchake, Rangatya, Sitalpur, Bishunpur.



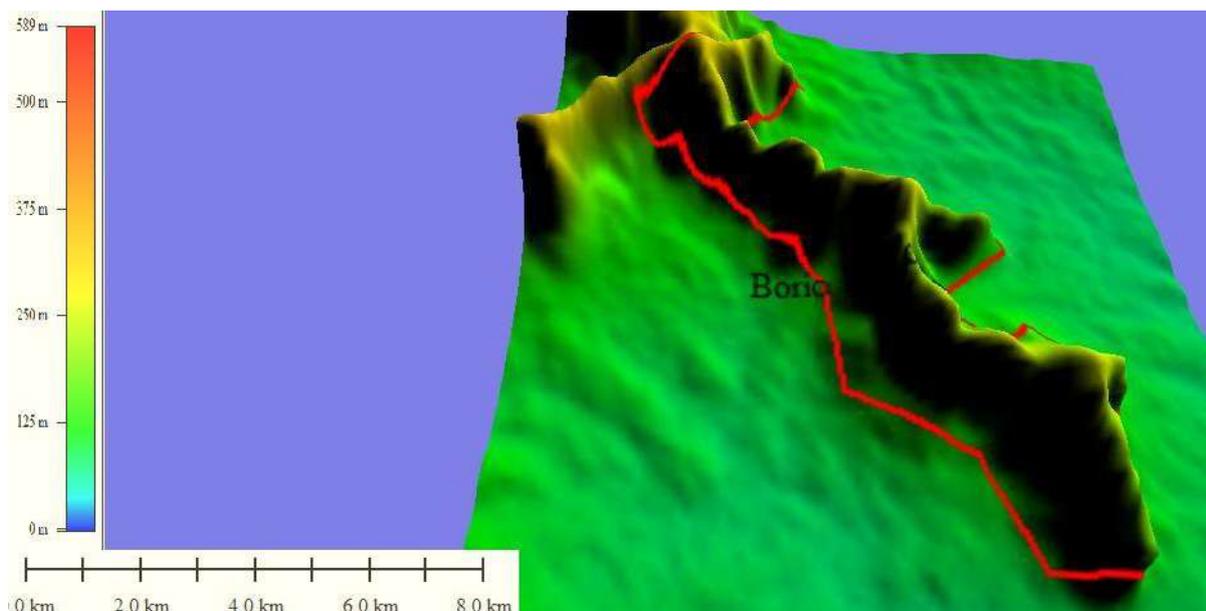


Image showing 3D Topographic view of the Potential Area

Volume of Potential Area - D, Block - Broio, Area 664 Hectare

| Section Proved 237 TO 117 | Cross sectional area of O.B in sqm | Total Cross Sectional area in sqm | Influence Length m | Total Volume of O.B in Cum situ (B) | Total Volume in Cum situ (A) | Total Volume of Stone Cum situ (A-B) | Recovery 60% in m cum situ | Million tons of Stone |
|---------------------------|------------------------------------|-----------------------------------|--------------------|-------------------------------------|------------------------------|--------------------------------------|----------------------------|-----------------------|
| 1000N | 5584 | 104609 | 1700 | 9492800 | 177835300.00 | 168342500.00 | 457.78578 | 1236.02 |
| 0.00 | 6354 | 74567 | 1900 | 12072600 | 141677300.00 | 129604700.00 | | |
| 1000S | 9345 | 181578 | 2700 | 25231500 | 490260600.00 | 465029100.00 | | |
| Total | | | | 34724300 | 668095900.00 | 762976300.00 | | |

Block - Mandro

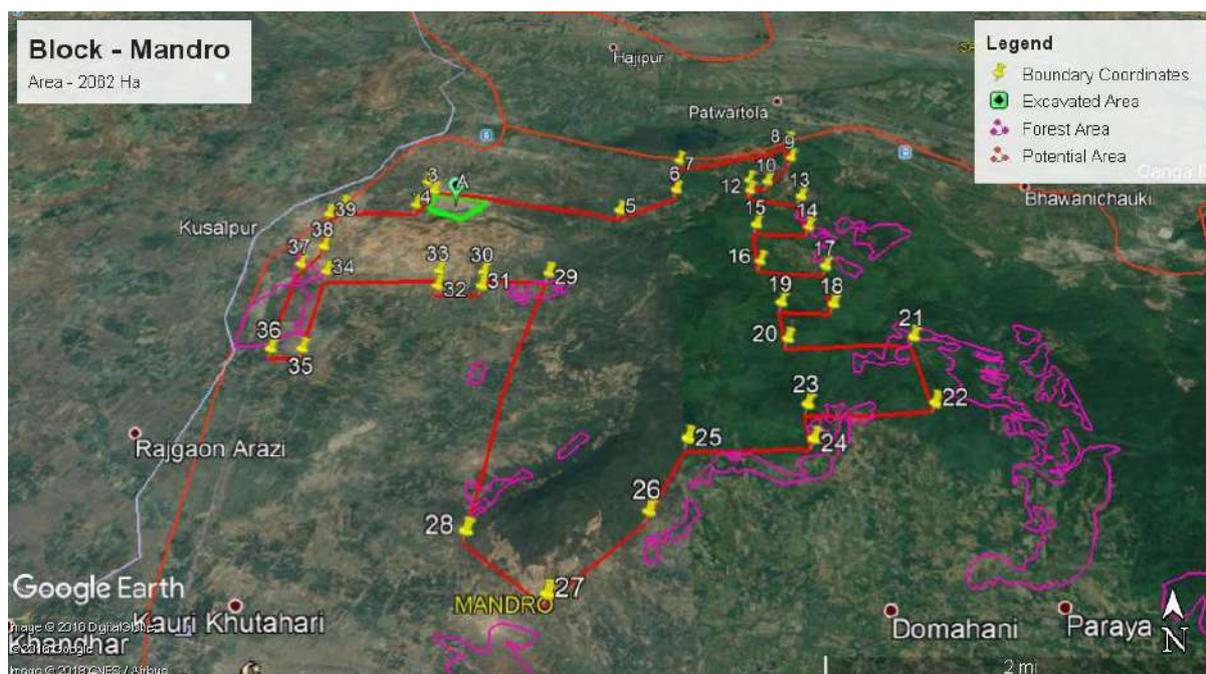
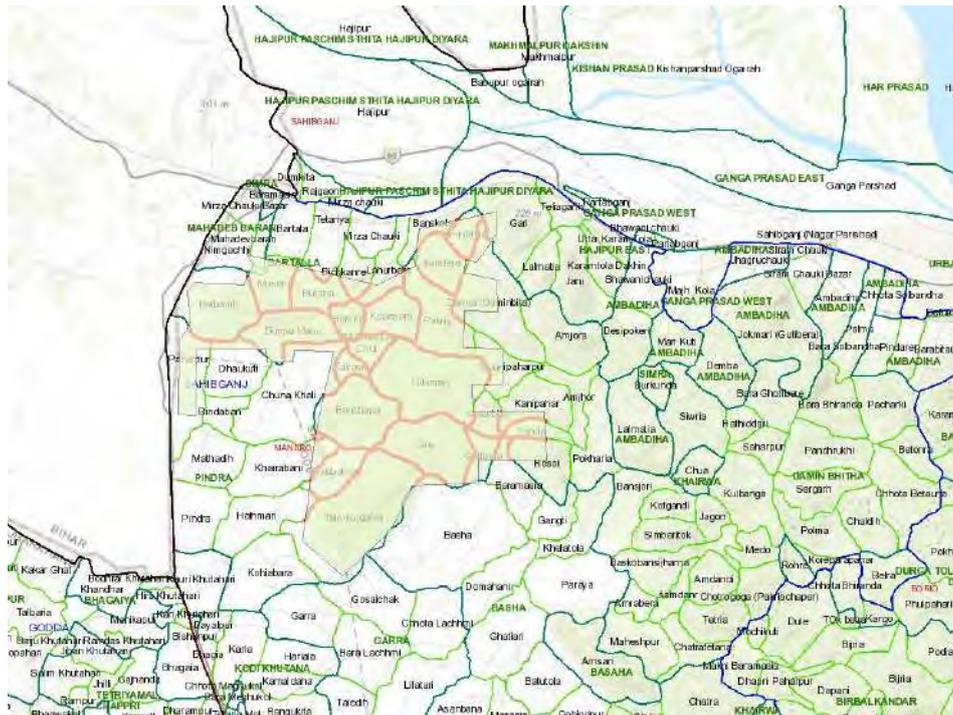


Image showing the Potential Area (Block – A, Mineral – Basalt & Granite Gneiss) As Per KML Data

| Sl no | Latitude | Longitude |
|-------|---------------|---------------|
| 1 | 25°14'40.14"N | 87°28'53.34"E |
| 2 | 25°14'38.37"N | 87°29'25.79"E |
| 3 | 25°14'50.45"N | 87°29'31.95"E |
| 4 | 25°14'56.57"N | 87°29'27.99"E |
| 5 | 25°14'38.24"N | 87°30'55.26"E |
| 6 | 25°14'50.36"N | 87°31'20.61"E |
| 7 | 25°15'12.34"N | 87°31'23.09"E |
| 8 | 25°15'23.04"N | 87°32'14.93"E |
| 9 | 25°15'9.19"N | 87°32'14.22"E |
| 10 | 25°14'52.52"N | 87°32'1.36"E |
| 11 | 25°14'53.94"N | 87°31'53.44"E |
| 12 | 25°14'45.45"N | 87°31'52.90"E |
| 13 | 25°14'41.60"N | 87°32'14.91"E |
| 14 | 25°14'22.16"N | 87°32'15.45"E |
| 15 | 25°14'22.52"N | 87°31'53.18"E |
| 16 | 25°14'0.20"N | 87°31'52.24"E |
| 17 | 25°13'59.67"N | 87°32'19.31"E |
| 18 | 25°13'38.23"N | 87°32'18.67"E |
| 19 | 25°13'37.90"N | 87°31'58.20"E |
| 20 | 25°13'21.02"N | 87°31'58.61"E |

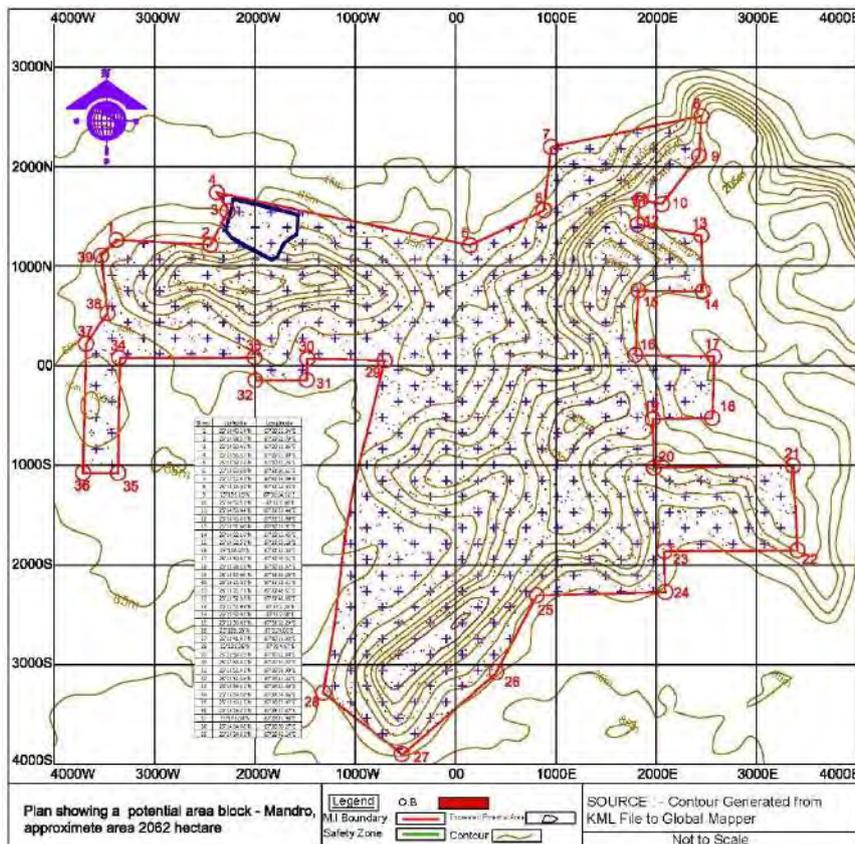
| Sl no | Latitude | Longitude |
|-------|---------------|---------------|
| 21 | 25°13'21.73"N | 87°32'46.51"E |
| 22 | 25°12'52.35"N | 87°32'48.06"E |
| 23 | 25°12'51.99"N | 87°32'2.23"E |
| 24 | 25°12'37.91"N | 87°32'2.50"E |
| 25 | 25°12'36.69"N | 87°31'18.29"E |
| 26 | 25°12'9.53"N | 87°31'4.00"E |
| 27 | 25°11'41.47"N | 87°30'31.93"E |
| 28 | 25°12'2.96"N | 87°30'4.67"E |
| 29 | 25°13'58.25"N | 87°30'25.80"E |
| 30 | 25°13'58.81"N | 87°29'59.22"E |
| 31 | 25°13'51.41"N | 87°29'58.99"E |
| 32 | 25°13'51.36"N | 87°29'41.24"E |
| 33 | 25°13'59.31"N | 87°29'41.00"E |
| 34 | 25°13'59.20"N | 87°28'54.66"E |
| 35 | 25°13'19.17"N | 87°28'53.97"E |
| 36 | 25°13'19.21"N | 87°28'41.87"E |
| 37 | 25°14'4.04"N | 87°28'42.98"E |
| 38 | 25°14'14.68"N | 87°28'50.27"E |
| 39 | 25°14'34.61"N | 87°28'48.14"E |

| Central Coordinate of Excavated Area | | | |
|--------------------------------------|---------------|---------------|-----------|
| Sl no | Latitude | Longitude | Area (Ha) |
| A | 25°14'44.19"N | 87°29'43.65"E | 30 |



List of villages falling under the potential area:

Sundere, Daminbhita, Damra (Daminbhita), Pakria, Kodepara, Sugnipaharpur, Bomria, Butaha, Mundli, Bumra Mago, Balbadri, Kairasol, Chui, Banskola, Gari, Banchapa, Gutu, Talmi, Baubathan, Sonda, Kanipahar, Hathmari, Khairabani, Chuna Khali, Dhaukuti, Paharpur, Rosoi, Tetaria, Bichkanre, Bartala, Nimgachhi.



District Survey Report of Sahibganj, Jharkhand

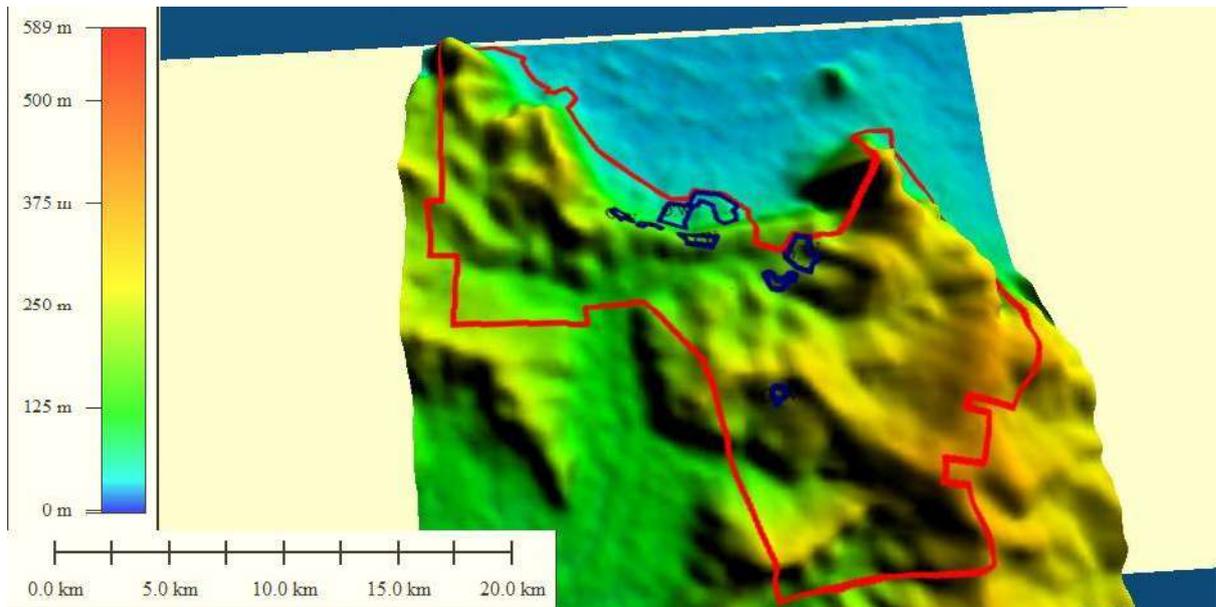
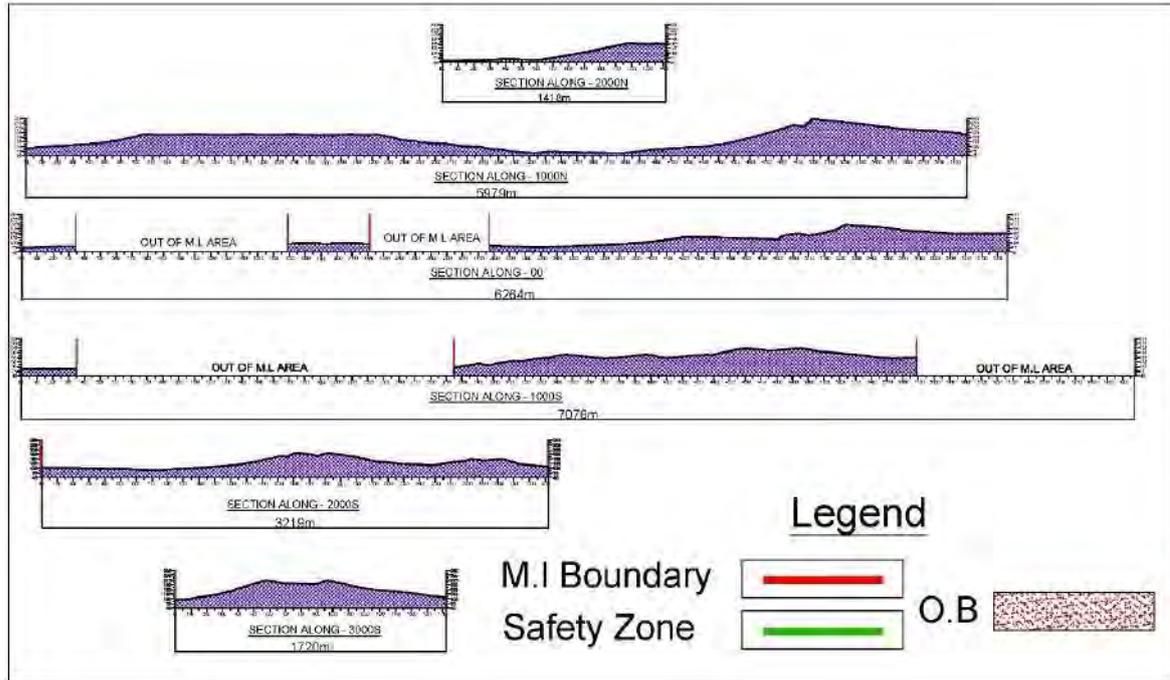


Image showing 3D Topographic view of the Potential Area

Volume of Potential Area - A, Block - Mandro, Area 2000 Hectare

| Section Proved 245 TO 45 | Cross sectional area of O.B in sqm | Total Cross Sectional area in sqm | Influence Length m | Total Volume of O.B in Cum (B) | Total Volume in Cum (A) | Total Volume of Stone Cum (A-B) | Recovery 60% in m cum | Million tons of |
|--------------------------|------------------------------------|-----------------------------------|--------------------|--------------------------------|-------------------------|---------------------------------|-----------------------|-----------------|
| 2000N | 5726 | 74461.00 | 850 | 4867100 | 63291850.00 | 58424750.00 | 1111.852 | 3002.00 |
| 1000N | 24180 | 631296.00 | 1000 | 24180000 | 631296000.00 | 607116000.00 | | |
| 0.00 | 16758 | 342980.00 | 1000 | 16758000 | 342980000.00 | 326222000.00 | | |
| 1000S | 13275 | 386615.00 | 1000 | 13275000 | 386615000.00 | 373340000.00 | | |
| 2000S | 13020 | 284142.00 | 1000 | 13020000 | 284142000.00 | 271122000.00 | | |
| 3000S | 7007 | 204154.00 | 1100 | 7707700 | 224569400.00 | 216861700.00 | | |
| Total | | | | 79807800 | 1932894250.00 | 1853086450.00 | | |

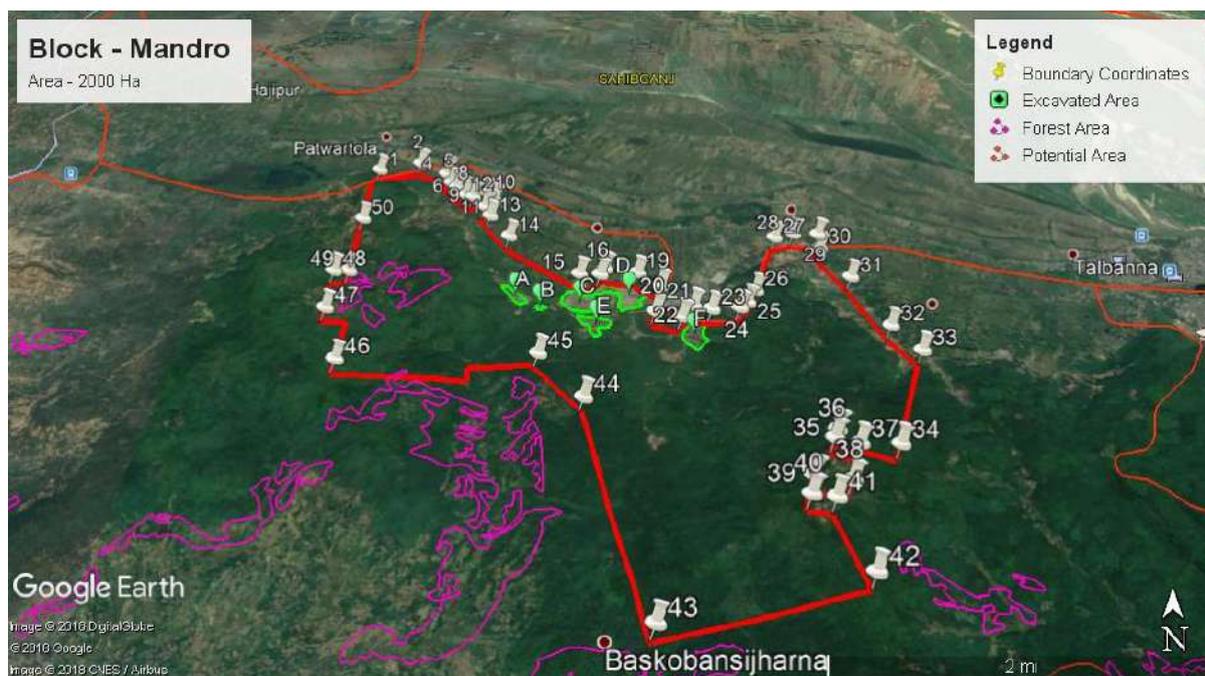


Image showing the Potential Area (Block – B, Mineral - Basalt) As Per KML Data

| Sl no | Latitude | Longitude |
|-------|---------------|---------------|
| 1 | 25°15'25.53"N | 87°32'18.04"E |
| 2 | 25°15'35.95"N | 87°32'34.60"E |
| 3 | 25°15'30.84"N | 87°32'48.28"E |
| 4 | 25°15'28.64"N | 87°32'47.59"E |
| 5 | 25°15'22.32"N | 87°32'50.76"E |
| 6 | 25°15'19.01"N | 87°32'53.62"E |
| 7 | 25°15'14.72"N | 87°32'59.12"E |
| 8 | 25°15'13.11"N | 87°32'58.62"E |
| 9 | 25°15'12.12"N | 87°33'1.92"E |
| 10 | 25°15'15.17"N | 87°33'7.47"E |
| 11 | 25°15'10.98"N | 87°33'11.81"E |
| 12 | 25°15'4.84"N | 87°33'7.94"E |
| 13 | 25°14'58.87"N | 87°33'10.97"E |
| 14 | 25°14'46.40"N | 87°33'20.35"E |
| 15 | 25°14'23.73"N | 87°33'51.55"E |
| 16 | 25°14'23.34"N | 87°34'0.26"E |
| 17 | 25°14'26.87"N | 87°34'2.23"E |
| 18 | 25°14'24.36"N | 87°34'15.99"E |
| 19 | 25°14'16.53"N | 87°34'25.28"E |
| 20 | 25°13'59.35"N | 87°34'22.57"E |
| 21 | 25°13'56.19"N | 87°34'32.99"E |
| 22 | 25°14'1.85"N | 87°34'37.88"E |
| 23 | 25°13'59.61"N | 87°34'45.03"E |
| 24 | 25°14'0.46"N | 87°34'56.22"E |
| 25 | 25°14'3.26"N | 87°34'59.61"E |

| Sl no | Latitude | Longitude |
|-------|---------------|---------------|
| 26 | 25°14'9.25"N | 87°35'3.47"E |
| 27 | 25°14'44.63"N | 87°35'15.73"E |
| 28 | 25°14'47.59"N | 87°35'24.31"E |
| 29 | 25°14'47.60"N | 87°35'35.12"E |
| 30 | 25°14'38.90"N | 87°35'34.56"E |
| 31 | 25°14'21.95"N | 87°35'45.06"E |
| 32 | 25°13'53.21"N | 87°35'55.57"E |
| 33 | 25°13'40.86"N | 87°36'5.10"E |
| 34 | 25°12'54.58"N | 87°35'46.04"E |
| 35 | 25°12'59.31"N | 87°35'24.45"E |
| 36 | 25°12'55.96"N | 87°35'23.07"E |
| 37 | 25°12'53.91"N | 87°35'31.41"E |
| 38 | 25°12'39.00"N | 87°35'26.09"E |
| 39 | 25°12'40.88"N | 87°35'13.40"E |
| 40 | 25°12'33.86"N | 87°35'11.71"E |
| 41 | 25°12'32.62"N | 87°35'19.80"E |
| 42 | 25°13'16.01"N | 87°35'28.23"E |
| 43 | 25°11'53.26"N | 87°34'18.73"E |
| 44 | 25°11'51.39"N | 87°33'54.95"E |
| 45 | 25°13'38.59"N | 87°33'36.88"E |
| 46 | 25°13'34.09"N | 87°32'20.15"E |
| 47 | 25°14'0.56"N | 87°32'10.73"E |
| 48 | 25°14'20.43"N | 87°32'10.21"E |
| 49 | 25°14'20.50"N | 87°32'16.34"E |
| 50 | 25°14'52.51"N | 87°32'16.11"E |

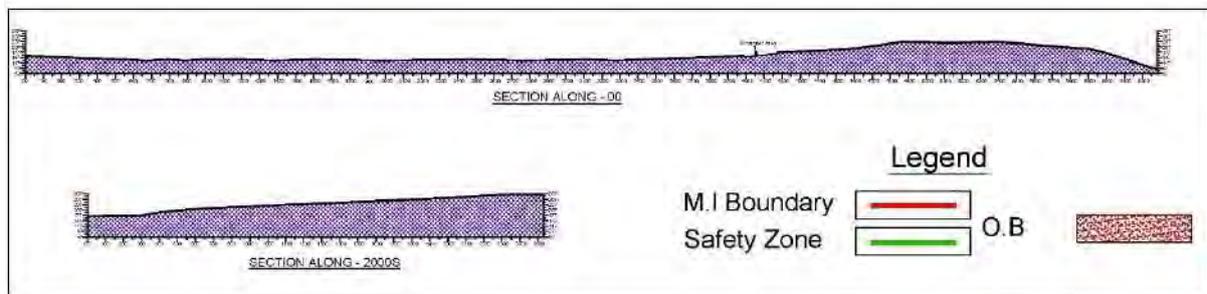
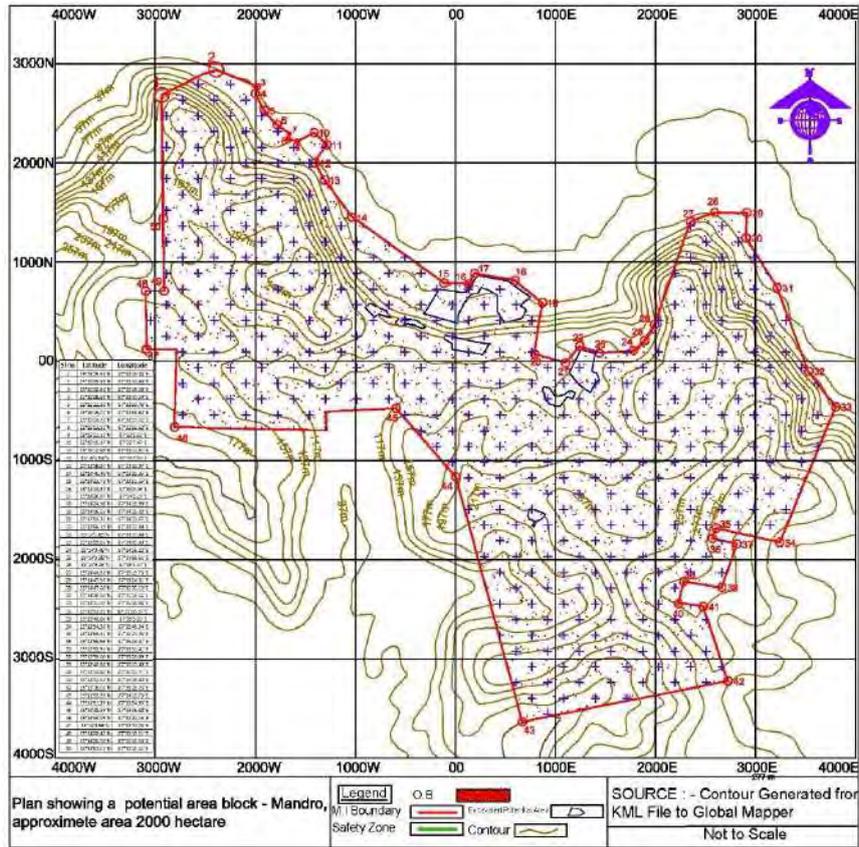
| Details of Excavated Area within this potential area | | | |
|--|---------------|---------------|-----------|
| Sl no | Latitude | Longitude | Area (Ha) |
| A | 25°14'16.00"N | 87°33'27.20"E | 4 |
| B | 25°14'9.87"N | 87°33'37.60"E | 0.68 |
| C | 25°14'14.07"N | 87°33'53.71"E | 12.5 |
| D | 25°14'18.66"N | 87°34'14.00"E | 14 |
| E | 25°14'0.14"N | 87°34'0.61"E | 6.58 |
| F | 25°13'52.75"N | 87°34'39.11"E | 8 |
| Total | | | 45.76 |



List of villages falling under the potential area:

Gari, Daminbita, Amjora, Sugnipahar, Amjhor, Jani, Karamtola Dakhin, Bhawanichauki, Desipokeria, Marikuti, Burkunda, Siwria, Demba, Majh Kola, Hathidari, Chua, Kulbanga, Jagori, Kotgandi, Baskobansijharna, Medo, Polma, Bara Gutibera, Bara Bhiranda, Ambadiha, Teliagarhi, Kanipahar, Sergarh.

District Survey Report of Sahibganj, Jharkhand



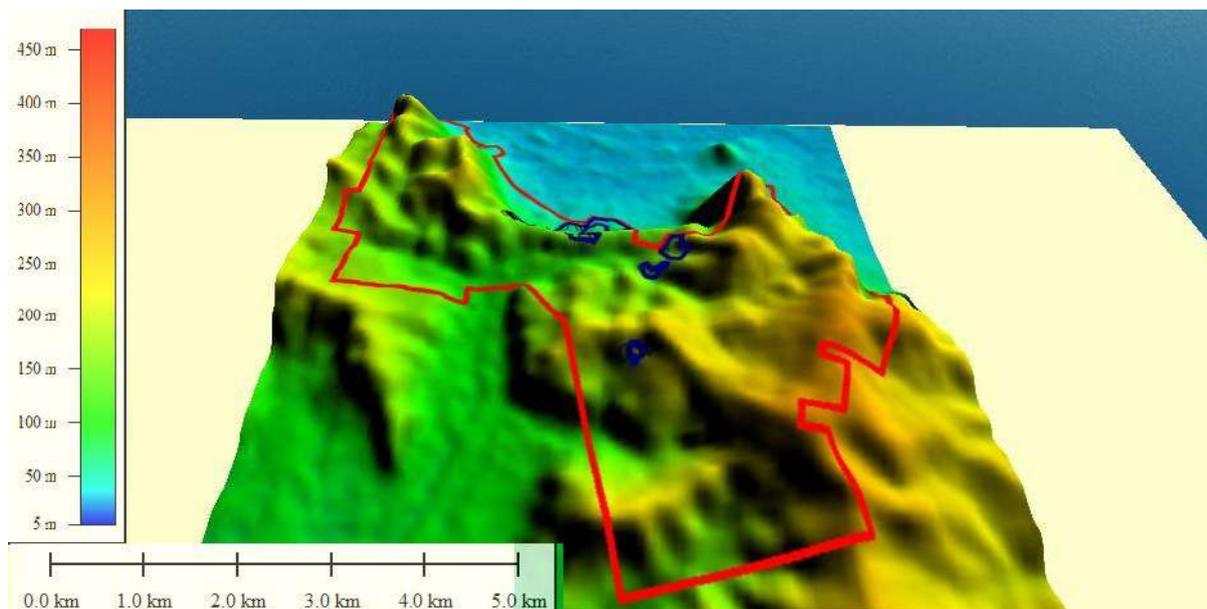


Image showing 3D Topographic view of the Potential Area

Volume of Potential Area - B, Block - Mandro, Area 1828 Hectare

| Section Proved 237 TO 57 | Cross sectional area of O.B in sqm | Total Cross Sectional area in sqm | Influence Length m | Total Volume of O.B in Cum situ (B) | Total Volume in Cum situ (A) | Total Volume of Stone Cum situ (A-B) | Recovery 60% in m cum situ | Million tons of Stone |
|--------------------------------|------------------------------------|-----------------------------------|--------------------|-------------------------------------|------------------------------|--------------------------------------|----------------------------|-----------------------|
| 0.00 | 24476 | 625196.00 | 2800 | 68532800 | 1750548800.00 | 1682016000.00 | 1943.8419 | 5248.37 |
| 2000S | 10136 | 455199.00 | 3500 | 35476000 | 1593196500.00 | 1557720500.00 | | |
| Total | | | | 104008800 | 3343745300.00 | 3239736500.00 | | |

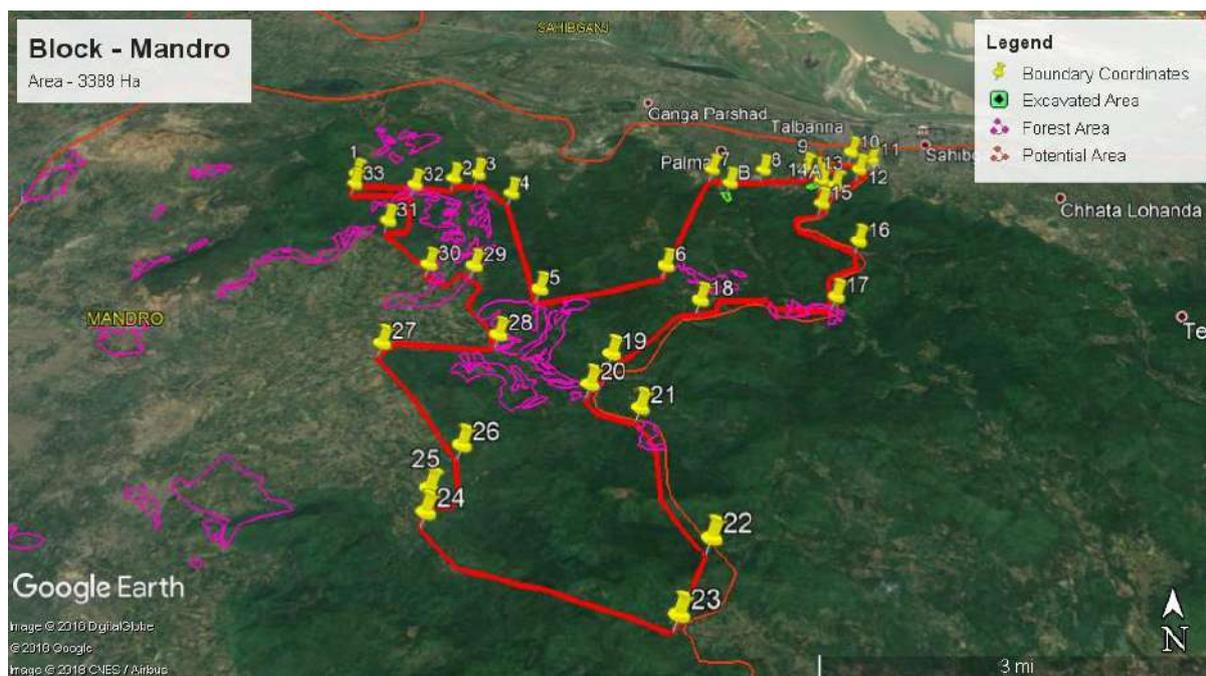


Image showing the Potential Area (Block – C, Mineral - Basalt) As Per KML Data

| SI No | Latitude | Longitude |
|-------|---------------|---------------|
| 1 | 25°13'31.37"N | 87°32'7.15"E |
| 2 | 25°13'31.16"N | 87°33'12.25"E |
| 3 | 25°13'35.66"N | 87°33'27.78"E |
| 4 | 25°13'12.48"N | 87°33'52.55"E |
| 5 | 25°11'48.86"N | 87°34'15.77"E |
| 6 | 25°12'3.94"N | 87°35'31.52"E |
| 7 | 25°13'40.09"N | 87°36'6.87"E |
| 8 | 25°13'41.71"N | 87°36'41.68"E |
| 9 | 25°13'43.60"N | 87°37'10.86"E |
| 10 | 25°14'1.27"N | 87°37'45.49"E |
| 11 | 25°13'52.06"N | 87°37'57.59"E |
| 12 | 25°13'37.36"N | 87°37'45.75"E |
| 13 | 25°13'19.43"N | 87°37'26.35"E |
| 14 | 25°13'24.48"N | 87°37'18.32"E |
| 15 | 25°12'50.02"N | 87°37'33.97"E |
| 16 | 25°12'25.84"N | 87°37'31.89"E |

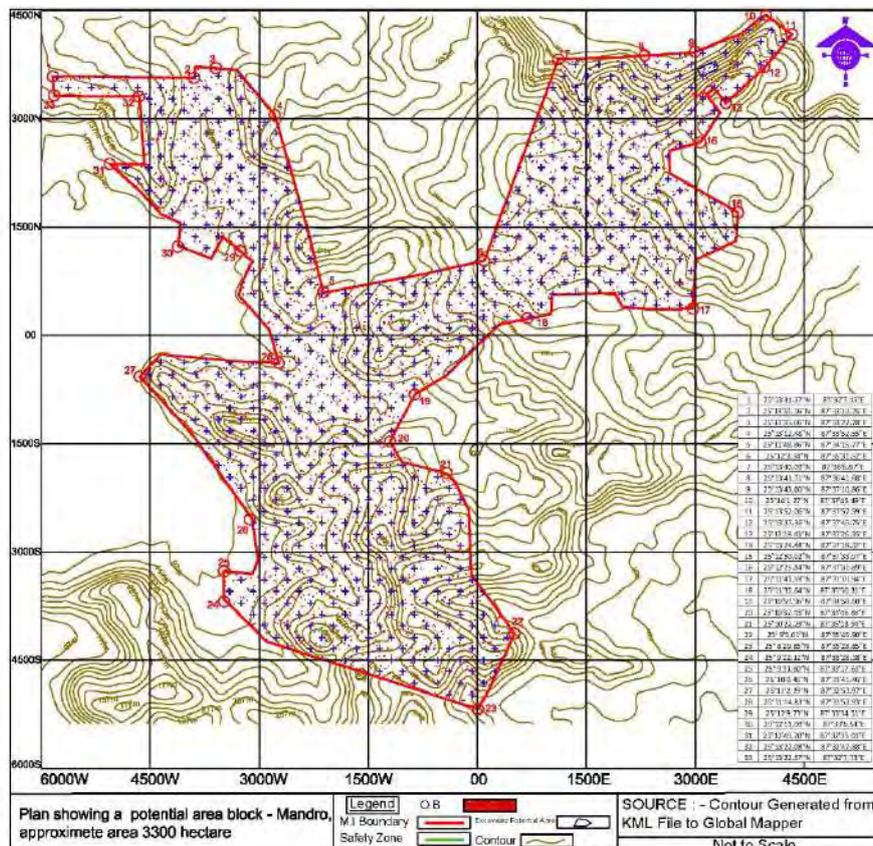
| SI No | Latitude | Longitude |
|-------|---------------|---------------|
| 17 | 25°11'41.59"N | 87°37'10.94"E |
| 18 | 25°11'35.64"N | 87°35'50.31"E |
| 19 | 25°10'59.96"N | 87°34'58.60"E |
| 20 | 25°10'37.43"N | 87°34'46.88"E |
| 21 | 25°10'22.29"N | 87°35'13.94"E |
| 22 | 25° 9'5.61"N | 87°35'45.90"E |
| 23 | 25° 8'29.85"N | 87°35'28.85"E |
| 24 | 25° 9'22.12"N | 87°33'28.18"E |
| 25 | 25° 9'31.80"N | 87°33'17.63"E |
| 26 | 25°10'0.46"N | 87°33'41.46"E |
| 27 | 25°11'2.29"N | 87°32'53.97"E |
| 28 | 25°11'14.83"N | 87°33'53.93"E |
| 29 | 25°12'9.73"N | 87°33'34.51"E |
| 30 | 25°12'11.09"N | 87°33'6.54"E |
| 31 | 25°12'49.70"N | 87°32'35.03"E |
| 32 | 25°13'22.08"N | 87°32'47.88"E |
| 33 | 25°13'22.67"N | 87°32'7.73"E |

| Central Coordinate of Excavated Area | | |
|--------------------------------------|---------------|---------------|
| SI No | Latitude | Longitude |
| 1 | 25°13'30.49"N | 87°37'17.83"E |
| 2 | 25°13'24.61"N | 87°36'17.22"E |

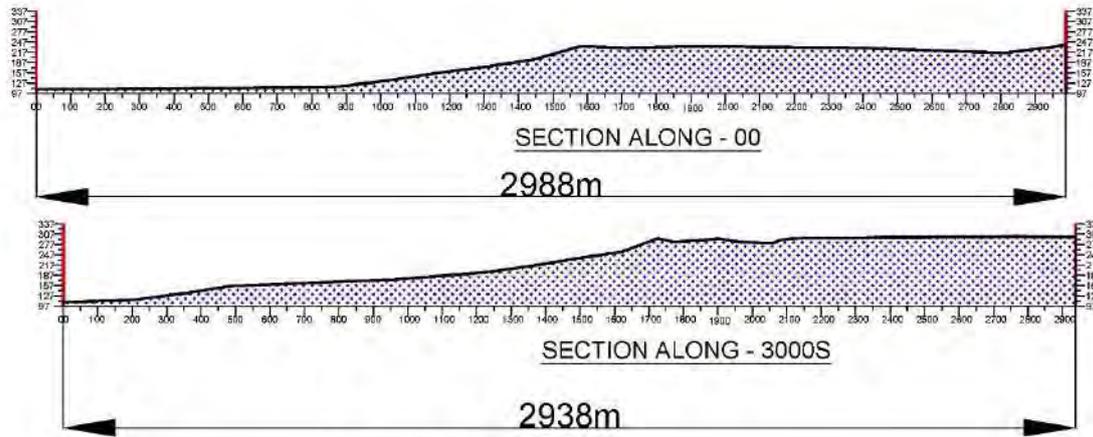


List of villages falling under the potential area:

Kanaipahar, Rosoi, Amjhor, Pokharia, Lalmatia, Khelatola, Gangti, Kotgandi, Simberitok, Baskobansijharna, Amdandi, Medo, Bara Bhiranda, Pacharaki, Karambi, Lalatok, Betonra, Sergarh, Polma, Chaldih, Pokhariapahar, Koreparapahar, Rohre, Medo, Tetria, Maheshpur, Chotrogoga, Amsari, Chuko, Heth Chara, Kalajhor, Maligoda, Dule, Bhomdai, Badem, Damdama, Jokani.



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Legend

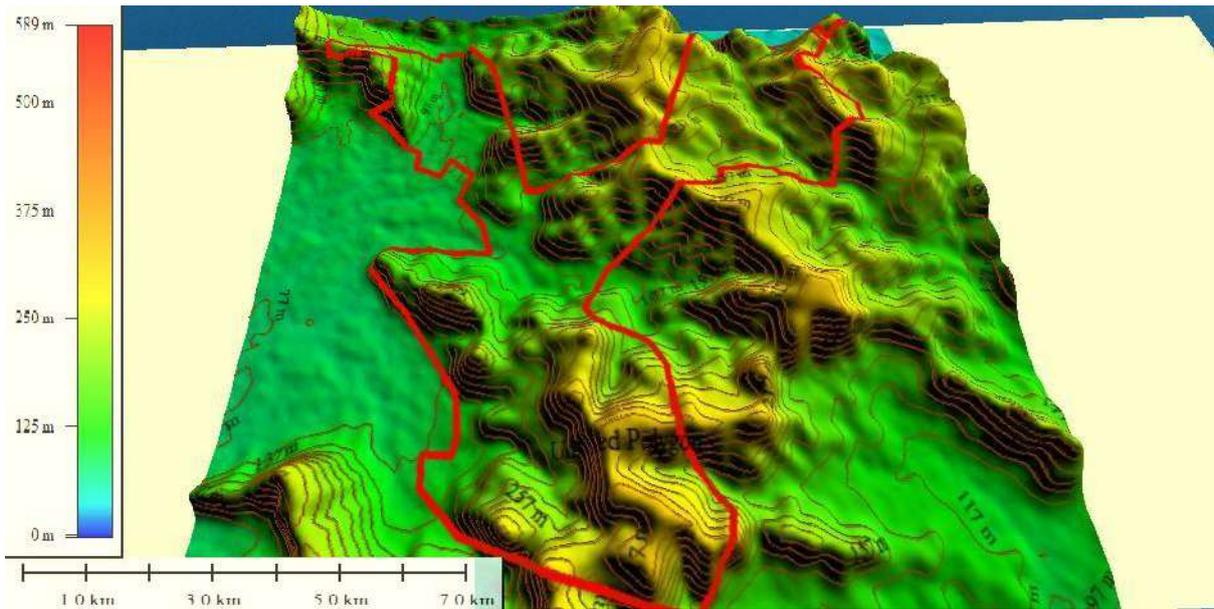


Image showing 3D Topographic view of the Potential Area

Volume of Potential Area - C, Block - Mandro, Area 3300 Hectare

| Section Proved 237 TO 57 | Cross sectional area of O.B in sqm | Total Cross Sectional area in sqm | Influence Length m | Total Volume of O.B in Cum (B) | Total Volume in Cum (A) | Total Volume of Stone Cum (A-B) | Recovery 60% in m cum | Million tons of |
|--------------------------|------------------------------------|-----------------------------------|--------------------|--------------------------------|-------------------------|---------------------------------|-----------------------|-----------------|
| 0.00 | 12006 | 241560.00 | 5700 | 68434200 | 1376892000.00 | 1308457800.00 | 1757.41218 | 4745.01 |
| 3000N | 11836 | 371961.00 | 4500 | 53262000 | 1673824500.00 | 1620562500.00 | | |
| Total | | | | 121696200 | 3050716500.00 | 2929020300.00 | | |

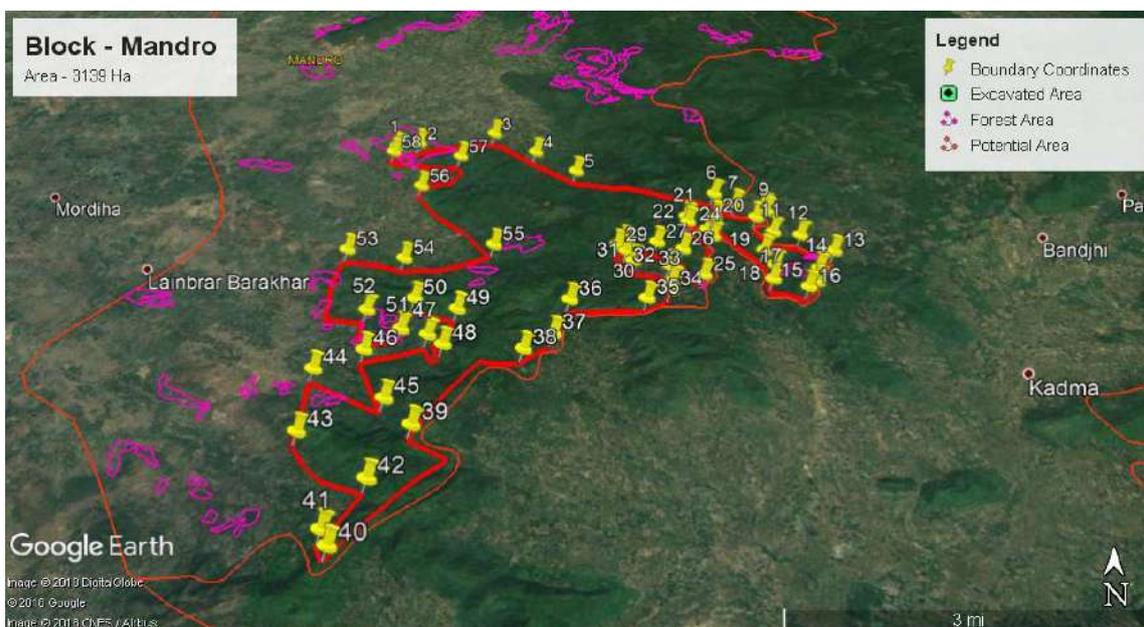
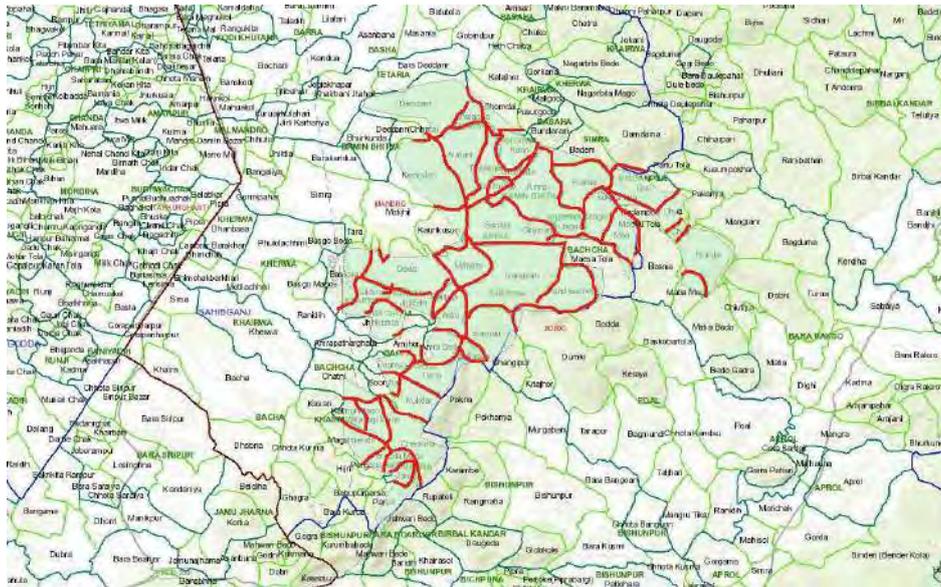


Image showing the Potential Area (Block – D, Mineral - Basalt) As Per KML Data

| Sl No | Latitude | Longitude |
|-------|---------------|---------------|
| 1 | 25° 9'26.75"N | 87°31'37.87"E |
| 2 | 25° 9'29.76"N | 87°31'54.58"E |
| 3 | 25° 9'40.19"N | 87°32'49.08"E |
| 4 | 25° 9'18.60"N | 87°33'20.84"E |
| 5 | 25° 8'55.35"N | 87°33'50.10"E |
| 6 | 25° 8'27.73"N | 87°35'24.81"E |
| 7 | 25° 8'17.45"N | 87°35'38.16"E |
| 8 | 25° 8'15.82"N | 87°35'57.21"E |
| 9 | 25° 8'12.07"N | 87°35'58.72"E |
| 10 | 25° 8'2.83"N | 87°35'50.22"E |
| 11 | 25° 7'50.61"N | 87°35'59.99"E |
| 12 | 25° 7'48.28"N | 87°36'17.78"E |
| 13 | 25° 7'32.67"N | 87°36'36.61"E |
| 14 | 25° 7'16.37"N | 87°36'23.70"E |
| 15 | 25° 7'4.74"N | 87°36'20.61"E |
| 16 | 25° 7'0.65"N | 87°36'14.73"E |
| 17 | 25° 7'9.50"N | 87°35'54.21"E |
| 18 | 25° 7'21.68"N | 87°35'56.98"E |
| 19 | 25° 7'35.22"N | 87°35'52.31"E |
| 20 | 25° 8'2.54"N | 87°35'25.06"E |
| 21 | 25° 8'6.04"N | 87°35'4.36"E |
| 22 | 25° 7'55.81"N | 87°35'11.14"E |
| 23 | 25° 7'48.63"N | 87°35'18.86"E |
| 24 | 25° 7'46.97"N | 87°35'20.13"E |
| 25 | 25° 7'13.86"N | 87°35'11.32"E |
| 26 | 25° 7'35.82"N | 87°34'59.64"E |
| 27 | 25° 7'42.10"N | 87°34'43.26"E |
| 28 | 25° 7'42.79"N | 87°34'21.20"E |
| 29 | 25° 7'39.28"N | 87°34'17.14"E |

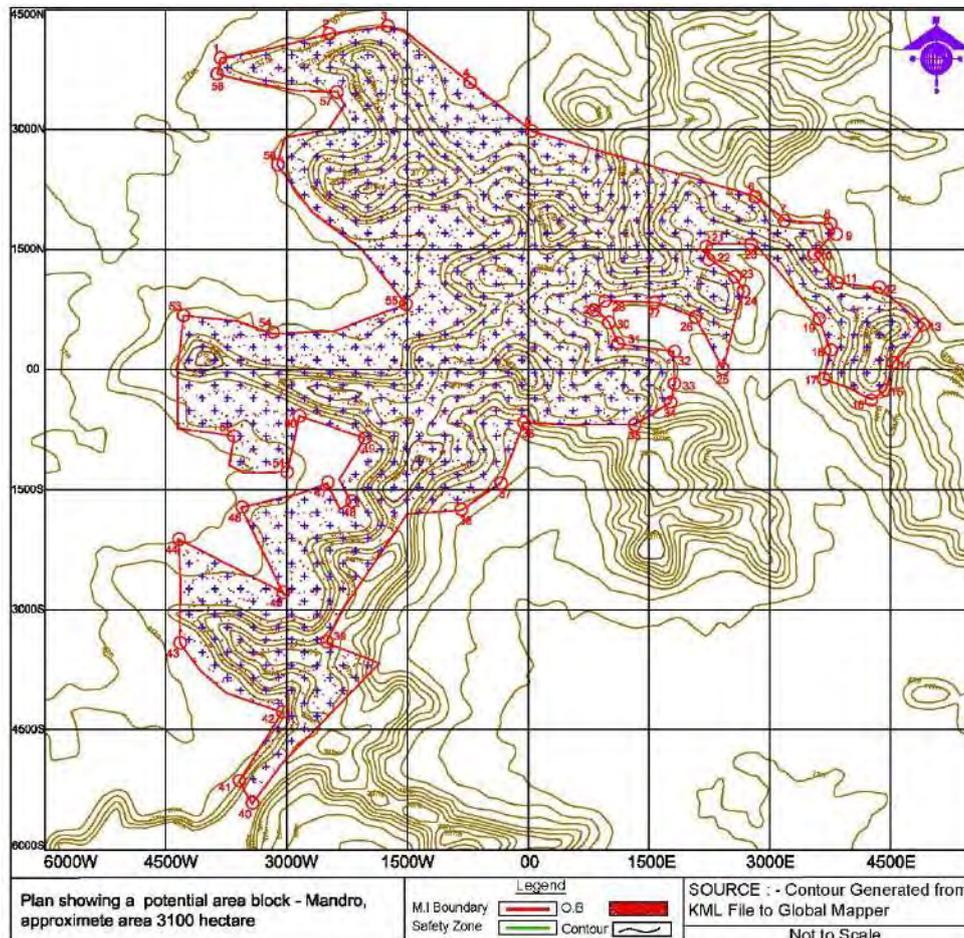
| Sl No | Latitude | Longitude |
|-------|---------------|---------------|
| 30 | 25° 7'33.74"N | 87°34'22.88"E |
| 31 | 25° 7'24.65"N | 87°34'26.91"E |
| 32 | 25° 7'21.04"N | 87°34'50.16"E |
| 33 | 25° 7'7.05"N | 87°34'50.65"E |
| 34 | 25° 6'59.37"N | 87°34'49.13"E |
| 35 | 25° 6'49.90"N | 87°34'34.00"E |
| 36 | 25° 6'50.70"N | 87°33'46.76"E |
| 37 | 25° 6'25.04"N | 87°33'37.07"E |
| 38 | 25° 6'11.59"N | 87°33'20.03"E |
| 39 | 25° 5'16.77"N | 87°32'22.74"E |
| 40 | 25° 4'7.70"N | 87°31'51.20"E |
| 41 | 25° 4'17.51"N | 87°31'45.82"E |
| 42 | 25° 4'46.49"N | 87°32'3.41"E |
| 43 | 25° 5'16.38"N | 87°31'20.40"E |
| 44 | 25° 6'0.08"N | 87°31'19.94"E |
| 45 | 25° 6'1.37"N | 87°31'40.28"E |
| 46 | 25° 6'13.96"N | 87°31'46.77"E |
| 47 | 25° 6'24.65"N | 87°32'22.81"E |
| 48 | 25° 6'16.29"N | 87°32'32.78"E |
| 49 | 25° 6'43.37"N | 25° 6'43.37"N |
| 50 | 25° 6'46.12"N | 87°32'27.69"E |
| 51 | 25° 6'29.48"N | 87°32'5.92"E |
| 52 | 25° 6'40.25"N | 87°31'46.34"E |
| 53 | 25° 7'12.58"N | 87°31'32.64"E |
| 54 | 25° 7'28.75"N | 87°32'0.04"E |
| 55 | 25° 7'41.49"N | 87°32'56.73"E |
| 56 | 25° 8'40.55"N | 87°32'1.97"E |
| 57 | 25° 9'12.09"N | 87°32'26.73"E |
| 58 | 25° 9'19.91"N | 87°31'36.89"E |

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List of villages falling under the potential area:

Deodanr, Chalgona, Aurjanr, Komodari, Dudama, Kanri, Rakesi, Gutti, Chua, Mori, Bunda, Sahara, Kaurikusum, Dubigoda, Gilamari, Mandra, Garapani, Sormari, Doda, Baskola, Jhirikbhita, Amrabeto, Pagro, Kukdar, Cheokola, Magalmendo, Soonjha, Tetria, Cheokola, Katingi Mago, Magalmendo, Bhomdai, Badem, Partutola.



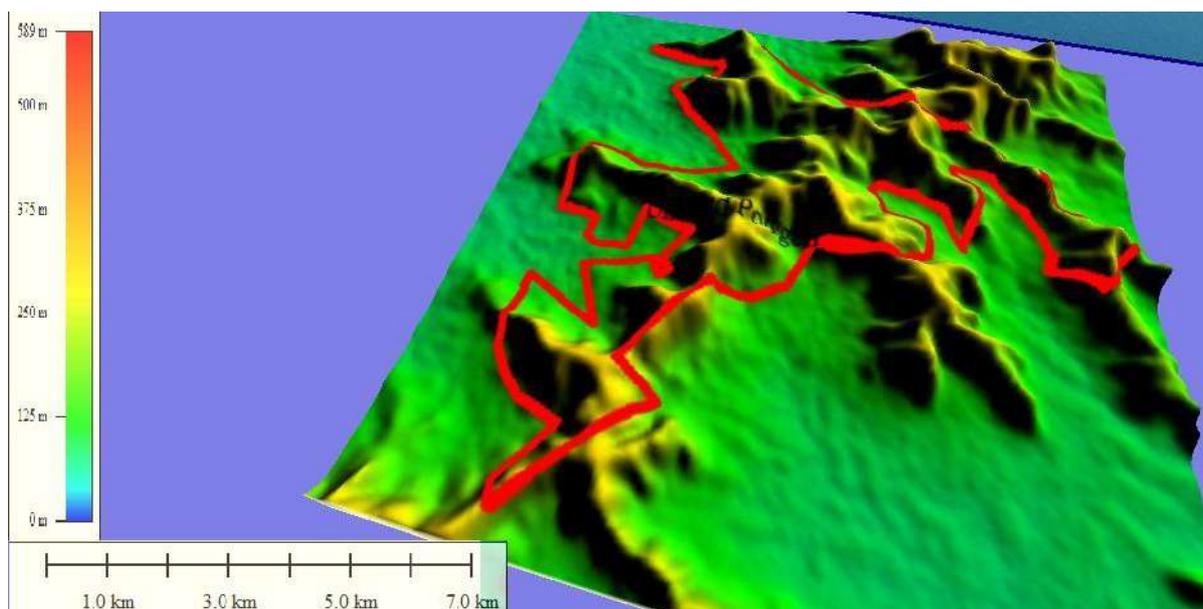
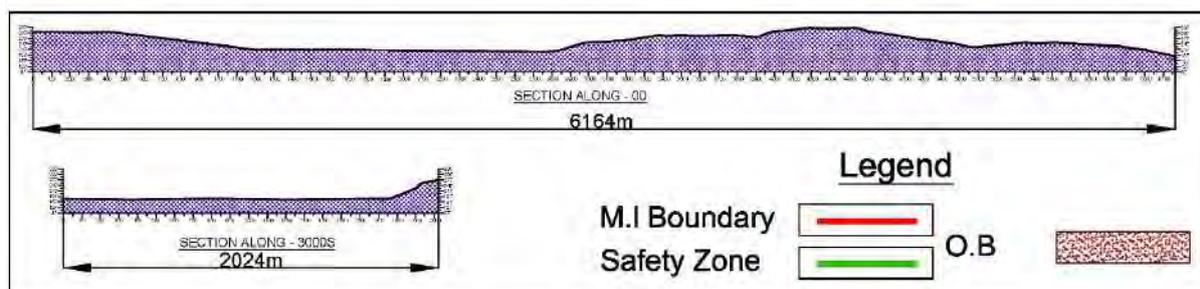


Image showing 3D Topographic view of the Potential Area

Volume of Potential Area - D, Block - Mandro, Area 3100 Hectare

| Section Proved 297 TO 97 | Cross sectional area of O.B in sqm | Total Cross Sectional area in sqm | Influence Length m | Total Volume of O.B in Cum situ (B) | Total Volume in Cum situ (A) | Total Volume of Stone Cum situ (A-B) | Recovery 60% in m cum situ | Million tons of Stone |
|--------------------------|------------------------------------|-----------------------------------|--------------------|-------------------------------------|------------------------------|--------------------------------------|----------------------------|-----------------------|
| 0.00 | 24814 | 977600.00 | 4200 | 104218800 | 4105920000.00 | 4001701200.00 | 2885.83128 | 7791.74 |
| 3000S | 8194 | 163582.00 | 5200 | 42608800 | 850626400.00 | 808017600.00 | | |
| Total | | | | 146827600 | 4956546400.00 | 4809718800.00 | | |

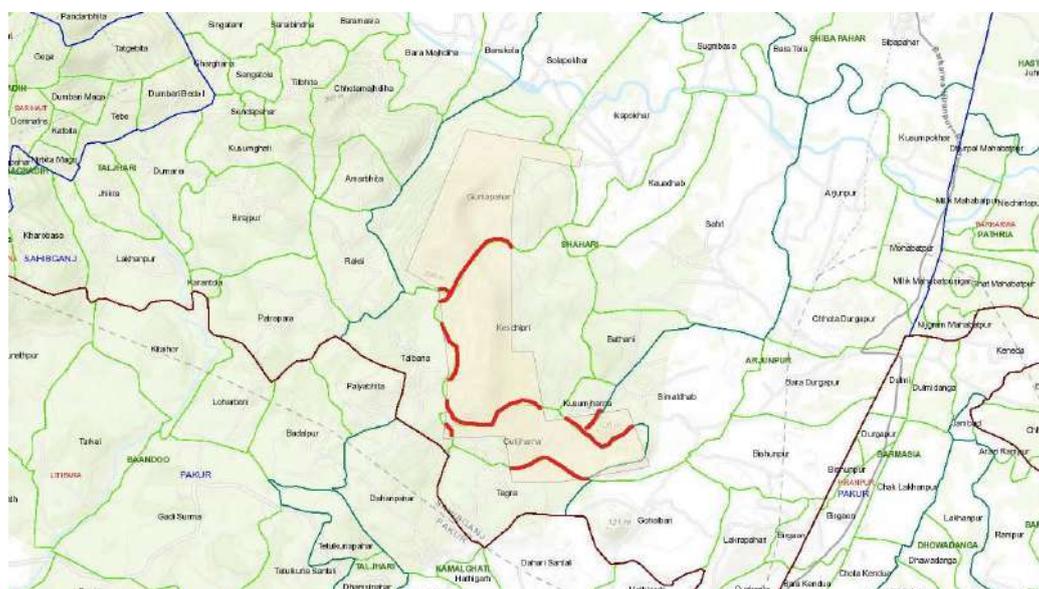
Block - Pathna



Image showing the Potential Area (Block – A, Mineral – Basalt & Granite Gneiss) As Per KML Data

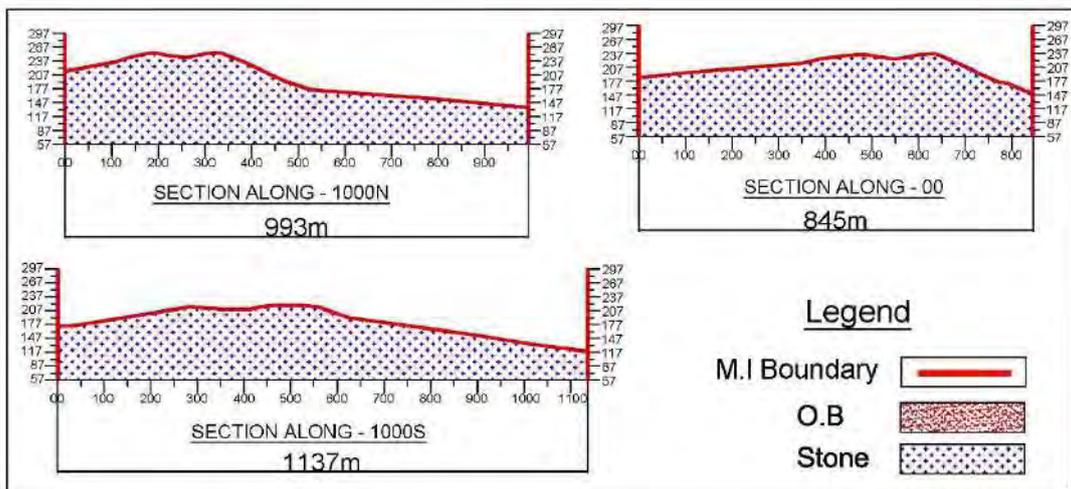
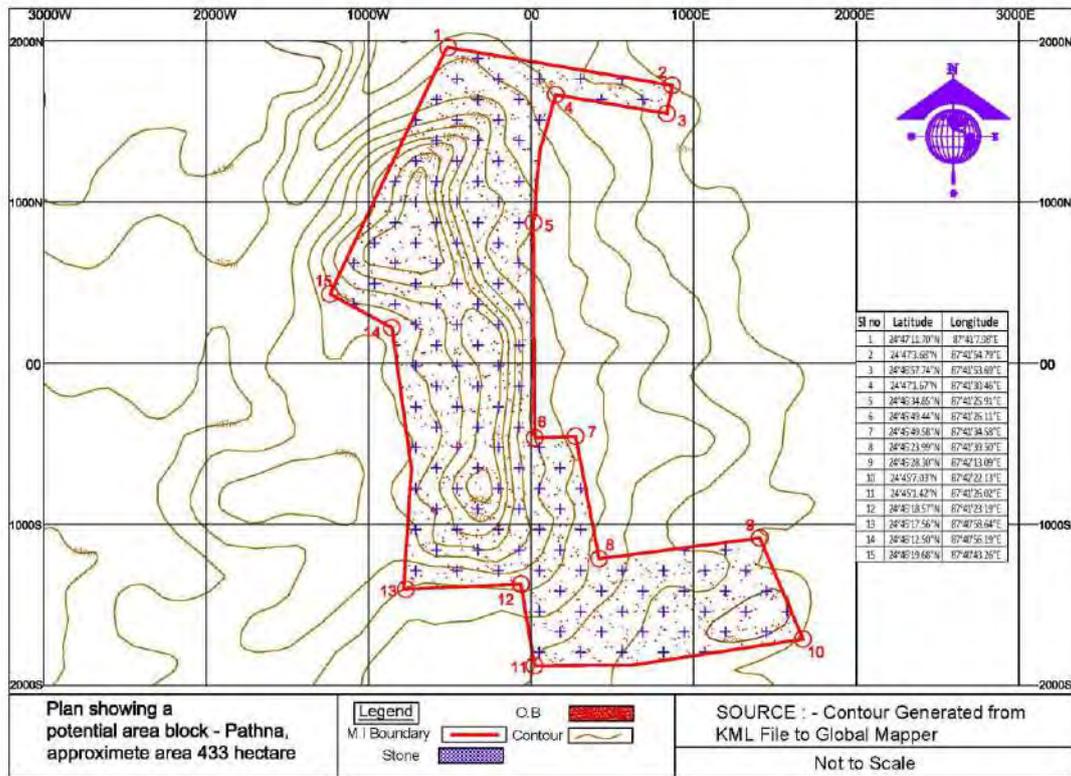
| Sl no | Latitude | Longitude |
|-------|---------------|---------------|
| 1 | 24°47'11.70"N | 87°41'7.98"E |
| 2 | 24°47'3.68"N | 87°41'54.79"E |
| 3 | 24°46'57.74"N | 87°41'53.69"E |
| 4 | 24°47'1.67"N | 87°41'30.46"E |
| 5 | 24°46'34.85"N | 87°41'25.91"E |
| 6 | 24°45'49.44"N | 87°41'26.11"E |
| 7 | 24°45'49.58"N | 87°41'34.58"E |
| | | |

| Sl no | Latitude | Longitude |
|-------|---------------|---------------|
| 8 | 24°45'23.99"N | 87°41'39.50"E |
| 9 | 24°45'28.30"N | 87°42'13.09"E |
| 10 | 24°45'7.03"N | 87°42'22.13"E |
| 11 | 24°45'1.42"N | 87°41'26.02"E |
| 12 | 24°45'18.57"N | 87°41'23.19"E |
| 13 | 24°45'17.56"N | 87°40'58.64"E |
| 14 | 24°46'12.50"N | 87°40'56.19"E |
| 15 | 24°46'19.68"N | 87°40'43.26"E |



List of villages falling under the potential area:

Gumapahar, Keschipri, Gutijharna, Talbaria, Ikapokhar.



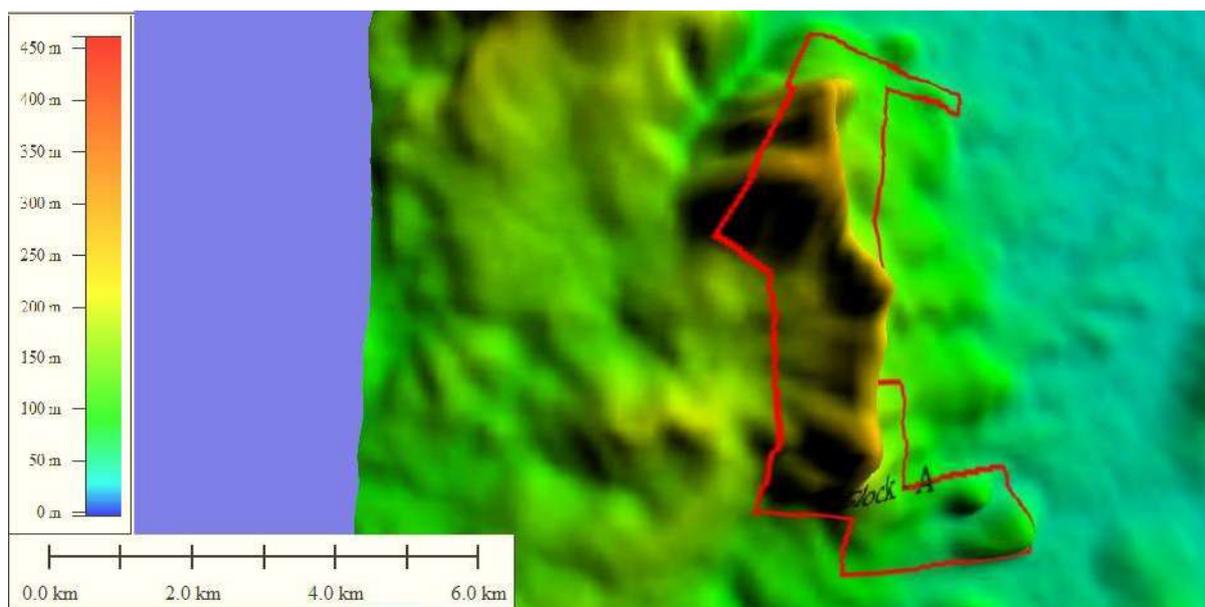


Image showing 3D Topographic view of the Potential Area

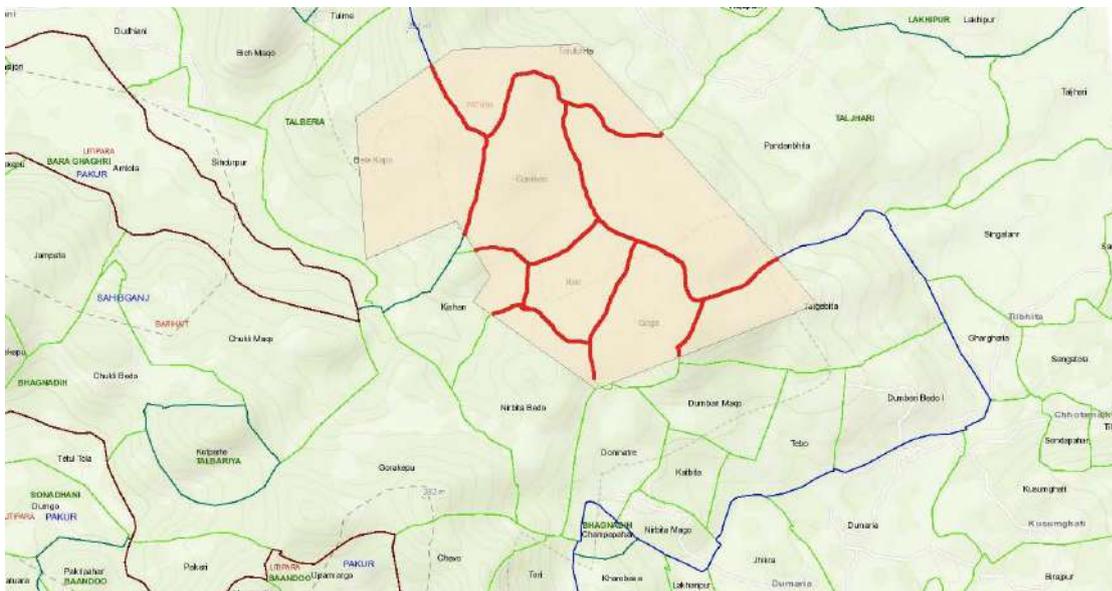
Volume of Potential Area - A, Block - Pathna, Area 433 Hectare

| Section Proved 257 TO 57 | Cross sectional area of O.B in sqm | Total Cross Sectional area in sqm | Influence Length m | Total Volume of O.B in Cum situ (B) | Total Volume in Cum situ (A) | Total Volume of Stone Cum situ (A-B) | Recovery 60% in m cum situ | Million tons of Stone |
|--------------------------|------------------------------------|-----------------------------------|--------------------|-------------------------------------|------------------------------|--------------------------------------|----------------------------|-----------------------|
| 1000N | 4066 | 136070.00 | 1500 | 6099000 | 204105000.00 | 198006000.00 | 321.57852 | 868.26 |
| 0.00 | 3468 | 125951.00 | 1000 | 3468000 | 125951000.00 | 122483000.00 | | |
| 1000S | 4601 | 139273.00 | 1600 | 7361600 | 222836800.00 | 215475200.00 | | |
| Total | | | | 16928600 | 552892800.00 | 535964200.00 | | |



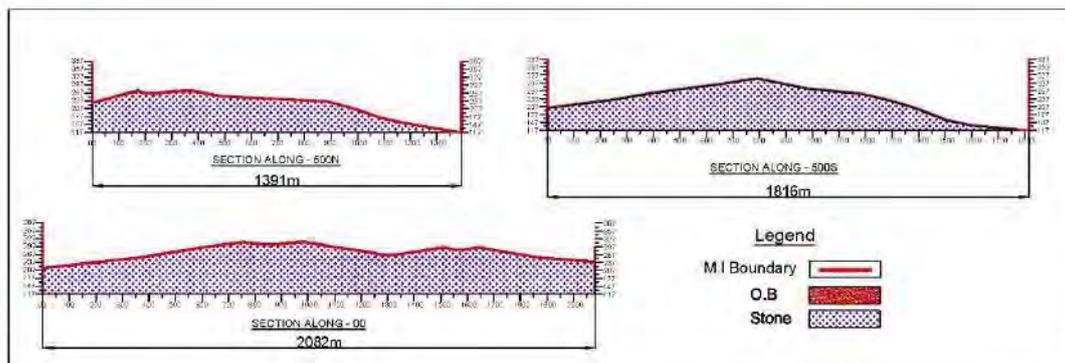
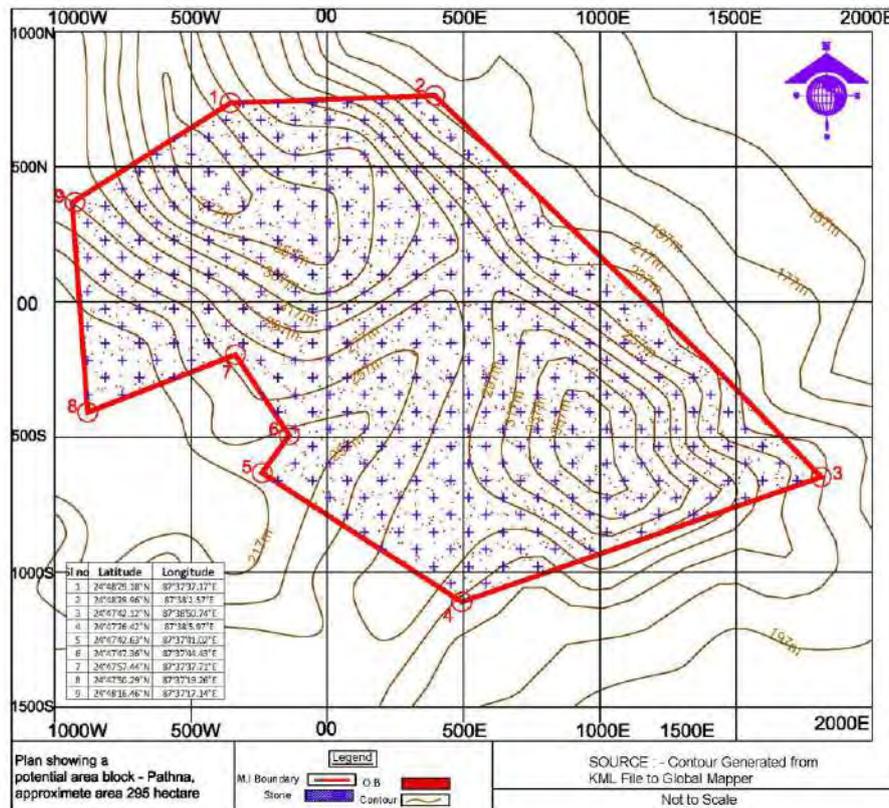
Image showing the Potential Area (Block – B, Mineral - Basalt) As Per KML Data

| Sl no | Latitude | Longitude |
|-------|---------------|---------------|
| 1 | 24°48'29.18"N | 87°37'37.17"E |
| 2 | 24°48'29.96"N | 87°38'2.57"E |
| 3 | 24°47'42.12"N | 87°38'50.74"E |
| 4 | 24°47'26.42"N | 87°38'5.97"E |
| 5 | 24°47'42.63"N | 87°37'41.02"E |
| 6 | 24°47'47.36"N | 87°37'44.43"E |
| 7 | 24°47'57.44"N | 87°37'37.71"E |
| 8 | 24°47'50.29"N | 87°37'19.26"E |
| 9 | 24°48'16.46"N | 87°37'17.14"E |



List of villages falling under the potential area:

Tetulbhita, Belekapa, Gambari, Kari, Goga, Kishan, Narbita Bedo, Tatgebita, Pandanbhita, Nirbita.



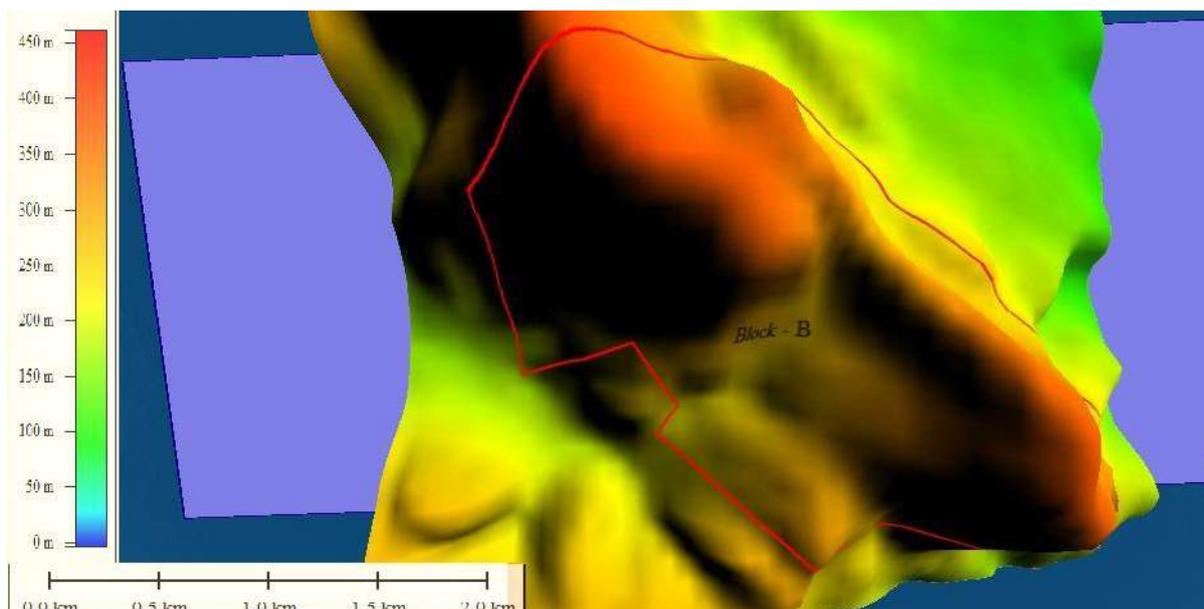


Image showing 3D Topographic view of the Potential Area

Volume of Potential Area - B, Block - Pathna, Area 295 Hectare

| Section Proved 357 TO 117 | Cross sectional area of O.B in sqm | Total Cross Sectional area in sqm | Influence Length m | Total Volume of O.B in Cum situ (B) | Total Volume in Cum situ (A) | Total Volume of Stone Cum situ (A-B) | Recovery 60% in m cum situ | Million tons of Stone |
|---------------------------|------------------------------------|-----------------------------------|--------------------|-------------------------------------|------------------------------|--------------------------------------|----------------------------|-----------------------|
| 500N | 5620 | 144790.00 | 250 | 1405000 | 36197500.00 | 34792500.00 | 246.53826 | 665.65 |
| 0.00 | 8410 | 324335.00 | 500 | 4205000 | 162167500.00 | 157962500.00 | | |
| 500S | 7308 | 205619.00 | 1100 | 8038800 | 226180900.00 | 218142100.00 | | |
| Total | | | | 13648800 | 424545900.00 | 410897100.00 | | |

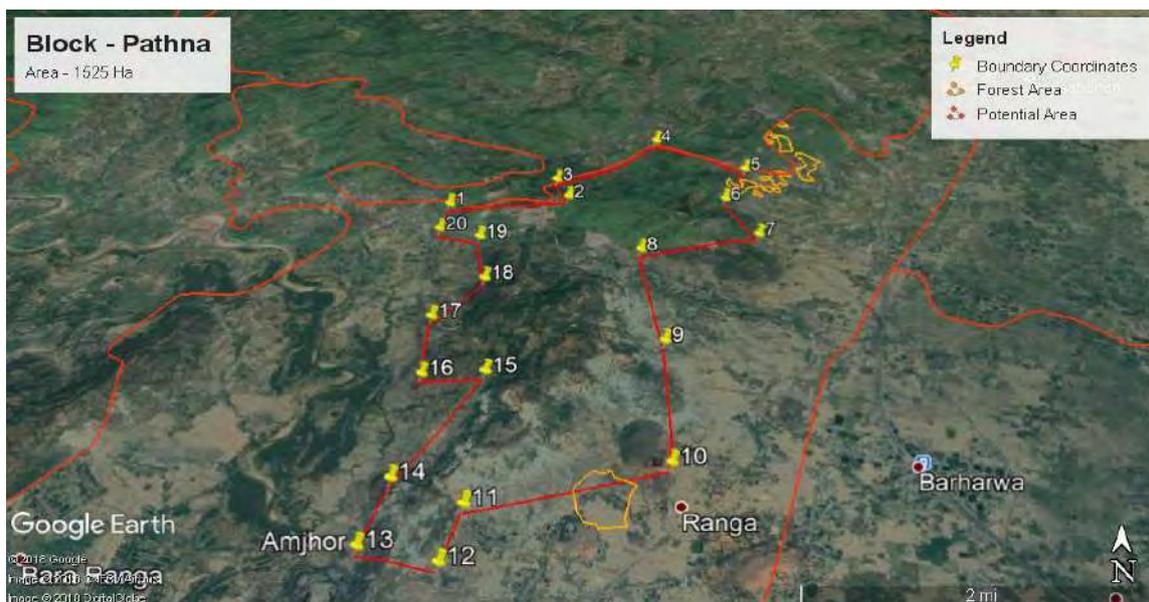
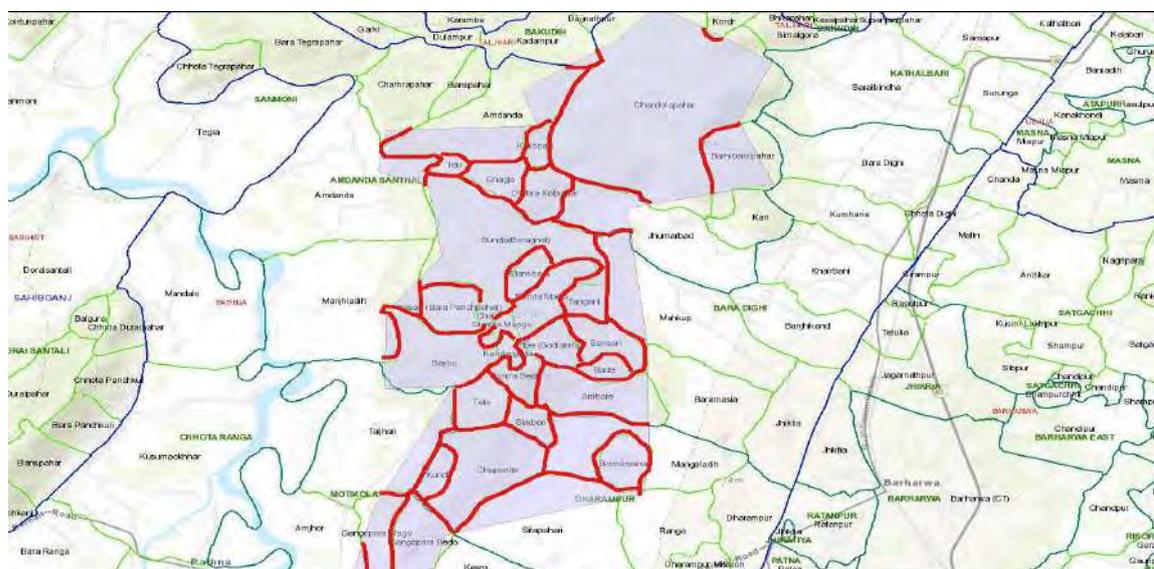


Image showing the Potential Area (Block – C, Mineral - Basalt) As Per KML Data

| Sl no | Latitude | Longitude |
|-------|---------------|---------------|
| 1 | 24°53'50.85"N | 87°43'24.86"E |
| 2 | 24°53'52.79"N | 87°44'20.05"E |
| 3 | 24°54'6.47"N | 87°44'14.45"E |
| 4 | 24°54'40.04"N | 87°45'3.50"E |
| 5 | 24°54'17.63"N | 87°45'45.35"E |
| 6 | 24°53'54.54"N | 87°45'33.09"E |
| 7 | 24°53'29.98"N | 87°45'45.68"E |
| 8 | 24°53'20.41"N | 87°44'52.36"E |
| 9 | 24°52'27.05"N | 87°44'59.83"E |
| 10 | 24°51'29.09"N | 87°44'58.72"E |

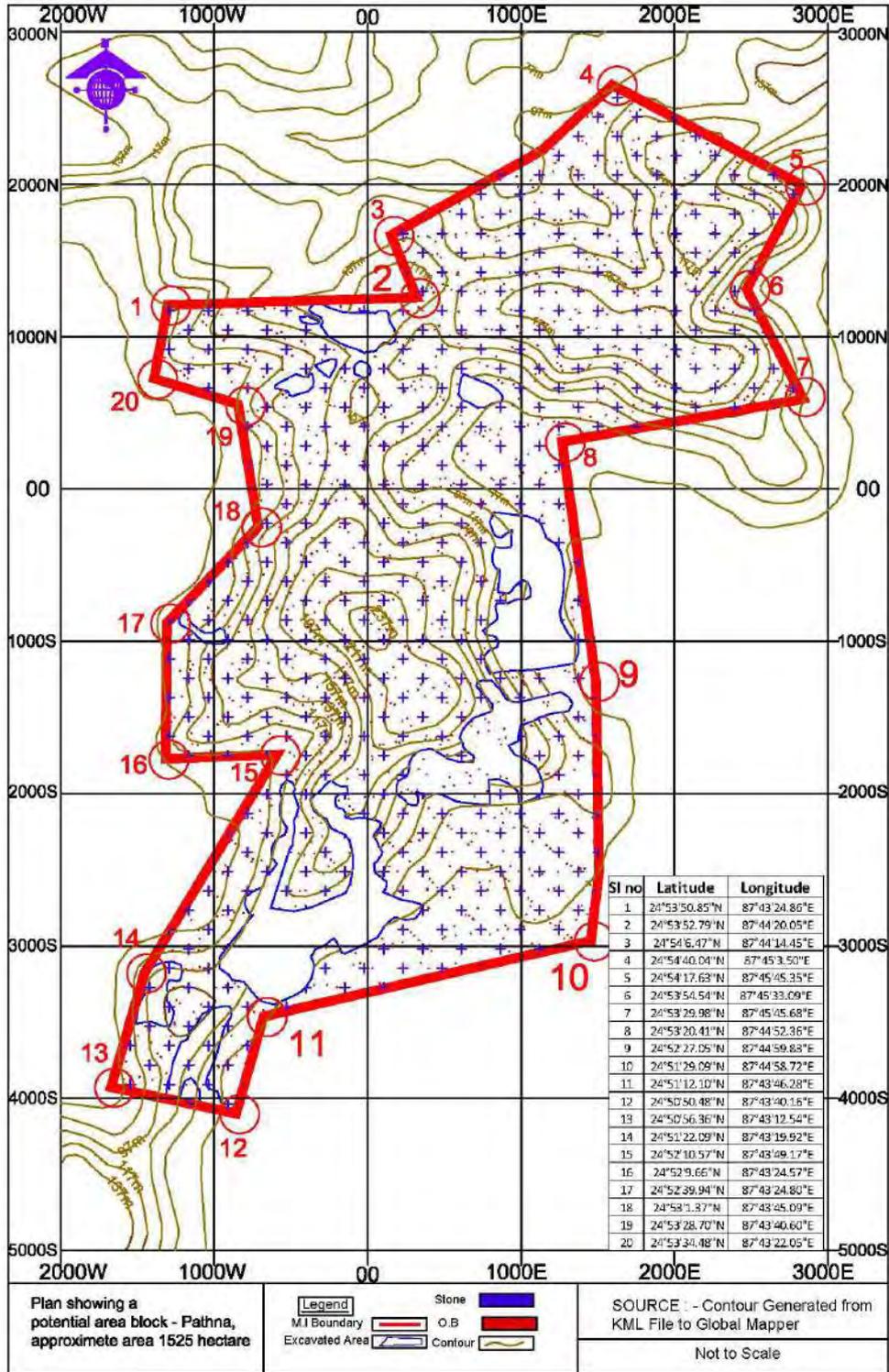
| Sl no | Latitude | Longitude |
|-------|---------------|---------------|
| 11 | 24°51'12.10"N | 87°43'46.28"E |
| 12 | 24°50'50.48"N | 87°43'40.16"E |
| 13 | 24°50'56.36"N | 87°43'12.54"E |
| 14 | 24°51'22.09"N | 87°43'19.92"E |
| 15 | 24°52'10.57"N | 87°43'49.17"E |
| 16 | 24°52'9.66"N | 87°43'24.57"E |
| 17 | 24°52'39.94"N | 87°43'24.80"E |
| 18 | 24°53'1.37"N | 87°43'45.09"E |
| 19 | 24°53'28.70"N | 87°43'40.60"E |
| 20 | 24°53'34.48"N | 87°43'22.05"E |

| Central Coordinate of Excavated Area | | | |
|--------------------------------------|---------------|--------------|-----------|
| Sl no | Latitude | Longitude | Area (Ha) |
| A | 24°53'44.81"N | 87°44'6.39"E | 10 |



List of villages falling under the potential area:

Chandolapahar, Kalopahari, Idri, Chaigo, Dhibra Kalopahar, Bunda Baraghat, Barhibastipahar, Aamdanda, Baijinathpur, Kadampur, Jhumarbad, Tangani, Mansbera, Bunda Mago, Basko, Telo, Simbera, Ambare, Bade, Idpe, Kanderghoda, Manjhladih, Mahkup, Kund, Chapande, Sitapahari, Kesro, Taljhari, Gangopara Mago, Gangopara Bedo, Borna, Ranga.



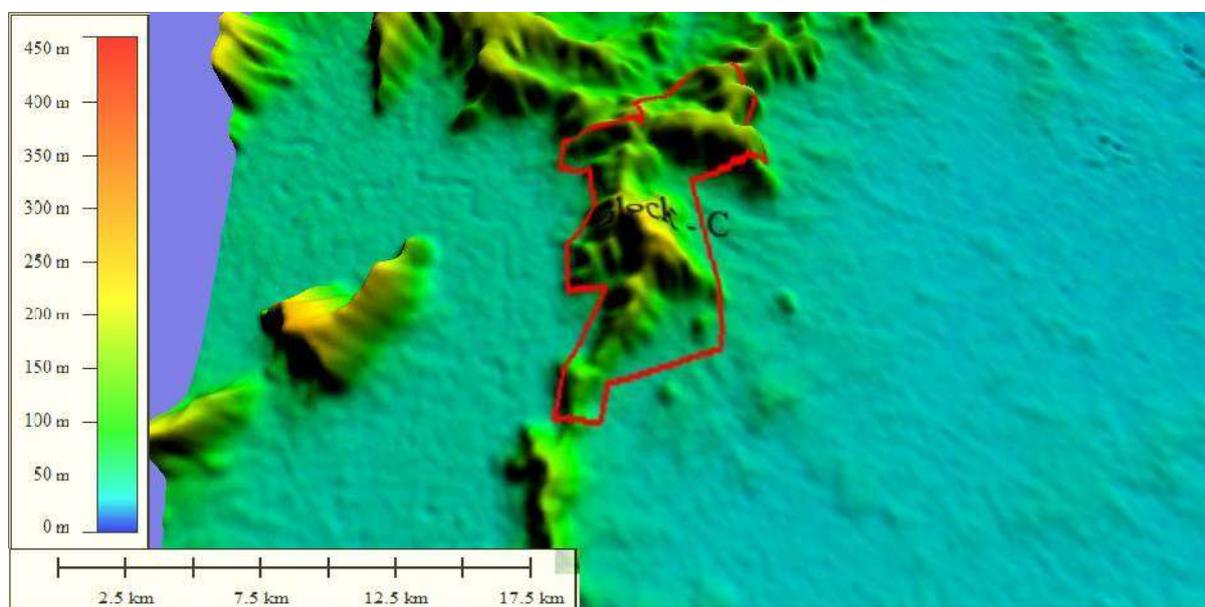
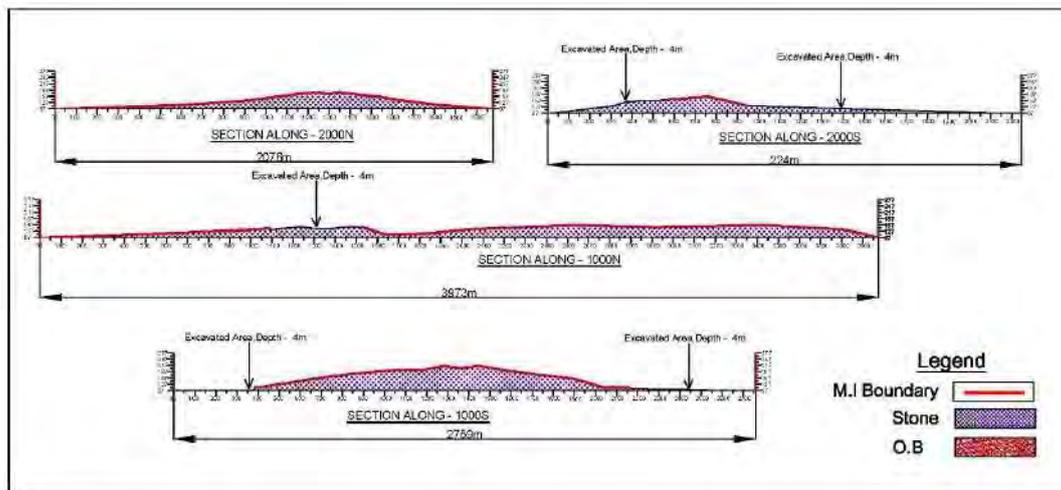


Image showing 3D Topographic view of the Potential Area

Volume of Potential Area - C, Block - Pathna, Area 1525 Hectare

| Section Proved 237 TO 97 | Cross sectional area of O.B in sqm | Total Cross Sectional area in sqm | Influence Length m | Total Volume of O.B in Cum situ (B) | Total Volume in Cum situ (A) | Total Volume of Stone Cum situ (A-B) | Recovery 60% in m cum situ | Million tons of Stone |
|--------------------------|------------------------------------|-----------------------------------|--------------------|-------------------------------------|------------------------------|--------------------------------------|----------------------------|-----------------------|
| 1000N | 13936 | 137596.00 | 600 | 8361600 | 82557600.00 | 74196000.00 | 303.16254 | 818.54 |
| 2000N | 8008 | 62589.00 | 1000 | 8008000 | 62589000.00 | 54581000.00 | | |
| 1000S | 7169 | 125918.00 | 2000 | 14338000 | 251836000.00 | 237498000.00 | | |
| 2000S | 1472 | 61905.00 | 2300 | 3385600 | 142381500.00 | 138995900.00 | | |
| Total | | | | 34093200 | 539364100.00 | 505270900.00 | | |

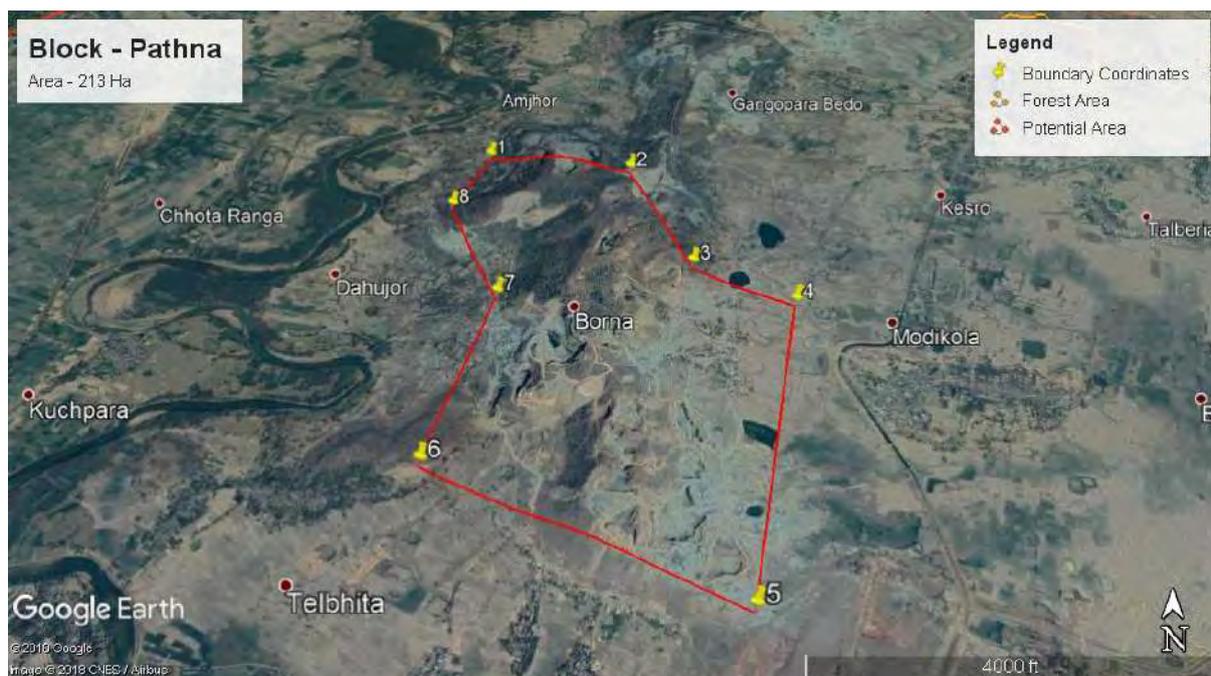


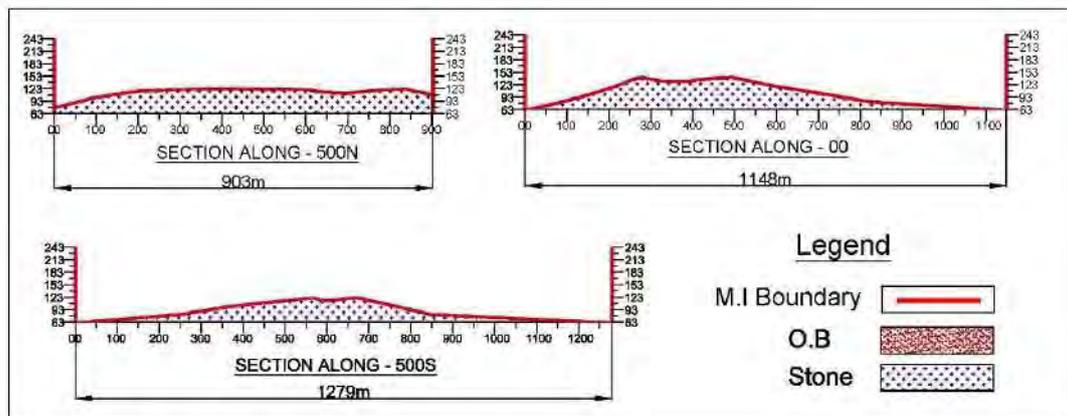
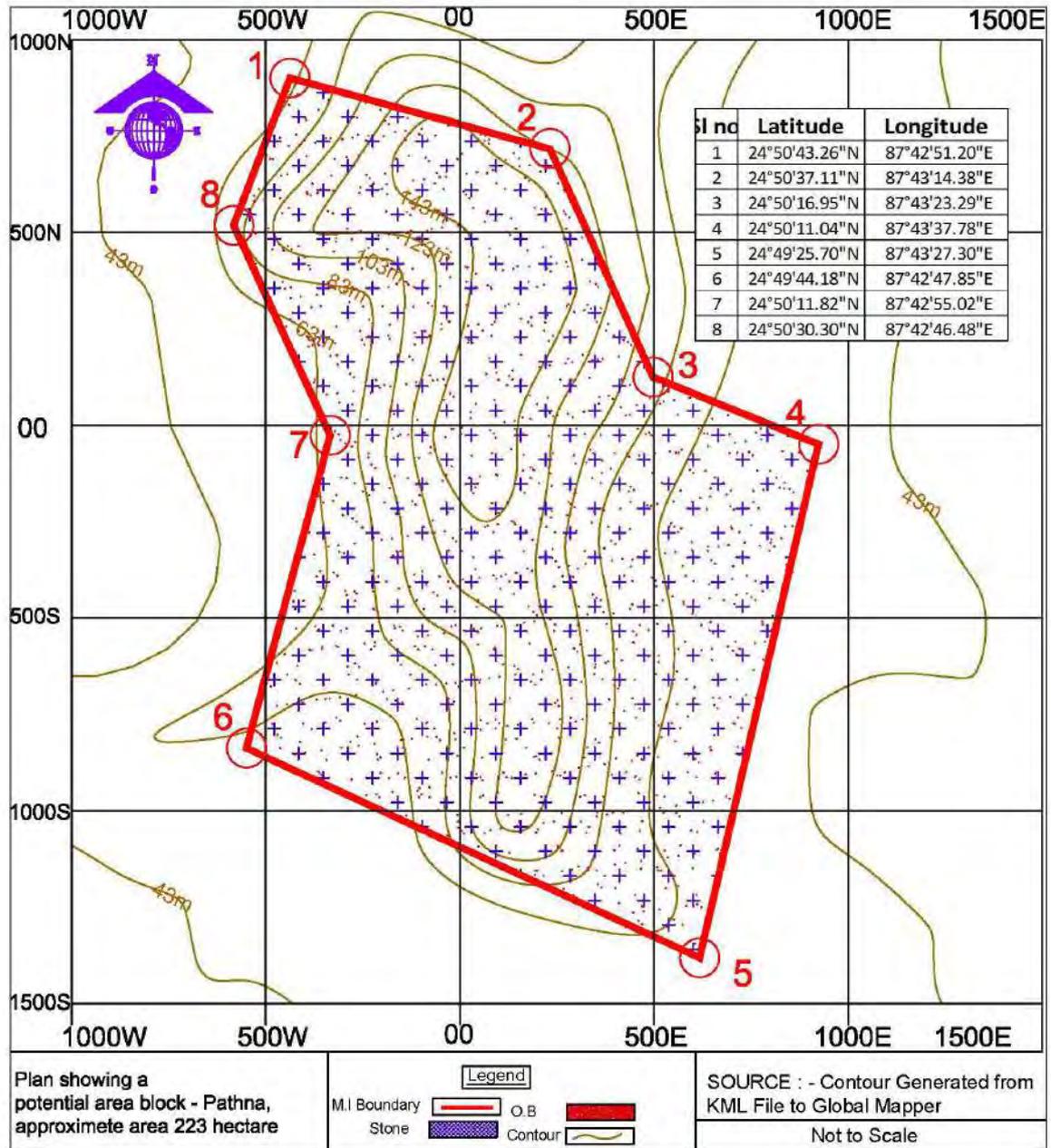
Image showing the Potential Area (Block – D, Mineral - Basalt) As Per KML Data

| Sl no | Latitude | Longitude |
|-------|---------------|---------------|
| 1 | 24°50'43.26"N | 87°42'51.20"E |
| 2 | 24°50'37.11"N | 87°43'14.38"E |
| 3 | 24°50'16.95"N | 87°43'23.29"E |
| 4 | 24°50'11.04"N | 87°43'37.78"E |
| 5 | 24°49'25.70"N | 87°43'27.30"E |
| 6 | 24°49'44.18"N | 87°42'47.85"E |
| 7 | 24°50'11.82"N | 87°42'55.02"E |
| 8 | 24°50'30.30"N | 87°42'46.48"E |



List of villages falling under the potential area:

Borna, Modikola, Telbhita, Kendua, Dahujor



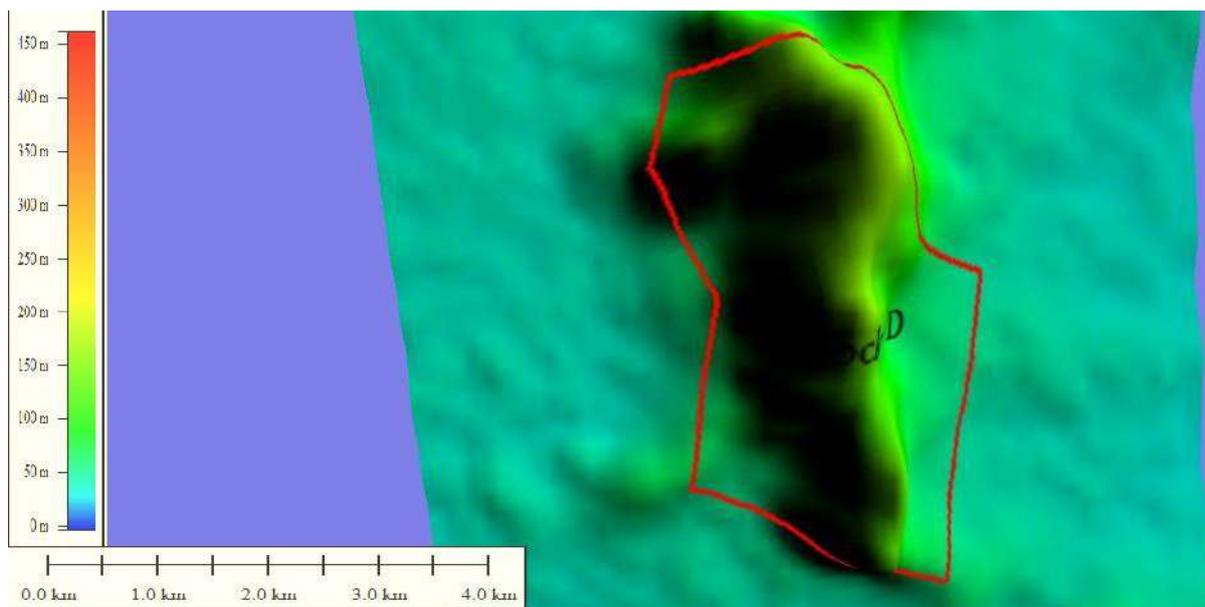


Image showing 3D Topographic view of the Potential Area

Volume of Potential Area - D, Block - Pathna, Area 213 Hectare

| Section Proved 143 TO 63 | Cross sectional area of O.B in sqm | Total Cross Sectional area in sqm | Influence Length m | Total Volume of O.B in Cum situ (B) | Total Volume in Cum situ (A) | Total Volume of Stone Cum situ (A-B) | Recovery 60% in m cum situ | Million tons of Stone |
|--------------------------|------------------------------------|-----------------------------------|--------------------|-------------------------------------|------------------------------|--------------------------------------|----------------------------|-----------------------|
| 500N | 3639 | 44631.00 | 390 | 1419210 | 17406090.00 | 15986880.00 | 38.950968 | 105.17 |
| 0.00 | 4510 | 41161.00 | 500 | 2255000 | 20580500.00 | 18325500.00 | | |
| 500S | 4883 | 28426.00 | 1300 | 6347900 | 36953800.00 | 30605900.00 | | |
| Total | | | | 10022110 | 74940390.00 | 64918280.00 | | |

Block - Barharwa

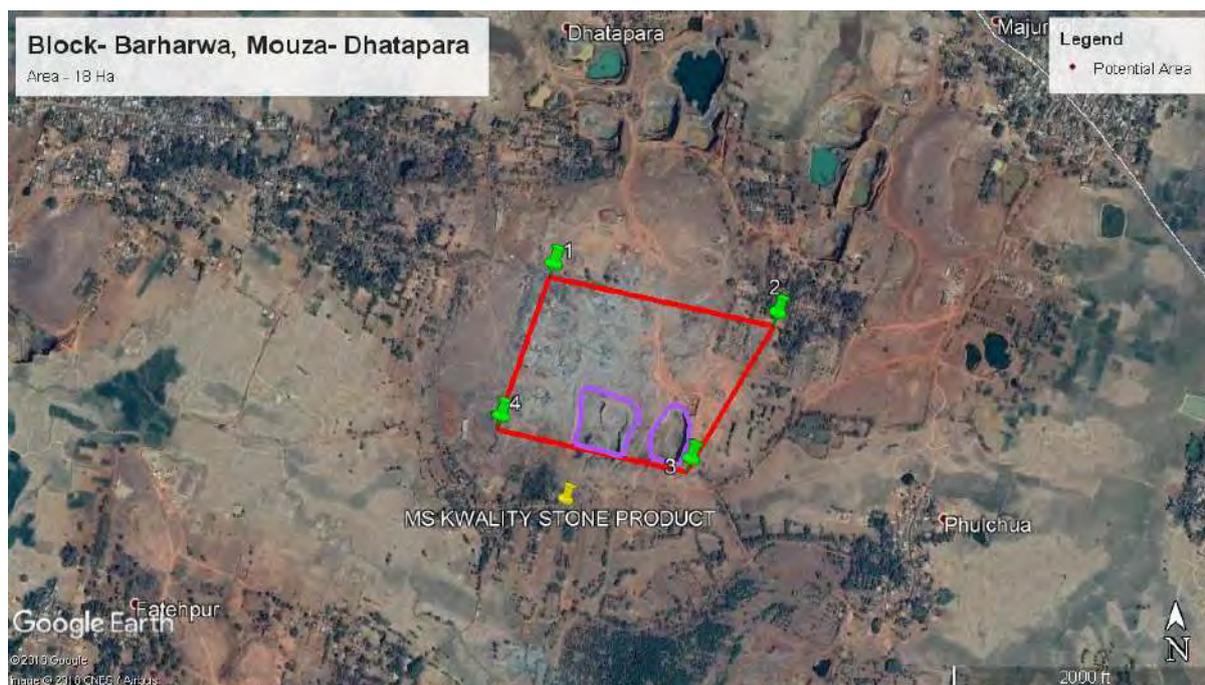


Image showing the Potential Area (Block – A, Mineral – Basalt & Granite Gneiss) As Per KML Data

| Sl.no | Latitude | Longitude |
|-------|---------------|---------------|
| 1 | 24°45'40.18"N | 87°47'35.37"E |
| 2 | 24°45'36.54"N | 87°47'53.65"E |
| 3 | 24°45'25.62"N | 87°47'46.59"E |
| 4 | 24°45'28.85"N | 87°47'31.04"E |

| Details of Excavated Area within this potential area | | | |
|--|---------------|---------------|-----------|
| Sl. No. | Latitude | Longitude | Area (Ha) |
| 1 | 24°45'28.05"N | 87°47'40.26"E | 1.61 |
| 2 | 24°45'27.86"N | 87°47'45.32"E | 0.93 |



Village – Dhatapara, Panchayat - Majurkol

District Survey Report of Sahibganj, Jharkhand

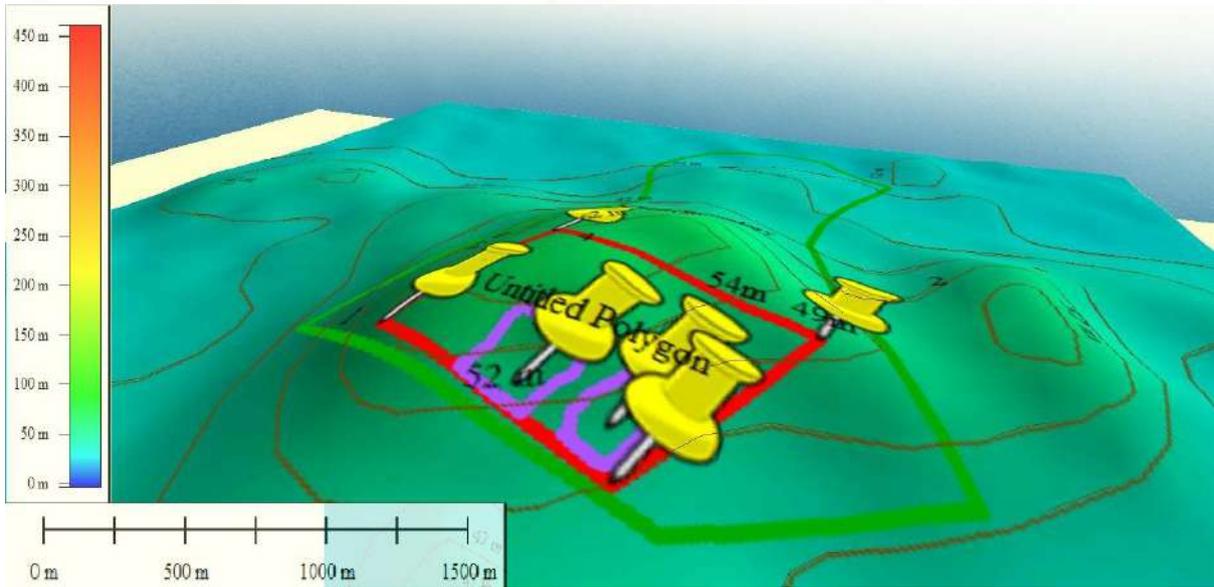
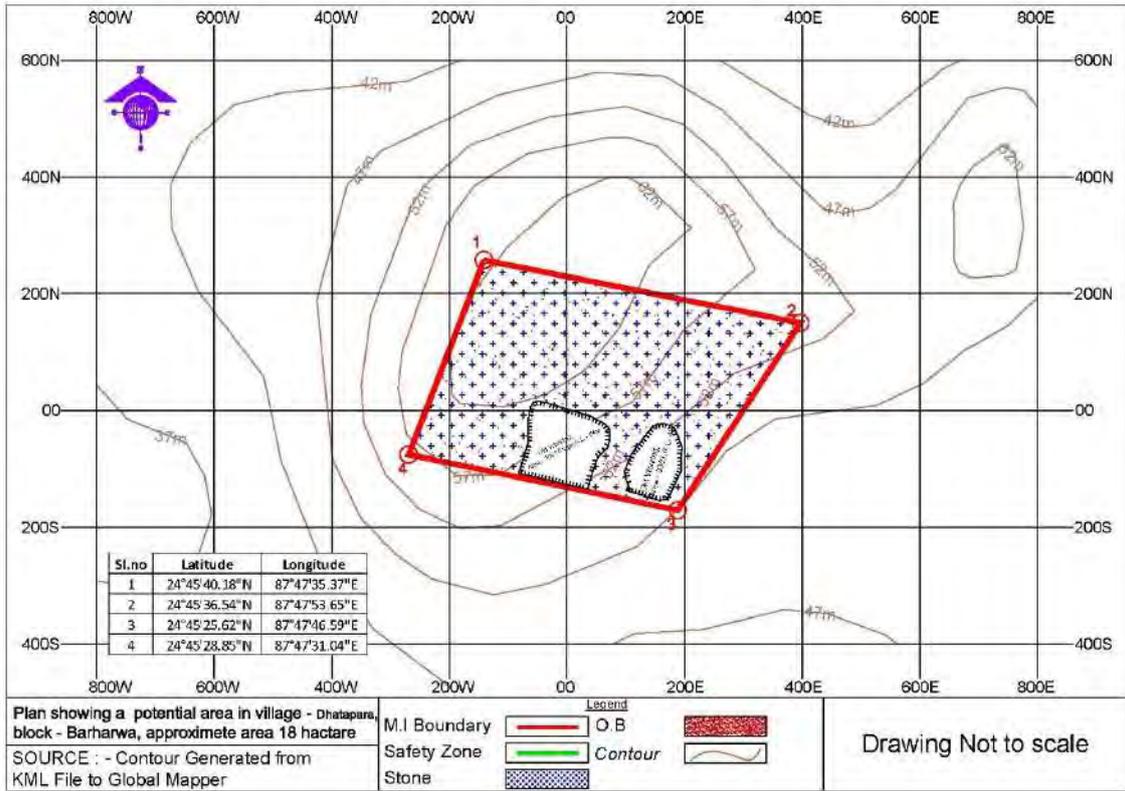


Image showing 3D Topographic view of the Potential Area

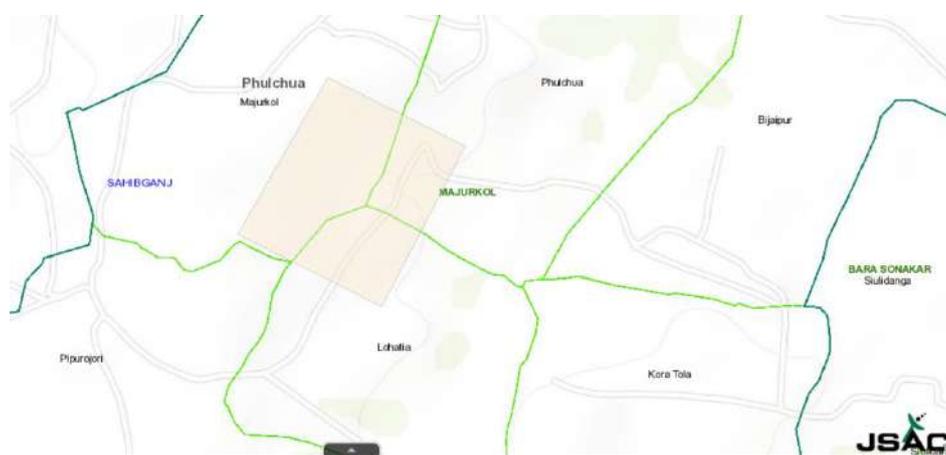
Block - Barharwa, Vill - Dhatapara, Area - 18 Ha Volume in cum

| Area in Ha | Length in M | Width in M | Min R.L in M | Max. R.L in M | Avg. Height in M | Total Volume in Situ in Million cum | Total Volume of O.B in Cum at depth upto 4m | Volume of Stone in m cum | Recovery Factor 60% in m cum | Million tons of Stone |
|------------|-------------|------------|--------------|---------------|------------------|-------------------------------------|---|--------------------------|------------------------------|-----------------------|
| 18 | 370 | 487 | 47 | 62 | 15 | 2.70285 | 0.72076 | 1.98209 | 1.189254 | 3.2109858 |



Image showing the Potential Area (Block – B, Mineral – Basalt & Granite Gneiss) As Per KML Data

| Sl.no | Latitude | Longitude |
|-------|---------------|---------------|
| 1 | 24°45'14.72"N | 87°47'52.57"E |
| 2 | 24°45'9.62"N | 87°48'3.83"E |
| 3 | 24°44'57.68"N | 87°47'57.00"E |
| 4 | 24°45'3.04"N | 87°47'45.27"E |



Village – Lohatia, Panchayat - Majurkol

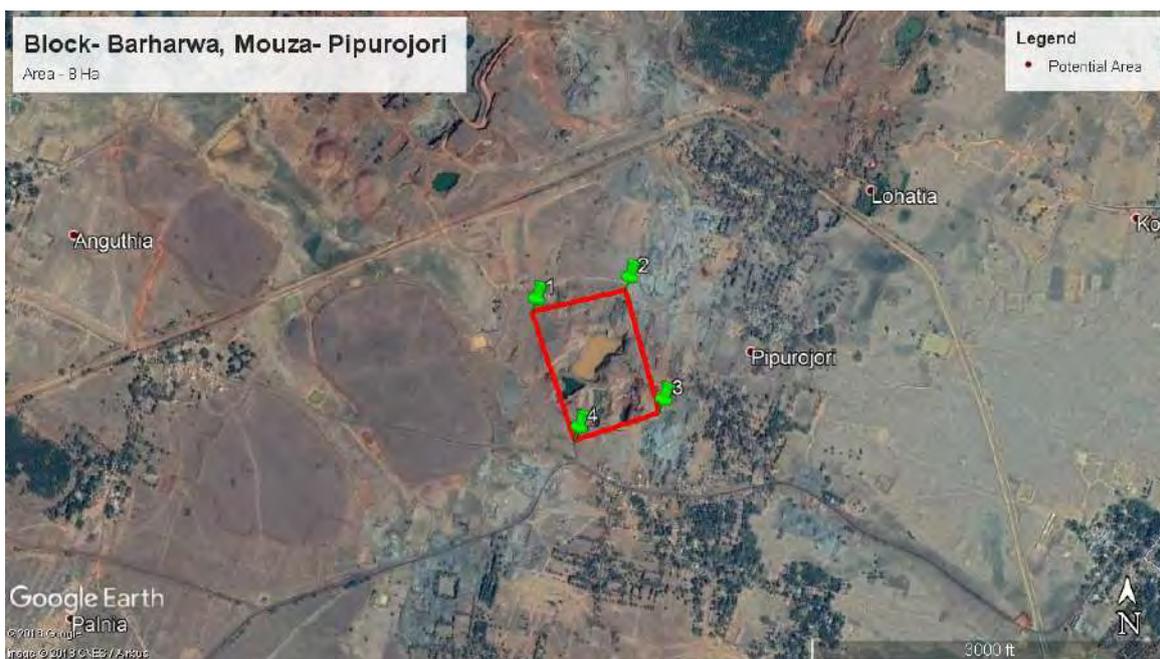


Image showing the Potential Area (Block – C, Mineral – Basalt & Granite Gneiss) As Per KML Data

| Sl.no | Latitude | Longitude |
|-------|---------------|---------------|
| 1 | 24°44'42.30"N | 87°47'21.24"E |
| 2 | 24°44'44.10"N | 87°47'29.74"E |
| 3 | 24°44'33.89"N | 87°47'32.84"E |
| 4 | 24°44'31.57"N | 87°47'25.12"E |



Village – Pipurjori, Panchayat - Majurkol

Block - Barharwa, Vill - Pipurojori, Area - 8 Ha Volume in cum

| Area in Ha | Length in M | Width in M | Min R.L in M | Max. R.L in M | Depth in m av. R.L 53 to 33 | Total Volume in Situ in Million cum | Total Volume of O.B in Cum at depth upto 4m | Volume of Stone in m cum | Recovery Factor 60% in m cum | Million tons of Stone |
|------------|-------------|------------|--------------|---------------|-----------------------------|-------------------------------------|---|--------------------------|------------------------------|-----------------------|
| 8 | 334 | 240 | 51 | 55 | 20 | 1.6032 | 0.32064 | 1.28256 | 0.769536 | 2.0777472 |

Block - Rajmahal

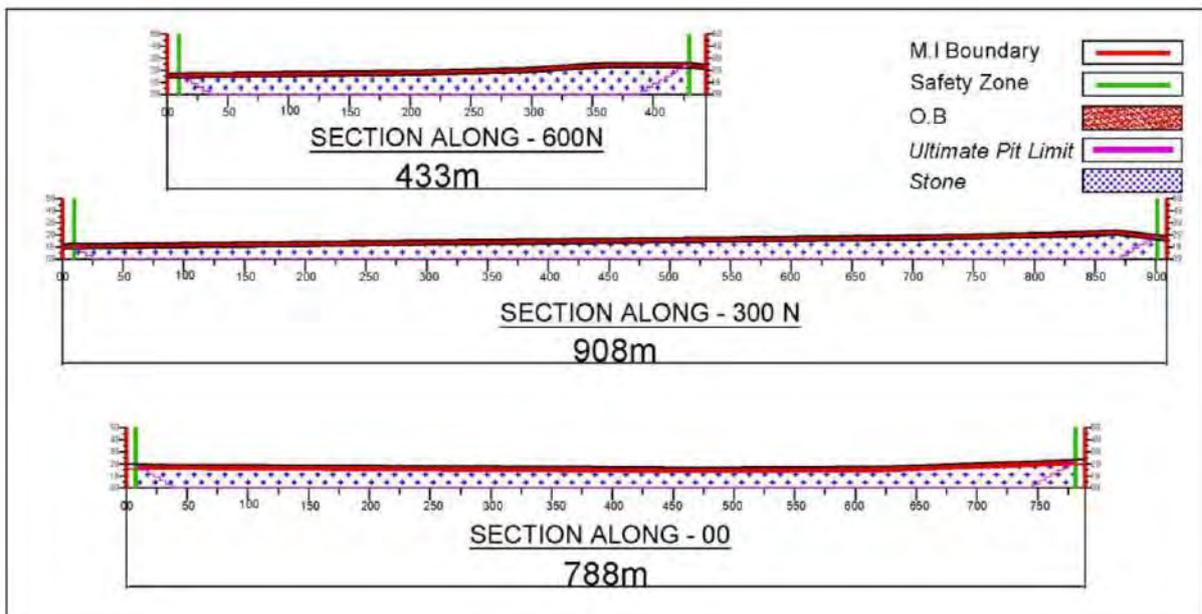
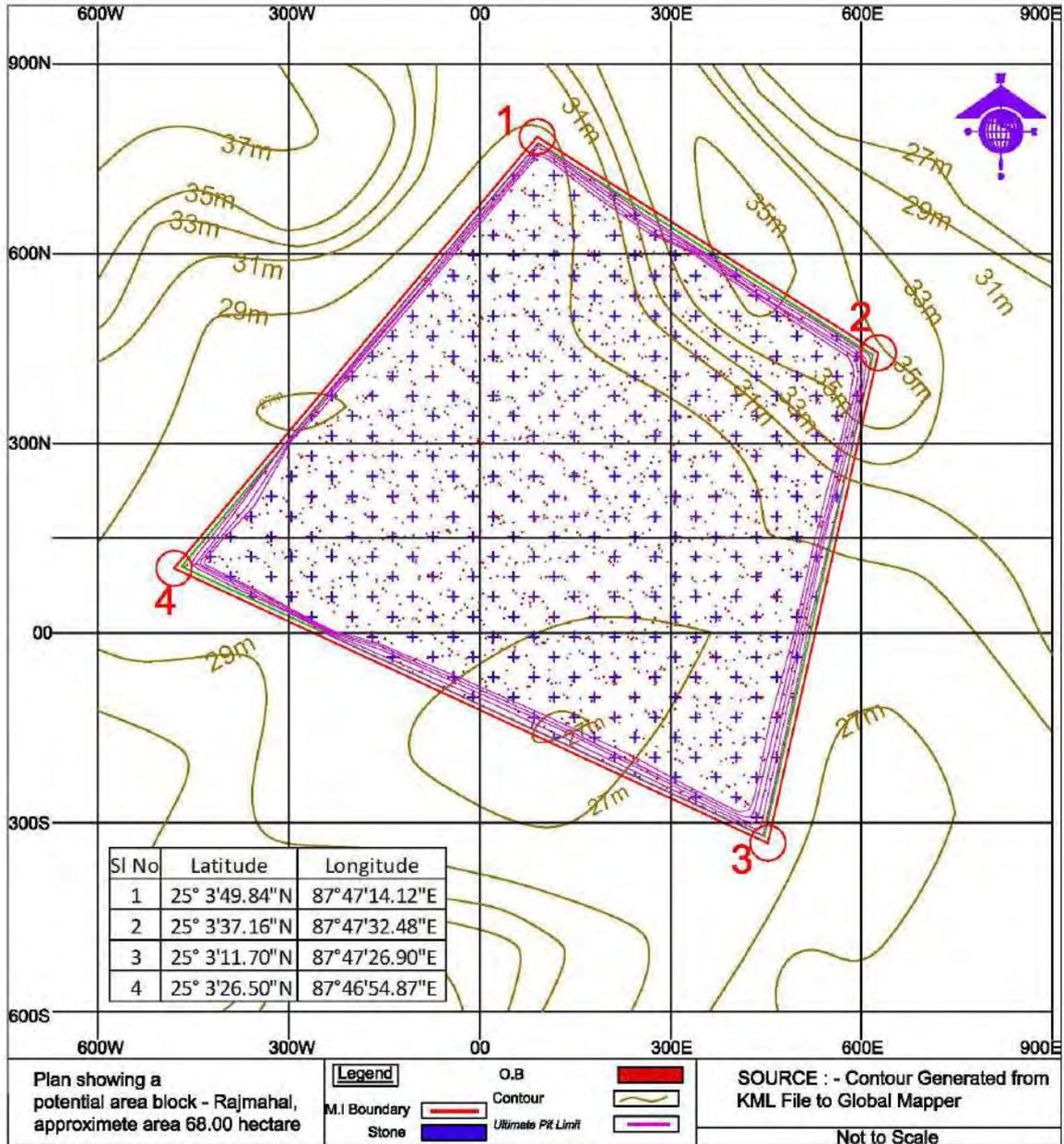


Image showing the Potential Area (Block – A, Mineral – China Clay) As Per KML Data

| Sl No | Latitude | Longitude |
|-------|---------------|---------------|
| 1 | 25° 3'49.84"N | 87°47'14.12"E |
| 2 | 25° 3'37.16"N | 87°47'32.48"E |
| 3 | 25° 3'11.70"N | 87°47'26.90"E |
| 4 | 25° 3'26.50"N | 87°46'54.87"E |



Villages under this potential area : Raibazar, Mahasingpur, Mundomala, Kasba



District Survey Report of Sahibganj, Jharkhand

| | | <i>Total Volum In cum</i> | | | | <i>Volum Of ROM In Cum</i> | | | |
|--|---|-----------------------------------|-----------------------------------|---|---------------------------------|------------------------------------|-----------------------------------|---------------------------------|---|
| Section Proved 29 TO 09 | Cross sectional area of O.B in sqm | Sectional area sqm | Inffuence Length m | Total Volume of O.B in Cum (B) | Total Volume Cum | Sectional area sqm | Inffuence Length m | Total Volume Cum | ROM Blocked In Benches and safety zone Cum |
| 600N | 1775 | 7692 | 295 | 523625 | 2269140 | 8177.00 | 295 | 2412215.00 | 143075.00 |
| 300N | 3636 | 12066 | 300 | 1090800 | 3619800 | 15026.00 | 300 | 4507800.00 | 888000.00 |
| 0.00 | 3156.00 | 11685 | 400 | 1262400 | 4674000 | 13777.00 | 400 | 5510800.00 | 836800.00 |
| | | | | 2876825 | 8293800 | | | 10018600.00 | 1867875.00 |

SUMMARY OF TOTAL RESOURCE

| working area details | R.L in m | Vol of total O.B | Volume of stone | Recovery 60% of A | | |
|---|-----------------|-----------------------------|----------------------------|------------------------------|--------------------|---------------------|
| | | cum | Cum | Cum | MT=B ×2.7 | Million tons |
| | | | A | B | C | D |
| from surface up to 20m depth | 29 to 09 | 0 | 10018600.00 | 6011160.00 | 16230132.00 | 16.230 |
| Total | | 1 | 10018600.00 | 6011160.00 | 16230132.00 | 16.230 |

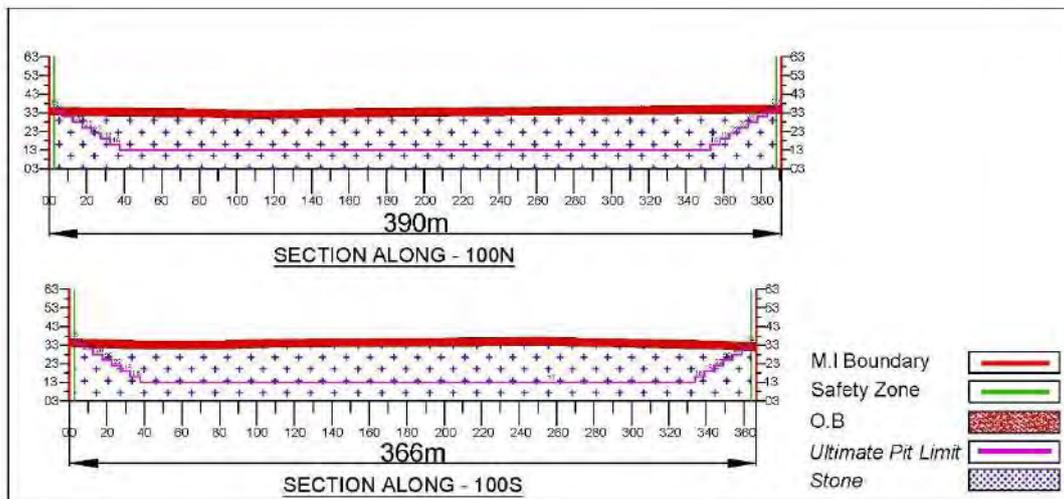
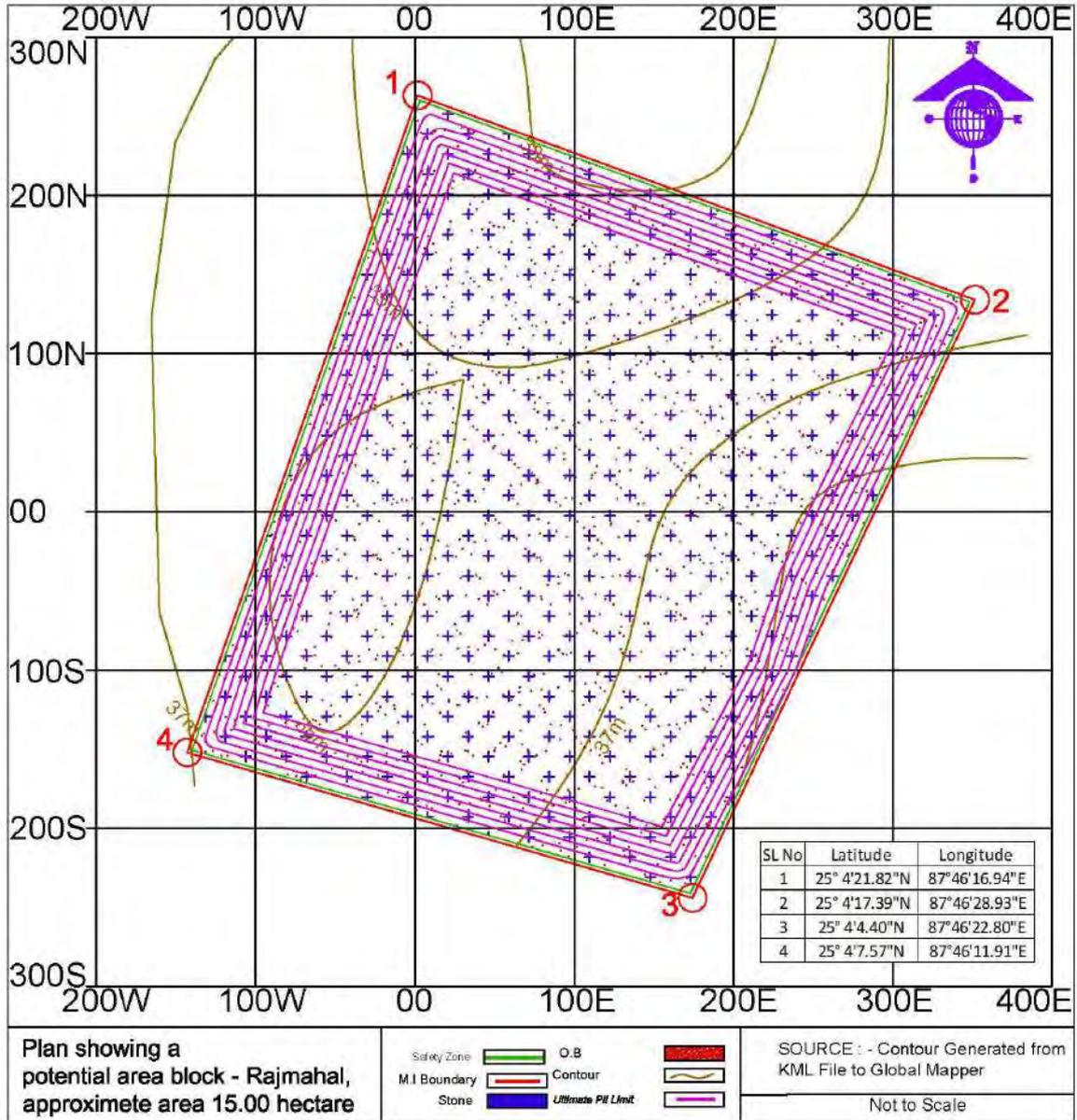


Image showing the Potential Area (Block – B, Mineral – China Clay) As Per KML Data

| SL No | Latitude | Longitude |
|-------|---------------|---------------|
| 1 | 25° 4'21.82"N | 87°46'16.94"E |
| 2 | 25° 4'17.39"N | 87°46'28.93"E |
| 3 | 25° 4'4.40"N | 87°46'22.80"E |
| 4 | 25° 4'7.57"N | 87°46'11.91"E |



Village – Kasba



District Survey Report of Sahibganj, Jharkhand

| Total Volum In cum | | | | | Volum Of ROM In Cum | | | | |
|--------------------------------|---|---------------------------|---------------------------|---------------------------------------|----------------------------|---------------------------|---------------------------|-------------------------|---|
| Section Proved 33 TO 13 | Cross sectional area of O.B in sqm | Sectional area sqm | Inffuence Length m | Total Volume of O.B in Cum (B) | Total Volume Cum | Sectional area sqm | Inffuence Length m | Total Volume Cum | ROM Blocked In Benches and safety zone Cum |
| 100N | 1562 | 7255 | 156 | 243672 | 1131780 | 7859.00 | 156 | 1226004.00 | 94224.00 |
| 100S | 1466.00 | 6940 | 294 | 431004 | 2040360 | 7557.00 | 294 | 2221758.00 | 181398.00 |
| | | | | 674676 | 3172140 | | | 3447762.00 | 275622.00 |

SUMMRUCTONY OF TOTAL PROD

| working area details | R.L in m | Vol of total O.B | Volume of stone | Recovery 60% of A | | |
|-------------------------------------|-----------------|-------------------------|------------------------|--------------------------|-------------------|---------------------|
| | | cum | Cum | Cum | MT=B ×2.7 | Million tons |
| | | | A | B | C | D |
| from surface up to 20m depth | 33 to 13 | 0 | 3447762.00 | 2068657.20 | 5585374.44 | 5.585 |
| Total | | 0 | 3447762.00 | 2068657.20 | 5585374.44 | 5.585 |

15. QUALITY/GRADE OF MINERAL AVAILABLE IN THE DISTRICT

Rocks and Minerals found in Sahibganj District:-

➤ **GRANITE GNEISS / MIGMATITE**

Granite gneiss is a rock consisting of an orthogneiss or paragneiss having the composition of a granite. Gneiss is an old German word meaning bright or sparkling. It is a high grade metamorphic rock, meaning that it has been subjected to higher temperatures and pressures than schist. It is formed by the metamorphosis of granite, or sedimentary rock. Gneiss displays distinct foliation, representing alternating layers composed of different minerals. However, unlike slate and schist, gneiss does not preferentially break along planes of foliation because less than 50% of the minerals formed during the metamorphism are aligned in thin layers. Because of the coarseness of the foliation, the layers are often sub-parallel, i.e. they do not have a constant thickness, and discontinuous.

Mineralogy The granite gneiss includes several varieties: banded gneiss, schistose granite, porphyroblastic gneissose granite and granodiorite. Grain size -medium to coarse grained; can see crystals with the naked eye. Hardness -hard. The granite gneiss is full of mafic enclaves at places. The gneiss is composed of quartz, microcline, plagioclase (An₂₀-An₄₄), biotite, hornblende and other accessory minerals, but lacks in muscovite. Felsic minerals such as feldspar (orthoclase, plagioclase) and quartz generally form the light coloured bands; mafic minerals such as biotite, pyroxene (augite) and amphibole (hornblende) generally form the dark coloured bands.

Texture - foliated, foliation on a scale of cm or more.

Colour - variable - generally alternating lighter and darker sub-parallel discontinuous bands garnet porphyroblasts common.

Occurrence- The granite gneiss complex is a composite mass consisting mainly of granite gneiss, migmatites and massive granite with enclaves of para and orthometamorphics, dykes of dolerite and innumerable veins of pegmatite; aplite and quartz. Because of repeated folding, highgrade regional metamorphism and profuse granitic activities, the elucidation of the stratigraphic succession in the area poses a great problem.

MIGMATITE - The magmatic rocks are exposed in several parts, both as an 'in situ' migmatites and as an injection migmatites. There are innumerable enclaves of mica-schist and hornblende schist of varying size in the granitic rocks. Biotite rich schlierens show considerable amount of contortion and flowage. Thin leucocratic, granites are commonly seen to form 'lit-per-lit' veins in the enclaves. Sometimes, the leucocratic granites and the metamorphic country rocks are intermingled in layer in fine scale so that the resulting rock is a banded gneiss or a banded augen gneiss. The minerals in the schlierens or melanosocnes are recrystallised and show schistose structure

with marked variation in the proportion of mafics. The leucosomes generally show crude hypidiomorphic texture with subhedral laths of microcline, and plagioclase (albite-orthoclase), anhedral grains of quartz and some thin flakes of biotite with minor amounts of apatite, sphene, epidote and opaque ores. Perthites (microcline - micro perthite) and myrmekites are quite common. Potash feldspar rimmed with albite and occurring within potash feldspars is also noted. Some potash feldspar plates show sieve structure with quartz inclusions. Muscovite is generally absent but whenever present, is seen gradually being replaced by orthoclase from the borders and along the cleavage planes.

Geographical Location of Granitic Rocks in Sahibganj District – In Sahibganj district Granitic rocks are found in **Sahibganj block (25°16'N : 87°36'E)**.

➤ **Rajmahal Trap- Basalt (Rajmahal Formation)**

By definition, basalt is dark coloured aphanitic (fine-grained) igneous rock with generally 45-53% silica (SiO₂) and less than 10% feldspathoid by volume, and where at least 65% of the rock is feldspar in the form of plagioclase. This is as per definition of the International Union of Geological Sciences (IUGS) classification scheme. It most commonly forms as an extrusive rock, such as a lava flow, but can also form in small intrusive bodies, such as an igneous dyke or a thin sill.

Mineralogy - Essential minerals are augite, calcic plagioclase and iron oxide. Usually Olivine is also present. Labradorite feldspar is the chief constituent of the groundmass where as more calcic plagioclase (bytownite or anorthite) may occur as phenocrysts.

Geological formation- The Rajmahal Formation exposed in the Rajmahal area is represented by 450 to 550m thick predominantly basaltic lava flows (4-15 individual flows) intercalated with fresh-water sedimentary beds. This formation is well developed in the Rajmahal hills of Jharkhand, Bihar and West Bengal. It is made up of extensive lavaflows of Basic composition, called the Rajmahal Traps. The hills extend in N-S direction for about 125 km from near the River Ganga at Sahibganj to 24°N latitude. The basalts are intercalated with clay stone, siltstone, some of which are silicified and porcellanoid. The cumulative thickness of these intertrappean beds is about merely 40 m.

The Rajmahal formation can be divided into four units: lower lava flows with intercalated unfossiliferous sedimentary beds from the lowermost unit. The second unit comprises five to six lava flows with four to five sedimentary beds composed of tuff, claystone, siltstone, etc. The fourth unit comprises series of basalt flows with or without sedimentary beds. The radiometric dating of the Rajmahal traps has shown that they are of Albian age.

Geographical Location of Rajmahal Trap -Basalt in Sahibganj District- In Sahibganj district Rajmahal Trap- Basalt are found in Mandro, Borio, Barhait, Pathna, Taljhari Blocks.

➤ **Sandstone & Shale:-**

Sandstone is a clastic sedimentary rock composed mainly of sand-sized (0.0625 to 2 mm) mineral particles or rock fragments. It is clastic in origin (as opposed to either organic, like chalk and coal, or chemical, like gypsum and jasper). They are formed from cemented grains that may either be fragments of a pre-existing rock or be monomineralic crystals. The cements binding these grains together are typically calcite, clays, and silica. Grain sizes in sands are defined (in geology) within the range of 0.0625 mm to 2 mm (0.002–0.079 inches). Clays and sediments with smaller grain sizes not visible with the naked eye, including siltstones and shales, are typically called argillaceous sediments; rocks with larger grain sizes, including breccias and conglomerates, are termed rudaceous sediments.

Mineralogy:- The chemical compounds like silicon dioxide or silica, calcium carbonate, and iron dioxide act as natural cementing agents to hold together the sand in the form of a rock that we know by the name of sandstone. Chemically, sandstone is an absolutely impervious and monomineralic rock that is primarily composed of quartz.

Shale is a fine-grained, clastic sedimentary rock composed of mud that is a mix of flakes of clay minerals and tiny fragments (silt-sized particles) of other minerals, especially quartz and calcite. Shale is characterized by breaks along thin laminae or parallel layering or bedding less than one centimeter in thickness, called fissility. It is the most common sedimentary rock.

Geographical Location of Sandstone and Shale in Sahibganj District- In Sahibganj district Sandstone and Shale are found in **Barhait Block(24°52'N : 87°30'E)**.

➤ **Quartz:-**

Quartz is a mineral composed of silicon and oxygen atoms in a continuous framework of SiO₄ silicon–oxygen tetrahedra, with each oxygen being shared between two tetrahedra, giving an overall chemical formula of SiO₂. Quartz is the second most abundant mineral in Earth's continental crust, behind feldspar

Occurrence- Quartz is a defining constituent of granite and other felsic igneous rocks. It is very common in sedimentary rocks such as sandstone and shale. It is a common constituent of schist, gneiss, quartzite and other metamorphic rocks.

While the majority of quartz crystallizes from molten magma, much quartz also chemically precipitates from hot hydrothermal veins as gangue, sometimes with ore minerals like gold, silver and copper. Large crystals of quartz are found in magmatic pegmatites. Well-formed crystals may reach several meters in length and weigh hundreds of kilograms.

Geographical Location of Quartz in Sahibganj District- It is common constituent of schist, gneiss, quartzite, sandstone, shale. It is found in almost every block of Sahibganj District.

➤ **Bentonite:-**

Bentonite is an absorbent aluminium phyllosilicate clay consisting mostly of montmorillonite.

The different types of bentonite are each named after the respective dominant element, such as potassium (K), sodium (Na), calcium (Ca), and aluminium (Al).

Occurrence- Bentonite usually forms from weathering of volcanic ash, most often in the presence of water. However, the term bentonite, as well as a similar clay called tonstein, has been used to describe clay beds of uncertain origin. For industrial purposes, two main classes of bentonite exist: sodium and calcium bentonite. In stratigraphy and tephrochronology, completely devitrified (weathered volcanic glass) ash-fall beds are commonly referred to as K-bentonites when the dominant clay species is illite. In addition to montmorillonite and illite another common clay species that is sometimes dominant is kaolinite. Kaolinite-dominated clays are commonly referred to as tonsteins and are typically associated with coal.

Chemical Composition- Chemically, montmorillonite is described as a hydrous aluminum silicate containing small amounts of alkali and alkaline earth metals. Structurally, montmorillonite is made of two basic building blocks, the aluminum octahedral sheet and the silica tetrahedral sheet.

Geographical Location of Bentonite in Sahibganj District:- It is found in Taljhari Block in Ranga, Pokharia and Manoharpur village.

➤ **Flint**

Flint is a hard, sedimentary cryptocrystalline form of the mineral quartz, categorized as a variety of chert. It occurs chiefly as nodules and masses in sedimentary rocks, such as chalks and limestones. Inside the nodule, flint is usually dark grey, black, green, white or brown in colour, and often has a glassy or waxy appearance. A thin layer on the outside of the nodules is usually different in colour, typically white and rough in texture. From a petrological point of view, "flint" refers specifically to the form of chert which occurs in chalk or marly limestone. Similarly, "common chert" (sometimes referred to simply as "chert") occurs in limestone. The uniform fine grain, brittleness, and conchoidal fracture made it relatively easy to shape arrowheads by flaking off chips, and the edges produced were quite sharp.

Occurrence-

The exact mode of formation of flint is not yet clear, but it is thought that it occurs as a result of chemical changes in compressed sedimentary rock formations, during the process of diagenesis. Chert and flint provided the main source of tools and weapons for Stone Age man.

Geographical Location of Flint in Sahibganj District:- It is found in Khorbanni, Bisunpur village in Rajmahal Block, Dudhkol village in Taljhari Block.

➤ China clay

Rocks that are rich in kaolinite are known as kaolin or china clay. Kaolinite is a clay mineral, part of the group of industrial minerals, with the chemical composition $Al_2Si_2O_5(OH)_4$. It is a layered silicate mineral, with one tetrahedral sheet of silica (SiO_4) linked through oxygen atoms to one octahedral sheet of alumina (AlO_6) octahedral.

Owing to their following features, these clays are widely demanded and appreciated :

- Good plasticity
- Ability to withstand high temperature
- Accurate composition
- Longer shelf life

Occurrence-

China clay occurs in abundance in soils that have formed from the chemical weathering of rocks in hot, moist climates—for example in tropical rainforest areas. Comparing soils along a gradient towards progressively cooler or drier climates, the proportion of kaolinite decreases, while the proportion of other clay minerals such as illite (in cooler climates) or smectite (in drier climates) increases. Such climatically-related differences in clay mineral content are often used to infer changes in climates in the geological past, where ancient soils have been buried and preserved.

Composition-

In its natural state China clay is a white, soft powder consisting principally of the mineral kaolinite, which, under the electron microscope, is seen to consist of roughly hexagonal, platy crystals ranging in size from about 0.1 micrometre to 10 micrometres or even larger. These crystals may take vermicular and book like forms, and occasionally macroscopic forms approaching millimetre size are found. Kaolin as found in nature usually contains varying amounts of other minerals such as muscovite, quartz, feldspar, and anatase. In addition, crude kaolin is frequently stained yellow by iron hydroxide pigments. It is often necessary to bleach the clay chemically to remove the iron pigment and to wash it with water to remove the other minerals in order to prepare kaolin for commercial use.

Geographical Location of China clay in Sahibganj District:- It is found in Rajmahal block.

➤ Coal

Geographical Location of Coal in Sahibganj District:- In Sahibganj district it is found Barhait block (24° 45':87°30' & 24°60':87°30')

Coal is a combustible black or brownish-black sedimentary rock usually occurring in rock strata in layers or veins called coal beds or coal seams. The harder forms, such as anthracite coal, can be regarded as metamorphic rock because of later exposure to elevated temperature and pressure. Coal is composed primarily of carbon, along with variable quantities of other elements, chiefly hydrogen, sulfur, oxygen, and nitrogen. Coal is a fossil fuel that forms when dead plant matter is converted into peat, which in turn is converted into lignite, then sub-bituminous coal, after that bituminous coal, and lastly anthracite. This involves biological and geological processes. The geological processes take place over millions of years.

Throughout human history, coal has been used as an energy resource, primarily burned for the production of electricity and heat, and is also used for industrial purposes, such as refining metals. Coal is the largest source of energy for the generation of electricity worldwide, as well as one of the largest worldwide anthropogenic sources of carbon dioxide releases. The extraction of coal, its use in energy production and its byproducts are all associated with environmental and health effects including climate change.

Formation-

At various times in the geologic past, the Earth had dense forests in low-lying wetland areas. Due to natural processes such as flooding, these forests were buried underneath soil. As more and more soil deposited over them, they were compressed. The temperature also rose as they sank deeper and deeper. As the process continued the plant matter was protected from biodegradation and oxidation, usually by mud or acidic water. This trapped the carbon in immense peat bogs that were eventually covered and deeply buried by sediments. Under high pressure and high temperature, dead vegetation was slowly converted to coal. As coal contains mainly carbon, the conversion of dead vegetation into coal is called carbonization.

The wide, shallow seas of the Carboniferous Period provided ideal conditions for coal formation, although coal is known from most geological periods. The exception is the coal gap in the Permian–Triassic extinction event, where coal is rare. Coal is known from Precambrian strata, which predate land plants—this coal is presumed to have originated from residues of algae.

Ranks-

As geological processes apply pressure to dead biotic material over time, under suitable conditions, its metamorphic grade increases successively into:

- Peat, considered to be a precursor of coal, which has industrial importance as a fuel in some regions. In its dehydrated form, peat is a highly effective absorbent for fuel and oil spills on land and water, and also used as a conditioner for soil to make it more able to retain and slowly release water.
- Lignite, or brown coal, the lowest rank of coal, used almost exclusively as fuel for electric power generation
 - Jet, a compact form of lignite, sometimes polished; used as an ornamental stone since the Upper Palaeolithic

- Sub-bituminous coal, whose properties range between those of lignite and those of bituminous coal (It is used primarily as fuel for steam-electric power generation and is also an important source of light aromatic hydrocarbons for the chemical synthesis industry.)
- Bituminous coal, a dense sedimentary rock, usually black, but sometimes dark brown, often with well-defined bands of bright and dull material (It is used primarily as fuel in steam-electric power generation, with substantial quantities used for heat and power applications in manufacturing and to make coke.)
- Steam coal, a grade between bituminous coal and anthracite (It was once widely used as a fuel for steam locomotives.
- Anthracite, the highest rank of coal (It is a harder, glossy black coal used primarily for residential and commercial space heating; it may be divided further into metamorphically altered bituminous coal and "petrified oil", as from the deposits in Pennsylvania.)
- Graphite (It is one of the more difficult coals to ignite and not commonly used as fuel; it is most used in pencils, or powdered for lubrication.)

16. USE OF MINERAL

➤ GRANITE GNEISS / MIGMATITE

Uses of granitic rocks-

- **Building Stone:-** Granitic rocks have been extensively used as a dimension stone and as flooring tiles in public and commercial buildings and monuments.
- **Sub base and base material in road and highway construction:-** Crushed stone is the most basic use of granite. Crushed granite is used as a sub base and base material in road and highway construction. It is used as crushed stone media in sewage system drain fields and as a base material for foundations and construction slabs. Crushed granite in attractive colors is used as a landscape stone and in planters. It also makes great railroad ballast, and in larger sizes it makes good riprap.
- **Engineering:-** Engineers have traditionally used polished granite surface plates to establish a plane of reference, since they are relatively impervious and inflexible. Sandblasted concrete with a heavy aggregate content has an appearance similar to rough granite, and is often used as a substitute when use of real granite is impractical. Granite block is usually processed into slabs, which can be cut and shaped by a cutting center. Granite tables are used extensively as bases for optical instruments because of granite's rigidity, high dimensional stability, and excellent vibration characteristics.
- **Granite Paving Stone:-** Granite paving stones or "pavers" can make a colorful and interesting way of paving a driveway or patio. The beauty of natural stone combined with expert craftsmanship and design can produce a unique and lasting result. In the past granite blocks were often used to pave city streets.

➤ Rajmahal Trap- Basalt (Rajmahal Formation)

Uses of Basalt-

- Basalt is used for a wide variety of purposes. It is most commonly crushed for use as an aggregate in construction projects. Crushed basalt is used for road base, concrete aggregate, asphalt pavement aggregate, railroad ballast, filter stone in drain fields, and may other purposes.
- Basalt is also cut into dimension stone. Thin slabs of basalt are cut and sometimes polished for use as floor tiles, building veneer, monuments, and other stone objects.

➤ Sandstone

Uses:-

- It has also been used for artistic purposes to create ornamental fountains and statues.
- Some sandstones are resistant to weathering, yet are easy to work. This makes sandstone a common building and paving material including in asphalt concrete.

➤ Shale

Uses-

- Shale is relatively fragile, as far as rock fragility goes, so it is rarely used for building materials or industrial uses in its raw form. When properly processed, it can be used as an additive in cement and art clay products.
- Shale uses in construction industry include Cement manufacture, Construction aggregate, For road aggregate, Making natural cement, Raw material for the manufacture of mortar.

➤ Quartz

Uses- Quartz is an important mineral with numerous uses.

- **Glass Making-** Geological processes have occasionally deposited *sand* that are composed of almost 100% quartz grains. These deposits have been identified and produced as sources of high purity silica sand. These sands are used in the glassmaking industry. Quartz sand is used in the production of container glass, flat plate glass, specialty glass and fibreglass
- **Abrasive-** The high hardness of quartz, seven on the Mohs Scale, makes it harder than most other natural substances. As such it is an excellent abrasive material. Quartz sands and finely ground silica sand are used for sand blasting, scouring cleansers, grinding media, and grit for sanding and sawing.
- **Foundry Sand-** Quartz is very resistant to both chemicals and heat. It is therefore often used as a foundry sand. With a melting temperature higher than most metals it can be used for the molds and cores of common foundry work.

Refractory brick are often made of quartz sand because of its high heat resistance. Quartz sand is also used as a flux in the smelting of metals.

- **Petroleum Industry-** Quartz sand has a high resistance to being crushed. In the petroleum industry *sand slurries* are forced down oil and gas wells under very high pressures in a process known as *hydraulic fracturing*. This high pressure fractures the reservoir rocks and the sandy slurry injects into the fractures. The durable sand grains hold the fractures open after the pressure is released. These open fractures facilitate the flow of natural gas into the well bore.
- **Many Other Quartz Sand Uses-** Quartz sand is used as a filler in the manufacture of rubber, paint and putty. Screened and washed, carefully sized quartz grains are used as filter media and roofing granules. Quartz sands are used for traction in the railroad and mining industries. These sands are also used in recreation on golf courses, volleyball courts, baseball fields, children's sand boxes and beaches.

➤ Flint

Uses-

- **Tools or cutting edges**

Flint was used in the manufacture of tools during the Stone Age as it splits into thin, sharp splinters called flakes or blades (depending on the shape) when struck by another hard object (such as a hammerstone made of another material). This process is referred to as knapping.

- **Flintlocks**

A piece of flint held in the jaws of a spring-loaded hammer, when released by a trigger, strikes a hinged piece of steel ("frizzen") at an angle, creating a shower of sparks and exposing a charge of priming powder. The sparks ignite the priming powder and that flame, in turn, ignites the main charge

- **As a building material**

Flint, knapped or unknapped, has been used from antiquity up to the present day as a material for building stone walls, using lime mortar, and often combined with other available stone or brick rubble.

- **Ceramics**

Flint pebbles are used as the media in ball mills to grind glazes and other raw materials for the ceramics industry. The pebbles are hand-selected based on colour; those having a tint of red, indicating high iron content, are discarded. The remaining blue-grey stones have a low content of chromophoric oxides and so are less deleterious to the colour of the ceramic composition after firing.

- **Jewellery**

Flint bracelets were known in Ancient Egypt, and several examples have been found. Striped flint is today in use as a gemstone as well.

- **Fragmentation**

While flint may be used in fire-lighting, it should not be exposed to excessive heat, as from a fire. Due to uneven expansion, flint may fracture, sometimes violently, during heating. This tendency to fracture is enhanced by the fact that most samples of flint contain impurities that may expand to a greater or lesser degree than the surrounding stone. This makes the material more homogeneous and thus more "knappable" and produces tools with a cleaner, sharper cutting edge.

➤ **China clay**

Uses-

- **Kaolin**, also called **china clay**, soft white clay that is an essential ingredient in the manufacture of china and porcelain and is widely used in the making of paper, rubber, paint, and many other products.
- When kaolin is mixed with water in the range of 20 to 35 percent, it becomes plastic (i.e., it can be molded under pressure), and the shape is retained after the pressure is removed. With larger percentages of water, the kaolin forms a slurry, or watery suspension.

➤ **Bentonite**

Uses-

- **Bentonite** is a type of absorbent clay that is usually refined from volcanic ash. Its high absorbency makes it a useful substance in industrial applications, in products like kitty litter and even in natural medicine.
- Bentonite also used as "Multani Mitti" has great scope of export to other parts of the other state of Jharkhand.

➤ **Coal**

Different types of coal have different uses.

- Steam coal - also known as thermal coal - is mainly used in power generation.
- Coking coal - also known as metallurgical coal - is mainly used in steel production.

Other important users of coal include alumina refineries, paper manufacturers, and the chemical and pharmaceutical industries. Several chemical products can be produced from the by-products of coal. Refined coal tar is used in the manufacture of chemicals, such as creosote oil, naphthalene, phenol, and benzene. Ammonia gas recovered from coke ovens is used to manufacture ammonia salts, nitric acid and agricultural fertilisers. Thousands of different products have coal or coal by-products as components: soap, aspirins, solvents, dyes, plastics and fibres, such as rayon and nylon.

Coal is also an essential ingredient in the production of specialist products:

- Activated carbon - used in filters for water and air purification and in kidney dialysis machines.
- Carbon fibre - an extremely strong but light weight reinforcement material used in construction, mountain bikes and tennis rackets.
- Silicon metal - used to produce silicones and silanes, which are in turn used to make lubricants, water repellents, resins, cosmetics, hair shampoos and toothpastes.

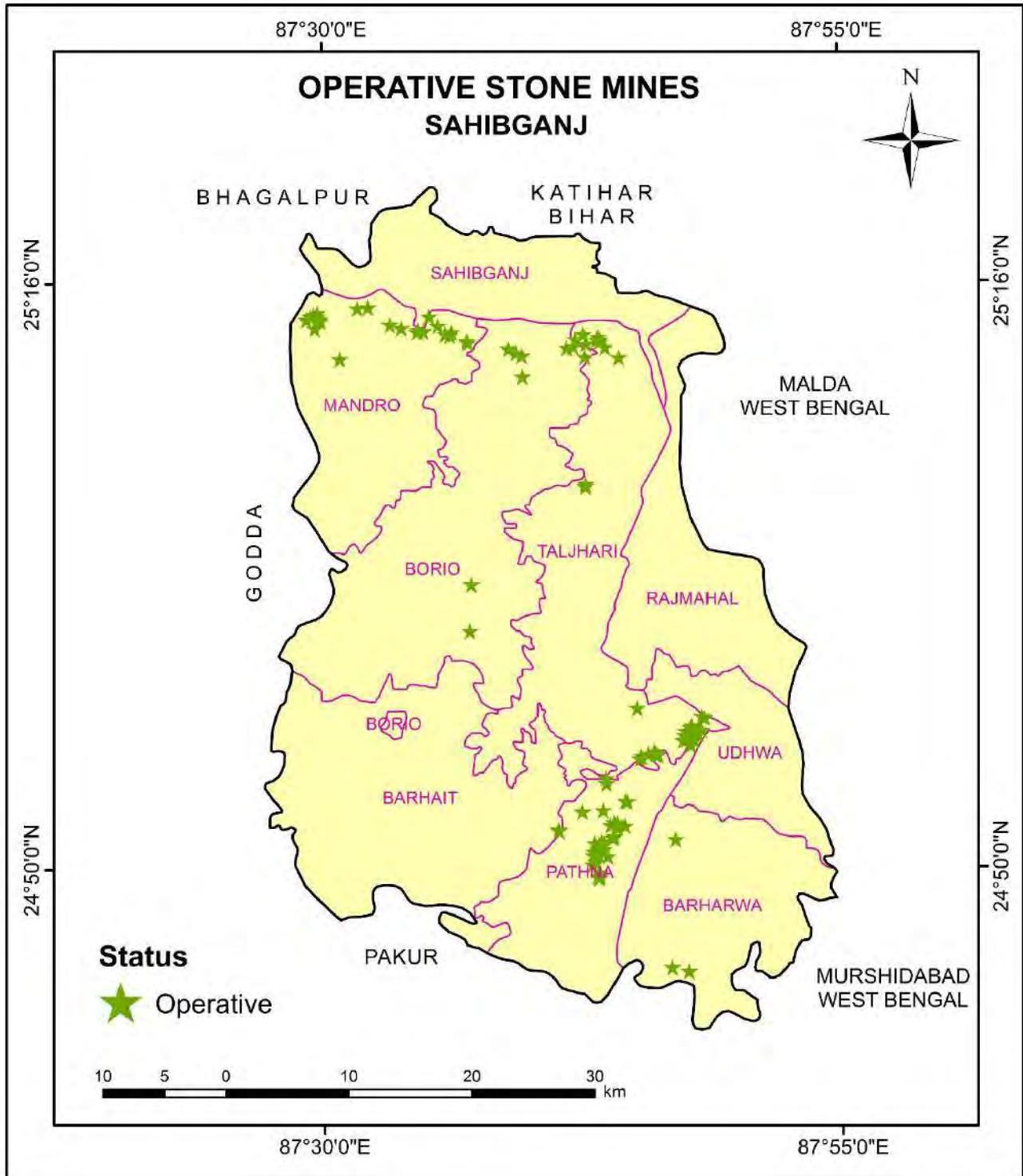
17. DEMAND AND SUPPLY OF THE MINERAL IN THE LAST THREE YEARS

As such there are huge infrastructural activities such as road, building, railways are coming up by Govt. of India & PSUs under “Make In India” programme.

The Granite Gneiss, Basalt are the main raw minerals for the above activities and considering the last three years’ actual production of Sahibganj with respect to the requirement of the state has a huge gap.

It is proposed to start the stone production from larger block/area to atleast double the production of the district which will enhance the revenue of the district and also support the livelihood of the local people.

18. MAP OF EXISTING MINING LEASES IN THE DISTRICT

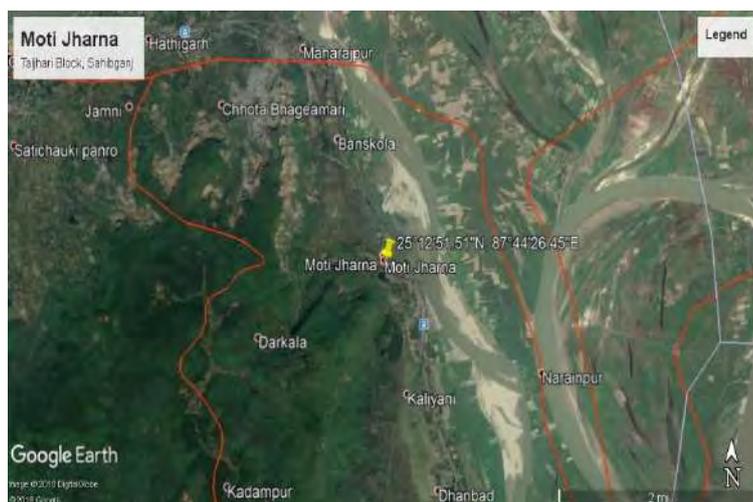


**19. DETAILS OF THE AREA OF WHERE THERE IS A CLUSTER OF MINING LEASE
VIZ. NUMBER OF MINING LEASES, LOCATION (LATITUDE AND LONGITUDE)**

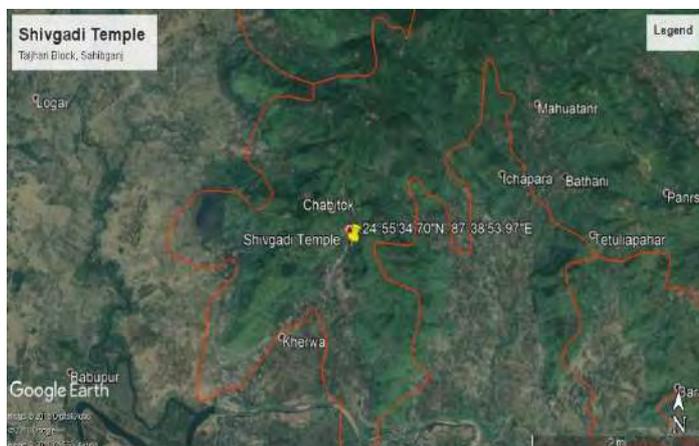
Currently there is no such cluster of mining lease. However, it is proposed to consider the cluster of mining lease while planning for new lease area in coming years.

20. DETAILS OF ECO-SENSITIVE AREA, IF ANY, IN THE DISTRICT

Moti Jharna Waterfall, Shivgadi Temple, Udhwa Bird Sanctuary and National Fossil Park have been identified as some of the important historical monuments in the district and it is suggested that a minimum distance as per DEIAA guideline to be declared as No Mining Zone.



Moti Jharna in Taljhari Block (Latitude: 25 12' 51.51"N, Longitude: 87 44' 26.45"E)



Shivgadi Temple in Taljhari Block (Latitude: 24 55' 34.70"N, 87 38' 53.97"E)

District Survey Report of Sahibganj, Jharkhand



Udhwa Bird Sanctuary (Latitude: 24 57' 54.06"N, 87 49' 37.30"E)



National Fossil Park, Ghughwa Forest, Sahibganj

21. IMPACT OF MINING ON ENVIRONMENT

Impact on Environment due to mining activities varies based on the quantum of production rate proposed. The different activities involved before & during mining are narrated below, which helps to assess the impact on environment.

- **Exploration:**

A mining project can only commence with knowledge of the extent and value of the mineral ore deposit. Information about the location and value of the mineral ore deposit is obtained during the exploration phase. This phase includes surveys, field studies, and drilling test boreholes and other exploratory excavations.

The exploratory phase may involve clearing of wide areas of vegetation (typically in lines), to allow the entry of heavy vehicles mounted with drilling rigs. Many countries require a separate EIA for the exploratory phase of a mining project because the impacts of this phase can be profound and because further phases of mining may not ensue if exploration fails to find sufficient quantities of high-grade mineral ore deposits of economical values.

- **Development**

If the mineral ore exploration phase proves that there is a large enough mineral ore deposit, of sufficient grade, then the project proponent may begin to plan for the development of the mine. This phase of the mining project has several distinct components.

- **Site preparation**

If a mine site is located in a remote, undeveloped area, the project proponent may need to begin by clearing land for the construction of staging areas that would house project personnel and equipment. Even before any land is mined, activities associated with site preparation and clearing can have significant environmental impacts, especially if they are within or adjacent to ecologically sensitive areas. The EIA must assess, separately, the impacts associated with site preparation and clearing.

- **Active mining**

Once a mining company has constructed access roads and prepared staging areas that would house project personnel and equipment, mining may commence. All types of active mining share a common aspect, i.e. the extraction and concentration (or beneficiation) of a metal from the earth. Proposed mining projects differ considerably in the proposed method for extracting and concentrating the metallic ore. In almost every case, metallic

ores are buried under a layer of ordinary soil or rock (called 'overburden' or 'waste rock') that must be moved or excavated to allow access to the ore deposit. The first way in which proposed mining projects differ is the proposed method of moving or excavating the overburden. What follows are brief descriptions of the most common methods.

- **Open-pit mining**

Open-pit mining is a type of strip mining in which the ore deposit extends very deep in the ground, necessitating the removal of layer upon layer of overburden and ore.

In many cases, logging of trees and clear-cutting or burning of vegetation above the ore deposit may precede removal of the overburden. The use of heavy machinery, usually bulldozers and dump trucks, is the most common means of removing overburden. Open-pit mining often involves the removal of natively vegetated areas, and is therefore among the most environmentally-destructive types of mining, especially within tropical forests.

- **Underground mining**

In underground mining, a minimal amount of overburden is removed to gain access to the ore deposit. Access to this ore deposit is gained by tunnels or shafts. Tunnels or shafts lead to a more horizontal network of underground tunnels that directly access the ore. In an underground mining method called 'stoping' or 'block caving,' sections or blocks of rock are removed in vertical strips that leave a connected underground cavity that is usually filled with cemented aggregate and waste rock.

Although underground mining is a less environmentally-destructive means of gaining access to an ore deposit, it is often costlier and entails greater safety risks than strip mining, including open-pit mining. While most large-scale mining projects involve open-pit mining, many large underground mines are in operation around the world.

- **Disposal of overburden and waste rock**

In almost every project, metallic ores are buried under a layer of ordinary soil or rock (called 'overburden' or 'waste rock') that must be moved or excavated to allow access to the metallic ore deposit. For most mining projects, the quantity of overburden generated by mining is enormous. The ratio of the quantity of overburden to the quantity of mineral ore (called the 'strip ratio')

is usually greater than one, and can be much higher. For example, if a proposed mining project involves the extraction of 100 million metric tons of mineral ore, then the proposed mining project could generate more than one billion metric tons of overburden and waste rock.

These high-volume wastes, sometimes containing significant levels of toxic

substances, are usually deposited on-site, either in piles on the surface or as backfill in open pits, or within underground mines. Therefore, the EIA for a proposed mining project must carefully assess the management options and associated impacts of overburden disposal.

- **Human displacement and resettlement**

According to the International Institute for Environment and Development:

The displacement of settled communities is a significant cause of resentment and conflict associated with large-scale mineral development. Entire communities may be uprooted and forced to shift elsewhere, often into purpose-built settlements not necessarily of their own choosing. Besides losing their homes, communities may also lose their land, and thus their livelihoods. Community institutions and power relations may also be disrupted. Displaced communities are often settled in areas without adequate resources or are left near the mine, where they may bear the brunt of pollution and contamination. Forced resettlement can be particularly disastrous for indigenous communities who have strong cultural and spiritual ties to the lands of their ancestors and who may find it difficult to survive when these are broken.

ENVIRONMENTAL AND SOCIAL IMPACTS OF MINING

The most important environmental impact of mining projects are:-

- **Acid mine drainage and contaminant leaching**

Acid mine drainage is considered one of mining most serious threats to water resources. A mine with acid mine drainage has the potential for long-term devastating impacts on rivers, streams and aquatic life.

HARM TO FISH & OTHER AQUATIC LIFE:

If mine waste is acid-generating, the impacts to fish, animals and plants can be severe. Many streams impacted by acid mine drainage have a pH value of 4 or lower – similar to battery acid. Plants, animals, and fish are unlikely to survive in streams such as this.

PERPETUAL POLLUTION:

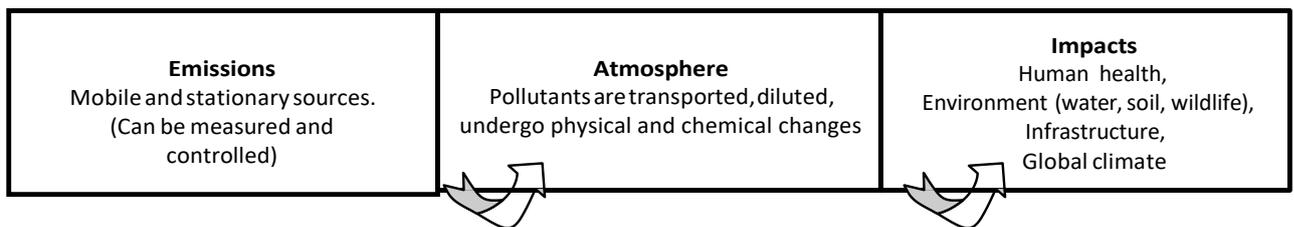
Acid mine drainage is particularly harmful because it can continue indefinitely causing damage long after mining has ended. Due to the severity of water quality impacts from acid mine drainage, many hardrock mines across the west require water treatment in perpetuity. Even with existing technology, acid mine drainage is virtually impossible to stop once the reactions begin.

To permit an acid generating mine means that future generations will take responsibility for a mine that must be managed for possibly hundreds of years.”

Impacts of mining projects on air quality:-

The largest sources of air pollution in mining operations are:

Particulate matter transported by the wind as a result of excavations, blasting, transportation of materials, wind erosion (more frequent in open-pit mining), fugitive dust from tailings facilities, stockpiles, waste dumps, and haul roads. Exhaust emissions from mobile sources (cars, trucks, heavy equipment) raise these particulate levels; and gas emissions from the combustion of fuels in stationary and mobile sources, explosions, and mineral processing. Once pollutants enter the atmosphere, they undergo physical and chemical changes before reaching a receptor. These pollutants can cause serious effects to people's health and to the environment.



Large-scale mining has the potential to contribute significantly to air pollution, especially in the operation phase. All activities during ore extraction, processing, handling, and transport depend on equipment, generators, processes and materials that generate hazardous air pollutants such as particulate matter, heavy metals, carbon monoxide, sulfur dioxide, and nitrogen oxides.

Transportation sources

Transportation sources of air pollutants include heavy vehicles used in excavation operations, cars that transport personnel at the mining site, and trucks that transport mining materials. The level of polluting emissions from these sources depends on the fuel and conditions of the equipment. Even though individual emissions can be relatively small, collectively these emissions can be of real concern. In addition, mobile sources are a major source of particulate matter, carbon monoxide, and volatile organic compounds that contribute significantly to the formation of ground-level ozone.

Stationary sources

The main gaseous emissions are from combustion of fuels in power generation installations, and drying, roasting, and smelting operations. Many producers of precious metals smelt metal on-site, prior to shipping to off-site refineries. Typically, gold and silver is produced in melting/fluxing furnaces that may produce elevated levels of airborne mercury, arsenic, sulfur dioxide, and other metals.

Fugitive emissions

Common sources of fugitive emissions include: storage and handling of materials; mine processing; fugitive dust, blasting, construction activities, and roadways associated with

mining activities; leach pads, and tailing piles and ponds; and waste rock piles. Sources and characteristics of fugitive emissions dust in mining operations vary in each case, as do their impacts. Impacts are difficult to predict and calculate but should be considered since they could be a significant source of hazardous air pollutants.

Noise and vibration

Noise pollution associated with mining may include noise from vehicle engines, loading and unloading of rock into steel dumpers, chutes, power generation, and other sources. Cumulative impacts of shoveling, ripping, drilling, blasting, transport, crushing, grinding, and stock-piling can significantly affect wildlife and nearby residents.

Vibrations are associated with many types of equipment used in mining operations, but blasting is considered the major source. Vibration has affected the stability of infrastructures, buildings, and homes of people living near large-scale open-pit mining operations. According to a study commissioned by the European Union in 2000: "Shocks and vibrations as a result of blasting in connection with mining can lead to noise, dust and collapse of structures in surrounding inhabited areas. The animal life, on which the local population may depend, might also be disturbed."

**22. REMEDIAL MEASURES TO MITIGATE THE IMPACT OF
MINING ON THE ENVIRONMENT**

Following are the remedial measures to mitigate the impact of mining :

1. Water sprinkeling on haul road, loading and unloading points.
2. Plantation along the safety zone and dump area.
3. Providing dust masks to workers.
4. Regular monitoring of ambient air quality.
5. Provision of air conditioned cabin of Excavators and Dumpers.
6. Regular and proper maintainance of working equipments.
7. Periodic medical examination of the workers and organise medical camp in the area.
8. Use Milli Second Delay Detonator in blasting operation.
9. Pvision of ear plug to the workers.
10. Regular training program to the mines workers and operators.

23. RECLAMATION OF MINED OUT AREA

Necessity of Reclamation & Rehabilitation:

- Exponential growth in mineral production since 1980.
- Mining activities causes physical, chemical, biological and socio-economic changes in the area.
- Surface mining activities disturb the original land profile.
- In India, mineral production comes mostly from opencast mines & hence Land degradation problems is of serious concern.
- An intricate, in-depth and site-specified techniques involving integrated approach is necessary.

Reclamation has three vital roles:

- Reclamation** – Reclamation means return the mined-out land with useful life. It implies restoring the land to a form and productivity that is useful and inconformity with a prior land use. Reclamation always may not be a single-phase operation.
- Rehabilitation** – Rehabilitation is to bring back the degraded land to a normal stage by a special treatment. It is a process of taking some mitigation measures for disturbed environmental condition created through mining activities.
- Restoration** – Restoration is the process of returning the mined out land being fit to an acceptable environmental condition. However, the general acceptable meaning of the term is bringing the disturbed land to its original form. Restoration is often used to indicate that biological properties of soil are put back to what they were. This is a rare phenomenon.

When active mining ceases, mine facilities and the site are reclaimed and closed. The goal of mine site reclamation and closure should always be to return the site to a condition that most resembles the pre-mining condition. Mines that are notorious for their immense impact on the environment often made impacts only during the closure phase, when active mining operations ceased. These impacts can persist for decades and even centuries.

Mine reclamation and closure plans must describe in sufficient detail how the mining company will restore the site to a condition that most resembles pre-mining environmental quality; how it will prevent – in perpetuity – the release of toxic contaminants from various mine facilities (such as abandoned open pits and tailings impoundments); and how funds will be set aside to insure that the costs of reclamation and closure will be paid for.

Proposed future land use after reclamation:

- Forestry, b. Recreation, c. Water Reservoir, d. Crop Land, e. Residential/Commercial, f. Fish & wildlife Habitat, g. Undeveloped Land, h. Grazing/Pasture Land

Statutory requirement:

As per the Mineral Conservation Development Rule, 2017, the following rules must be bare in mind by the mine owner/agent/manager, which is a part of reclamation activities –

Rule 22, Mine Closure Plan

Rule 23, Submission of Progressive Mine Closure Plan

Rule 24, Submission of Final Mine Closure Plan

Rule 26, Responsibility of holder of mining lease

Rule 27, Financial Assurance

Rule 35, Sustainable Mining

24. RISK ASSESSMENT AND DISASTER MANAGEMENT PLAN

24.1 Vulnerability of the State

Almost all the 24 districts are affected by different kind of Disaster. There is great need to strengthen the capacity of State, District, Block and newly formed Panchayat level of departments, institutions and functionaries to respond to the Disaster at their own level in participation of community. Jharkhand is vulnerable to following kind of Hazards:-

- Drought,
- Mining Accidents,
- Chemical and Industrial Hazards,
- Lightning,
- Bird Flu,
- Flood,
- Earthquake,
- Fire / Forest Fire,
- Elephant Attacks,
- Climate Change, Biodiversity loss,
- Naxalism/Landmine Blasts etc.

| Major Hazards affected districts SI No | Name of Hazards | No. of districts affected | Name of the district |
|--|------------------------------|-----------------------------|---|
| 1. | Drought | All the 24 Districts (2010) | All districts affected |
| 2. | Flood | 01 | (Sahibgunj) |
| 3. | Flash Flood | 03 | (Jamshedpur, Saraikela , Ranchi) |
| 4. | Forest Fire | 09 | (Garhwa, Palamau, Latehar, Chatra, Hazaribagh, E. & W. Singhbhum, Simdega, Gumla) |
| 5. | Lightening | 09 | (Palamau, Chatra, Latehar, Koderma, Ranchi, Giridih, 9 Hazaribagh, Lohardagga, Dumka) |
| 6. | Mining Hazards | 09 | Latehar, Ramgarh, Dhanbad, Lohardagga, Giridih E & W Singhbhum & Koderma |
| 7. | Earthquake Hazard – Zone –IV | 02 Districts | (Godda & Sahibgunj - Partially) |

| | | | |
|--|-----------|--------------|--|
| | Zone –III | 15 Districts | (Godda , Sahibgunj, Garhwa, Palamau, Chatra, Hazaribagh, Koderma, Giridih, Bokaro, Dhanbad, Deoghar, Dumka, Godda, Pakur, Jamtara) |
| | Zone – II | 7 Districts | (Lohardagga, Ranchi, Ramgarh, Khunti, Gumla, E. & W. Singhbhum) |

24.2 Mine disaster

Thousands of miners die each year around the globe due to mining accidents, especially from underground coal mining, although hard rock mining is not immune from accidents. A number of coal mines in the state are affected by fires leading to steady destruction of precious energy resource. The reason for mine fires presumably involves the phenomenon of spontaneous heating through two interrelated processes viz., the oxygen coal interaction or oxidative process and the thermal process. It is estimated that about 10% of total national coal resources are in the fire-affected areas. Although underground mining has considerably less impact than opencast mining on land, it causes enough damage through subsidence as observed in Jharia and Raniganj coalfields. Apart from this, leaks of poisonous gases such as hydrogen sulphide or explosive natural gases, especially firedamp or methane, dust explosions, collapsing of mine stopes, mining-induced seismicity, flooding, or general mechanical errors from improperly used or malfunctioning mining equipments and improper explosives underground can also cause to catastrophe.

The Chasnala mining disaster happened on 27 December 1975 in a coal mine near Dhanbad caused by an explosion in the mine followed by flooding which killed 372 miners.

The Dhanbad coal mine disaster occurred on May 28, 1965, in a coal mine near Dhanbad. On the fateful day, there was an explosion in Ghori Dhori colliery near Dhanbad, which led to fire in the mines which killed 375 miners.

25. DETAILS OF THE OCCUPATIONAL HEALTH ISSUE IN THE DISTRICT

Since all the stone mines excavating below six metres from the supergessent ground, it attracts Mines Act 1952. As such there is no previous record in this regard available in the department, however it is proposed as per *Section 9A of Mines Act 1952*, it is the responsibility of the owner/agent/manager of the mine to provide occupational health survey facilities to the employees. In line with above *rule 29B of Mines Rules 1955*, it speaks about the initial and periodical medical examinations of the employees employed in the mine.

For initial medical examination, every person seeking employment in the mine and person has already undergone within the preceeding 5 years, a medical examination under these rules is to be carried out.

According to MSME Report 2011, there are 10 numbers of Allopathic Hospitals, 27 nos Community Health Centers, 58 Dispensaries, 2 Sub health centers and 1 Private Hospital, and it is proposed to carryout the above-mentioned activities with the guidance of these available facilities in the district.

26. PLANTATION AND GREEN BELT DEVELOPMENT IN RESPECT OF LEASE ALREADY GRANTED IN THE DISTRICT

It is proposed to have a detailed record of plantation to be kept by the respective owner/agent/manager of the mine every year, which has been planted in the safety zone area and transport rout, which is statutorily required.

As per the norms of the forest department, the plantation has to be carried out at the rate of 2500 local plants per hectare and along the road side, at an interval of 5 metres in the zig-zag manner in both sides.

27. Other Information

Jharkhand Minor Minerals (Auction) Rules, 2017 and Jharkhand Minor Minerals (Evidence & Mineral Contents) Rules, 2018 in Annexure I & II has been attached for ready reference.

Conclusion

1. 27 numbers of new potential areas have been identified having total reserve of **77764.27** Million Ton in Sahibganj district on the basis of geological study carried out during field observation. All the parameters and the statutory clearances required for mining should be verified by consulting with concerned authorities before opting for E.C.
2. Since it is an interim report, to meet the requirement of minerals in the present scenario, it is proposed to identify such potential areas at certain interval and get the data bank of DSR to be updated.

REFERENCES

- Geology of Bihar and Jharkhand by T. M. Mahadevan
- District Mining Office – Sahebganj
- District Forest Office - Sahebganj
- National Institute of Disaster Management Report
- Report of Central Ground Water Board, Ministry of Water Resources – State Unit Office, Ranchi, September 2013.
- <http://www.jharkhandminerals.gov.in>
- <http://gis.jharkhand.gov.in/>
- <http://sahibganj.nic.in/>
- https://en.wikipedia.org/wiki/Sahebganj_district
- https://sameti.org/Soil_Inventory/Sahibganj_Soil_Analysis.pdf
- Brief Industrial Profile of Sahibganj District, MSME Development Institute, Ranchi
- Geological Maps of GSI
- Survey of India Topo Sheets
- GSI Memoirs Vol LXXVIII
- Geology And Mineral Resources of the States of India, GSI, Miscellaneous Publication No. 30, Part – V (Bihar & Jharkhand)

Annexure I

झारखण्ड गजट (साधारण), बुधवार, 6 सितम्बर, 2017

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Department of Industries, Mines and Geology.

NOTIFICATION

16 AUGUST, 2017

No.05/kha.Ni.-JMM(Auction)Rules-02/2017-2302-- In exercise of the powers conferred by section 15 of the Mines and Minerals (Regulation and Development) Act, 1957 (67 of 1957), the Governor of Jharkhand exercises power to notify following rules :-

CHAPTER I

PRELIMINARY

- 1. Short title and commencement.-** (1) These rules may be called the Jharkhand Minor Mineral (Auction) Rules, 2017.
(2) They shall come into force on the date of their publication in the Official Gazette.
- 2. Definitions.-** (1) In these rules, unless the context otherwise requires,-
 - a) "Act" means the Mines and Minerals (Development and Regulation) Act, 1957 (67 of 1957);
 - b) "Composite Licence" means prospecting licence-cum-mining lease granted under rule 18;
 - c) "Mine Development and Production Agreement" means the agreement referred to in sub-rule (4) of rule 10 or sub-rule (8) of rule 18;
 - d) "Preferred bidder" means the bidder referred to in sub-clause (iii) of clause (b) of sub-rule (4) of rule 9;
 - e) "Qualified bidders" means the bidder referred to in sub-clause (iv) of clause (a) of sub-rule (4) of rule 9;
 - f) "Reserve Price" means the minimum percentage of value of mineral despatched as referred to in sub-rule (1) of rule 8;
 - g) "State Government" means Government of Jharkhand.
 - h) "Section" means section of the Act;
 - i) "Schedule" means a Schedule appended to these rules;
 - j) "Successful bidder" means the bidder as referred to in sub-rule (3) of rule 10 or sub-rule (2) of rule 18;
 - k) "Technically Qualified Bidders" means the bidder as referred to in sub-clause (ii) of clause (a) of sub-rule (4) of rule 9;

- l) "Tender Document" means the tender document issued by the Director, Mines / Deputy Commissioner for conduct of an auction referred to in sub-rule (2) of rule 9;
- m) "Upfront Payment" means the payment referred to in sub-rule (1) of rule 11;
- n) "Value of estimated resources" means an amount equal to the product of,-
- i) the estimated quantity of mineral resources for which the mineral block is being auctioned, expressed in metric tonne/cft; and
 - ii) the average price per metric tonne of such mineral as published by Indian Bureau of Mine for Jharkhand State for a period of twelve months immediately preceding the month of computation of the Value of Estimated Resources or the price notified by the Director, Mines; on the basis of the norm followed by Indian Bureau of Mines.

"Value of mineral despatched" shall have the meaning specified in sub-rule (2) of rule 8.

- o) "Director, Mines" means appointed as Director, Mines by the State Government.
- p) "Director, Geology" means appointed as Director, Geology by the State Government.
- q) "Deputy Commissioner" means appointed as Deputy Commissioner of respective District

(2) The words and expressions used in these rules but not defined herein shall have the same meaning as assigned to them in the Act or rules made there under.

3. Application- These rules shall apply to all minor minerals except Soil, Brick Earth, Morrums, Red Soil, clay for making Raniganj tiles and Stone (Boulder, Bajri, Single, Stone Brick, Stone Dust) over an area of less than five hectare of Raiyati land (private land).

4. Grant of concession- (1) Where mineral contents of an area has been established and demarcated by the Director Geology, Mining Lease shall be granted in the manner specified under the provisions of JMMC Rules, 2004 as amended from time to time.

(2) A Composite Licence with respect to an area where the mineral content of an area have not been fully established but mineral block has been prepared by Director of Geology for grant of composite Licence, shall be granted in the manner specified under the provision of JMMC Rules, 2004 as amended from time to time.

CHAPTER II
GRANT OF MINING LEASE

- 5. Prerequisites for auction of Mining Lease-** (1) The Director, Mines /Deputy Commissioner may initiate an auction process for grant of a mining lease with respect to an area within the District if the mineral contents in such area has been established by Director, Geology.
- (2) The Director, Mines /Deputy Commissioner shall, prior to issuance of the notice inviting tender with respect to mineral auction, identify and demarcate the area where a mining lease is proposed to be granted through auction and the area so demarcated shall be classified into forests land, land owned by the State Government and land not owned by the State Government.
- (3) The extent of area so demarcated shall include area required for all the activities falling under the definition of 'mine' as defined in clause (j) of sub-section (1) of section 2 of the Mines Act.
- 6. Eligibility for Mining Lease.-** (1) For the purpose of participating in the auction of mining lease, an applicant shall meet the requirements as specified in section 5 of MMDR Act and the terms and conditions of eligibility as specified in Schedule-I.
- (2) The Director, Mines /Deputy Commissioner may having regard to article 244 and the Fifth Schedule to the Constitution, the provisions of the Panchayats (Extension to the Scheduled Areas) Act, 1996 (40 of 1996); and the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 (2 of 2007), make such amendments to Schedule I as it may deem necessary.
- (3) The eligibility for participating in the auction shall be determined as per the terms and conditions of eligibility for participating in the

auction and the Successful Bidder shall be decided solely on the basis of financial bids submitted by the eligible bidders.

- 7. Electronic Auction-** (1) An auction shall be conducted only through an online electronic auction platform.
- (2) The Director, Mines /Deputy Commissioner may utilise any online electronic auction platform which meets the minimum technical and security requirements as specified in the Guidelines for compliance to Quality requirements of e-Procurement Systems issued by the Standardisation Testing and Quality Certification Directorate, Department of Information Technology, Ministry of Communications and Information Technology, Government of India.
- 8. Bidding parameters-** (1) The Director, Mines / Deputy Commissioner shall specify in the tender document the minimum percentage of the value of mineral despatched, which shall be known as the "reserve price".
- (2) The value of mineral despatched shall be an amount equal to the product of,-
- (i) mineral despatched in a month; and
 - (ii) sale price of the mineral (Grade-wise and State-wise) as published by Indian Bureau of Mines for such month of despatch or the price notified by the Director, Mines.
- (3) The bidders shall quote, as per the bidding parameter, for the purpose of payment to the State Government, a percentage of value of mineral despatched equal to or above the reserve price and the successful bidder shall pay to the Director, Mines /Deputy Commissioner an amount equal to the product of,-
- (i) percentage so quoted; and
 - (ii) value of mineral despatched.
- (4) Where an area is being auctioned for more than one mineral, the percentage of value of mineral despatched as quoted by the successful bidder under sub-rule (3) shall be applicable for the

purpose of payment to the Director, Mines /Deputy Commissioner in respect of each such mineral.

- (5) If subsequent to grant of a mining lease, one or more new minerals are discovered, the percentage of value of mineral despatched as quoted by the successful bidder under sub-rule (3) shall be applicable for the purpose of payment to the Director, Mines /Deputy Commissioner in respect of each such mineral.

9. Bidding Process.- (1) Subject to the provisions of rule 5, the Director, Mines/Deputy Commissioner shall issue a notice inviting tender, at least in three daily News Paper and on the State Government Website to commence the auction process and such notice shall contain brief particulars regarding the area under auction, including.-

- (a) particulars of the area identified and demarcated shall be divided into forest land, land owned by the State Government, and land not owned by the State Government
- (b) estimated mineral resources and brief particulars regarding evidence of mineral contents with respect to all minerals in the area as provided by Director, Geology.

(2) The tender document issued by the Director, Mines /Deputy Commissioner shall contain.-

- (a) geological report prepared by the Director, Geology specifying particulars and estimated quantities of all minerals discovered in the area; and

- (b) revenue survey details of the area identified and demarcated shall be divided into forest land, land owned by the State Government, and land not owned by the State Government

(3) The bidders shall be provided a fixed period, as notified by the Director, Mines /Deputy Commissioner to study the tender document and such reports and the bidding process shall commence only on expiry of such period.

- (4) The auction shall be an ascending forward online electronic auction and shall comprise of the following rounds, namely:-
- (a) First Round of Auction to be held in the following manner, namely:-
- (i) the bidders shall submit-
- (A) a technical bid comprising amongst others, documentary evidence to confirm eligibility as per the provisions of the Act and the rules made thereunder to participate in the auction, bid security and such other documents and payments as may be specified in the tender document; and
- (B) an initial price offer which shall be a percentage of value of mineral despatched;
- (ii) only those bidders who are found to be eligible in accordance with the terms and conditions of eligibility specified in rule 6 and whose initial price offer is equal to or greater than the reserve price, referred to as "technically qualified bidders", shall be considered for the second round of electronic auction;
- (iii) The Highest initial price offer amongst the technically qualified bidders shall be the floor price of the second round of online electronic auction.
- (iv) the technically qualified bidders shall be ranked on the basis of the descending initial price offer submitted by them and the technically qualified bidders holding the first fifty percent of the ranks (with any fraction rounded off to higher integer) or the top five technically qualified bidders, whichever is higher, shall qualify as qualified bidders for participating in the second round of electronic auction:

Provided that where the total number of technically qualified bidders is less than three, then no technically qualified bidder shall be considered to be qualified bidder and the auction process shall be annulled:

Provided further that the Director, Mines /Deputy Commissioner may, in its discretion, decide not to annul the auction process if even in the third or subsequent attempt the total number of technically qualified bidders continues to be less than three and the Director, Mines/Deputy Commissioner may, in such case, decide to consider the technically qualified bidders as qualified bidders so as to continue with the bidding process:

Provided also that if the number of technically qualified bidders is between three and five, then all the technically qualified bidders shall be considered as qualified bidders:

Provided also that in the event of identical initial price offers being submitted by two or more technically qualified bidders, all such technically qualified bidders shall be assigned the same rank for the purposes of determination of qualified bidders and in such case, the aforementioned fifty percent shall stand enhanced to fifty percent plus the number of technically qualified bidders, whose initial price offers are identical less the number of such identical initial price offers

Illustration;

In the event there are a total of ten technically qualified bidders, and each technically qualified bidder submits different initial price offer, then the technically qualified bidders holding the first fifty percent of ranks shall be considered to be qualified bidders. If three such technically

qualified bidders submit the same initial price offer and are ranked in first fifty percent of the total number of ranks, then, all the three technically qualified bidders shall be considered to be qualified bidders and the total number of qualified bidders shall stand increased by two.

(b) Second Round of Auction to be held in the following manner, namely:-

(i) the qualified bidders may submit their final price offer which shall be a percentage of value of mineral despatched and greater than the floor price:

Provided that the final price offer may be revised till the conclusion of the auction as per the technical specifications of the auction platform;

(ii) The auction process shall be annulled if none of the qualified bidders submits a final price offer on the online electronic auction platform;

(iii) the qualified bidder who submits the highest final price offer shall be declared as the "preferred bidder" immediately on conclusion of the auction.

10. Grant of Mining Lease- (1) The preferred bidder shall submit the first installment being ten percent of the upfront payment as per rule 11.

(2) Upon receipt of the first instalment of the upfront payment, the Director, Mines / Deputy Commissioner shall issue a letter of intent to the preferred bidder.

(3) The preferred bidder shall be considered to be the "successful bidder" upon,-

(a) continuing to be in compliance with all the terms and conditions of eligibility;

(b) payment of the second instalment being ten per cent. of the upfront payment;

- (c) furnishing performance security as specified in rule 12;
- (d) satisfying the conditions with respect to Mining Plan specified in Jharkhand Minor Mineral Concession Rules, 2004 as amended from time to time
- (e) satisfying such other conditions as may be specified by the Director, Mines /Deputy Commissioner with the prior approval of the State Government.
- (4) The successful bidder shall sign the Mine Development and Production Agreement with the Deputy Commissioner upon obtaining all consents, approvals, permits, no-objections and the like as may be required under applicable laws for commencement of mining operations.
- (5) The successful bidder shall pay the third installment being eighty percent of the upfront payment subsequent to execution of the Mine Development and Production Agreement and upon such payment the Deputy Commissioner shall grant a mining lease to the successful bidder.
- (6) The Mining Lease Deed shall be executed by the Deputy Commissioner within thirty days of the date of completion of the conditions specified in sub-rule (5) and shall be subject to the provisions of the Act and the rules made thereunder.
- (7) The mining lease shall be for minerals found in the area pursuant to exploration/reserve estimated prior to the auction:
- Provided that where, subsequent to the auction, any new mineral is discovered, then the holder of mining lease shall follow the provisions of the Jharkhand Minor Mineral Concession Rules, 2004 as amended from time to time for inclusion of such new mineral in the Mining Lease Deed.
- (8) Where, prior to the auction or subsequent to the auction, presence of minor mineral is established or discovered, such minor minerals shall

be dealt in accordance with such rules made/to be made by the State Government under section 15.

- (9) The date on which a duly executed Mining Lease Deed is registered shall be the date of commencement of the mining lease.

11. Upfront payment for mining lease- (1) An amount equal to 0.50% of the value of estimated resources shall be the upfront payment.

- (2) The upfront payment shall be payable to the Director, Mines/Deputy Commissioner in three installments of ten percent; ten percent; and eighty percent as specified in the tender document and shall be adjusted in full against the amount paid under sub-rule (3) of rule 8 of these rules within the first five years of commencement of production of mineral as specified in the tender document.

12. Performance security for mining lease.—(1) The successful bidder shall provide a performance security of an amount of 0.50% of the value of estimated resources and the performance security shall be adjusted every five years so that it continues to correspond to 0.50% of the reassessed value of estimated resources.

- (2) The performance security provided through bank guarantee in the format as specified in Schedule II or through security deposit, may be invoked as per the provisions of -
- (i) the Mine Development and Production Agreement and
 - (ii) the Mining Lease Deed.

13. Payments under mining lease— (1) The lessee shall pay royalties and dead rent to the State Government as specified in the Act and the rules made thereunder.

- (2) The lessee shall pay the applicable amount quoted under rule 8 to the State Government on a monthly basis.
- (3) The lessee shall contribute such amounts as may be required under the Act/Rule made thereunder to -
- (a) the designated account of the District Mineral Foundation.

(4) The lessee shall also pay such other amounts as may be required under any law for the time being in force to the concerned authorities.

14. Payment of Interest—The State Government shall charge simple interest at the rate of twenty four percent per annum on any payment due to State Government under these rules the payment of which is delayed beyond sixty days from the due date thereof.

15. Time Period—The time period for compliance of rules 10 to 14 of these rules shall be as specified in the tender document.

CHAPTER III

GRANT OF COMPOSITE LICENCE

16. Prerequisites for auction of Composite Licence—

(1) The Director, Mines/Deputy Commissioner may initiate an auction process for grant of a Composite Licence with respect to an area within the State in accordance with the provisions of these rules and this Chapter for the mineral block prepared by the Director, Geology for grant of a Composite Licence.

(2) The Director, Mines /Deputy Commissioner shall, prior to issuance of the notice inviting tender with respect to auction, identify and demarcate the area where a Composite Licence is proposed to be granted through auction and the area so demarcated shall be classified into forests land, land owned by the State Government, and land not owned by State Government.

17. Auction for Composite Licence—(1) The auction process as specified in rules 6 to 9 shall be applicable for conduct of auction for grant of a Composite Licence subject to the following, namely:—

(a) the State Government shall not make any reservation on the basis of end use;

(b) the Director, Mines /Deputy Commissioner shall subject to compliance of rule 16, issue a notice inviting tender, including on

- their website, to commence the auction process and such notice shall contain brief particulars regarding the area under auction, including,-
- (i) particulars of the area identified and demarcated shall be divided into forest land, land owned by the State Government, and land not owned by the State Government
 - (ii) estimated mineral resources with respect to all minerals discovered in the area as prepared by Director, Geology.
- (c) the tender document issued by the Director, Mines, shall contain,—
- (i) geological report specifying particulars and estimated quantities of all minerals discovered in the area as prepared by Director, Geology; and
 - (ii) revenue survey details of the area identified, demarcated shall be divided into forest land, land owned by the State Government, and land not owned by the State Government.
- (d) the bidders shall be provided a fixed period, as prescribed by the Director, Mines/Deputy Commissioner to study the Tender Document and such reports and the bidding process shall commence only on expiry of such period.

18. Grant of Composite Licence.— (1) Upon completion of the auction process, the preferred bidder shall submit a performance security in the manner specified in sub-rule (1) of rule 19 and upon receipt of such performance security, the Director, Mines /Deputy Commissioner shall issue a letter of intent to the preferred bidder.

- (2) On receipt of the letter of intent the preferred bidder shall be considered to be the successful bidder upon fulfilment of the following conditions, namely:—
- (a) compliance with all the terms and conditions of eligibility;
 - (b) obtaining all consents, approvals, permits, no-objections and the like as may be required under applicable laws for commencement of prospecting operations; and

- (c) submitting the Scheme of prospecting.
- (3) Upon fulfilment of the conditions specified in sub-rule (2), the Director, Mines /Deputy Commissioner shall grant a Composite Licence to the successful bidder and such Composite Licence shall be subject to the provisions of the Act and the rules made thereunder, as applicable to a prospecting licence and mining lease.
- (4) The minimum area for grant of a Composite Licence shall not be less than the minimum area for which a mining lease may be granted in accordance with the provisions of the Jharkhand Minor Mineral Concession Rules, 2004 as amended from time to time and the maximum area shall be in accordance with section 6 as applicable to a prospecting licence.
- (5) The holder of a Composite Licence shall conduct geological exploration of the area under the Composite Licence so as to ascertain evidence of mineral contents and shall submit periodic reports in accordance with the Act and rules made thereunder, as applicable to a prospecting licence and all reports, studies and other documentation related to the geological exploration of the area under the Composite Licence shall be submitted to the Director, Mines/Deputy Commissioner.
- (6) If a holder of a Composite Licence,—
- (a) fails to complete prospecting operations or fails to establish the existence of mineral contents in accordance with the guidelines issued by the Director, Geology such holder shall not be eligible to receive a mining lease and the Composite Licence shall be terminated;
- (b) completes prospecting operations in accordance with the guidelines issued by the Director, Geology resulting in determination of evidence of mineral contents, such holder shall make an application to the Director, Mines/Deputy

Commissioner for grant of a mining lease accompanied with the first installment, being ten percent of the upfront payment:

Provided that the mining lease shall be granted only with respect to the area for which evidence of mineral contents has been found and shall not be for an area larger than the maximum area for which a mining lease may be granted under the Act:

Provided further that any excess area shall be deemed to be surrendered by the holder of Composite Licence after completing its reclamation.

- (7) Upon receipt of the duly completed mining lease application and the first installment of the upfront payment as specified in clause (b) of sub-rule (6), the Director, Mines /Deputy Commissioner shall issue a letter of intent for mining lease.
- (8) A Mine Development and Production Agreement shall be executed between the Director, Mines /Deputy Commissioner and the holder of Composite Licence if the holder of a Composite Licence—
 - (a) continues to comply with the terms and conditions of eligibility;
 - (b) pays the second instalment being ten percent of the upfront payment;
 - (c) furnishes the enhanced performance security as specified in sub-rule (2) of rule 19;
 - (d) satisfying the conditions with respect to Mining Plan specified in Jharkhand Minor Mineral Concession Rules, 2004 as amended from time to time;
 - (e) obtains all consents, approvals, permits, no-objections and the like as may be required under applicable laws for commencement of mining operations; and
 - (f) satisfies such other conditions as may be specified by the Director, Mines with the prior approval of the State Government.

- (9) The holder of the Composite Licence shall pay the third instalment being eighty percent of the upfront payment, subsequent to execution of the Mine Development and Production Agreement and upon such payment, the State Government shall execute a Mining Lease Deed with the holder of the Composite Licence within thirty days of the date of completion of all the conditions specified in sub-rule (8).
- (10) The mining lease shall be subject to the provisions of the Act and the rules made thereunder.
- (11) The mining lease shall be for minerals found in the area pursuant to exploration prior to the auction:
Provided that where subsequent to the auction, any new mineral is discovered, then the holder of the mining lease shall follow the provisions of the Jharkhand Minor Mineral Concession Rules, 2004 as amended from time to time for inclusion of such new mineral in the Mining Lease Deed.
- (12) The date on which a duly executed Mining Lease Deed is registered shall be the date of commencement of the mining lease.

- 19. Performance Security for Composite Licence—** (1) An amount of 0.25% of the value of estimated resources shall be payable by the preferred bidder as performance security prior to the issuance of the Composite Licence.
- (2) The amount of performance security shall be revised, prior to the issuance of the mining lease, to an amount of 0.50% of the value of estimated resources.
- (3) The performance security provided under sub-rule (2) shall be adjusted every five years so that it continues to correspond to 0.50% of the reassessed value of estimated resources.
- (4) The performance security may be invoked as per provisions of,-
- (i) the Mine Development and Production Agreement and
 - (ii) the Mining Lease Deed.

CHAPTER IV
MISCELLANEOUS

20. Power to rectify apparent mistakes—Any clerical or arithmetical mistake in any order passed by the Director, Mines /Deputy Commissioner or any authority or officer under these rules and any error arising therein due to accidental slip or omission, may be corrected by the Director, Mines /Deputy Commissioner the concerned authority or officer, as the case may be:

Provided that no rectification order prejudicial to any person shall be passed unless such person has been given a reasonable opportunity of being heard.

21. Exploration Obligation—The holder of a Composite Licence shall complete detailed exploration and prepare a detailed feasibility study report confirming to the Guidelines issued by the Director, Geology over the entire area under the mining lease, within a period of Three years from the date of commencement of such mining lease.

By order of Governor of Jharkhand

Sunil Kumar Barnwal,
Secretary of Government.

SCHEDULE I**Terms and conditions of eligibility****[See rules 6(1) and 6(2)]**

1. The following net worth requirements shall be applicable for an auction of mining lease depending on the Value of Estimated Resources,—
 - (a) If the Value of Estimated Resources is more than Rupees 10 (Ten) Crores, the applicant, including an individual, shall have a net worth more than 4% of Value of Estimated Resources.
 - (b) If the Value of Estimated Resources is less than or equal to Rupees 10 (Ten) Crores, the applicant, not being an individual, shall have a net worth more than 2% of Value of Estimated Resources.
 - (c) If the Value of Estimated Resources is less than or equal to Rupees 10 (Ten) Crores, the applicant, being an individual, shall have a minimum net worth of 1% of the Value of Estimated Resources.
2. In case of auction of Composite Licence, the applicant must have a net worth of more than 1% of the Value of Estimated Resources.

Explanation:

- (1) In case an applicant is a subsidiary of another company incorporated in India, the net worth of such holding company may also be considered:
Provided that, in such case, the applicant must continue to be a subsidiary of such holding company until such time the applicant meets the aforementioned net worth threshold.
- (2) In case of a Company, the Net worth shall be the sum of paid up share capital and the free Reserves as per the audited Balance Sheet of the immediately preceding financial year.
- (3) In case of an individual, the Net worth shall be the closing cash balance on the last date for submission of application, and such amount may include amount in Savings Bank accounts in Scheduled Bank/ Post Office, free and un-encumbered Fixed Deposits in Scheduled Banks, Post Office, Listed Companies/Government Organisation/Public Sector Undertaking of State and Central Government, Kisan Vikas Patra, National Saving certificate, Bonds, Shares of Listed Companies, Listed Mutual Funds, Unit Linked Insurance Plan, Public Provident Fund, Surrender Value of Life Insurance policies in the name of Applicant.

By order of Governor of Jharkhand

Sunil Kumar Barnwal,
Secretary of Government.

SCHEDULE II**Format of Performance Security****[See rules 12(2)]****[Reference number of the bank] [date]****To****The Director, Mines/ Deputy Commissioner****[address]****WHEREAS**

- A. [Name of the Successful Bidder] incorporated in India under the Companies Act, [1956/2013] with corporate identity number [CIN of the Successful Bidder], whose registered office is at [address of registered office], India and principal place of business is at [address of principal place of business, if different from registered office] (the "Successful Bidder") is required to provide an unconditional and irrevocable bank guarantee for an amount equal to INR [figures] (Indian Rupees [words]) as a performance security valid until [date of expiry of performance bank guarantee] ("Expiry Date").
- B. The Performance Security is required to be provided to The Director, Mines/ Deputy Commissioner of [Name of District], for discharge of certain obligations under the Tender Document dated, [date] with respect to auction of [particulars of auction] and the Mine Development and Production Agreement to be executed between the Director, Mines /Deputy Commissioner and the Successful Bidder (collectively the "Agreement").
- C. We, [name of the bank] (the "Bank") at the request of the Successful Bidder do hereby undertake to pay to the Director, Mines/ Deputy Commissioner an amount not exceeding INR [figures] (Indian Rupees [words]) ("Guarantee Amount") to secure the obligations of the Successful Bidder under the Agreement on demand from the Director, Mines /Deputy Commissioner on the terms and conditions herein contained herein.

NOW THEREFORE, the Bank hereby issues in favour of the Director, Mines /Deputy Commissioner this irrevocable and unconditional payment bank guarantee (the "Guarantee") on behalf of the Successful Bidder in the Guarantee Amount:

1. The Bank for the purpose hereof unconditionally and irrevocably undertakes to pay to the Director, Mines /Deputy Commissioner without any demur, reservation, caveat, protest or recourse, immediately on receipt of first written demand from the Director, Mines /Deputy Commissioner, a sum or sums (by way of one or more claims) not exceeding the Guarantee Amount in the aggregate without the Director, Mines /Deputy Commissioner needing to prove or to show to the Bank grounds or reasons for such demand for the sum specified therein and notwithstanding any dispute or difference between the Director, Mines /Deputy Commissioner and Successful Bidder on any matter whatsoever. The Bank undertakes to pay to the Director, Mines /Deputy Commissioner any money so demanded notwithstanding any dispute or disputes raised by the Successful Bidder in any suit or proceeding pending before any court or tribunal relating thereto the Bank's liability under this present being absolute and unequivocal.
2. The Bank acknowledges that any such demand by the Director, Mines /Deputy Commissioner of the amounts payable by the Bank to the State shall be final, binding and conclusive evidence in respect of the amounts payable by Successful Bidder to the Director, Mines /Deputy Commissioner under the Agreement.
3. The Bank hereby waives the necessity for the Director, Mines /Deputy Commissioner from demanding the aforesaid amount or any part thereof from the Successful Bidder and also waives any right that the Bank may have of first requiring the Director, Mines/Deputy Commissioner to pursue its legal remedies against the Successful Bidder, before

presenting any written demand to the Bank for payment under this Guarantee.

4. The Bank further unconditionally agrees with the Director, Mines /Deputy Commissioner that the Director, Mines /Deputy Commissioner shall be at liberty, without the Bank's consent and without affecting in any manner the Bank's obligation under this Guarantee, from time to time to:
 - (i) vary and/or modify and of the terms and conditions of the Agreement;
 - (ii) extend and / or postpone the time for performance of the obligations of the Successful Bidder under the Agreement, or
 - (iii) forbear or enforce any of the rights exercisable by the Director, Mines /Deputy Commissioner against the Successful Bidder under the terms and conditions of the Agreement. and the Bank shall not be relieved from its liability by reason of any such act or omission on the part of the State or any indulgence by the Director, Mines /Deputy Commissioner to the Successful Bidder or other thing whatsoever which under the law relating to sureties would, but for this provision, have the effect of relieving the Bank of its obligations under this Guarantee.
5. Any payment made hereunder shall be made free and clear of and without deduction for, or on account of, any present or future taxes, levies, imposts, duties, charges, fees, commissions, deductions or withholdings of any nature whatsoever.
6. The Bank agrees that Director, Mines /Deputy Commissioner at its option shall be entitled to enforce this Guarantee against the Bank, as a principal debtor in the first instance without proceeding at the first instance against the Successful Bidder.
7. The Bank further agree that the guarantee herein contained shall remain in full force and effect during the period that specified in the Agreement and that it shall continue to be enforceable till all the obligations of the Successful Bidder under or by virtue of the said Agreement with respect

to the Performance Security have been fully paid and its claims satisfied or discharged or till the Director, Mines /Deputy Commissioner certifies that the terms and conditions of the Agreement with respect to the Performance Security have been fully and properly carried out by the Successful Bidder and accordingly discharges this guarantee. Notwithstanding anything contained herein, unless a demand or claim under this guarantee is made on the Bank in writing on or before the Expiry Date the Bank shall be discharged from all liability under this guarantee thereafter.

8. The payment so made by the Bank under this Guarantee shall be a valid discharge of Bank's liability for payment thereunder and the Director, Mines /Deputy Commissioner shall have no claim against the Bank for making such payment.
9. This Guarantee is subject to the laws of India. Any suit, action, or other proceedings arising out of this Guarantee or the subject matter hereof shall be subject to the exclusive jurisdiction of courts at Ranchi.
10. The Bank has the power to issue this Guarantee in favour of the Director, Mines /Deputy Commissioner. This guarantee will not be discharged due to the change in the constitution of the Bank.
11. The Bank undertakes not to revoke this Guarantee during its currency except with the previous consent of the Director, Mines /Deputy Commissioner in writing.
12. The Director, Mines/Deputy Commissioner may, with prior intimation to the Bank, assign the right under this Guarantee to any other departments, ministries or any governmental agencies, which may act in the name of the Director, Mines /Deputy Commissioner. Save as provided in this Clause 12, this Guarantee shall not be assignable or transferable.
13. Notwithstanding anything contained herein,

a. the liability of the bank under this bank guarantee shall not exceed the Guarantee Amount.

b. This bank guarantee shall be valid up to the Expiry Date.

14. The Bank is liable to pay the guaranteed amount or any part thereof under this bank guarantee only and only if the Director, Mines /Deputy Commissioner serves upon the Bank a written claim or demand on or before the Expiry Date. Dated the [day] day of [month] [year] for the Bank. In witness whereof the Bank, through its authorized officer, has set its hand and stamp.

(Signature)

(Name and Designation)

(Bank Stamp)

By order of Governor of Jharkhand

Sunil Kumar Barnwal,
Secretary of Government.

अधीक्षक, झारखण्ड राजकीय मुद्रणालय, राँची द्वारा प्रकाशित एवं मुद्रित,
झारखण्ड गजट (साधारण) 24--200 ।

Annexure II

GOVERNMENT OF JHARKHAND
DEPARTMENT OF INDUSTRY, MINES & GEOLOGY
MINES & GEOLOGY DIVISION

Notification

No. 547..

Dated: 22/02/2018

In exercise of the powers conferred by section 15 of the Mines and Minerals (Development and Regulation) Act, 1957 (67 of 1957) and in the light of Jharkhand Minor Mineral (Auction) Rules, 2017, the Government of Jharkhand hereby makes the following rules, namely:-

1. Short title and commencement:

- 1) These rules may be called the Jharkhand Minor Minerals (Evidence of Mineral Contents) Rules, 2018.
- 2) It shall come into force on the date of its publication in the Official Gazette.

2. Application: These rules shall extend to the whole State of Jharkhand and shall apply to minor minerals as specified in clause (e) of section 3* of Mines and Minerals (Development and Regulation) Act, 1957 (67 of 1957) (Schedule-II).

3. Definitions and interpretation:

In these rules, unless the context otherwise requires, -

- a. "Act" means the Mines and Minerals (Development and Regulation) Act, 1957 (67 of 1957);
- b. "Evidence of mineral contents" means the existence of mineral contents established by the process of geological exploration according to the norms fixed in Schedule-I of these Rules.
- c. "Threshold value of minerals" means the limits prescribed by the Indian Bureau of Mines or Government of Jharkhand from time to time based on the beneficiability and marketability of a mineral for a given region and for given time, below which the material obtained after mining can be discarded as waste;
- d. "Schedule" means the Schedule annexed to these rules;
- e. The expressions General Exploration (C2) & Detailed Exploration (C1), Feasibility Study (FS) used in these rules shall have the meanings assigned to them in Part-I of the Schedule-I.
- f. All other words and expressions used in these rules, but not defined, shall have the same meaning as assigned to them in the Act or the rules made there under.

**minor minerals" means building stones, gravel, ordinary clay, ordinary sand other than sand used for prescribed purposes, and any other mineral which the Central Government may, by notification in the Official Gazette, declare to be a minor mineral.*

4. Preparation of mineral blocks:-

A mineral block may be defined as an area where there is evidence to show the existence of mineral contents in accordance with the parameters prescribed in Schedule-I. The Government may grant a mining lease/ composite license through Electronic Auction, in the manner specified in Jharkhand Minor Mineral (Auction) Rules, 2017. Mineral Blocks should be prepared in defined geometrical shapes as far as possible.

5. Existence of mineral contents for grant of composite license

(1) An area may be notified for auction to grant a composite license under chapter III of Jharkhand Minor Mineral (Auction) Rules, 2017 if, in respect of such area:-

- a) General Exploration (C2) has been completed to establish Inferred Mineral Resource.
- b) A geological report has been prepared conforming to Part-III A of the schedule.

6. Existence of mineral contents for grant of mining lease

An area shall be considered for grant a mining lease under Chapter II of Jharkhand Minor Mineral (Auction) Rules, 2017 if, in respect of such area:-

- a) Detailed Exploration (C1) has been completed to establish Indicated/ Measured Mineral Resource.
- b) A geological report has been prepared conforming to Part-III A of Schedule-I.

7. Relaxation

Depending upon the local geological setup, mode of occurrence and nature of mineralization, the Government (State Cabinet) may relax the exploration norms as specified in Part III of Schedule-I, in whole or in part for any mineral or any area.

SCHEDULE I
EVIDENCE OF MINERAL CONTENTS

Existence of mineral content will have to be established in an area for the purpose of auction of Mineral Block by carrying out exploration as per the suggested geological parameters and exploration norms given in Part-I, II and III of Schedule-I.

Part – I

Definitions

1. The exploration for any minor mineral deposit involves two stages namely, General Exploration (C2) and Detailed Exploration (C1). These stages of exploration lead to resource categories namely Inferred Mineral Resource and Indicated/ Measured Mineral Resource respectively reflecting the degree of geological assurance.
2. **General Exploration (C2)** involves the initial delineation of an identified deposit. Methods used include surface mapping, pitting/ trenching/ drilling, followed by sampling for evaluation of mineral quantity and quality (including mineralogical tests on laboratory scale if required), and limited interpolation based on indirect methods of investigation. The objective is to establish the main geological features of a deposit, giving a reasonable indication of continuity and providing an initial estimate of size, shape, structure and grade.
3. **Detailed Exploration (C1)** involves the detailed three-dimensional delineation of a known deposit achieved through sampling, such as from outcrops, pits, trenches, boreholes, shafts and tunnels etc. Sampling grids are closely spaced such that size, shape, structure, grade and other relevant characteristics of the deposit are established with a high degree of accuracy. Processing tests involving bulk sampling may be required.
4. **Mineral Resource** is a concentration or occurrence of solid material of economic interest in or on the earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade or quality, continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling. Mineral Resources are subdivided, in order of increasing geological confidence into Reconnaissance, Inferred, Indicated and Measured resource categories which are defined as follows:-
 - (a) **Inferred Mineral Resource** is that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling achieved through a stage of preliminary exploration. An Inferred Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and shall not be converted to a Mineral Reserve. The majority of Inferred Mineral

Resources' could be upgraded to Indicated Mineral Resources with continued exploration.

- (b) **Indicated Mineral Resource** is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing and is sufficient to assume geological and grade or quality continuity between points of observation. An Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource and may only be converted to a Probable Mineral Reserve.
- (c) **Measured Mineral Resource** is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit. Geological evidence is derived from detailed and reliable exploration, sampling and testing and is sufficient to confirm geological and grade or quality continuity between points of observation. A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proved Mineral Reserve or to a Probable Mineral Reserve.
5. **A Feasibility Study (FS)** is a detailed comprehensive economic study of the selected development option for a mineral project that includes appropriately detailed assessments of applicable Modifying Factors together with any other relevant operational factors and detailed financial analysis that are necessary to demonstrate at the time of reporting that extraction is reasonably justified (economically mineable).
6. **Feasibility Mineral Resource:** A Feasibility Mineral Resource is that part of Indicated/ Measured Mineral Resource which is not economically mineable as, defined by studies at feasibility level. This material is identified as being possibly economically viable subject to changes in technological, economic, and environmental and/ or other relevant conditions.
7. **Mineral Reserve** is the economically mineable part of a Measured and Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at Feasibility level as appropriate that include application of Modifying Factors which are factors those are taken into consideration while conducting a Pre-feasibility or feasibility study so as to convert Mineral Resources to Mineral Reserves. These include, but are not

restricted to, mining, processing, end use, cut-off grade, threshold value, metallurgical, infrastructure, economic, marketing, legal, environmental, social and governmental factors. Mineral reserve may further be categorized as:-

- (a) **Probable Mineral Reserve** is the economically mineable part of an Indicated, and in some circumstances, a Measured Mineral Resource. The confidence in the Modifying Factors applying to a Probable Mineral Reserve is lower than that applying to a Proved Mineral Reserve.
- (b) **Proved Mineral Reserve** is the economically mineable part of a Measured Mineral Resource. A Proved Mineral Reserve implies a high degree of confidence in the Modifying Factors.

Part-II

Geological Parameters and Exploration Norms

| | |
|----|--|
| 1. | Aerial reconnaissance: Satellite imagery/ aerial photograph studies, as per necessity. |
| 2. | Topographic & Geological survey (Mapping): General Exploration stage: 1:50,000 to 1:4,000 scale and Detailed Exploration stage: larger than 1:4,000 to 1:1,000 scale as per type of mineral deposit. Geological mapping during general and detailed exploration to be carried out with the help of Total Station, Theodolite and other Electronic Survey Instruments. Exploration block to be geo-coordinated with the help of DGPS/ GPS. |
| 3. | Ground Geophysical and Geochemical survey: Geophysical and geochemical survey using appropriate techniques, as may be necessary, for the style of mineralization as per requirement. |
| 4. | <p>Technology: Exploration and sampling using appropriate techniques from locations such as outcrops, trenches, pits, old workings and drill holes. The sampling locations are spaced suitably (in a grid pattern to the extent possible and may be modified depending on structural complexity) for establishing existence of mineralized body and its lateral and vertical continuity.</p> <p>The lateral extension to be considered for resource assessment shall depend on geological considerations supplemented by geological continuity by mapping or by other means and in any case shall not be more than 50% of the grid spacing of the probe points.</p> <p>Assessment based on selected information such as isolated assays, isolated drill holes, assays of panned concentrates etc. is not recommended.</p> |
| 5. | <p>Sampling & sub sampling:</p> <p>a. Random grab/ chip/ channel sampling from surface exposure/ escarpments/ nala cuttings/ pit/ channel etc.</p> |

| | |
|-----|--|
| | <p>b. Systematic sampling from pits/ trenches/ outcrops/ workings etc. spaced closely enough to confirm geological and grade continuity for other stages of geological assessment.</p> <p>c. Geological logging and sampling of drill core/ chip samples at regular interval, preferably metre wise or less for the mineralized portions.</p> <p>d. The drill technique to be deployed shall depend on the rock type to be penetrated and with an aim to achieve maximum sample/ core recovery.</p> <p>e. The exploration samples including surface samples, drill core/ chip samples shall be preserved for future use.</p> |
| 6. | Assay data & Laboratory tests: Analysis of all samples generated for major radicals appropriate to the mineral under investigation. |
| 7. | Petrographic & Mineragraphic studies: Petrographic analysis of mineralized portions to ascertain the rock types and mineral assemblages including grain size, texture, gangue and its liberation characteristics etc. if considered necessary. |
| 8. | Bulk density study: The bulk density must be measured by methods that adequately account for incipient void spaces (vugs, porosity etc.) in mineral/ ore body. |
| 9. | Bulk Sampling for Beneficiation studies: Bulk sampling, if necessary, for testing processing technology. |
| 10. | Environmental setting: Details about local infrastructure, host population, historical sites, forests, sanctuaries, national park and base line information on environmental setting of the area to be collected. |
| 11. | Any other relevant data: Groundwater, geotechnical and rock characteristics etc. that may be relevant. |

Part-III

Exploration Norms (category-wise) for different types of Minor Mineral Deposits/ Mineralization

| Category | Type of deposit & Principal Minerals | General Exploration (C-2) | Detailed Exploration (C-1) |
|----------|---|---|--|
| A | <p>Building materials/ Road materials/ General stones</p> <p>Bedded Stratified and Tabular deposits of regular and irregular habit: Road Metal, Boulder, Murrum, Calcareous Sand, Diaspore, Laterite, Lime Kankar, Sand (others), Quartzite and Sand Stone (for making road metal), ordinary earth (used or filling or leveling purposes in construction or embankments, roads, railways, building) Brick-earth, Ordinary Earth, Soft & Murrum, Felsite.</p> | <p>1. Geological Survey:</p> <p>i. Geological Mapping on 1:50,000 to 1:4,000 scale with boundary demarcation with GPS.</p> <p>ii. Broad assessment of lithology, structure, surface extension of mineral.</p> <p>iii. Recording of broad geomorphology, drainage, weather profile.</p> <p>2. Geochemical Survey: not necessary</p> <p>3. Ground geophysical survey: not necessary.</p> <p>4. Technology:</p> <p>i. Pitting/ Trenching: As per requirement to proof mineralization in the area.</p> <p>ii. Scout drilling: not</p> | <p>1. Geological Survey:</p> <p>iv. Mapping on 1:4,000 to 1:1,000 scale with boundary demarcation with GPS.</p> <p>v. Assessment of lithology, structure, surface extension of mineral.</p> <p>vi. Recording of geomorphology drainage, weather profile.</p> <p>2. Geochemical Survey: not necessary</p> <p>3. Geophysical survey: not necessary.</p> <p>4. Technology:</p> <p>i. Pitting/ trenching: 2 to 5 per sq km per prospect.</p> <p>ii. Drilling: not necessary.</p> <p>iii. Sampling: systematic, grab chip, pit & trench sampling for geotechnical studies.</p> <p>iv. Geotechnical studies: measurement of compressive strength, tensile strength etc., if necessary.</p> <p>v. Bulk density/ specific gravity study.</p> <p>5. Petrographic and mineralogical</p> |

| | | | |
|----------|--|---|---|
| | Shale, Slate, Shingle, Chalcedony pebbles used for ball mill purpose only, Lime shell, Kankar and Limestone used in kilns for manufacture of lime used as building materials, Gneissic & schistose rocks, Acid and Basic rock, Gabbro, Dolerite, Basalt, Norite etc. Phyllite, Quartzite, Sandstone, Slate, Boulder, Chalcedony Pebbles, Gravel, Ordinary Sand and Quartzite Pebbles, Trachyte, and Ordinary Clay. | <p>necessary.</p> <p>iii. Sampling: Regional and random grab/ chip sample for geotechnical, specific gravity studies as per necessity.</p> <p>iv. Bulk density/ specific gravity.</p> <p>5. Integration of all data and identification of blocks for further exploration.</p> | studies as per requirement. |
| B | <p>Industrial minerals</p> <p>(i) Bedded Stratified and Tabular deposits of regular and irregular habit:</p> <p>Ball Clay, Red Clay Lithomargic Clay, Pozzolanic Clay, Natural Clay, Diatomaceous Clay, Bentonite, Chalk, Dolomite, Fireclay, Fuller's Earth, Gypsum, Quartzite, Molding Sand, Silica sand, Barytes, Chinaclay, Kaolin, Reh Matti, Ochre, Calc-Tuffa</p> | <p>1. Geological Survey:</p> <p>i. Geological Mapping on 1: 50,000 to 1:4,000 scale with boundary demarcation with GPS.</p> <p>ii. Broad assessment of lithology, structure, surface extension of mineral.</p> <p>iii. Recording of broad geomorphology, drainage, weather profile.</p> <p>2. Geochemical Survey: not necessary</p> <p>3. Ground geophysical survey: not necessary.</p> <p>4. Technology:</p> <p>iv. Pitting/ Trenching: As per requirement to proof mineralization in the area.</p> <p>v. Scout drilling: not necessary.</p> <p>vi. Sampling: Regional and random grab/ chip sample for geotechnical, specific gravity studies as per necessity.</p> <p>vii. Bulk density/ specific gravity.</p> <p>5. Integration of all data and identification of blocks for further exploration.</p> | <p>1. Geological Survey:</p> <p>i. Mapping on 1:4,000 to 1:1,000 scale with boundary demarcation with GPS.</p> <p>ii. Assessment of lithology, structure, mineralization extent.</p> <p>2. Geochemical Survey: Not Necessary</p> <p>3. Geophysical survey: Not Necessary.</p> <p>4. Technology:</p> <p>i. Pitting/ Trenching: 2 to 5 per sq km or as per requirement.</p> <p>ii. Drilling: Core drilling on grid spacing of 400m or closer for deposits of regular habit and 200m or closer for irregular habit.</p> <p>iii. Sampling: systematic pit & trench sampling. Core/ sludge sampling mineralization wise.</p> <p>iv. Chemical analysis of all samples.</p> <p>v. Bulk density/ specific gravity study.</p> <p>1. Petrographic and mineralogical studies as per requirement.</p> |
| | (ii) Lenticular bodies of all dimensions including Bodies occurring en echelon, silicified linear zones of composite veins, Lenses, pockets, stockworks; irregular shaped modest to small sized bodies | <p>1. Geological Survey:</p> <p>i. Geological Mapping on 1: 50,000 to 1:4,000 scale with boundary demarcation with GPS.</p> <p>ii. Broad assessment of lithology, structure, surface extension of mineral.</p> <p>iii. Recording of broad geomorphology, drainage, weather</p> | <p>1. Geological Survey:</p> <p>i. Mapping on 1:4,000 scale to 1:1,000 scale with boundary demarcation with GPS.</p> <p>ii. Assessment of lithology, structure, mineralization extent.</p> <p>2. Geochemical Survey: Not Necessary</p> <p>3. Geophysical survey: Not Necessary.</p> <p>4. Technology:</p> <p>i. Pitting/ Trenching: 2 to 5 per sq km or as per requirement.</p> <p>ii. Drilling: Core drilling on grid</p> |

| | | | |
|-----------------|--|---|--|
| | <p>a. General Industrial Minerals Calcite, Clay (Others), Feldspar, Ochre, Quartz, Steatite or Tale or Soapstone, China Clay, Kaolin and White Clay.</p> | <p>profile. 2. Geochemical Survey: not necessary 3. Ground geophysical survey: not necessary. 4. Technology: i. Pitting/ Trenching: As per requirement to proof mineralization in the area. ii. Scout drilling: not necessary. iii. Sampling: Regional and random grab/ chip sample for geotechnical, specific gravity studies as per necessity. iv. Bulk density/ specific gravity. 5. Integration of all data and identification of blocks for further exploration.</p> | <p>spacing of 400m or closer for deposits of regular habit and 200m or closer for irregular habit. iii. Sampling: systematic pit & trench sampling. Core/ sludge sampling mineralization wise. iv. Chemical analysis of all samples. v. Bulk density/ specific gravity study. 5. Petrographic and mineralogical studies as per requirement.</p> |
| | <p>b. Precious & Semi Precious Stones, Pegmatite, Ultra basic rocks and Mica Agate, Corundum, Diaspore (gem varieties), Dunit, Peridotite, Pyroxenite and Mica all varieties.</p> | <p>1. Geological Survey: i. Geological Mapping on 1: 50,000 to 1:4,000 scale with boundary demarcation with GPS. ii. Broad assessment of lithology, structure, surface extension of mineral. iii. Recording of broad geomorphology, drainage, weather profile. 2. Geochemical Survey: not necessary 3. Ground geophysical survey: not necessary. 4. Technology: i. Pitting/ Trenching: As per requirement to proof mineralization in the area. ii. Scout drilling: not necessary. iii. Sampling: Regional and random grab/ chip sample for geotechnical, specific gravity studies as per necessity. iv. Bulk density/ specific gravity. 5. Integration of all data and identification of blocks for further exploration.</p> | <p>1. Geological Survey: i. Mapping on 1:4,000 scale to 1:1,000 scale with boundary demarcation with GPS. ii. Assessment of lithology, structure, mineralization extent. 2. Geochemical Survey: Not Necessary 3. Geophysical survey: Not Necessary. 4. Technology: i. Pitting/Trenching: 2 to 5 per sq km or as per requirement. ii. Drilling: Not required. iii. Sampling: systematic pit & trench sampling. iv. Chemical analysis of all samples. v. Bulk density/ specific gravity study. 5. Petrographic, Gem Testing and mineralogical studies as per requirement.</p> |
| <p>C</p> | <p>Dimension and Decorative Stones Granite (Granite means dolerites, granites, gneisses, migmatites, gabbros, anorthosites, rhyolites, syenites, leptynites, charnockites and any other igneous and ortho-metamorphic rock</p> | <p>1. Geological Survey: i. Geological Mapping on 1: 50,000 to 1:4,000 scale with boundary demarcation with GPS. ii. Broad assessment of lithology, structure, surface extension of mineral. iii. Recording of broad geomorphology,</p> | <p>1. Geological Survey: i. Mapping on 1:4,000 to 1:1,000 scale with boundary demarcation with GPS. ii. Assessment of lithology, structure, mineralization extent. 2. Geochemical Survey: Not Necessary 3. Geophysical survey: Not Necessary. 4. Technology:</p> |

| | | | |
|--|--|---|---|
| | types) Marble (marble means crystalline metamorphosed calcareous or dolomitic rocks and serpentine rock types) BHL, Fuschite Quartzite | drainage, weather profile. 2. Geochemical Survey: not necessary 3. Ground geophysical survey: not necessary. 4. Technology: i. Pitting Trenching: As per requirement to proof mineralization in the area. ii. Scout drilling: not necessary. iii. Sampling: Regional and random grab/ chip sample for geotechnical, specific gravity studies as per necessity. iv. Bulk density/ specific gravity. 5. Integration of all data and identification of blocks for further exploration. | i. Pitting/ Trenching: 2 to 5 per sq km or as per requirement. ii. Drilling: Not required. iii. Sampling: 2 to 3 grabs per prospect. iv. Geotechnical: Further refinement of blockability data, polishing index measurement, measurement of compressive strength, tensile strength etc. v. Bulk density/ specific gravity study. 5. Petrographic and mineralogical studies as per requirement. |
|--|--|---|---|

Part-III A

Reporting of Minor Mineral Resources

A Geological Study Report for estimation and reporting of Minor Mineral Resources may be prepared integrating all data of exploration (sampling and testing generated through aerial, geophysical, geochemical, geological surveys and technological study) collected for assessing the resources as per the stage of exploration. The report may incorporate, among other things, the following contents:

| Sl. | Contents | Explanation |
|-----|------------------------------|---|
| 1 | Title & Ownership | <ul style="list-style-type: none"> • Title of Report. • Details of period of prospecting/ mineral right if any. • Details of exploration agency, qualification, experience of associated technical persons engaged in exploration. |
| 2 | Details of the area | <ul style="list-style-type: none"> • Mauza/ Village, Post Office, Taluka, District, State. • Survey of India Toposheet/ OSM Sheet Number and Geo-coordinates of the area of all corner points. • Mineral(s) under investigation. |
| 3 | Infrastructure & Environment | Local infrastructure, host population, historical sites, forests, sanctuaries, national park and environmental settings of the area. |
| 4 | Previous exploration | <ul style="list-style-type: none"> • Details of previous exploration carried out by other agencies/ parties. |
| 5 | Geology | <ul style="list-style-type: none"> • Brief regional geology of the area outlining the broad geological, structural frame work. • Local Geology: Deposit/ mineralization type, geological |

| | | |
|----|--|---|
| | | <p>setting and details of dip, strike, old workings, surface exposures etc. of the area under study also of adjoining nearby areas if the information is likely to have an impact on the area under study.</p> <ul style="list-style-type: none"> • Geological map of appropriate scale with geo-coordinates showing major litho-logical units, structural features; extent of surface mineralization, location of boreholes, pits, trenches, old workings etc. |
| 6 | Aerial/ ground geophysical/ geochemical Data | Details of aerial, geophysical & geochemical survey results taken up if any and their results (if carried out). |
| 7 | Technological investigation | Details of technological investigation (pitting/ trenching/ drilling etc.). |
| 8 | Type of Sampling | Grab, channel, random etc. |
| 9 | Drilling technique & drill sampling employed | <ul style="list-style-type: none"> • Drill type and details like core diameter, collar R.L, azimuth, inclination, coordinates of bore holes etc. • Whether core and chip sample recoveries have been properly recorded and results assessed. • Measures taken to maximize sample recovery and ensure representative nature of the samples. • Whether a relationship exists between sample recovery and grade. • Logging: -Whether core and chip samples have been logged to a level of detail to support • Appropriate Mineral Resource estimation, mining studies. |
| 10 | Grade and chemical analysis | Chemical analysis data for grade determination and procedures. |
| 11 | Bulk Density/ Specific Gravity | Whether assumed or determined. |
| 13 | Resource estimation techniques | <ul style="list-style-type: none"> • Discussion on mineralization and techniques for resource estimation. • The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, maximum distance of extrapolation from data points. |

| | | |
|----|---|---|
| 14 | Geotechnical Studies For Dimensional stone report | <ul style="list-style-type: none"> • Assessment of Blockability. • Polishing Index. • measurement of compressive strength, tensile strength etc. |
| 15 | Annexure/ enclosures to the report | The report shall include all relevant data including maps, sections, logs, analysis reports, photographs etc. in support of the estimates made. |
| 16 | Any other information | Any other information as may be available or required by any authority as prescribed. |

SCHEDULE II MINOR MINERALS

Categorization of Minor Minerals for conditions relating to grant of Mineral Concessions

| | |
|-------------|--|
| Category- A | <p><u>Building materials/ Road materials/ General stones</u></p> <p>Bedded Stratified and Tabular deposits of regular and irregular habit: Road Metal, Boulder, Murrum, Calcareous Sand, Diaspore, Laterite, Lime Kankar, Sand (others), Quartzite and Sand Stone (for making road metal), ordinary earth (used or filling or leveling purposes in construction or embankments, roads, railways, building) Brick-earth, Ordinary Earth, Soft & Murrum, Felsite, Shale, Slate, Shingle, Chalcedony pebbles used for ball mill purpose only, Lime shell, Kankar and Limestone used in kilns for manufacture of lime used as building materials, Gneissic & schistose rocks, Acid and Basic rock, Gabbro, Dolerite, Basalt, Norite etc. Phyllite, Quartzite, Sandstone, Slate, Boulder, Chalcedony Pebbles, Gravel, Ordinary Sand and Quartzite Pebbles, Trachyte, and Ordinary Clay.</p> |
| Category- B | <p><u>Industrial minerals</u></p> <p>(i) Bedded Stratified and Tabular deposits of regular and irregular habit: Ball Clay, Red Clay Lithomargic Clay, Pozzolanic Clay, Natural Clay, Diatomaceous Clay, Bentonite, Chalk, Dolomite, Fireclay, Fuller's Earth, Gypsum, Quartzite, Molding Sand, Silica sand, Barytes, Chinaclay, Kaolin, Reh Matti, Ochre, Calc-Tuffa</p> <p>(ii) Lenticular bodies of all dimensions including Bodies occurring en echelon, silicified linear zones of composite veins. Lenses, pockets, stockworks; irregular shaped modest to small sized bodies</p> <p>a. <u>General Industrial Minerals</u> Calcite, Clay (Others), Feldspar, Ochre, Quartz, Steatite or Talc or Soapstone, China Clay, Kaolin and White Clay.</p> |

| | |
|--------------------|--|
| | <p>b. Precious & Semi Precious Stones, Pegmatite, Ultra basic rocks and Mica</p> <p>Agate, Corundum, Diaspore (gem varieties), Dunite, Peridotite, Pyroxenite and Mica all varieties.</p> |
| Category- C | <p><u>Dimension and Decorative Stones</u></p> <p>Granite (Granite means dolerites, granite gneisses, migmatites, gabbros, anorthosites, rhyolites, syenites, leptynites, charnockites and any other igneous and ortho-metamorphic rock types) Marble (marble means crystalline metamorphosed calcareous or dolomitic rocks and serpentine rock types) BHJ, Fuschite Quartzite</p> |



TOWARDS A BETTER AIR QUALITY MANAGEMENT IN SAHIBGANJ

EMISSION INVENTORY & ASSIMILATIVE CARRYING CAPACITY*

***Disclaimer: This report is based on the data provided by the JSPCB and other government departments/agencies. Though a through scientific study is in process, therefore this report is work in progress.**

SUMMARY

The Jharkhand State Pollution Control Board (JSPCB) has taken a pro-active initiative to develop an air quality management plan for Sahibganj, along with eight cities of Jharkhand, in view of prevailing poor air quality situation in the district. A well-structured management plan includes the identification and quantification of sources that contribute to pollution levels, mitigation measures, the evaluation of future emissions to assess the effectiveness of mitigation measures, and a robust monitoring mechanism.

The foremost step in developing the air quality management plan is to understand the sources of air pollution and to explore its quantitative contribution to ambient air quality. This can be done through source apportionment study. Further, the understanding of assimilative capacity of air environment is also important in air quality management as it quantifies the amount of emission loads an area can assimilate without violating the standards. *But the estimation of carrying capacity requires a long-term seasonal and meteorological data along with other information therefore in the present report; a modified approach has been used. A detailed carrying capacity is under process.*

Thus, the report seeks *to assess and present the major sources of air pollution in Sahibganj, their percentage contribution to ambient air quality and the PM_{2.5} reduction target required to achieve under the National Ambient Air Quality Standard has been computed in this report.*

In terms of methodological approach, the major sources of air pollution in Sahibganj have been identified qualitatively and assessed through the evaluation of available secondary information. Therefore, meetings, surveys and physical visits have been helpful in identifying the key sources. To develop a source apportionment a bottom-up approach is used. In this approach, an emission inventory is established for all the known sectors of the district and processed through meteorology coupled chemical transport model to ascertain their share of contribution to the air shed.

It is noteworthy to mention that the PM_{2.5} concentration in the district is mainly coming from the domestic sector (use of biomass in cooking and lighting) followed by the contribution of road dust. The primary reason of suspended dust is the fugitive emissions coming from the mining and crushing activities prevalent in the district. Hence, ***Domestic sector accounts for 33.5% of the total PM_{2.5}, while 17% from road dust, 12.5% from power plants and Diesel Generator sets, 7.5% from industry, 5% from vehicles, 8% from open fires and 7.5% from open waste burning. The remaining 8.1% is coming from anthropogenic emissions from outside district periphery and natural emissions together.***

In addition, satellite based PM_{2.5} data has been used for the last 20 years (2000–2019) to assess the air quality and understand the level of pollution in the district and required reduction. Moreover, ***CPCB's Exceedance Factor (EF) method has been applied based on the average annual concentration of the PM_{2.5}. While adhering to the EF, it is found that Sahibganj faces critical air pollution in year 2019.*** The report has also considered the NAAQS set by Central Pollution Control Board (CPCB) to understand the pollution reduction required in Sahibganj and the extent to which it can address the issue.

The annual concentration of PM_{2.5} has been recorded higher for all the years. ***For the year 2015, the average annual concentration of PM_{2.5} was 84 µg/m³, followed by 80 µg/m³ in 2016, 76 µg/m³ in 2017, 69.1 µg/m³ in 2018 and 64 µg/m³ in 2019. Keeping in mind the annual concentration of PM_{2.5} in year 2019, PM_{2.5} should be reduced up to 38% to ensure clean air in the district.*** The reduction of 38% of PM_{2.5} from base year 2019 can bring the district into the 'moderate' to 'low' category. ***The air quality index for the year 2019 showed that the air quality has been 'moderate' category in Sahibganj. The AQI index value for the year 2019 is 113.***

Moreover, the trend analysis of monthly mean concentration of PM_{2.5} shows that air quality of the district can be classified in two seasons, i.e. clean air period (March to September) and polluted period (October to March). Thus, the report tries to present a vivid scenario about the current air quality of Sahibganj and the sources which are

endowed with some suggestions to control the air quality. **This document is a part of the process to develop the Clean Air Action Plan of Sahibganj.**

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ABBREVIATIONS

| | |
|--|-------------------------------------|
| Jharkhand Bijli Vitran Nigam Limited | JBVNL |
| Central pollution control board | CPCB |
| Comprehensive Clean Air Action Plan | CCAAP |
| Compressed Nitrogen Gas | CNG |
| Construction and Demolition Waste | C & D |
| Department of Forest, Environment and Climate Change | DoFECC |
| Electric Vehicles | EV |
| End of life | EOL |
| Environment Protection | EPCA |
| Graded Response Action Plan | GRAP |
| HC+Nox | Hydrocarbon+ Nitrogen oxides |
| ICMR | Indian council for Medical Research |
| Jharkhand State pollution control board | JSPCB |
| Ministry of Environment, forest and climate change | MoEFCC |
| Ministry of Health and Family welfare | MoFHW |
| National Air Monitoring Program | NAMP |
| National Air Quality Index | NAQI |
| National Ambient Air Quality Standards | NAAQS |
| National Clean Air Program | NCAP |
| Nitrogen dioxide | NO ₂ |
| Operation and continuous emission monitoring system | OCEMS |
| Particulate matter | PM ₁₀ |
| Particulate Matter | PM |
| PHFI | Public Health foundation of India |
| Sulphur dioxide | SO ₂ |
| Suspended Particulate matter | SPM |
| Pardhan Mantri Ujjwala Yojna | PMUY |
| Indian Meteorological Department | IMD |
| Heavy Motor Vehicles | HMV |

| | |
|----------------------|-----|
| Light Motor Vehicles | LMV |
| Exceedance Factor | EF |

KEY HIGHLIGHTS

1. The PM_{2.5} concentration in Sahibganj is largely coming from the domestic sector (use of biomass in cooking and lighting) followed by the contribution of road dust. This suspended dust is mainly due to fugitive emissions coming from the mining and crushing activities prevalent in the district.
2. Domestic sector accounts for 33.5% of the total PM_{2.5}, while 17% from road dust, 12.5% from power plants and DG sets, 7.5% from industry, 5% from vehicles, 8% from open fires and 7.5% from open waste burning. The remaining 8.1% is coming from anthropogenic emissions from outside district periphery and natural emissions altogether.
3. The satellite PM_{2.5} data for the last 20 years (2000–2019) has been used to assess the air quality of Sahibganj and understand the level of pollution and the required reduction. PM₁₀ measured by continuous air quality monitoring stations in the year 2020 has also been analyzed.
4. Based on the Exceedance Factor for the year 2019 it is found that Sahibganj is in critical pollution level. In the last five years the exceedance factor remains between 1-2, in the year 2015, the value is 2.1, followed by 2.0 for the year 2016, 1.9 for 2017, 1.7 for the year 2018, and 1.6 for 2019.
5. The annual concentration of PM_{2.5} was recorded higher for all the years. For the year 2015, the average annual concentration of PM_{2.5} was 84µg/m³, followed by 80µg/m³ in 2016, 76 µg/m³ in 2017, 69.1 µg/m³ in 2018 and 64 µg/m³ in 2019.
6. PM_{2.5} should be reduced up to 38% taking 2019 as a base year to ensure clean air in the district. Sahibganj can be brought to moderate to low range based on CPCB exceedance factor by reducing PM_{2.5} concentration by the above-indicated value.

- 7. Based on the monthly average data of PM_{2.5}, the Sahibganj air quality can be divided into two seasonal variations viz, the period of clean air quality (from April to September) and polluted period (October to March).**
- 8. It is observed that air quality was in 'moderate' to 'satisfactory' category for 67% of the year, 25% in 'very poor' category while rest (8%) in 'Poor' category.**
- 9. The air quality has been in the 'moderate' category for year 2019 in Sahibganj . The AQI index value for the year 2019 is 113.**
- 10. The concentration of PM₁₀ in the district monitored by Continuous Air Quality Monitors has also been used to understand the air pollution in the last year (2020) in Sahibganj.**
- 11. The 24-hour concentrations of PM₁₀ at all monitoring stations in year 2020 are recorded within the national standard (100mcg /m³). Based on the data monitored in these stations, the annual average concentration of PM₁₀ is noted at 42 mcg / m³ which is below the national standard.**
- 12. By observing air quality and keeping in mind the presence of multiple crushing and mining units, Pathna and Mandro seem to be the most affected and they have been identified as local pollution control locations.**

1. LOCATION, TOPOGRAPHY & ECONOMIC PROFILE

Sahibganj (also known as Sahebganj) is situated at the North-Eastern part of Jharkhand and it has a predominantly tribal population largely of Santhals and Paharia along with non-tribal communities. Sahibganj is bounded on the North by the river Ganges and Katihar district (Bihar), on the South by the Godda district (Jharkhand), on the East by Maldah and Murshidabad districts (West Bengal), and on the West by Bhagalpur district (Bihar). Sahibganj lies approximately between 24° 42' North and 25° 21' North latitude and between 87° 025' and 87° 054' east longitude, and situated at the height of 37.185m from the sea level. The geographical area of the district is 1599.00 sq. km.¹

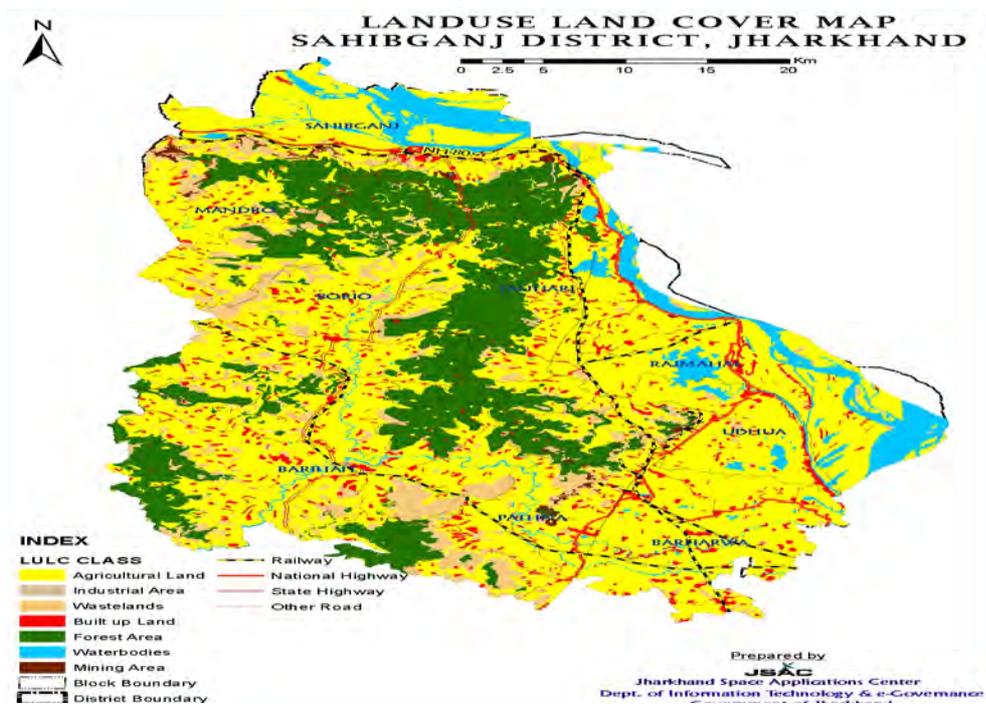


Figure 1: Land use and land cover map of Sahibganj (Source: Jharkhand Space Application Centre)

As per the Census-2011, the population of Sahibganj is 1,150,567 of which male and female were 589,391 and 561,176 respectively. Sahibganj district ranks thirteenth in terms of total population in the state. It has an average literacy rate of 53% which is

¹ <https://sahibganj.nic.in/profile/>

lower than the national average of 74.4%. For administrative purpose the district has been divided into 2 sub-divisions and 9 Blocks.

It has sub-tropical climate and it becomes cool during winter and record average temperature of 15°C but during summer temperature ranges from 30°C to 40C with humidity. The district receives an annual rainfall of 1500 mm, but due to its hilly topography the water during the rainy season flows away to nearby states. Since the Ganges flows in the district, this area is often prone to flood in rainy season. The district has agrarian economy and more than 64% of the total workers are engaged in agro and its allied activities.

2. SOURCES OF AIR POLLUTION IN SAHIBGANJ

The air quality management has two pre-requisite, first the identification and quantification of sources that contribute to pollution levels; and second the evaluation of scenarios for future emissions to assess the effectiveness of mitigation measures to control air quality levels. **The source profiling and capacity assessment study best serves this purpose and is a guiding factor. However, estimation of carrying capacity requires a long term seasonal and meteorological data along with other information. Therefore, in the present study, a modified approach has been illustrated. A detailed carrying capacity is under process.**

The emissions inventory for Sahibganj region has been developed for total PM in size fractions of PM_{2.5}. As the Figure 2 shows, there are two ways to conduct the source apportionment; a top down approach (collecting samples & analyzing them in lab) and bottom approach (to use existing data and surveys).

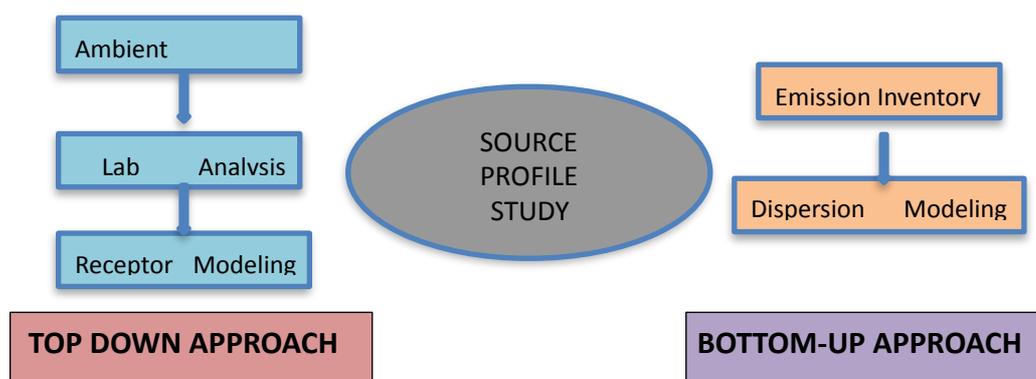


Figure 2: Diagram of process for conducting Source Profile study

Methodological Approach:

To develop a source apportionment of Sahibganj a bottom-up approach is used. In this approach an emission inventory is established for all the known sectors of the district and processed through meteorology coupled chemical transport model to ascertain their share of contribution to the air shed². The major sources of air pollution in entire Sahibganj have been identified qualitatively and through

² Urbanemissions.info

assessment of secondary information available. Moreover, meetings, surveys and physical visits have been helpful in assessing the key sources.

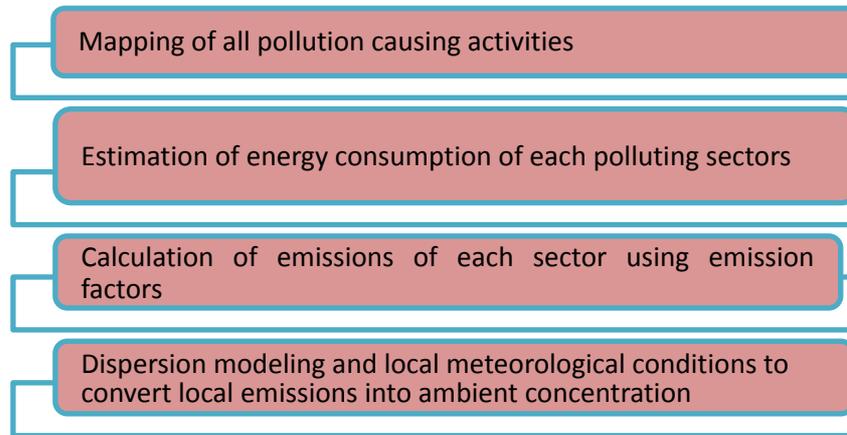
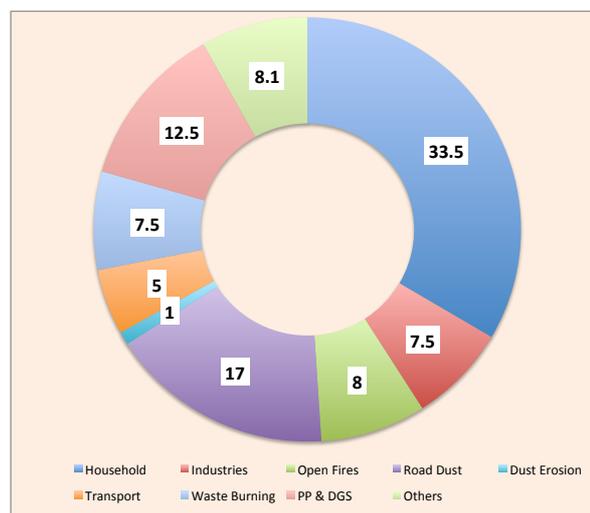


Figure 3: Flowchart of steps employed in source apportionment study of Sahibganj

The secondary information has been collated from the pollution control board, census bureau, national sample survey, industries’ annual survey, municipal waste management, and publications from academic and non-governmental institutions. ***For instance, industrial energy consumption has been identified using audits and energy statistics, vehicle population has been analyzed using official transport data, and energy use at household level has been computed using the census 2011 data.***



[Figure 4: Sahibganj PM2.5 emission inventory³](#)

- **Household:** Contribution of domestic cooking, space heating, water heating, and lighting
- **Road dust:** Contribution of re-suspended dust on the roads and construction activities
- **PP and DGS:** Contribution of power plants (PP) and Diesel Generator Sets (DGS)
- **Open fires:** Contribution of open biomass burning (both in agricultural lands and forest areas), a seasonal affair linked to dry conditions and agricultural clearing patterns (supported via satellite feeds)
- **Waste burning:** Contribution of open waste burning
- **Industries:** Contribution of industrial activities
- **Transport:** Contribution of passenger transport (two/three/four wheelers, buses, and aviation) and freight transport (heavy and light trucks, non-road vehicles, and shipping)
- **Dust erosion:** Contribution of wind-blown dust from dry and arid regions, dependent on hourly meteorological conditions
- **Others:** Contribution of anthropogenic emissions from outside (and within the modelling domain) and natural emissions

A detailed source apportionment of the major sources of air pollution in Sahibganj is described above (see Figure 4). A major reason for the increase in air pollution is attributed to the use of biomass (coal, cow dung etc.) in domestic cooking, heating and lighting purposes, while thermal power plants and extensive use of diesel generator sets in industrial units is another major contributor to total PM2.5 emissions in the region.

Domestic/household sector accounts for 33.5% of the total PM2.5, while 17% from road dust, 12.5% from power plants and DG sets, 7.5% from industry, 5% from vehicles, 8% from open fires and 7.5% from open waste burning. The remaining 8.1% is coming from anthropogenic emissions from outside district periphery and natural emissions. The suspended road dust is mainly due to fugitive emissions from mining and crushing activities prevalent in the district.

Extensive stone mining and crusher operations are one of the most notable anthropogenic activities in terms of the quantity of dust and aerosol emissions in Sahibganj. ***The road dust found in Sahibganj is composed of dust from multiple***

³ Urbanemissions.info

sources, including wind transported mineral dust from mines and tailings as well as uncovered trucks leakage. Collectively, these are then distributed via wind and traffic activity, making them an important source of particulate matter in the region.

2.1 MINING

The district does not have large industries, but it is famous for the stone, pottery, clay washing industry and mining as they are important commercial activities there. **Six red-category industries involving mining and clay processing unit are operational in the district⁴.** Mining is estimated to be providing direct employment to large number of people engaged in activities like extraction, crushing plant, transportation of mined stones and crushed products etc.

Sahibganj has **a total of 604 registered small industrial units; and as the district is brimful of minor minerals like Black stone, Kaolin, China clay etc maximum of these units are based on stone mining and related query activities (see Table 1).** These mining activities give rise to substantial quantity of fine fugitive dust emissions that create health hazards to the workers as well as surrounding population by way of causing respiratory diseases.

| S. No | Types of Units | Total Units |
|-------|--------------------------------|-------------|
| 1 | Registered Industrial Units | 604 |
| 3 | Registered Medium & Large Unit | NA |
| 4 | Number of Industrial area | NA |

Table 1: Industrial setup of Sahibganj

The problem of air pollution is significant in the mining area and around; activities such as stone mining and crushing causes the emission of suspended particulate matter (SPM). Many activities involving distinct physical operations, including quarrying (like drilling, blasting, loading, hauling) and plant process operations (such as crushing, screening, conveying and transfer operations) generates considerable emissions (see Table 2). Further, in mining area the internal transportation also

⁴ Information provided by JSPCB

⁵ <http://dcmsme.gov.in/old/dips/Sahibganj.pdf>

contributes to total particulate matter emission.

| Activity | Process Sources | Fugitive Dust Sources |
|----------------|--------------------------|-----------------------|
| Mining | Drilling | Blasting |
| | | Loading and hauling |
| Transportation | N/A | Haul roads |
| Stone Crushing | Crushing | Stockpiles |
| | Screening | Conveying |
| | Conveyor transfer points | |

[Table 2: Stone Mining emission Sources](#)

There are 320 stone crushers and 155 stone mines are operative in the district. It should also be noted that according to the ‘District Profile of Sahibganj-2018’, there are 282 non-operational mines in the district⁶⁷. The production of minor minerals increased by about 38% between three years (2015-2018), indicating the contribution of mining activities to the increasing air quality of the district (see Table. 3). Further, it can be noted that most of the non-operational mines in the district have not followed any restoration plans and are also of concern.

| S.No | Year | Production (cft) |
|------|-----------|------------------|
| 1 | 2015-2016 | 118,019,586 |
| 2 | 2016-2017 | 140,699,287 |
| 3 | 2017-2018 | 195,042,738 |

[Table 3 : Detail of production of Minor Minerals \(2015-2018\)](#)⁸

⁶<https://cdn.s3waas.gov.in/s369421f032498c97020180038fddb8e24/uploads/2018/08/2018082857.pdf>

⁷ Data Shared by JSPCB

⁸<https://cdn.s3waas.gov.in/s369421f032498c97020180038fddb8e24/uploads/2018/08/2018082857.pdf>

According to a survey report of Sahibganj prepared by the Government of **Jharkhand, there are 77764.26 million tonnes of minor minerals (stone and kaolin)** in seven blocks of Sahibganj, indicating the possibility of more mining activities in the district. And if the proper emission control measures are not followed, pollution will increase further.

| Sr | No. of Potential Blocks identified | Total Area (Ha) | Calculated Reserve in Million Tton |
|-------|------------------------------------|-----------------|------------------------------------|
| Total | 27 | 36601 | 77764.26 |

[Table 4: Minor Mineral Reserve in Sahibganj District as on August 2018](#)

Interventions like 'mist sprinkler, fixed sprinklers and dust extraction' should be implemented with utmost stringency to control the dust suppression and fugitive emissions. Mobile tankers are to be augmented to sprinkle water on haul road and concrete pavement, along with many other measures to reduce the pollution impacts of mining on local and urban air quality.

2.2 ROAD DUST

The re-suspension of road dust carries a large part of the burden in PM concentration and most of the dust comes from mining and crushing activities. Along with uncovered mined material transportation, lack of water spraying system and movement of heavy vehicles have brought an addition to air pollution to the locality. The measures like end-to-end road pavement, plantations along road sides, strict compliance of existing policies and the introduction of mechanical sweepers can help to reduce suspended road dust particles.

2.3 THERMAL POWER PLANTS AND DIESEL GENERATORS

Though there are no thermal power plants present inside the district but air pollution has a trans-boundary impact and sources around the peripheries of the district can also affect the air quality. The emissions from thermal power plants around the periphery of the district like NTPC-Farakka, NTPC-Kahalgaon, ECL-Pakur also

contribute to the total PM2.5 in the district.

Reliable power supply is also a major challenge in the district and most commercial establishments and industrial sets are completely dependent on diesel generator sets. Domestic electricity needs in the district are mostly met by coal-fired power stations, while mobile phone towers, commercial establishments, stone crushers and mining units, hotels and theatres generally use diesel generators to meet their electricity needs. The prevalent use of diesel generator sets also adds to the total PM2.5 load at Sahibganj.

2.4 VEHICLES

The road transport sector in Sahibganj is not a major cause of rising air pollution, but Heavy Motor Vehicles (HMs), especially those involved in mining activities, contribute a lot. The movement and the loading and unloading activities contribute a significant percentage to air pollution.

The information on registration of total vehicles in Sahibganj clearly shows the large number of vehicles used for transport mining materials and excavation. In addition, there are many buses and trucks, which are not registered in the district, but they are moving within and across the district also contribute to pollution.

The data available in the public domain by the Transport Department, Government of Jharkhand states that there are more than 48,000 vehicles registered in Sahibganj (till September 2020) and a major proportion of them are at the end of life stage. Actually, this particularly raises concern on the air pollution. This estimate is being made in view of the data present in the Comptroller and Auditor General (CAG) report of Transport Department of Jharkhand. This report states that **26% of the total registered vehicles in the state are over 15 years old.**

Further, new vehicles are added every year on the roads of Sahibganj. Between January 2017 and January 2020, **around 29,000 new vehicles were registered in Sahibganj**, The maximum number of vehicles registered is motorcycle followed by

tractor⁹. On an average it has been calculated that every year around 9000¹⁰ new vehicles are coming on the road of Sahibganj and the way the number of vehicles in the district is increasing, especially the exponential growth of HGV vehicles is a serious concern for air pollution and it needs to be tapped.

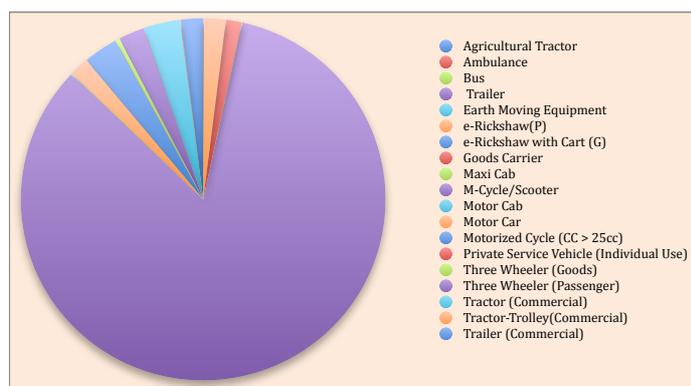


Figure 5: Vehicles Classification in Sahibganj¹¹ (Source:CEED analysis)

The high number of Heavy Motor Vehicles (HMGVs) is a concern for the district as these vehicles emit more as compared to Light Motor Vehicles (LMVs) as most of these are diesel vehicles. Impact of movement of transportation for carrying mined material on ambient air quality of surrounding area including traffic congestion on roads. Further, the increase in purchasing capacity and the way the automobile industry is booming there is a possibility of more vehicles coming on road and further worsening of the air quality.

2.5 BIOMASS BURNING IN DOMESTIC PURPOSE FOR COOKING & HEATING

Biomass burning in massive amounts by households for cooking and lighting purposes has also led to the increase in the pollution levels in the district. This will have to be strongly curtailed. Majority of the population in district relies on solid fuels for domestic cooking and lighting purposes due to their inability to access

⁹<https://cdn.s3waas.gov.in/s369421f032498c97020180038fddb8e24/uploads/2020/07/2020071625.pdf>

¹⁰ Based on CEED analysis

¹¹ <https://cdn.s3waas.gov.in/s369421f032498c97020180038fddb8e24/uploads/2020/07/2020071625.pdf>

cleaner and more efficient sources of energy. The Census of India-2011 in its 'Household and Amenities Survey' has presented a morbid scene for Jharkhand (88%), the state ranks third among the highest consumers of biomass and charcoal.

The district level data of Sahibganj shows that the majority of the households use solid fuel as a household fuel (see Figure 6). **Merely 5% of the total population uses LPG/PNG for cooking in households.**

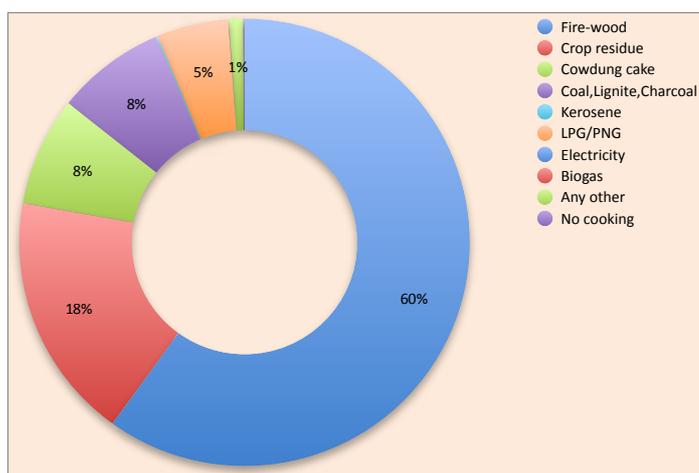


Figure 6: Status of inefficient fuel usage in districts Ranchi, Hazaribagh, Dumka, Pakur, Ramgarh and Sahibganj of Jharkhand (in percent) ¹²(Source:CEED analysis)

However, due to Pradhan Mantri Ujjwala Yojna (PMUY) and several other initiatives to promote cleaner energy options the number of households using solid fuel decreases in the district. But, still the situation is far from favourable.

The clean fuels should be made economically viable for domestic use as compared to cheaper solid fuels such as coal, firewood and crop residues. Sahibganj requires 100 percent LPG penetration and reliable supply for domestic and commercial usage, which will also require strong public awareness program support.

2.6 SOLID WASTE BURNING

With incompetent waste management systems in the district there are chances that waste deliberately burned to free up space at dumpsites, to facilitate scavenging of non-combustible materials (such as metals) for profit, or for use as a heat source.

¹² CENSUS Survey-2011

Further, in uncontrolled landfills and dump sites, waste may also spontaneously combust adding much to the already polluted air.

2.7 BRICK KILNS AND OTHER SOURCES

Owing to presence of river Ganges in the district few brick kilns also flourishes in the district. Six major brick kilns have been found operating in the region¹³.

¹³ Based on the data provided by CPCB

3.ASSIMILATIVE CARRYING CAPACITY OF SAHIBGANJ

Sahibganj is witnessing unprecedented poor air quality that leads to worrisome public health scenario. Apart from analysing the current situation of pollution, ***it is also necessary to understand how much pollution can be assimilated without violating the standards in the district. As mentioned earlier, assimilative carrying capacity is a key parameter to understand this but considering the lack of long-term information on metrological data and others in the present study, a modified approach has been illustrated.***

The report attempt to investigate the air quality situation and its prospective threat to the district of Sahibganj ***by computing the 'Exceedance Factor' of the region. An estimate has also been made on the necessary reduction in pollution to achieve NAAQS using the annual PM_{2.5} concentration. Moreover, to comprehend the level of pollution trend analysis the monthly mean concentration of PM_{2.5} for last 20 years (2000-2019) has been computed.*** The study has put focus on particulate matter as generally concentration of gaseous pollution is comparatively less compared to particle pollution in mining areas.

Both the ***satellite-based available data in public domain and ground data is used to understand the morbid picture of air pollution in the district.*** It can to be noted that two main sources used to create PM_{2.5} exposure data are ground-based measurements (especially regulatory monitoring) and satellite retrievals (especially aerosol optical depth, (AOD)¹⁴. Aerosol Optical Depth (AOD) is a quantitative estimate of the amount of aerosol present in the atmosphere, and it can be used as a proxy for surface Particulate Matter PM_{2.5}¹⁵.

In order to evaluate the pollution intensity and air quality status of Sahibganj district, the Exceedance Factor (EF) method given by CPCB has been applied. An EF

¹⁴ <https://www.tandfonline.com/doi/abs/10.1080/10962247.2019.1668498?journalCode=uawm20>

¹⁵ http://cimss.ssec.wisc.edu/goes/OCLOFactSheetPDFs/ABIQuickGuide_BaselineAerosolOpticalDepth.pdf

is the “proportion of the yearly average concentration of a pollutant and its particular standard”. The equation for calculating Exceedance Factor is below:

Exceedance Factor (EF) = (Yearly average concentration of the pollutant)/(Yearly standard for that particular pollutant)¹⁶

The air quality has been classified into four broad categories based on an Exceedance Factor.

- **Critical pollution (C): EF is above 1.5**
- **High pollution (H): EF is between 1.0–1.5**
- **Moderate pollution (M): EF between 0.5–1.0; and**
- **Low pollution (L): EF is below 0.5.**

Based on the EF, any locations in either of the first two categories are actually not meeting the standards, although, with varying magnitude. Those, falling in the third category are meeting the standards as of now but likely to exceed the standards in future if pollution continues to increase and it is not controlled. However, the locations in Low pollution category have a rather clean air quality¹⁷.

The satellite based annual average concentration of PM_{2.5} has been used to understand the air quality of Sahibganj with respect to NAAQS. ***The analysis found a significant amount of concentration in the city, as the range of PM_{2.5} is witnessed at high level between these years. Based on the data PM_{2.5}, the exceedance factors are calculated which is shown in Figure 7.*** It is evident from the figure that the pollution level crosses critical level for PM_{2.5} in all the years. This indicates that immediate attention is needed to curb the particulate matter.

The Exceedance value for the PM_{2.5} in all consecutive years, i.e., ***from 2000 to 2020, was within 1.6 to 2, which is a critical level. In the last five years the exceedance***

¹⁶ Central Pollution Control Board

¹⁷ <https://cpcb.nic.in/openpdf.php?id=UmVwb3J0RmlsZXMvMzJfMTQ1ODEyNjU5MV90ZXJdJdGVtXzE5MI90QUFRU1RjLnBkZg==>

factor remains between 1.5- 2, in the year 2015, the value is 2.1, followed by 2.0 for the year 2016, 1.9 for 2017, 1.7 for the year 2018, and 1.6 for 2019 (see Table 5).

The district of Sahibganj has been found with critical level of pollution with respect to PM2.5 thus more efforts in terms of mitigating emissions are required.

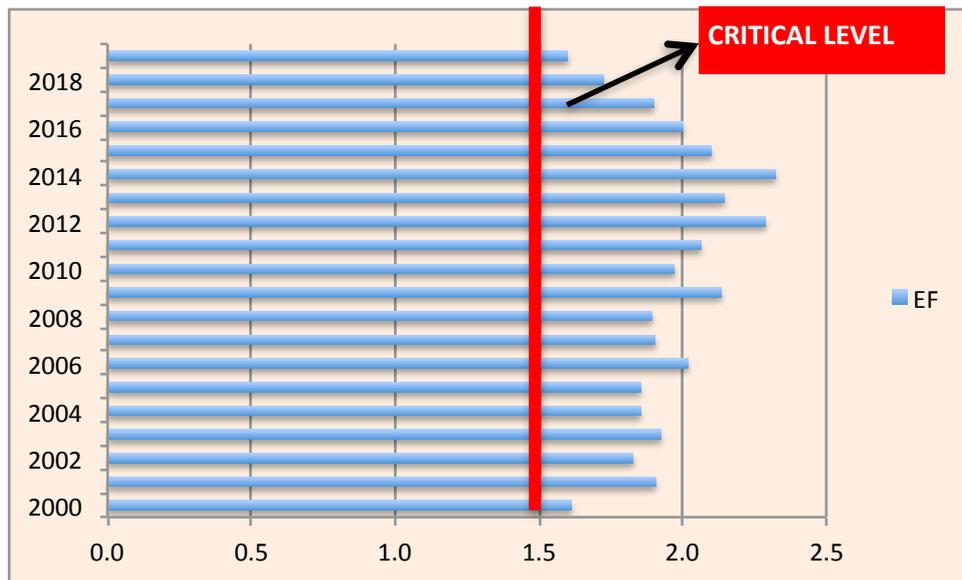


Figure 7: Exceedence factor of PM2.5 in Sahibganj (2000-2019)¹⁸ (Source: CEED Analysis)

| YEAR | EF | CATEGORY | YEAR | EF | CATEGORY |
|------|-----|----------|------|-----|----------|
| 2000 | 1.6 | Critical | 2011 | 2.1 | Critical |
| 2001 | 1.9 | Critical | 2012 | 2.3 | Critical |
| 2002 | 1.8 | Critical | 2013 | 2.1 | Critical |
| 2003 | 1.9 | Critical | 2014 | 2.3 | Critical |
| 2004 | 1.9 | Critical | 2015 | 2.1 | Critical |
| 2005 | 1.9 | Critical | 2016 | 2.0 | Critical |
| 2006 | 2.0 | Critical | 2017 | 1.9 | Critical |
| 2007 | 1.9 | Critical | 2018 | 1.7 | Critical |
| 2008 | 1.9 | Critical | 2019 | 1.6 | Critical |

¹⁸ Satellite data

| | | | | | |
|------|-----|----------|--|--|--|
| 2009 | 2.1 | Critical | | | |
| 2010 | 2.0 | Critical | | | |

Table 5: Exceedence factor value for consecutive years (Source:CEED analysis)

Considering the National Ambient Air Quality Standard prescribed by the CPCB, the present study also highlights the extent to which pollution has increased in Sahibganj district and how much pollution reduction is required. The CPCB standards fall above the World Health Organization’s (WHO) Interim Target-2 (IT-2) (WHO, 2006). **The annual concentration of PM_{2.5} was recorded higher for all the years. For the year 2015, the average annual concentration of PM_{2.5} was 84µg/m³, followed by 80µg/m³ in 2016, 76 µg/m³ in 2017, 69.1 µg/m³ in 2018 and 64 µg/m³ in 2019** (Figure 8).

Keeping in mind the average annual concentration of PM_{2.5} in Sahibganj district for last 20 years, **PM_{2.5} should be reduced up to 38% taking 2019 as base year to ensure clean air in the district.** Sahibganj can be brought to moderate range based on CPCB exceedance factor by reducing PM_{2.5} concentration by the above-indicated value.

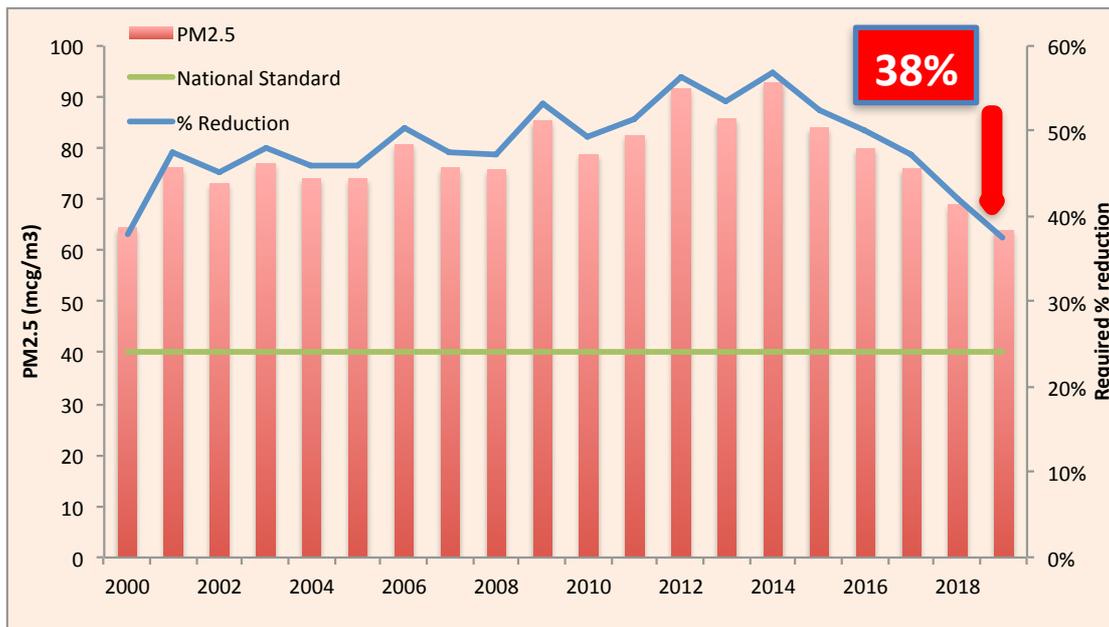
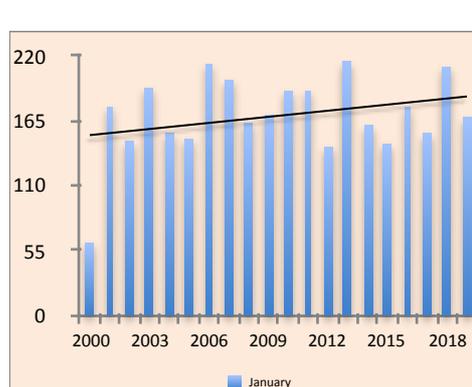


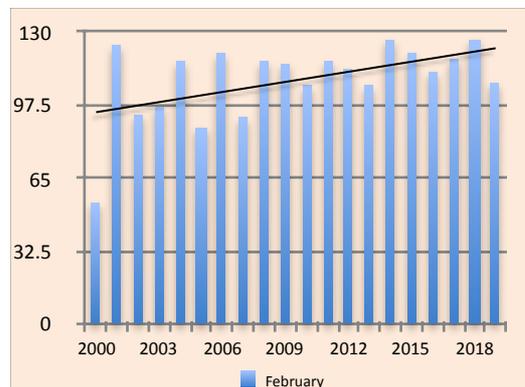
Figure 8: Annual trend of PM_{2.5} and % reduction required¹⁹ (Source:CEED Analysis)

¹⁹ Satellite data

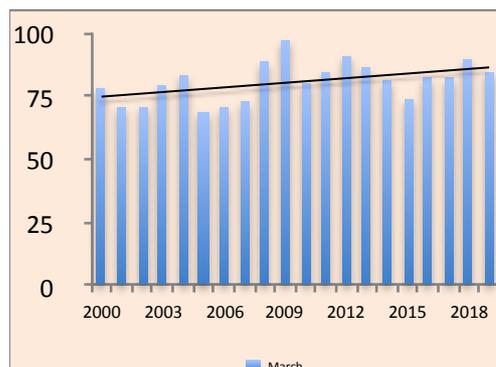
To understand the monthly variation in PM_{2.5} concentration in Sahibganj the report computed the monthly trend of PM_{2.5}. As per the Figure 9 mentioned below, which has been prepared based on the monthly average data of PM_{2.5}, ***the Sahibganj air quality can be divided into two seasonal variations viz, the period of clean air quality (from May to September) and polluted period (October to March)***. This type of variations mainly takes place due to seasonal effect when during winter month vertical winds with high pressure prevails on the ground which results in the concentration of pollutants at the surface for a more extended period and so recording the high pollution levels. The concentrations of PM_{2.5} between May and September have generally been found to be within the safe limit²⁰.



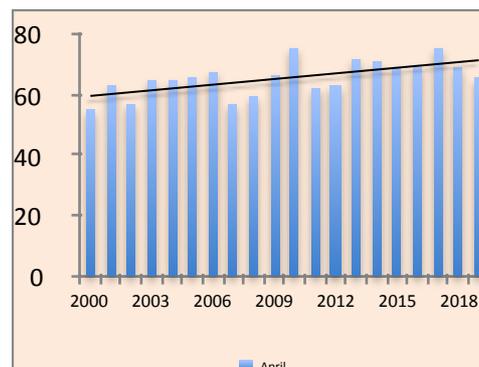
A. January



B. February

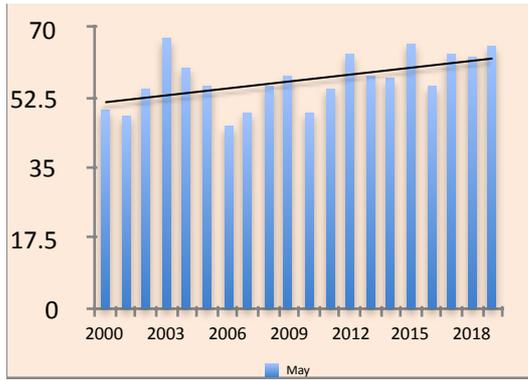


C. March

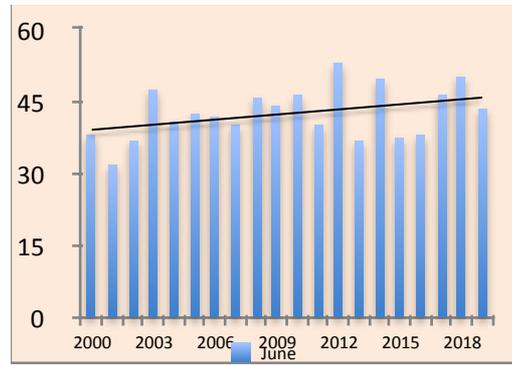


D. April

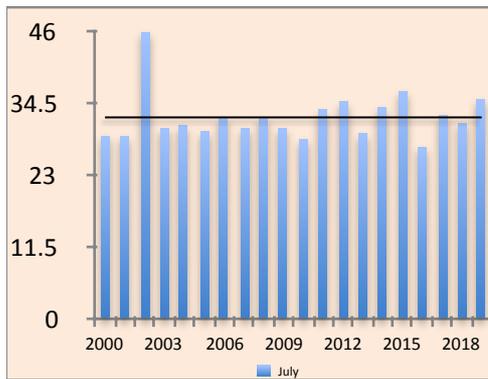
²⁰ Monthly national standard for PM_{2.5} does not exist



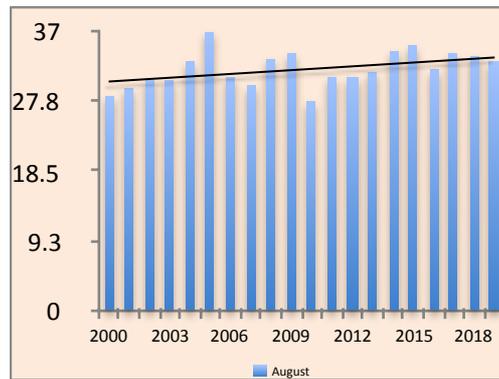
E. May



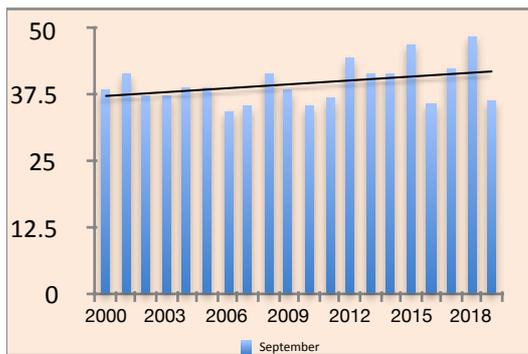
F. June



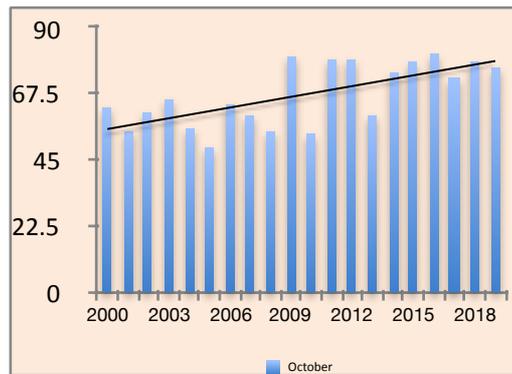
G. July



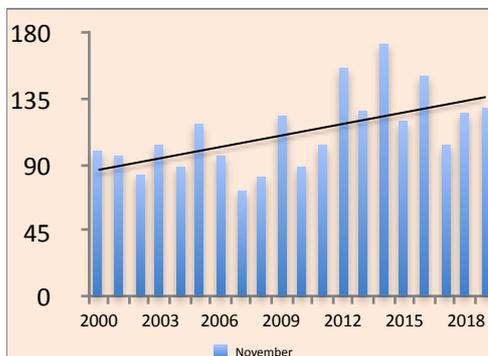
H. August



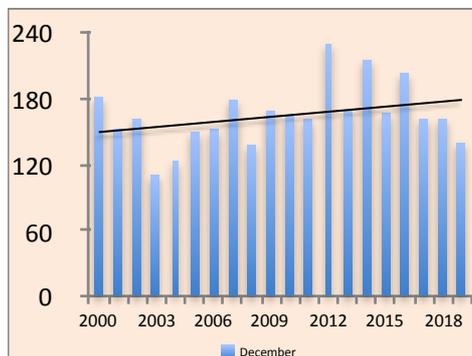
I. September



J. October



K. November



L. December

Figure 9: Monthly mean concentration of PM2.5 over the years (2000-2019)²¹ (Source: CEED Analysis)

3.1 AIR QUALITY INDEX

The total number of months with varied Air Quality Index (AQI) values in accordance with CPCB's AQI category is elaborated in the graph for year 2019. It is observed that air quality was in 'moderate' to 'satisfactory' category for 67% of the year, 25% in 'very poor' category while rest (8%) in 'Poor' category

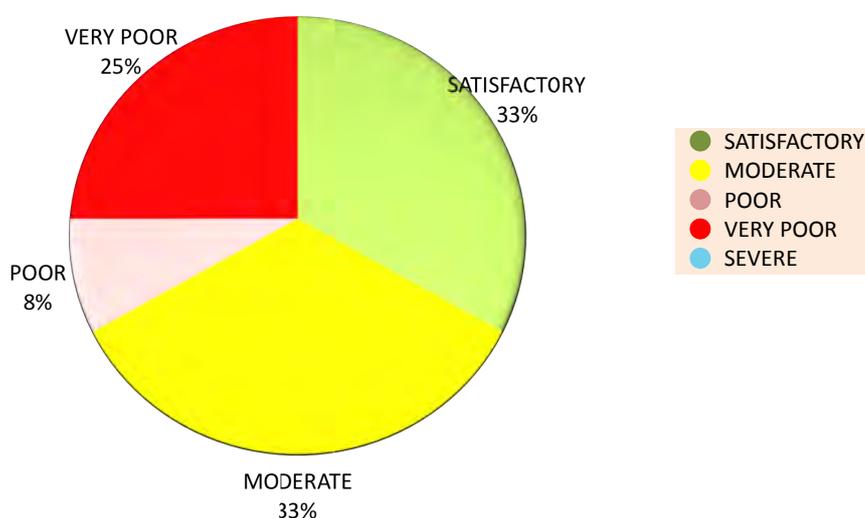


Figure 10: Monthly distribution of air quality index in Sahibganj district²² (Source: CEED Analysis)

In the year 2019, the air quality in Sahibganj has been in the 'Moderate' category. The AQI index value for the year 2019 is 113 indicating that the air quality in the district has been generally in 'poor' to 'very poor' category for 3-4 months, the rest of the time it is in 'moderate' to 'satisfactory' category. This is also indicated in the monthly trend of PM2.5 for the last 20 years, as discussed above.

²¹ Satellite data

²² Satellite data

The downward trend in the air quality index has also been observed in the last five years (2015-2019). AQI was 180 in 2015, 167 in 2016, 153 in 2017, 130 in 2018 and 113 in 2019.

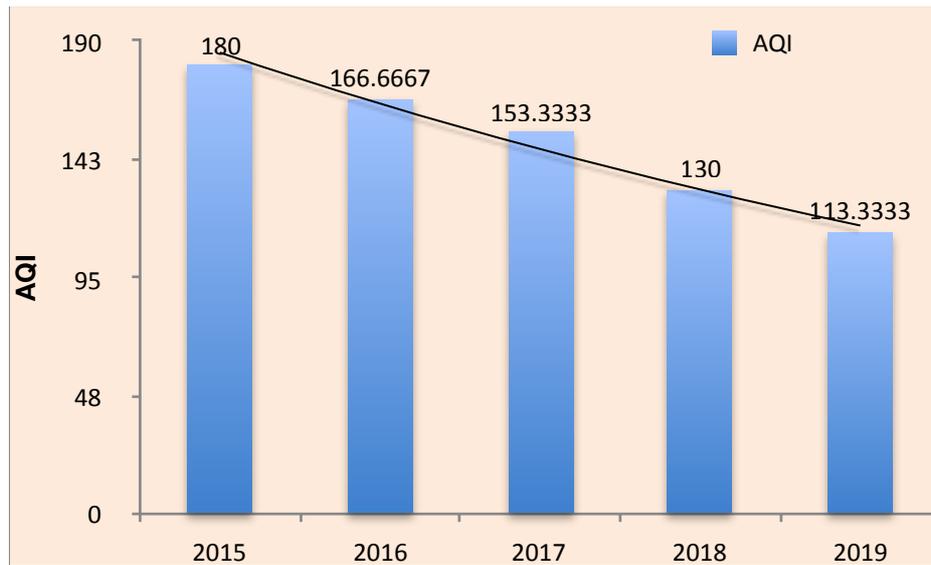


Figure 11: Annual AQI noted in 2015-2019 (Source: CEED Analysis)

3.2 TREND OF PM10 CONCENTRATION (2020)

For measuring the PM10 concentration, few continuous air quality monitors have been installed in the district in January 2020. These are located inside or around the periphery of the mines. Air quality monitoring stations are installed at **Mandhan Mines, M / S Maa Ambika Mines, Bhagwan Stones and Maa Ambika traders (old)**.

The PM10 value recorded at these stations has also been used to understand the trend of pollution in relation to PM10 in Sahibganj. Although the data monitored is discrete, it is sufficient to represent the air quality observed in the district in the year 2020 (see Figure 11).

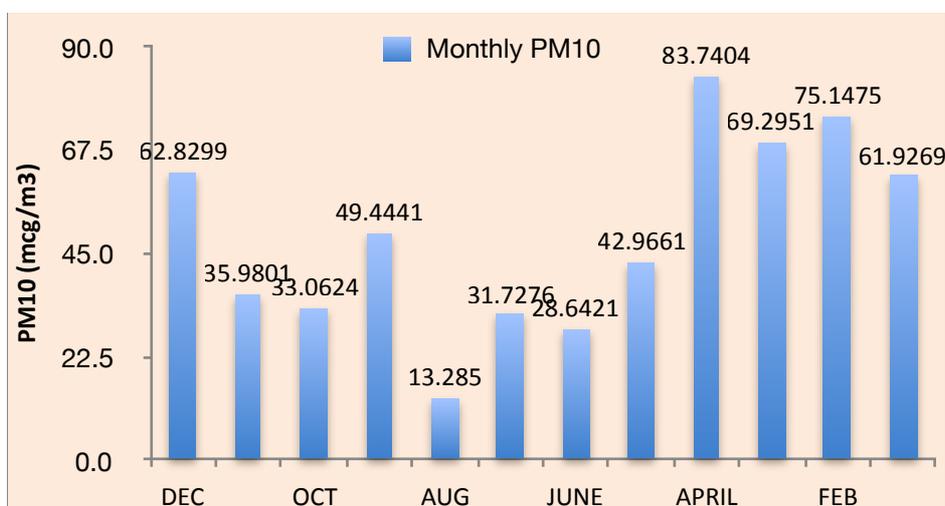


Figure 12: Monthly mean concentration of PM10 in year 2020²³ (Source: CEED Analysis)

The 24-hour concentrations of PM10 *at all monitoring stations in year 2020 are recorded within the national standard (100mcg/m³)²⁴. Based on the data monitored in these stations, the annual average concentration of PM10 is noted as 42 mcg / m³, which is below the national standard.*

3.3 AIR QUALITY MONITORING

The district Sahibganj, which is famous for stone chips, is witnessing severe levels of air pollution. Known sources of air pollution, such as vehicles, industries and mining, solid fuel usage, brick kilns, road dust etc., are responsible for the air pollution in Sahibganj. To understand the air quality in the district a robust network of air quality monitoring stations is required. The required number of minimum air quality stations required for understanding the trends of the pollutants is recommended in the guidelines for ambient air quality monitoring developed and published by CPCB.

Based on the thumb rule proposed by CPCB and district level population (2011 census), the minimum number of air quality monitoring stations required in Sahibganj is 5 as mentioned below in Table 6. The calculated required stations have also been correlated with the analysis and findings of several other reports.

²³ CAAQMS data provided by JSPCB

²⁴ http://cpcbenvi.nic.in/air_pollution_main.html#

| City | Minimum no. of required stations |
|-----------|----------------------------------|
| Sahibganj | 5 |

Table 6: [Requisite expansion of air-quality monitoring network based on CPCB guidelines²⁵](#)

Moreover, the possibility of low cost sensor based air quality monitors and use of satellite-driven air quality data should also consider. This can help in assessing a much larger area to generate baseline data for local action.

4. LOCAL POLLUTION HOT SPOTS

There are 9 blocks in Sahibganj district, out of which mining and stone crushing activities are prevalent in 7 blocks. While observing air quality and the presence of multiple crushing and mining units, Pathna and Mandro have been seemed to be the most affected and have been identified as local pollution control locations. The process of identification of major polluting clusters in this block is under progress and local action plan will be implemented

A local pollution hot spot action plan is also required for the Rajmahal block. Most of the china clay processing units are situated in this block. The District Survey Report has also identified that Pathna, Mandro and Takjhari blocks has maximum mineral reserve, making new units more likely to be established, resulting in further deterioration of air quality²⁶.

²⁵ http://www.indiaairquality.info/wpcontent/uploads/docs/2003_CPCB_Guidelines_for_Air_Monitoring.pdf

²⁶ <https://cdn.s3waas.gov.in/s369421f032498c97020180038fddb8e24/uploads/2018/08/2018082857.pdf>



Figure 13 : Local pollution hot spots in Sahibganj

5. EXISTING POLICIES AND PROGRAMS FOR REDUCING POLLUTION

Any clean air action plan should be developed based on the review of the current challenges in each sector and existing policy and schemes both at the State and National level. The current status of the ongoing policy initiative in each sector is important to align the emerging policy initiatives and actions for reducing the pollution level. Thus, a brief review of every policies and programs pertaining to the sector concern for air pollution has been undertaken. The current policies and programs in each region are given below.

4.1 INDUSTRIES

Over the last few years JSPCB has undertaken many steps to improve regulatory framework for industrial emissions.

4.1.1 Compliance of Emission Standards, OCEMS & Environment (Siting for Industrial Projects) Rules, 1999

Industries release large quantum of pollutants through air emissions and effluent discharge. In order to regulate such emissions and discharges to safe limits, CPCB has prescribed standards for various pollutants emitted/discharged by the industries as notified under the Environment (Protection) Act, 1986. Further to strengthen the compliance monitoring and also to ensure that industries and facilities comply with emission standards in June 2015, installation of OCEMS in 17 categories of highly polluting industries has been mandated²⁷.

However, it is also important to have an immediate implementation of the new sulphur oxides (SO_x) and nitrogen oxides (NO_x) standards that have been notified by the MoEF&CC in March 2018. The stringent compliance of the Environment (Siting for Industrial Projects) Rules-1999 should also be ensure during the implementation of the new industrial development projects or shifting of the current projects.

4.1.2 Star Rating Program

JSPCB is also implementing the star-rating program. The program utilizes the continuous monitored emissions data from major industrial plants to categorize industry from least complaint to the most compliant. The program is bringing more transparency to control emissions from industries and also incentivize quicker uptake of improved emissions control system.

4.1.3 Emissions from thermal power plants

The thermal power plants emit harmful gases and particulate matter and most important among them are sulphur oxides, nitrogen oxides and particulate matter. The Union Ministry of Environment, Forest and Climate Change (MoEFCC) had set standards to limit the concentration of these from coal power plants. Further in December 2015, it had come out with new standards to limit the concentration of pollutants, which has been further extended to the year 2022. Few thermal power plants are in around the Sahibganj and it is crucial to ensure that the power plants comply with the new standards by an early date.

²⁷ <http://www.indiaenvironmentportal.org.in/files/file/Revised%20Guidelines%20for%20Real-time%20Effluent%20Quality%20Monitoring%20System.pdf>

| Emission Parameter | TPSs (Units) Installed | | |
|-------------------------|--|---------------------------------|---------------|
| | Before 31.12.03 | After 31.12.03 – 31.12.16 | From 01.01.17 |
| Particulate Matter (PM) | 100mg/N3 | 50 mg/Nm3 | 30 mg/N3 |
| SO2 | 600 mg/Nm3 (For < 500 MW Unit) | 200 mg/Nm3 (For => 500 MW Unit) | 100 mg/Nm3 |
| NOx | 600 mg/Nm3 | 300 mg/Nm3 | 100 mg/Nm3 |
| Mercury | NIL (< 500 MW Unit) 0.03 mg/Nm3 (=>500 MW Unit) | 0.03 mg/Nm3 | 0.03 mg/Nm3 |
| Water | 1. All plants with once through cooling (OTC) shall install cooling tower and achieve specific water consumption (SWC) up to maximum of 3.5 m3 /MWh within a period of 2 years from the date of publication of the notification. 2. All CT-based plants reduce SWC up to maximum of 3.5 m3 /MWh within a period of 2 years from the date of publication of the notification. 3. New plants to be installed after 1 January 2017 shall have to meet SWC up to maximum of 2.5 m3 /MWh and achieve zero wastewater discharge. | | |

Table 7: New environmental norms for thermal power stations (MoEFCC 2015)²⁸

For each thermal power plants, a transition plan need to be drawn up and stringent stack monitoring to be scaled up for the plants which have higher emissions. This will enable the emission control and ensure compliance.

3.2 VEHICLES

4.2.1 Emission Control of on road vehicles

The emission standards have been set by the central government to keep a check on the pollutant levels emitted by vehicles that use combustion engines. Following the national roadmap, Jharkhand has implemented the Bharat Stage VI (BSVI) emission norms for new vehicles in April 2020. As per BS-VI emission norms, it is expected to reduce the pollution level in the state; petrol vehicles will have 25% reduction in their

²⁸ <https://www.teriin.org/sites/default/files/2020-02/emissions-control-thermal-power.pdf>

NOx while diesel engine will reduce their HC+NOx by 43%, NOx level by 68% and particulate matter by 82%. It helps to ensure low emissions of new vehicles.

However, the on-road emissions from older vehicles are also important to regulate as usually their emissions are higher than those from newer ones because of deteriorated engine, decreased fuel efficiency, low maintenance, etc. Due to the presence of a large number of old and ill-maintained vehicles in the state, the benefits of strict emission norms and introduction of BS VI vehicles will not be reflected in the ambient air quality. To check emissions from these vehicles and to ensure proper maintenance, Central Motor Vehicle Rules (1989) mandates every one-year-old transport and non-transport vehicle to be tested for emission compliance and obtain a PUC certificate. However, due to fraud, ineffective implementation, and infrastructural constraints, the current system (PUC) is failing to effectively control emissions from vehicles. A robust implementation and strengthening of the current emission control system (PUC) is needed to effectively mitigate vehicular emission.

4.2.2 CNG and Electric Mobility

Compared to petrol and diesel, CNG vehicles are pollution free as it is made up of methane and results in less carbon emissions. Additionally, it has close to zero emissions of particulate matter. ***In a major push towards CNG transportation in the personal mobility space, rollout of 200 to 250 CNG stations within the next few years has been announced for Jharkhand²⁹.***

In partnership with the Energy Efficiency Services Limited (EESL), Jharkhand government has adopted an E-mobility program for the deployment of 50 electric vehicles (EVs) for various Jharkhand Bijli Vitran Nigam Limited (JBVNL) offices in Ranchi. However the state does not have a statewide comprehensive Electric Vehicle Policy yet. The state wise number of electric/battery operated vehicles in India shows

²⁹ <https://auto.economicstimes.indiatimes.com/news/oil-and-lubes/cng-png-project-launched-in-jharkhand/70815043>

that as on 9 July 2019, 5257 electric/battery-operated vehicles exist in Jharkhand. Out of the total 36 are the electric cars³⁰.

National Urban Electric Mobility Mission by the Union Government gives a considerable opportunity in Jharkhand to adopt electric mobility and to reduce the vehicular emission. Converting maximum fleet to electric powered, will result in reduction in air pollution to a large extent. ***Sahibganj is favourable for quicker adoption of the electric vehicles because of their compact periphery, urban design and being small in area.***

4.2.3 Phasing of old vehicles

Many studies have highlighted that the emission rate of vehicles generally increases with usage over time, and diesel and petrol vehicles should be scrapped as they reach their End-of-Life (EOL) stage after 10 and 15 years respectively. Jharkhand has been articulating the need to phase out all the old polluting vehicles. But despite repeated directives and drafts, implementation has not been done. As of now no cities in Jharkhand have phase out program for older vehicles.

4.2.4 Movement of Heavy Motor vehicles (HMV)

The heavy vehicles (Trucks and Trollies) play a major role in the economy of the state especially in Sahibganj; the vehicle movement and operations like hauling coals from mines to industries and transporting thousands of raw materials around cities. But these vehicles also greatly affect the air pollution and public health. The heavy-duty vehicles comprise only about mere percent of all vehicles on the road, yet they contribute to large emissions that come from the transportation sector. The movement and the loading and unloading activities contribute a significant percentage to air pollution.

A spatial planning and development of road network to bypass the highly populated cities should be done, ensuring the norms like covering the loading and pavements of pathway in coal yard. Continuing to lower emissions from heavy-duty vehicles is an important step.

³⁰ <https://www.indiastat.com/transport-data/30/transport/30/vehicles/289/stats.aspx>

4.2.5 Public Transport

The public transport produces significantly less air pollution per passenger mile than a standard car carrying a single driver and also helps to keep traffic congestion lower, which in turn reduces air pollution from idling vehicles and fetch many more people in much less space than individual automobiles. Apart from rising affluence and economic progress, lack of effective and convenient public transport can be seen as the major reason for high growth of private vehicles.

4.3 SOLID FUEL BURNING

Firewood, animal dung, and low quality coal are some of the fuels commonly used in households across Sahibganj as a means of generating energy for cooking, light, and heating purposes. Their contribution to the total particulate matter places the need of immediate action. The Pradhan Mantri Ujjwala Yojana (PMUY) is an initiative taken by the Government of India to promote LPG for use in households is also implemented in Sahibganj but further expansion is needed. More effort is required, in particular, increasing the use of electricity as a substitute and ensuring that the use of LPG is sustained.

5. CONCLUSION

Air pollution is one of the most serious public health risks we face today. The study published by British Journal 'Lancet Commission' ranks India first in terms of air pollution-related deaths with 1.24 million deaths recorded in the year 2017³¹. The same report has predicted that nearly 100.2 deaths per 100,000 in Jharkhand occurred due to rising air pollution¹⁰. Further, the state-level disease burden estimates (released by IHME, ICMR and PHFI) shows that air pollution is the third-largest risk factor responsible for the premature deaths in Jharkhand. The air pollution exposure is associated with a broad range of health effects; short-term effects and long-term effects. Ischaemic heart disease and lower respiratory

³¹ [https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196\(18\)30261-4/fulltext](https://www.thelancet.com/journals/lanplh/article/PIIS2542-5196(18)30261-4/fulltext)

infections have been identified as the leading cause of disability in year 2017³².

As this report has indicated through the source apportionment study, one of the major source that contributes large amounts of pollution in the districts is the use of biomass in cooking methods at domestic level. In addition to this, the air pollution is increasing mainly due to the movement of heavy vehicles, mining and crushing activities and transportation of raw materials and it needs to be reduced through stringent enforcement. Hence, policy interventions, regulatory frameworks and capacity building and public awareness programs at the industry and community level can deal with the air pollution, which are mentioned below:

- A well-defined strategy should be in place, and in this connection Graded response action plan (GRAP) is important for immediate response, emergency action along with public health advisory during episodic spikes of air pollution.
- A comprehensive clean air action plan to cap emissions from identified sources by taking strong and sustained action has great significance. This may range from strict compliance of existing policies and adherence of emission norms to initiate interventions like mist sprinkler, fixed sprinklers and dust extraction' should be implemented with utmost stringency to control the dust suppression and fugitive emissions.
- Although some immediate interventions, such as strict implementation of local action plans for pollution hotspots and strict vigilance of norms violations from non-compliance activities are being implemented, but more robust steps are required for ensuring breathable air. For instance, a robust implementation and strengthening of the current emission control system (PUC) is needed to effectively mitigate vehicular emission. There should be more periodic inspection to ensure that the transport of the mined raw material is done with covered vehicles.
- Apart from phasing out the older vehicles, increasing use of cleaner fuels (e.g. CNG), cleaner energy sources (solar powered solutions) and zero emission based

³² <https://phfi.org/wp-content/uploads/2018/05/Jharkhand-Disease-Burden-Profile.pdf>

efficient public and transport systems (such as Electric mobility) should be promoted at a wider scale to curb the hazardous impact of air pollution.

- A series of awareness programs and capacity building of personnel involved in the industry and reclamation and rehabilitation of abandoned mines needs to be ensured. Also, public education and community awareness is the key in ensuring a sustainable environment and breathable city.

BIBLIOGRAPHY

1. <https://www.sciencedirect.com/science/article/pii/S0160412019301539>
2. <https://link.springer.com/article/10.1007/s10098-009-0270-z>
3. <https://jharkhand.pscnotes.com/jharkhand-general-studies/jharkhand-economy/jharkhands-major-industriesthier-location-and-industrial-development/>
4. http://moef.gov.in/wp-content/uploads/2017/06/moef_gov_in_citizen_specinfo_siguin_html.pdf
5. [https://jspcb.nic.in/upload/uploadfiles/files/Star%20Rating%20---AAAAA%20\(1F\)\(5\).pdf](https://jspcb.nic.in/upload/uploadfiles/files/Star%20Rating%20---AAAAA%20(1F)(5).pdf)
6. <https://india.mongabay.com/2019/08/pollution-control-in-coal-based-thermal-power-plants-will-cost-money-but-benefits-will-outweigh/>
7. <https://auto.economictimes.indiatimes.com/news/oil-and-lubes/cng-png-project-launched-in-jharkhand/70815043>
8. <https://mercomindia.com/jharkhand-adopts-e-mobility-program-in-partnership-with-eesl/>
9. <https://www.ucsusa.org/resources/cars-trucks-buses-and-air-pollution>
10. <https://www.tandfonline.com/doi/abs/10.1080/09208119108944290?src=recsys>
11. <http://ibm.nic.in/writereaddata/files/02232018114710Jharkhand%20AdvanceRe2016.pdf>
12. https://shaktifoundation.in/wp-content/uploads/2019/12/PCAAP_Report_Final-3-1.pdf
13. http://164.100.107.13/upload/NewItems/NewItem_174_FinalReport_onInventorizationof17CategoryGPIRedCategoryIndustries.PDF
14. https://www.jspcb.nic.in/upload/5d6cabafc0dec5bd05a060aaefUpdated_list_of_17_Cat._of_highly_polluting_Ind._and_calibration.pdf
15. <http://jsac.jharkhand.gov.in/pollution/>
16. <https://cpcb.nic.in/Actionplan/Raipur.pdf>
17. <https://cpcb.nic.in/Actionplan/Korba.pdf>
18. <https://cpcb.nic.in/Actionplan/Kashipur.pdf>
19. <https://cpcb.nic.in/Actionplan/Bhubaneswar.pdf>
20. <https://ranchi.nic.in/economy/>
21. <http://dcmsme.gov.in/dips/DIPS-Saraikela-Kharsawan.pdf>
22. <http://dcmsme.gov.in/dips/DIPS%20Dumka.pdf>
23. <http://dcmsme.gov.in/dips/DIPS%20Hazaribagh.pdf>
24. <http://dcmsme.gov.in/dips/Pakur.pdf>
25. <http://dcmsme.gov.in/dips/Sahibganj.pdf>
26. <http://dcmsme.gov.in/dips/Ramgarh.pdf>
27. <http://dcmsme.gov.in/dips/DIPS%20Ranchi.pdf>
28. <https://cpcb.nic.in/displaypdf.php?id=bWFudWFsLW1vbml0b3JpbmcvTG9jYXRpb25fZGF0YV8yMDE4LnBkZg==>
29. <https://cpcb.nic.in/displaypdf.php?id=bWFudWFsLW1vbml0b3JpbmcvTG9jYXRpb25fZGF0YV8yMDE3LnBkZg==>

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31. <https://cpcb.nic.in/displaypdf.php?id=bWFudWFsLW1vbml0b3JpbmcvTG9jYXRpb25fZGF0YV8yMDE1LnBkZg==>
32. <https://www.jspcb.nic.in/upload/project/5d15e105232d4ACTION%20PLAN%20FOR%20IMPROVING%20AIR%20QUALITY%20OF%20DHANBAD.pdf>
33. <https://www.teriin.org/sites/default/files/2020-02/emissions-control-thermal-power.pdf>
34. <https://cerca.iitd.ac.in/app/assets/cities-plan-pdf/Orrisa/Bhubaneswar.pdf>
35. <https://cpcb.nic.in/Actionplan/Bhubaneswar.pdf>
36. <http://ceedindia.org/know-what-you-breathe-air-pollution-statistics-for-north-indian-cities/>
37. <http://ceedindia.org/towards-healthy-air-for-patna/>
38. <http://ceedindia.org/air-pollution-begins-at-home/>
39. <http://ceedindia.org/wp-content/uploads/2019/01/PUC-Report-I-1.pdf>

Office of the Deputy Commissioner, Sahibganj

Letter No.78...../M. dated..20.1.21..2021

From : Deputy Commissioner
Sahibganj. (Jharkhand)

To,

Dr. Manish Kumar jain
Associate Professor,
Department of Environmental Science and Engineering
Indian Institute of Technology (ISM)
Dhanbad.

Sub : Link for the 2nd Meeting OA23/2017(EZ) & other

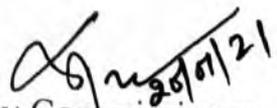
Sir,

With reference to above subject I Would like to say informed you as per discussion your letter no. nil dated 08 Jan 2021. I am sending you Sahibganj District Survey Report (Mineral Zone) and Action Taken Report by the District Task Force in which Total no. of **FIR lodge 136** in involving -of **537 Truck , Crusher Demolished 161, Crusher Sealed- 44, Boats- 29, Person Arrested- 53, Illegal Mining- 17 and JCB Equipment- 13. Requested for CTO cancellation 39, Directed to Ex. Engineer Electricity for disconnection of Illegal Crushing Plant Electric- 69**

Enclosed-

Thinking you.

Yours Faithfully

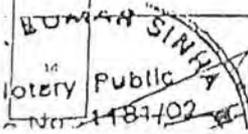

Deputy Commissioner
Sahibganj.

DISTRICT MINING OFFICE, SAHIBGANJ

IN ORDER OF INSPECTION THE RELATED CRUSHER PLANTS WERE FOUND TO BE ILLEGAL OPERATED
ACTION TAKEN REPORT (upto jun 2019)

ANCIAL- TALHARI

| Sl No. | Lessee Name | Mouzi | Take Action | Action taken date |
|--------|--|-------------------|--|-------------------|
| 1 | M/S PAPPU STONE WORK, PROP: PAPPU BHGAT AT- BETARIA, SAHIBGANJ | Pindri | During the insepction it is found that crusher unit operating illegle so the crusher unit sealed and FIR logged against him | 24.10.18 |
| 2 | M/S SARASWATI STONE WORKS, PROP: PINTU KUMAR SINGH | Choti Bhugiyamari | During the insepction it is found that crusher unit operating illegle so the crusher unit sealed and FIR logged against him F.I.R no. 116/18 | 24.10.18 |
| 3 | MOHAN SING, AT- N.S COLOANY, SAHIBGANJ | Choti Bhugiyamari | During the insepction it is found that crusher unit operating illegle so the crusher unit sealed and FIR logged against him | 24.10.18 |
| 4 | ARJUN YADAV, S/o- LATE BISHWANATH YADAV, AT- SAMDANALA, SAKRIGALI SAHIBGANJ | Ambadiha | During the insepction it is found that crusher unit operating illegle so the crusher unit sealed and FIR logged against him | 24.10.18 |
| 5 | AJAY MISHRA | Ambadiha | During the insepction it is found that crusher unit operating illegle so the crusher unit sealed and FIR logged against him | 24.10.18 |
| 6 | M/S SHANTI STONE WORK, HARENDRA KUMAR YADAV, S/o- RAMJATAN YADAV, SAKRIGALI SAHIBGANJ | Ambadiha | During the insepction it is found that crusher unit operating illegle so the crusher unit sealed and FIR logged against him | 24.10.18 |
| 7 | M/S SARASWATI STONE WORKS, PROP: HIRA LAL YADAV, SAKRIGALI SAHIBGANJ | Ambadiha | During the insepction it is found that crusher unit operating illegle so the crusher unit sealed and FIR logged against him | 24.10.18 |
| 8 | M/S SHIV STONE WORK, PROP: RAJENDRA YADAV, S/o- DEVDHARI YADAV, AT- BHUWAHADI, SAHIBGANJ | Choti Bhugiyamari | During the insepction it is found that crusher unit operating illegle so the crusher unit sealed and FIR logged against him | 24.10.18 |
| 9 | M/S APPEX ENTERPRISES, PROP: GOPAL IZIKH, AT- GHAT ROAD, SAHIBGANJ | Choti Bhugiyamari | During the insepction it is found that crusher unit operating illegle so the crusher unit sealed and FIR logged against him | 24.10.18 |
| 10 | M/S HAR-HAR MAHADEV STONE WORKS, PROP: ASHOK YADAV, S/o- YAMUNA PRASAD YADAV | Choti Bhugiyamari | During the insepction it is found that crusher unit operating illegle so the crusher unit sealed and FIR logged against him | 24.10.18 |
| 11 | UNKNOWN | Choti Bhugiyamari | During the insepction it is found that crusher unit operating illegle so the crusher unit sealed and FIR logged against him | 24.10.18 |
| 12 | M/S DEV STONE WORK, PROP: RANJIT SINGH, AT- KAMALPOLA | Choti Bhugiyamari | During the insepction it is found that crusher unit operating illegle so the crusher unit sealed and FIR logged against him | 24.10.18 |
| 13 | SEESH KUMAR, AT- RAMCHANDRAPUR, FASDIH, DEOGARH | Choti Bhugiyamari | During the insepction it is found that crusher unit operating illegle so the crusher unit sealed and FIR logged against him | 24.10.18 |
| 14 | KRIPA YADAV | Choti Bhugiyamari | During the insepction it is found that crusher unit operating illegle so the crusher unit sealed and FIR logged against him | 24.10.18 |


 Bumper Lottery Public
 No. 1184/02
 KRIPA YADAV

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| 15 | ABHINAV CHOUHARY CHOUHARY, S/o- DEVNANDAN CHOUHARI, AT- SAKRIGALL, SAHIBGANJ | Choti Bhagiyamuri | During the insepction it is found that crusher unit operating illegle so the crusher unit sealed and FIR logged against him | 24.10.18 |
| 16 | SAHNI ENTERPRISES, AT- BHOLA PRASAD SAHNI AT- AMBADIHA, SAKRIGALL, SAHIBGANJ | Gudwa | During the insepction it is found that crusher unit operating illegle so the crusher unit sealed and FIR logged against him | 24.10.18 |
| 17 | MISHALAKSHMI CRUSHER LOJESTIKJ PROP- SANJAY KUMAR YADAV, AT- HARMU ROAD, RANCHI | Gudwa | During the insepction it is found that crusher unit operating illegle so the crusher unit sealed and FIR logged against him | 24.10.18 |
| 18 | PRAKASH CHANDRA YADAV, AT- N.S COLOANY, SAHIBGANJ | Gudwa | During the insepction it is found that crusher unit operating illegle so the crusher unit sealed and FIR logged against him | 24.10.18 |
| 19 | KISHOR KUMAR, S/o- BADRI SAU, AT- SAKRIGALL, SAHIBGANJ | Gudwa | During the insepction it is found that crusher unit operating illegle so the crusher unit sealed and FIR logged against him | 24.10.18 |
| 20 | GOVERDHAN YADAV, S/o- RAMNAT YADAV AT- SAKRIGALL, RAMPUR KARARA, SAHIBGANJ | Ambadiha | During the insepction it is found that crusher unit operating illegle so the crusher unit sealed and FIR logged against him | 24.10.18 |
| 21 | KAMLESH STONE WORKS, PROP- LALAN SINGH, AT- N.S COLOANY, PS- JIRWABADI, SAHIBGANJ | Ambadiha | During the insepction it is found that crusher unit operating illegle so the crusher unit sealed and FIR logged against him | 24.10.18 |
| 22 | SU BHANI STONE WORKS, PROP- GANESH PAWANSHAD TIWARI, S/o- BANARASI TIWARI, AT- KUSHINA NAGAR, SAHIBGANJ | Ambadiha | During the insepction it is found that crusher unit operating illegle so the crusher unit sealed and FIR logged against him | 24.10.18 |

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DISTRICT MINING OFFICE, SAHIBGANJ

IN ORDER OF INSPECTION THE RELETED CRUSHER PLANTS WERE FOUNDE TO BE ILLEGAL OPERATED

ACTION TAKEN REPORT (upto jan 2019)

ANCHAL, SAHIBGANJ

| Sl No. | Lessee Name | Mouza | Take Action | Action taken date |
|--------|---|--------------------|--|-------------------|
| 1 | M/S BHAWANI STONE WORK, PROP- SANJAY DAV, S/o- LATE INDRDEO YADAV, MIRZACHOUKI | HAJIPUR BHITHA | During the insepction it is found that crusher unit operationg illegle so the crusher unit sealed and | 18.11.18 |
| 2 | PRATHHA STONE WORK, PRO- SANJAY KUMAR YADAV, AT- DIHARI, SAHIBGANJ | HAJIPUR | During the insepction it is found that crusher unit operationg illegle so the crusher unit sealed and | 18.11.18 |
| 3 | SHIV SHANKAR STONE WORK, PROP- SHANKAR PRASHAD S/o- HARHAR PRASHAD, AT- CHHETIDURGA, SAHIBGANJ | HAJIPUR | During the insepction it is found that crusher unit operationg illegle so the crusher unit sealed and | 18.11.18 |
| 4 | ARVIND GUPTA, S/o- SACHINAND GUPTA, AT- CHOUDHARY COLONY, SAHIBGANJ | BADI KODARJANNA | During the insepction it is found that crusher unit operationg illegle so the crusher unit sealed and | 18.11.18 |
| 5 | SUNIL SAG, AT- PIRPANTI, BHAGALPUR | PRATAPGANJ | During the insepction it is found that crusher unit operationg illegle so the crusher unit sealed and | 18.11.18 |
| 6 | GOUTAM STONE WORKS, PROP- GOUTAM KUMAR SINGH, S/o- KEDAR PRASHAD SINGH, HARIKODARJANNA, SAHIBGANJ | HAJIPUR PRATAPGANJ | During the insepction it is found that crusher unit operationg illegle so the crusher unit sealed and | 18.11.18 |
| 7 | DINESH KUMAR SINGH, S/O. RAVICHANDRA SINGH, AT- JOKIA TALAH, PIRPANTI, BHAGALPUR | PRATAPGANJ | During the insepction it is found that crusher unit operationg illegle so the crusher unit sealed and | 18.11.18 |
| 8 | KISHOR AND KUMAR STONE WORK, PROP- AWADH KISHOR RAM, AT- RUPNTPER, PIRPANTI, BHAGALPUR | KARAMTOLA | During the insepction it is found that crusher unit operationg illegle so the crusher unit sealed and | 18.11.18 |
| 9 | ISLAMIYA STONE WORKS, PROP- MD DASTGEER ALAM, S/o- AID EDADAT, HUSHEN AT- CHOTI KODARJANNA, SAHIBGANJ | SUNDERPUR | During the insepction it is found that crusher unit operationg illegle so the crusher unit sealed and FIR logged against him | 18.11.18 |
| 10 | PAKUA STNE WORK, PROP- SAMSUL HAQUE S/o- HAZI AKHATER ALI | SUNDERPUR | During the insepction it is found that crusher unit operationg illegle so the crusher unit sealed and | 18.11.18 |
| 11 | AZAD STONE WORK, PROP- YUSHUJ AZAD, AT- KODARJANA, SAHIBGANJ | SUNDERPUR | During the insepction it is found that crusher unit operationg illegle so the crusher unit sealed and FIR logged against him | 18.11.18 |

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DISTRICT MINING OFFICE, SAHIBGANJ

IN ORDER OF INSPECTION THE RELATED CRUSHER PLANTS WERE FOUND TO BE ILLEGAL OPERATED

ACTION TAKEN REPORT (upto Jan 2019)

ANCHAL-MANDRO

| Sl No. | Lessee Name | Mouza | Take Action | Action taken date |
|--------|---|----------|---|-------------------|
| 1 | M/S PAPPU STONE WORK, PROP- PAPPU BHAGAT, AT- BHARUA, SAHIBGANJ | Pindari | During the inspection it is found that crusher unit operating illegle so the crusher unit sealed and FIR logged against him | 28.12.18 |
| 2 | M/S WARIS STONE WORKS, PRO- SANDIP CHOUHDHARY, AT- MIRZACHOUKI, SAHIBGANJ | Pindari | During the inspection it is found that crusher unit operating illegle so the crusher unit sealed and FIR logged against him | 28.12.18 |
| 3 | M/S JAI MATA DI STONE WORKS, PROP- TINKAL BHAGAT, AT-PO- MIRZACHOUKI, SAHIBGANJ | MATHADIH | During the inspection it is found that crusher unit operating illegle so the crusher unit sealed and FIR logged against him | 28.12.18 |
| 4 | M/S NAINI STONE WORK, PROP- BINAY KUMAR PANDIT, AT-PO- MIRZACHOUKI, SAHIBGANJ | MATHADIH | During the inspection it is found that crusher unit operating illegle so the crusher unit sealed and FIR logged against him | 28.12.18 |
| 5 | M/S DINESH MEHTO, PROP- DINESH MEHTO, S/O- SHY KUMAR MEHTO, AT- NIMGACHIL, PO- MIRZACHOUKI, SAHIBGANJ | MATHADIH | During the inspection it is found that crusher unit operating illegle so the crusher unit sealed and FIR logged against him | 28.12.18 |
| 6 | AJI GUPTA, AT- KIRKANIYA, AT-PO- MIRZACHOUKI, SAHIBGANJ | MATHADIH | During the inspection it is found that crusher unit operating illegle so the crusher unit sealed and FIR logged against him | 28.12.18 |
| 7 | OM STONE WORKS, PROP- PINTU KUMAR PANDIT, AT-PO- MIRZACHOUKI, SAHIBGANJ | MATHADIH | During the inspection it is found that crusher unit operating illegle so the crusher unit sealed and FIR logged against him | 28.12.18 |
| 8 | DAVI JAISHWAL, AT- BHAGEEYA, PO- MIRZACHOUKI, SAHIBGANJ | PAHARPUR | During the inspection it is found that crusher unit operating illegle so the crusher unit sealed and FIR logged against him | 28.12.18 |
| 9 | BHARAT, AT- SEKGURA | PAHARPUR | During the inspection it is found that crusher unit operating illegle so the crusher unit sealed and FIR logged against him | 28.12.18 |
| 10 | UNKNOWN | PAHARPUR | During the inspection it is found that crusher unit operating illegle so the crusher unit sealed and FIR logged against him | 28.12.18 |
| 11 | JANARDHAN YADAV, AT- LAIRAKOLE | PAHARPUR | During the inspection it is found that crusher unit operating illegle so the crusher unit sealed and FIR logged against him | 28.12.18 |
| 12 | UNKNOWN | PAHARPUR | During the inspection it is found that crusher unit operating illegle so the crusher unit sealed and FIR logged against him | 28.12.18 |
| 13 | UNKNOWN | PAHARPUR | During the inspection it is found that crusher unit operating illegle so the crusher unit sealed and FIR logged against him | 28.12.18 |
| 14 | UNKNOWN | PAHARPUR | During the inspection it is found that crusher unit operating illegle so the crusher unit sealed and FIR logged against him | 28.12.18 |

DISTRICT MINING OFFICE SAHIBGANJ

IN ORDER OF INSPECTION THE RELATED CRUSHER PLANTS WERE FOUND TO BE LEGALLY OPERATED

ACTION TAKEN REPORT

| DEALER LIST | | | |
|-------------|---|------------|---|
| SL No | NAME & ADDRESS | MOUZA | ACTION TAKEN |
| 1 | M/S ABBAS & SONS PROP- ANISH ANSARI, S/O- HAZI MD ABBAS, AT+PO.- TINPAHAR, DISTT- SAHIBGANJ | DHAMDHAMIA | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 2 | M/S AMBA STONE WORKS, PROP-SRI PAVITRA KUMAR YADAV, S/O-LATE RAJ KISHOR YADAV, AT+PO+PS-MANIHARI DIST- KATIHAR | MARKUTTI | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 3 | M/S ARJUN BALCK STONE WORKS PROP- SMT PINKI YADAV, W/O-SRI BAJRANGI PD YADAV, AT-BHARTIYA COLONY, DIST- SAHIBGANJ | JOKMARI | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 4 | M/S BHAGWAN STONE WORKS PROP-SRI JAGANNATH BHAGAT, S/O-LATE DULAL CHANDRA BHAGAT AT-RATANPUR, PO+PS- BARHARWA, SAHIBGANJ | BORNA | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 5 | M/S BHARAT STONE WORKS, PROP- GAYATRI SUMAN SINHA W/O-SRI SANTOSH KUMAR SINHA, AT-KIRTANIA PO+PS- MIRJACHOKI, DIST-BHAGALPUR | NIMGACHHI | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 6 | M/S BIHAR BENTONITE SUPPLY CO. PROP- SRI NAND LAL BHAGAT S/O-LATE RAM JIVAN CHUDHARI AT+PO-BAKUDIH PS- TAUHARI DIST- SAHIBGANJ | BAKUDIH | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 7 | M/S BIHAR BENTONITE SUPPLY CO. PROP- SRI MAHADLAL BHAGAT S/O-LATE RAM JIVAN CHUDHARI AT+PO-BAKUDIH PS- TAUHARI DIST- SAHIBGANJ | BAKUDIH | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 8 | M/S CHANDAN STONE WORKS, PROP- CHANDAN PRASAD GUPTA AT+PO- MIRJACHOKI, SAHIBGANJ | NIMGACHHI | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 9 | MS QAITARA STONE WORKS PROP-MD SOFIKUL ISLAM, AT-KOTALPOKHAIL, BARHARWA, SAHIBGANJ | PIPALJORI | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 10 | M/S CHOURASIA AND SONS, PROP-BILARAT PRASAD CHOURASIA S/O-LATE SITAL PRASAD CHOURASIA AT+PO- MIRZACHOUKI, DIST-SAHIBGANJ | MUNDU | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |

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| 11 | M/S CTS INDUS.PVT.LTD DIR-SRI ASHOK KUMAR TULESHYAN, AT-37 SAXPIYAR SARANI, 3RD FLOOR, S.B.TOWAR, KOLKATA | JOKMARJ | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 12 | M/S CTS INDUS.PVT.LTD DIR-SRI ASHOK KUMAR TULESHYAN, AT-37 SAXPIYAR SARANI, 3RD FLOOR, S.B.TOWAR, KOLKATA | DAMRA DAMINBHITTA | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 13 | M/S DURGA STONE WORKS, PROP-ADITYA KUMAR SINGH, S/O-AMARDEV SINGH, AT-COLLAGE ROAD, PO-DIST-SAHIBGANJ | ADRO | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 14 | M/S GANGA STONE WORKS, PROP-SRI ARUN KUMAR CHOUDHARY, S/O-LATE GANGA PRASAD CHOUDHARY, AT+PO-BARHARWA, DIST-SAHIBGANJ | CHAPANDEY | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 15 | M/S GANPATI STONE WORKS PROP-TARUNKANTI GHOSH, AT-MAHADEVWARAN, MIRZACHOUKI, SAHIBGANJ | BARTALLA | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 16 | M/S GUPTA & SONS, PROP-SRI MAHENDRA PRASAD GUPTA, S/O-SRI AJAB LAL GUPTA AT-LOHIYA NAGAR PO-DIST- PATNA | CHHOTA LOHANDA | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 17 | M/S GUPTA STONE WORKS, PROP-SRI BIRBAL GUPTA, S/O-LATE KHUSHILAL GUPTA AT-KIRTANIA PO-MIRZACHOKI, BHAGALPUR | NIINGACHHI | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 18 | M/S HINDUSTANI STONE WORKS PROP-MD YASIN, S/O-CHOTA ABDUL HALIM AT-NAYANAGAR, PO-MIRZACHOUKI, SAHIBGANJ | PAHARPUR | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 19 | M/S ASCENT INFRA BILD, LLP PART-PAHKAJ KUMAR, AT-DUSRI MAJULI PARMASHIL BUNUS STAND PLOT NO. 23 KAJARHUMA COMMUNITY CENTER DELHI | MARIKUTTI | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 20 | M/S JAI GURU STONE WORKS PROP-SRI PRAMOD KUMAR JASWAL S/O-SRI SHIVNARAYAN JASWAL AT+PO-SHIVNARAYANPUR, DIST-BAGALPUR | BARTALLA | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 21 | M/S JAI MATA DI STONE WORKS, PROP-TIKYAL KUMAR BHAGAT S/O-SRI RAMNARAYAN BHAGAT AT+PO+PS-MIRZACHOKI DIST-SAHIBGANJ | MATHADIH | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |

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| 22 | M/S JINDAL STONE WORKS PROP- KANHAIYA KUMAR KHUDANIA S/O-LATE KISHANLAL KHUDANIA AT-MAHAJANPATTI, SAHIBGANJ | BARA LOHANDA | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 23 | M/S JYOTI CREATORS PVT.LTD, APOINTED ADUTHRATY SRI KUNDAN KUMAR S/O- LATE RAMAKANT SINGH AT-NIPNIYA, PO- BARONI, DIST-BEGUSARAI | MARIKUTTI | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 24 | M/S K.K.STONE WORKS PROP-KOUSHAL KISHOR OJHA, S/O-SRI TRILOKINATH OJHA AT-PURANI SAHIBGANJ, SAHIBGANJ | BARA LOHANDA | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 25 | M/S KANAK STONE PROP-VED PRAKASH KHUDANIA S/O-LATE SURJAMAL KHUDANIA AT-MAHAJANPATTI, SAHIBGANJ | CHHOTA LOHANDA | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 26 | M/S KESHRI NADAN STONE WORKS, PROP- SMT BIMLA DEVI, W/O-SRI BHIM BHAWANI YADAV, AT- BANHALITOLA, PO+DIST- SAHIBGANJ | JHAGRUCHOUKI | DURING INSPECTION DONE ON DATED 09/11/17 THE FOLLOWING CRUSHER IN FOUND IN NON WORKING CONDITION AND WORK HELD UP DUE TO BREAK DOWN IN MANUAL CRUSHER UNIT |
| 27 | M/S KOKIHOOR STONE WORKS MOUZA MEHKUB, RANGA BARBARWA | MEHKUB | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 28 | M/S KUSHBU STONE WORKS, PROP-SRI BADRI PRASAD BHAGAT S/O-SRI MAHABIR PD. BHGAT, AT- MAHADEVARAN PO+PS- MIRZACHOUKI, DIST- SAHIBGANJ | MAHADEOBARAN | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 29 | M/S LAKSHMI STONE WORK, PROP-SRI SUNIL KUMAR GUPTA, AT- KIRTANIYA, PO- MIRZACHOUKI, DIST- SAHIBGANJ | DELBHADRI | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 30 | M/S LALITA ENTERPRESES, PROP- KISHORE KAUSTUV, S/O-SRI CHANDRA KISHORE MANDAL AT- JAI PRAKESH NAGAR, PO+DIST SAHIBGANJ | MARIKUTTI | THE FOLLOWING DEALER IS UNDER PROCESSING OF RE-REGISTRATION. DURING THE ESTABLISHMENT OF RENEWAL OF REGISTRATION CLEAR DIRECTION GIVEN TO DEALER NOT DONE ANY PROCESSING ACTIVITY DURING THIS PERIOD |
| 31 | M/S M ALAM AND BROTHERS QAT PIYARPUR, PS RADHANAGAR, DIST SAHIBGANJ | MADHOPARA | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 32 | M/S M.L.STONE WORKS, PROP- SANJAY PANDIT, S/O-SRI M.L.PANDIT, AT- N.S. COLONY, DIST.- SAHIBGANJ | BARA LOHANDA | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |

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| 33 | M/S MAA DURGA STONE WORKS, PROP-SRI BISHNU PRASAD YADAV, S/O-LATE RAJ KISHOR YADAV AT+PO+PS-MANIHARI DIST-KATIHAR | CHHOTA BHAGIAMARI | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 34 | M/S GAYATRI STONE WORKS, PROP-SRI CHETKAR PRASAD SAH, S/O-LATE SHIVIKARAYAN SAH, AT+PO-KELABARI DIST-SAHIBGANJ | MADHOPARA | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 35 | M/S MAA GAYATRI STONE WORKS PROP-SRI SHAMSHU KUMAR JASWAL S/O-LATE SODAGGAR PRASAD JASWAL AT-KISHAN DASPUR, KAHALGHAN, BHAGALPUR | MAHADEOBARAN | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 36 | MS MAA JOGINI STONE WORKS, PROP-SANTOSH KUMAR JASWAL, MAUZA-MAHADEOBARAN, MIRZACHOUKI, SAHIBGANJ | MAHADEOBARAN | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 37 | M/S MAA LAXMI STONE WORKS PROP-RATAN KUMAR GUPTA, AT- KIRTANIA, PO-MIRZACHOUKI, PS-PIRPERNTI, DIST-BHAGALPUR | MANDRO | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 38 | M/S MAA TARA STONE WORKS, PROP-BRUMOHAN SHARMA, S/O-SRI LAI BHAGWAN SHARMA, PO+PS-RAJMAHAL, SAHIBGANJ | BELBHADRI | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 39 | M/S H S STONE WORKS VILL-FATHEPUR, PS-KOTALPOKHAR, DIST-SAHIBGANJ, PIN-816103, JHARKHAND | FATHEPUR | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 40 | M/S HEENSI STONE WORKS, PROP-BINAY KUMAR PANDIT, AT- MATHADIH, PO-MIRZACHOUKI DIST-SAHIBGANJ | MATHADIH | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 41 | M/S NEHA BLACK STONE WORKS, PROP-SMT. REHANA SULTANA, W/O-SRI ABDUL BAHAWAB, AT- MASTAPUR, PO-JOKA, DIST- SAHIBGANJ | BORNA | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 42 | M/S NOOR STONE WORKS PROP-MD DILDAR, S/O-MD ABDUL HAKIM ANSARI, AT-NAYANAGAR PO-MIRZACHAKI, DIST-BHAGALPUR | NIMGACHHI | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 43 | M/S OM STONE WORKS PROP-SRI PINTU KUMAR PANDIT S/O-SRI PRABHUL PANDIT AT+PO-MIRZACHOUKI, DIST-SAHIBGANJ | MATHADIH | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |

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| 44 | M/S-P.L.STONE WORKS, PROP- RAMESH KR. GUPTA, S/O- DR LAKSHMAN PRASAD, AT- GAYATRI MANDIR ROAD, DIST.- SAHIBGANJ | CHHOTA LOHANDA | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 45 | M/S SRI RAM STONE WORKS PROP-AT- MIRZACHOUKI PO-MANDRO DIST- SAHIBGANJ | NIMGACHHI | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 46 | M/S PRACHI STONE WORKS PROP- SRI ABHINANDAN CHOUDHARY AT+PO.- BANJHI BAZAR, DIST- SAHIBGANJ | MUNDU | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 47 | M/S PRATIK STONE WORKS PROP- SRI PINTU KUMAR PANDIT S/O- SRI PRABHULAL PANDIT AT+PO- MIRZACHOKI, DIST- SAHIBGANJ | BELBHADRI | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 48 | M/S PRIYA MINRALS, PROP- SRI SADANANAD PANDY, S/O- SRI MURUDHAR PANDY, AT- N S COLONY, SAHIBGANJ | MATHADIH | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 49 | M/S PURNIMA STONE WORK, PROP- SRI RAJESH KUMAR JAISHWAL, S/O- HIRA LAL BHGAT, AT- MAHADEVBARAN PO- MIRZACHOUKI, DIST- SAHIBGANJ | MAHADEVBARAN | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 50 | M/S R.A. ARSALAN ENTERPRISE PVT LTD MANAGING DIRECTOR- AKHTR PRAVEZ S/O L/T- RAFIQ CURRENT ADDRESS- B.T DEY ROAD SAHIBGANJ | PINDARI | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 51 | M/S RAJESH STONE WORKS, PROP- RAJESH CHIPANIA S/O- MAHAVIR PRASAD CHIPANIA, AT- BHARATIYA COLONY, SAHIBGANJ | KALYANI | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 52 | M/S RAJA MINPALS INDS. PROP- SRI BIKRAJ YADAV, S/O- LATE SHIVKATH YADAV, AT+PO- SAKRIGAU, DIST- SAHIBGANJ | HATHIGARH | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 53 | M/S RAMPRIT STONE WORKS, PROP- SRI LAXMAN YADAV, S/O- RAMPRIT YADAV, AT- SAMDALALA PO- SAKRIGAU SAHIBGANJ | JAMHI | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 54 | M/S KTIKA STONE WORKS PROP- SRI SUSHIL KUMAR BHARTIYA AT- BHARTIYA COLONY, PO.- DIST- SAHIBGANJ | ADRO | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |

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| 55 | M/S RODHIK VANAJICIAL PROJECT PVT LTD SILAUNI, BAKTIYARPUR, PATNA | AMRADIHA | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 56 | M/S S.S. STONE WORKS AT DAIILA ROAD SAHIBGANJ PO SAHIBGANJ DIST SAHIBGANJ | BAILA LOHANDA | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 57 | M/S SAI ASHRAWAD STONE WORKS PROP-SRI SANJAY KUMAR S/O LATE SAGAR BHAGAT AT+PO-BHAGEYA DIST-GODDA | MATHADIII | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 58 | M/S SANTOSH IND. PROP-SRIMATI SILANTI SINGH W/O-SRI RAJESHWAR PRASAD SINGH, AT-CHETTI DURGA ROAD, SAHIBGANJ | JAMNI | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 59 | M/S SHAKTI STONE WORKS, PROP-SRI SAMBHU JAJODIA S/O-LATE JAJISUNLAL JAJODIA AT-JAJODIA BHAWAN, BHARTIA ROAD, PO+PS+DIST-SAHIBGANJ | ADRO | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 60 | M/S SHALU STONE WORKS, PROP-SRI AJAY KUMAR SINGH, S/O-RATICHANDRA SINGH, AT+PO-MORZACHOUKI DIST-SAHIBGANJ | MAHADEOBARAN | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 61 | M/S SHAMBHU & CO. PROP-SAMBHU KUMAR GUPTA S/O-HANADIAL BHAGAT AT+PO-BAXUDIII PS-TAUHARI DIST-SAHIBGANJ | BAXUDIII | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 62 | M/S SHAMIM STONE WORKS PROP.-MD SHAJIM, VILL-MAKIAHI, PO AND PS-TAUHARI, DIST-SAHIBGANJ, B16129 | BEKCHURI | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 63 | M/S SHANTI STONE WORK, AT+PO+PS-MIRZACHOUKI, DIST-SAHIBGANJ | MUNDU | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 64 | M/S SHIV SUNKAR STONE WORKS, PROP-ASHOK KUMAR MANDAL, S/O-PERJESHWAR MANDAL, AT-S.B.RAY ROAD, PO+DIST-SAHIBGANJ | CHIHOTA LOHANDA | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 65 | M/S SIDHI VINAYAK STONE WORKS PROP-SRI RAM VILAS GUPTA AT+PO-MIRZACHOUKI DIST-SAHIBGANJ | MANDRO | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |

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| 66 | M/S SINGH STONE WORKS PROP-SRI TAPAN SINGH S/O-SRI RAM NARAYAN SINGH, AT+PO-BARHAWA, DIST-SAHIBGANJ | MAHKUB | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 67 | M/S SOURAV STONE WORKS, PROP-SRI GANESH PD TIWARI, S/O- BANARSI TIWARI, AT- KRISHNA NAGAR, DIST- SAHIBGANJ | CHHOTTA LOHANDA | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 68 | M/S SRI GURU STONE WORKS, PART AMARJIT SINGH & OTHERS, S/O-LATE KULDEEP SINGH AT-MALGODOWN, PO-DIST-PAKUR | PIPAJORI | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 69 | M/S SUMIT STONE WORKS, PROP-SRI SUMIT KUMAR CHOUDHARY, S/O-SRI SATYANARAYAN CHOUDHARI AT+PO+OS-MIRZACHOUKI SAHIBGANJ | MUNDU | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 70 | M/S TAMANNA STONE WORKS, PROP-MD KARJMUDDIN S/O-MD SIRAJUDDIN, AT-CHOTTI KODARIANA, PO-GANGA PRASAD DIST-SAHIBGANJ | MARIKUTTI | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 71 | M/S VANSRAJ STONE WORKS PROP-BIKASH KUMAR GUPTA, AT, PO-MIRZACHOUKI, DIST-SAHIBGANJ | BELBHADRI | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 72 | M/S VISHWNATH STONE WORK, PROP-SRI ARJUN YADAV, S/O- LATE VISHWNATH YADAV, AT- SAMDALAJI PO.- SAKRIGALI, DIST- SAHIBGANJ. | TAUHARI | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 73 | M/S WARISH STONE WORKS PROP-SANDEEP CHOUDHARY, AT PO-MIRZACHOUKI, DIST-SAHIBGANJ | MATHADIH | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 74 | M/S YASHRAJ BLACK STONE WORKS PROP-SRI BAJRANGI PRASAD YADAV, S/O-SRI ARJUN YADAV, AT-BHARTIYA COLONY, DIST-SAHIBGANJ | JOKMARI | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 75 | M/S SARVASRI AMBIKA STONE WORKS PROP-SRIASHOK KUMAR SINGH., S/O-LATE BHAIJAJDEV PD SINGH, AT-BARTALLA, PO-MIRZACHOUKI, DIST-SAHIBGANJ | BARTALLA | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 76 | SRI SATYA NATH SAJI, S/O-SRI GODIA SAH, AT- MOTIPAHARI, PO-BORIO DIST-SAHIBGANJ | BINDRI BANDARKOLA | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |

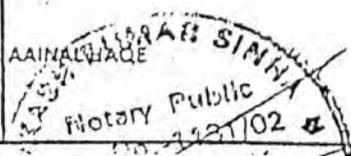
| | | | |
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| 77 | SRI DIGVIJAY VARNWAL & OTHER, AT+PO- MIRZACHOUKI DIST-SAHIBGANJ | BARTALLA | THE FOLLOWING DEALER IS VIOLATE THE TERM AND CONDITIONS OF DEALER RULE AND NOT MAINTAINED THE STANDARD FIXED BY PCB REGARDING THIS NOTICE HAS BEEN ISSUED TO CONCERNED THE DEALER DUE TO NON COMPLIANCE OF NOTICE RELATED CRUSHER LICENSE TERMINATED |
| 78 | SRI KUNDAN KUMAR AT INDAI, PO P/S DIST SHEIKHPURA, BIHAR | MUNDLI | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 79 | SRI PRAXASH CHANDRA YADAV, S/O-LAT ANANDI YADAV, AT-N.S.COLONY, SAHIBGANJ | GADWA | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 80 | LARSEN AND TURBO LTD SHRI NILOY MUKHERJEE, TITLAND MARK BUILDING, 5TH FLOOR, SUREN ROAD, CHAKALA, ANDHERY, EAST MUMBAI 400093 | AMBADIE | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 81 | M/S MAA CHINNAMASTIKA STEEL INDIA PVT.LTD.DIR-PRADIP BHARDWADJ, S/O- LATE RAM SARAN BELTHARIA AT- BUDABADAGHATI, DIST-SAHIBGANJ | BUNDA BARA GHATI | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 82 | MS MAA VAJSHNAVI STONE WORKS, PROP- SRI RAJESH KUMAR JAISHWAL, SO- SRI HIRA LAL BHGAT, AT- MAHADEVBARAN, PO- MIRZACHOUKI, DIST- SAHIBGANJ | MUNDLI | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 83 | M/S RAJ STONE WORKS PROP-SRI PREM PRAKASH CHOUDHARY AT+PO+PS- MIRZACHOUKI, DIST-SAHIBGANJ | BARTALLA | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 84 | M/S SAKET STONE WORKS, PROP- SRI SHYAM SUNDER SHRMA, S/O- LATE MADAN LALA SHRMA, AT- BHARTIA COLOANY, PO+DIST- SAHIBGANJ | CHHOTA LOHANDA | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 85 | M/S SHILA MINRALS, PROP-SRI MADAN SINGH, S/O-LATE RAGHUWANSH SINGH AT- NIMGACHI, PO+PS-MIRZACHOKI DIST- SAHIBGANJ | TETARIA | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 86 | M/S SHIV SHAKTI STONE WORK, PROP- SUBASH CHANDRA SINGH, AT- IBRAHIMPUR, PO- SABOUR, DIST- BHGALPUR | DELBHADRI | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 87 | MD TOKIR ALAM, S/O-LATE MD JANUL HAQ, AT-BIHOUDIAM, PO-BARHARWA, DIST-SAHIBGANJ | GANGOPARA BEDO | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |

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| 88 | M/S SUBHAM STONE WORKS PROP- GANESH PD TIWARI S/O-LT BANARASI TIWARI AT-KRISHNANAGAR, PO+PS+DIST- SAHIBGANJ | AMBADIHA | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 89 | M/S ADITI STONE WORKS PROP-GANESHI PD BHAGAT, AT-MIRZACHOUKI, SAHIBGANJ | MUNDLI | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 90 | SUBDHRA STONE WORKS RAMESH RANJAN CHODHARY, MIRZACHOUKI | BAITALLA | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 91 | M/S PULLA STONE WORKS | MAHADEODARAN | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 92 | M/S MAHADEV STONE WORKS PROP-AJAY KUMAR JAISHEWAL, MIRZACHOUKI | BELBHADRI | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 93 | M/S SRI SRI RAM STONE WORKS PROP- TINKAL KUMAR BHAGAT S/O-SRI RAMNARAYAN BHAGAT AT+PO+PS- MIRZACHOUKI DIST-SAHIBGANJ | BELBHADRI | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 94 | M/S MAA RAKSHA KALI STONE WORK | MADHOPARA | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 95 | M/S PATIL PUTRA ENTERPRISES PVT. LTD | CHUDEY | THE WORK OF ESTABLISHMENT AND UPGRADING OF THE PROCESSING PLANT GOING ON DURING INSPECTION ON DATED 09/11/17 |
| 96 | M/S RITIKA STONE | ADRID | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 97 | M/S SUBHADRA STONE WORKS | BAITALLA | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 98 | M/S NAV DURGA STONE WORKS | BAITALLA | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |

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| 99 | M/S DIIP KUMAR SHRMA | JOKMARI | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VAUD LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 100 | M/S BSC C&C JV | MARIKUTTI & DESHPOKHARIA | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 101 | M/S VANSRAJ STONE WORKS | BELBHADRI | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 102 | M/S RODIK VANANCHAL PROJECTED LTD | AAMDANDA | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VAUD LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 103 | M/S NATH STONE WORKS | BELBHADRI | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 104 | M/S MAA BAIASNAVI STONE WORKS | MUNDU | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VAUD LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 105 | M/S DDS STONE WORKS | PAHARPUR | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 106 | M/S SAKET STONE WORK | CHHOTA LOHANDA | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 107 | M/S HIMALYA STONE WORKS | PAHARPUR | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VAUD LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 108 | M/S LARSEN & TOUBRO LIMITED | AMBADE | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 109 | M/S FIZA STONE WORKS | PIPALJORI | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |

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| 110 | M/S ARYAN STONE WORKS | BARTALLA | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 111 | M/S KOHITUR STONE WORKS | MAHAKUD | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 112 | M/S ALFA MINING CORPORATION | KUNDI | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 113 | M/S G.G STONE WORKS | SITAPHARA | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 114 | M/S S.R. STONE WORKS | PIPARJORI | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 115 | M/S JAJ BAURANG STONE WORKS | BELBHADRI | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |
| 116 | M/S J.B. STONE WORKS | MADHOPARA | THE FOLLOWING DEALER IS REGISTERED UNDER THE DEALER RULE AND OBTAINED CLEARANCE CERTIFICATE FOR THE PROCESSING PLANT FROM THE PCB AND OTHER RELATED DEPARTMENTS THEY HAVE DONE PROCURMENT FROM VALID LEASE SOURCE AND MAKE ITS ENTRY IN MONTHLY STATEMENT AND DISPATCH MINERALS THROUGH E CHALLAN |

DISTRICT MINING OFFICE SAHIBGANJ

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| 1 | MS PROGRESSIVE STONE WORKS | DHATAPARA | DURING INSPECTION DONE ON DATED 9/02/18 DEALER HAVE FOUND INDULGE IN ILLEGAL STORAGE, PROCESSING AND DISPATCH OF MINERALS SO CONCERNED CRUSHER HAS BEEN DEMOLISHED IN COMPLIANCE WITH THE DEPARTMENTAL INSTRUCTIONS ON ILLEGAL MINING. |
| 2 | M/S MOKTAR HOSSAIN | FATHEPUR | DURING INSPECTION DONE ON DATED 9/02/18 DEALER HAVE FOUND INDULGE IN ILLEGAL STORAGE, PROCESSING AND DISPATCH OF MINERALS SO CONCERNED CRUSHER HAS BEEN DEMOLISHED IN COMPLIANCE WITH THE DEPARTMENTAL INSTRUCTIONS ON ILLEGAL MINING. |
| 3 | M/S OM STONE WORKS | SHYAMNAGAR | DURING INSPECTION DONE ON DATED 9/02/18 DEALER HAVE FOUND INDULGE IN ILLEGAL STORAGE, PROCESSING AND DISPATCH OF MINERALS SO CONCERNED CRUSHER HAS BEEN DEMOLISHED IN COMPLIANCE WITH THE DEPARTMENTAL INSTRUCTIONS ON ILLEGAL MINING. |
| 4 | MD ABU TAHIR | DHATAPARA | DURING INSPECTION DONE ON DATED 9/02/18 DEALER HAVE FOUND INDULGE IN ILLEGAL STORAGE, PROCESSING AND DISPATCH OF MINERALS SO CONCERNED CRUSHER HAS BEEN DEMOLISHED IN COMPLIANCE WITH THE DEPARTMENTAL INSTRUCTIONS ON ILLEGAL MINING. |
| 5 | M/S SATTAR SK | DHATAPARA | DURING INSPECTION DONE ON DATED 9/02/18 DEALER HAVE FOUND INDULGE IN ILLEGAL STORAGE, PROCESSING AND DISPATCH OF MINERALS SO CONCERNED CRUSHER HAS BEEN DEMOLISHED IN COMPLIANCE WITH THE DEPARTMENTAL INSTRUCTIONS ON ILLEGAL MINING. |
| 6 | M/S ASHRAFUL HAQU | PIPALORI | DURING INSPECTION DONE ON DATED 9/02/18 DEALER HAVE FOUND INDULGE IN ILLEGAL STORAGE, PROCESSING AND DISPATCH OF MINERALS SO CONCERNED CRUSHER HAS BEEN DEMOLISHED IN COMPLIANCE WITH THE DEPARTMENTAL INSTRUCTIONS ON ILLEGAL MINING. |
| 7 | MD ALIJUDIN SEKH | DHATAPARA | DURING INSPECTION DONE ON DATED 9/02/18 DEALER HAVE FOUND INDULGE IN ILLEGAL STORAGE, PROCESSING AND DISPATCH OF MINERALS SO CONCERNED CRUSHER HAS BEEN DEMOLISHED IN COMPLIANCE WITH THE DEPARTMENTAL INSTRUCTIONS ON ILLEGAL MINING. |
| 8 | AKJUR RAHMAN | DHATAPARA | DURING INSPECTION DONE ON DATED 9/02/18 DEALER HAVE FOUND INDULGE IN ILLEGAL STORAGE, PROCESSING AND DISPATCH OF MINERALS SO CONCERNED CRUSHER HAS BEEN DEMOLISHED IN COMPLIANCE WITH THE DEPARTMENTAL INSTRUCTIONS ON ILLEGAL MINING. |
| 9 | M/S ASHRAFUL STONE WORK | DHATAPARA | DURING INSPECTION DONE ON DATED 9/02/18 DEALER HAVE FOUND INDULGE IN ILLEGAL STORAGE, PROCESSING AND DISPATCH OF MINERALS SO CONCERNED CRUSHER HAS BEEN DEMOLISHED IN COMPLIANCE WITH THE DEPARTMENTAL INSTRUCTIONS ON ILLEGAL MINING. |
| 10 |  | DHATAPARA | DURING INSPECTION DONE ON DATED 9/02/18 DEALER HAVE FOUND INDULGE IN ILLEGAL STORAGE, PROCESSING AND DISPATCH OF MINERALS SO CONCERNED CRUSHER HAS BEEN DEMOLISHED IN COMPLIANCE WITH THE DEPARTMENTAL INSTRUCTIONS ON ILLEGAL MINING. |

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| 11 | MD IQBAL | SHYAMNAGAR | DURING INSPECTION DONE ON DATED 9/02/18 DEALER HAVE FOUND INDULGE IN ILLEGAL STORAGE, PROCESSING AND DISPATCH OF MINERALS SO CONCERNED CRUSHER HAS BEEN DEMOLISHED IN COMPLIANCE WITH THE DEPARTMENTAL INSTRUCTIONS ON ILLEGAL MINING. |
| 12 | M/S BASAR STONE WORKS | PIPALJORI | DURING INSPECTION DONE ON DATED 9/02/18 DEALER HAVE FOUND INDULGE IN ILLEGAL STORAGE, PROCESSING AND DISPATCH OF MINERALS SO CONCERNED CRUSHER HAS BEEN DEMOLISHED IN COMPLIANCE WITH THE DEPARTMENTAL INSTRUCTIONS ON ILLEGAL MINING. |
| 13 | SAMSUL HAQU | PIPALJORI | DURING INSPECTION DONE ON DATED 9/02/18 DEALER HAVE FOUND INDULGE IN ILLEGAL STORAGE, PROCESSING AND DISPATCH OF MINERALS SO CONCERNED CRUSHER HAS BEEN DEMOLISHED IN COMPLIANCE WITH THE DEPARTMENTAL INSTRUCTIONS ON ILLEGAL MINING. |
| 14 | MEENUL SEKH | DHATAPARA | DURING INSPECTION DONE ON DATED 9/02/18 DEALER HAVE FOUND INDULGE IN ILLEGAL STORAGE, PROCESSING AND DISPATCH OF MINERALS SO CONCERNED CRUSHER HAS BEEN DEMOLISHED IN COMPLIANCE WITH THE DEPARTMENTAL INSTRUCTIONS ON ILLEGAL MINING. |
| 15 | M/S RAJ STONE WORK | PIPALJORI | DURING INSPECTION DONE ON DATED 9/02/18 DEALER HAVE FOUND INDULGE IN ILLEGAL STORAGE, PROCESSING AND DISPATCH OF MINERALS SO CONCERNED CRUSHER HAS BEEN DEMOLISHED IN COMPLIANCE WITH THE DEPARTMENTAL INSTRUCTIONS ON ILLEGAL MINING. |
| 16 | HAZRAT SEKH | PIPALJORI | DURING INSPECTION DONE ON DATED 9/02/18 DEALER HAVE FOUND INDULGE IN ILLEGAL STORAGE, PROCESSING AND DISPATCH OF MINERALS SO CONCERNED CRUSHER HAS BEEN DEMOLISHED IN COMPLIANCE WITH THE DEPARTMENTAL INSTRUCTIONS ON ILLEGAL MINING. |
| 17 | M/S FIVE STARE STONE WORKS | DHATAPARA | DURING INSPECTION DONE ON DATED 9/02/18 DEALER HAVE FOUND INDULGE IN ILLEGAL STORAGE, PROCESSING AND DISPATCH OF MINERALS SO CONCERNED CRUSHER HAS BEEN DEMOLISHED IN COMPLIANCE WITH THE DEPARTMENTAL INSTRUCTIONS ON ILLEGAL MINING. |
| 18 | M/S JIYA SONE WORKS | DHATAPARA | DURING INSPECTION DONE ON DATED 9/02/18 DEALER HAVE FOUND INDULGE IN ILLEGAL STORAGE, PROCESSING AND DISPATCH OF MINERALS SO CONCERNED CRUSHER HAS BEEN DEMOLISHED IN COMPLIANCE WITH THE DEPARTMENTAL INSTRUCTIONS ON ILLEGAL MINING. |
| 19 | M/S MANIRUDIN SEKH | DHATAPARA | DURING INSPECTION DONE ON DATED 9/02/18 DEALER HAVE FOUND INDULGE IN ILLEGAL STORAGE, PROCESSING AND DISPATCH OF MINERALS SO CONCERNED CRUSHER HAS BEEN DEMOLISHED IN COMPLIANCE WITH THE DEPARTMENTAL INSTRUCTIONS ON ILLEGAL MINING. |
| 20 | M/S SOMNATH GOSH | PIPALJORI | DURING INSPECTION DONE ON DATED 9/02/18 DEALER HAVE FOUND INDULGE IN ILLEGAL STORAGE, PROCESSING AND DISPATCH OF MINERALS SO CONCERNED CRUSHER HAS BEEN DEMOLISHED IN COMPLIANCE WITH THE DEPARTMENTAL INSTRUCTIONS ON ILLEGAL MINING. |

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| 21 | M/S MAA TARA STONE WORK | PIPALJORI | DURING INSPECTION DONE ON DATED 9/02/18 DEALER HAVE FOUND INDULGE IN ILLEGAL STORAGE, PROCESSING AND DISPATCH OF MINERALS SO CONCERNED CRUSHER HAS BEEN DEMOLISHED IN COMPLIANCE WITH THE DEPARTMENTAL INSTRUCTIONS ON ILLEGAL MINING. |
| 22 | M/S KARISHMA STONE WORKS, | PIPALJORI | DURING INSPECTION DONE ON DATED 9/02/18 DEALER HAVE FOUND INDULGE IN ILLEGAL STORAGE, PROCESSING AND DISPATCH OF MINERALS SO CONCERNED CRUSHER HAS BEEN DEMOLISHED IN COMPLIANCE WITH THE DEPARTMENTAL INSTRUCTIONS ON ILLEGAL MINING. |
| 23 | M/S RAM RAHIM STONE WOKS | PIPALJORI | DURING INSPECTION DONE ON DATED 9/02/18 DEALER HAVE FOUND INDULGE IN ILLEGAL STORAGE, PROCESSING AND DISPATCH OF MINERALS SO CONCERNED CRUSHER HAS BEEN DEMOLISHED IN COMPLIANCE WITH THE DEPARTMENTAL INSTRUCTIONS ON ILLEGAL MINING. |
| 24 | MANOJ KUMAR YADAV | JOKMARI | DURING INSPECTION DONE ON DATED 18/04/18 THE FOLLOWING FIRM IS NOT REGISTERED UNDER THE DEALER RULE AND INDULGE IN ILLEGAL STORAGE, PROCESSING AND DISPATCH OF MINERALS SO CONCERNED CRUSHER HAS BEEN SEALED IN COMPLIANCE WITH THE DEPARTMENTAL INSTRUCTIONS ON ILLEGAL MINING. |
| 25 | RAKESH KUMAR YADAV | JOKMARI | DURING INSPECTION DONE ON DATED 18/04/18 THE FOLLOWING FIRM IS NOT REGISTERED UNDER THE DEALER RULE AND INDULGE IN ILLEGAL STORAGE, PROCESSING AND DISPATCH OF MINERALS SO CONCERNED CRUSHER HAS BEEN SEALED IN COMPLIANCE WITH THE DEPARTMENTAL INSTRUCTIONS ON ILLEGAL MINING. |
| 26 | SANJEEV KUMAR | JOKMARI | DURING INSPECTION DONE ON DATED 18/04/18 THE FOLLOWING FIRM IS NOT REGISTERED UNDER THE DEALER RULE AND INDULGE IN ILLEGAL STORAGE, PROCESSING AND DISPATCH OF MINERALS SO CONCERNED CRUSHER HAS BEEN SEALED IN COMPLIANCE WITH THE DEPARTMENTAL INSTRUCTIONS ON ILLEGAL MINING. |
| 27 | MD MISTER | PINDARI | DURING INSPECTION DONE ON DATED 18/04/18 BY DMO SAHEBGANJ THE FOLLOWING FIRM IS NOT REGISTERED UNDER THE DEALER RULE AND INDULGE IN ILLEGAL STORAGE, PROCESSING AND DISPATCH OF MINERALS SO CONCERNED CRUSHER HAS BEEN SEALED IN COMPLIANCE WITH THE DEPARTMENTAL INSTRUCTIONS ON ILLEGAL MINING. |
| 28 | HARERAM YADAV | JOKMARI | DURING INSPECTION DONE ON DATED 18/04/18 THE FOLLOWING FIRM IS NOT REGISTERED UNDER THE DEALER RULE AND INDULGE IN ILLEGAL STORAGE, PROCESSING AND DISPATCH OF MINERALS SO CONCERNED CRUSHER HAS BEEN SEALED IN COMPLIANCE WITH THE DEPARTMENTAL INSTRUCTIONS ON ILLEGAL MINING. |
| 29 | SHIV SHANKAR STONE WORKS | AMBADIHA | DURING INSPECTION DONE BY DISTRICT MINING TASK FORCE COMMITTEE ON DATED 3/05/18 TO 05/05/18 DEALER HAVE FOUND INDULGE IN ILLEGAL STORAGE, PROCESSING AND DISPATCH OF MINERALS SO CONCERNED CRUSHER HAS BEEN DEMOLISHED IN COMPLIANCE WITH THE DEPARTMENTAL INSTRUCTIONS ON ILLEGAL MINING. |

ASH KUMAR SINGH
Public

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| | MS DEEPA MINERALS | AMBADIHA | DURING INSPECTION DONE BY DISTRICT MINING TASK FORCE COMMITTEE ON DATED 3/05/18 TO 05/05/18 DEALER HAVE FOUND INDULGE IN ILLEGAL STORAGE, PROCESSING AND DISPATCH OF MINERALS SO CONCERNED CRUSHER HAS BEEN DEMOLISHED IN COMPLIANCE WITH THE DEPARTMENTAL INSTRUCTIONS ON ILLEGAL MINING. |
| 31 | MS SHANTI STONE WORKS | AMBADIHA | DURING INSPECTION DONE BY DISTRICT MINING TASK FORCE COMMITTEE ON DATED 3/05/18 TO 05/05/18 DEALER HAVE FOUND INDULGE IN ILLEGAL STORAGE, PROCESSING AND DISPATCH OF MINERALS SO CONCERNED CRUSHER HAS BEEN DEMOLISHED IN COMPLIANCE WITH THE DEPARTMENTAL INSTRUCTIONS ON ILLEGAL MINING. |
| 32 | MS RAM MINERALS | HATHIGARH | DURING INSPECTION DONE BY DISTRICT MINING TASK FORCE COMMITTEE ON DATED 3/05/18 TO 05/05/18 DEALER HAVE FOUND INDULGE IN ILLEGAL STORAGE, PROCESSING AND DISPATCH OF MINERALS SO CONCERNED CRUSHER HAS BEEN DEMOLISHED IN COMPLIANCE WITH THE DEPARTMENTAL INSTRUCTIONS ON ILLEGAL MINING. |
| 33 | MS LAXMI STONE WORKS | CHHOTI BHAGUMARI | DURING INSPECTION DONE BY DISTRICT MINING TASK FORCE COMMITTEE ON DATED 3/05/18 TO 05/05/18 DEALER HAVE FOUND INDULGE IN ILLEGAL STORAGE, PROCESSING AND DISPATCH OF MINERALS SO CONCERNED CRUSHER HAS BEEN SEALED IN COMPLIANCE WITH THE DEPARTMENTAL INSTRUCTIONS ON ILLEGAL MINING. |
| 34 | SHIVAM STONE WORKS | BARA BAGIAMARI | DURING INSPECTION DONE BY DISTRICT MINING TASK FORCE COMMITTEE ON DATED 3/05/18 TO 05/05/18 DEALER HAVE FOUND INDULGE IN ILLEGAL STORAGE, PROCESSING AND DISPATCH OF MINERALS SO CONCERNED CRUSHER HAS BEEN DEMOLISHED IN COMPLIANCE WITH THE DEPARTMENTAL INSTRUCTIONS ON ILLEGAL MINING. |
| 35 | SINGH STONE WORKS | AMBADIHA | DURING INSPECTION DONE BY DISTRICT MINING TASK FORCE COMMITTEE ON DATED 3/05/18 TO 05/05/18 DEALER HAVE FOUND INDULGE IN ILLEGAL STORAGE, PROCESSING AND DISPATCH OF MINERALS SO CONCERNED CRUSHER HAS BEEN DEMOLISHED IN COMPLIANCE WITH THE DEPARTMENTAL INSTRUCTIONS ON ILLEGAL MINING. |
| 36 | MS SARASWATI STONE WORKS | AMBADIHA | DURING INSPECTION DONE BY DISTRICT MINING TASK FORCE COMMITTEE ON DATED 3/05/18 TO 05/05/18 DEALER HAVE FOUND INDULGE IN ILLEGAL STORAGE, PROCESSING AND DISPATCH OF MINERALS SO CONCERNED CRUSHER HAS BEEN DEMOLISHED IN COMPLIANCE WITH THE DEPARTMENTAL INSTRUCTIONS ON ILLEGAL MINING. |
| 37 | MS KAMLESH STONE WORKS | AMBADIHA | DURING INSPECTION DONE BY DISTRICT MINING TASK FORCE COMMITTEE ON DATED 3/05/18 TO 05/05/18 DEALER HAVE FOUND INDULGE IN ILLEGAL STORAGE, PROCESSING AND DISPATCH OF MINERALS SO CONCERNED CRUSHER HAS BEEN DEMOLISHED IN COMPLIANCE WITH THE DEPARTMENTAL INSTRUCTIONS ON ILLEGAL MINING. |

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| 38 | MS SAHANI INTERPRISES | GADWA | DURING INSPECTION DONE BY DISTRICT MINING TASK FORCE COMMITTEE ON DATED 3/05/18 TO 05/05/18 DEALER HAVE FOUND INDULGE IN ILLEGAL STORAGE, PROCESSING AND DISPATCH OF MINERALS SO CONCERNED CRUSHER HAS BEEN DEMOLISHED IN COMPLIANCE WITH THE DEPARTMENTAL INSTRUCTIONS ON ILLEGAL MINING. |
| 39 | SAXRIGALI SMALL INDUSTRIES | BANSKOLA | DURING INSPECTION DONE BY DISTRICT MINING TASK FORCE COMMITTEE ON DATED 3/05/18 TO 05/05/18 DEALER HAVE FOUND INDULGE IN ILLEGAL STORAGE, PROCESSING AND DISPATCH OF MINERALS SO CONCERNED CRUSHER HAS BEEN DEMOLISHED IN COMPLIANCE WITH THE DEPARTMENTAL INSTRUCTIONS ON ILLEGAL MINING. |
| 40 | MS KOHINOOR MINING | HATHIGARH | DURING INSPECTION DONE BY DISTRICT MINING TASK FORCE COMMITTEE ON DATED 3/05/18 TO 05/05/18 DEALER HAVE FOUND INDULGE IN ILLEGAL STORAGE, PROCESSING AND DISPATCH OF MINERALS SO CONCERNED CRUSHER HAS BEEN DEMOLISHED IN COMPLIANCE WITH THE DEPARTMENTAL INSTRUCTIONS ON ILLEGAL MINING. |
| 41 | MS HAR HAR MAHADEV STONE WORKS | CHHOTI BHAGAMARI | DURING INSPECTION DONE BY DISTRICT MINING TASK FORCE COMMITTEE ON DATED 3/05/18 TO 05/05/18 DEALER HAVE FOUND INDULGE IN ILLEGAL STORAGE, PROCESSING AND DISPATCH OF MINERALS SO CONCERNED CRUSHER HAS BEEN DEMOLISHED IN COMPLIANCE WITH THE DEPARTMENTAL INSTRUCTIONS ON ILLEGAL MINING. |
| 42 | TRILOXI YADAV | ADRO | DURING INSPECTION DONE BY DISTRICT MINING TASK FORCE COMMITTEE ON DATED 3/05/18 TO 05/05/18 DEALER HAVE FOUND INDULGE IN ILLEGAL STORAGE, PROCESSING AND DISPATCH OF MINERALS SO CONCERNED CRUSHER HAS BEEN DEMOLISHED IN COMPLIANCE WITH THE DEPARTMENTAL INSTRUCTIONS ON ILLEGAL MINING. |
| 43 | GUDDU SINGH | ADRO | DURING INSPECTION DONE BY DISTRICT MINING TASK FORCE COMMITTEE ON DATED 3/05/18 TO 05/05/18 DEALER HAVE FOUND INDULGE IN ILLEGAL STORAGE, PROCESSING AND DISPATCH OF MINERALS SO CONCERNED CRUSHER HAS BEEN DEMOLISHED IN COMPLIANCE WITH THE DEPARTMENTAL INSTRUCTIONS ON ILLEGAL MINING. |
| 44 | IQBAL ANSAR | LOHANDA | DURING INSPECTION DONE BY DISTRICT MINING TASK FORCE COMMITTEE ON DATED 3/05/18 TO 05/05/18 DEALER HAVE FOUND INDULGE IN ILLEGAL STORAGE, PROCESSING AND DISPATCH OF MINERALS SO CONCERNED CRUSHER HAS BEEN DEMOLISHED IN COMPLIANCE WITH THE DEPARTMENTAL INSTRUCTIONS ON ILLEGAL MINING. |
| 45 | AFTAB | LOHANDA | DURING INSPECTION DONE BY DISTRICT MINING TASK FORCE COMMITTEE ON DATED 3/05/18 TO 05/05/18 DEALER HAVE FOUND INDULGE IN ILLEGAL STORAGE, PROCESSING AND DISPATCH OF MINERALS SO CONCERNED CRUSHER HAS BEEN DEMOLISHED IN COMPLIANCE WITH THE DEPARTMENTAL INSTRUCTIONS ON ILLEGAL MINING. |

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| 46 | ASHOK YADAV | LOHANDA | DURING INSPECTION DONE BY DISTRICT MINING TASK FORCE COMMITTEE ON DATED 3/05/18 TO 05/05/18 DEALER HAVE FOUND INDULGE IN ILLEGAL STORAGE, PROCESSING AND DISPATCH OF MINERALS SO CONCERNED CRUSHER HAS BEEN DEMOLISHED IN COMPLIANCE WITH THE DEPARTMENTAL INSTRUCTIONS ON ILLEGAL MINING. |
| 47 | SUNIL SHARMA | LOHANDA | DURING INSPECTION DONE BY DISTRICT MINING TASK FORCE COMMITTEE ON DATED 3/05/18 TO 05/05/18 DEALER HAVE FOUND INDULGE IN ILLEGAL STORAGE, PROCESSING AND DISPATCH OF MINERALS SO CONCERNED CRUSHER HAS BEEN DEMOLISHED IN COMPLIANCE WITH THE DEPARTMENTAL INSTRUCTIONS ON ILLEGAL MINING. |
| 48 | MS SILPI STONE WORKS | MAHADEOBARAN | DURING INSPECTION DONE BY DISTRICT MINING TASK FORCE COMMITTEE ON DATED 7/07/17 IN ORDER OF INSPECTION TASK FORCE TEAM FOUND THAT THE DEALER HAS BEEN OPERATED CRUSHER UNIT WITHOUT ALL PRIOR CLEARANCES, CONDITION OF DEALER RULE AND OPERATING STANDARDS HAS BEEN NOT MAINTAINED BY DEALER SO FOLLOWING CRUSHER UNIT HAS BEEN SEALED |
| 49 | M/S BABA STONE WORKS | MUNDLI | DURING INSPECTION DONE BY DISTRICT MINING TASK FORCE COMMITTEE ON DATED 7/07/17 IN ORDER OF INSPECTION TASK FORCE TEAM FOUND THAT THE DEALER HAS BEEN OPERATED CRUSHER UNIT WITHOUT ALL PRIOR CLEARANCES, CONDITION OF DEALER RULE AND OPERATING STANDARDS HAS BEEN NOT MAINTAINED BY DEALER SO FOLLOWING CRUSHER UNIT HAS BEEN SEALED |
| 50 | M/S AAYUSHMAN STONE WORKS | MUNDLI | DURING INSPECTION DONE BY DISTRICT MINING TASK FORCE COMMITTEE ON DATED 7/07/17 IN ORDER OF INSPECTION TASK FORCE TEAM FOUND THAT THE DEALER HAS BEEN OPERATED CRUSHER UNIT WITHOUT ALL PRIOR CLEARANCES, CONDITION OF DEALER RULE AND OPERATING STANDARDS HAS BEEN NOT MAINTAINED BY DEALER SO FOLLOWING CRUSHER UNIT HAS BEEN SEALED |
| 51 | MS DURGA STONE WORKS | MAHADEOBARAN | DURING INSPECTION DONE BY DISTRICT MINING TASK FORCE COMMITTEE ON DATED 7/07/17 IN ORDER OF INSPECTION TASK FORCE TEAM FOUND THAT THE DEALER HAS BEEN OPERATED CRUSHER UNIT WITHOUT ALL PRIOR CLEARANCES, CONDITION OF DEALER RULE AND OPERATING STANDARDS HAS BEEN NOT MAINTAINED BY DEALER SO FOLLOWING CRUSHER UNIT HAS BEEN SEALED |
| 52 | MS RADHA VIDYA SAGAR STONE WORKS | MAHADEOBARAN | DURING INSPECTION DONE BY DISTRICT MINING TASK FORCE COMMITTEE ON DATED 7/07/17 IN ORDER OF INSPECTION TASK FORCE TEAM FOUND THAT THE DEALER HAS BEEN OPERATED CRUSHER UNIT WITHOUT ALL PRIOR CLEARANCES, CONDITION OF DEALER RULE AND OPERATING STANDARDS HAS BEEN NOT MAINTAINED BY DEALER SO FOLLOWING CRUSHER UNIT HAS BEEN SEALED |
| 53 | MS RITESH DEO STONE WORKS | MUNDLI | DURING INSPECTION DONE BY DISTRICT MINING TASK FORCE COMMITTEE ON DATED 7/07/17 IN ORDER OF INSPECTION TASK FORCE TEAM FOUND THAT THE DEALER HAS BEEN OPERATED CRUSHER UNIT WITHOUT ALL PRIOR CLEARANCES, CONDITION OF DEALER RULE AND OPERATING STANDARDS HAS BEEN NOT MAINTAINED BY DEALER SO FOLLOWING CRUSHER UNIT HAS BEEN SEALED |

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| 54 | MS JAI MAA SHERAWALI STONE WORKS | MUNDU | DURING INSPECTION DONE BY DISTRICT MINING TASK FORCE COMMITTEE ON DATED 7/07/17 IN ORDER OF INSPECTION TASK FORCE TEAM FOUND THAT THE DEALER HAS BEEN OPERATED CRUSHER UNIT WITHOUT ALL PRIOR CLEARANCES, CONDITION OF DEALER RULE AND OPERATING STANDARDS HAS BEEN NOT MAINTAINED BY DEALER SO FOLLOWING CRUSHER UNIT HAS BEEN SEALED |
| 55 | MS AALIYA STONE WORKS | MUNDU | DURING INSPECTION DONE BY DISTRICT MINING TASK FORCE COMMITTEE ON DATED 7/07/17 IN ORDER OF INSPECTION TASK FORCE TEAM FOUND THAT THE DEALER HAS BEEN OPERATED CRUSHER UNIT WITHOUT ALL PRIOR CLEARANCES, CONDITION OF DEALER RULE AND OPERATING STANDARDS HAS BEEN NOT MAINTAINED BY DEALER SO FOLLOWING CRUSHER UNIT HAS BEEN SEALED |
| 56 | SRI RATAN KUMAR CHOUDHARY | MUNDU | DURING INSPECTION DONE BY DISTRICT MINING TASK FORCE COMMITTEE ON DATED 7/07/17 IN ORDER OF INSPECTION TASK FORCE TEAM FOUND THAT THE DEALER HAS BEEN OPERATED CRUSHER UNIT WITHOUT ALL PRIOR CLEARANCES, CONDITION OF DEALER RULE AND OPERATING STANDARDS HAS BEEN NOT MAINTAINED BY DEALER SO FOLLOWING CRUSHER UNIT HAS BEEN SEALED |
| 57 | MS BABA STONE WORKS | MUNDU | DURING INSPECTION DONE BY DISTRICT MINING TASK FORCE COMMITTEE ON DATED 7/07/17 IN ORDER OF INSPECTION TASK FORCE TEAM FOUND THAT THE DEALER HAS BEEN OPERATED CRUSHER UNIT WITHOUT ALL PRIOR CLEARANCES, CONDITION OF DEALER RULE AND OPERATING STANDARDS HAS BEEN NOT MAINTAINED BY DEALER SO FOLLOWING CRUSHER UNIT HAS BEEN SEALED |
| 58 | SRI PANKAJ KUMAR CHOUDHARY | MUNDU | DURING INSPECTION DONE BY DISTRICT MINING TASK FORCE COMMITTEE ON DATED 7/07/17 IN ORDER OF INSPECTION TASK FORCE TEAM FOUND THAT THE DEALER HAS BEEN OPERATED CRUSHER UNIT WITHOUT ALL PRIOR CLEARANCES, CONDITION OF DEALER RULE AND OPERATING STANDARDS HAS BEEN NOT MAINTAINED BY DEALER SO FOLLOWING CRUSHER UNIT HAS BEEN SEALED |
| 59 | MAA SHERAWALI STONE WORKS | MUNDU | DURING INSPECTION DONE BY DISTRICT MINING TASK FORCE COMMITTEE ON DATED 7/07/17 IN ORDER OF INSPECTION TASK FORCE TEAM FOUND THAT THE DEALER HAS BEEN OPERATED CRUSHER UNIT WITHOUT ALL PRIOR CLEARANCES, CONDITION OF DEALER RULE AND OPERATING STANDARDS HAS BEEN NOT MAINTAINED BY DEALER SO FOLLOWING CRUSHER UNIT HAS BEEN SEALED |
| 60 | MS KRISHNA STONE WORKS | MUNDU | DURING INSPECTION DONE BY DISTRICT MINING TASK FORCE COMMITTEE ON DATED 27/02/18 IN ORDER OF INSPECTION TASK FORCE TEAM FOUND THAT THE DEALER HAS BEEN OPERATED CRUSHER UNIT WITHOUT ALL PRIOR CLEARANCES, CONDITION OF DEALER RULE AND OPERATING STANDARDS HAS BEEN NOT MAINTAINED BY DEALER SO FOLLOWING CRUSHER UNIT HAS BEEN SEALED |

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| 61 | DIMPLE BHAGAT | MUNDU | DURING INSPECTION DONE BY DISTRICT MINING TASK FORCE COMMITTEE ON DATED 27/02/18 IN ORDER OF INSPECTION TASK FORCE TEAM FOUND THAT THE DEALER HAS BEEN OPERATED CRUSHER UNIT WITHOUT ALL PRIOR CLEARANCES, CONDITION OF DEALER RULE AND OPERATING STANDARDS HAS BEEN NOT MAINTAINED BY DEALER SO FOLLOWING CRUSHER UNIT HAS BEEN SEALED |
| 62 | MS ANANYA STONE WORKS | MUNDU | DURING INSPECTION DONE BY DISTRICT MINING TASK FORCE COMMITTEE ON DATED 27/02/18 IN ORDER OF INSPECTION TASK FORCE TEAM FOUND THAT THE DEALER HAS BEEN OPERATED CRUSHER UNIT WITHOUT ALL PRIOR CLEARANCES, CONDITION OF DEALER RULE AND OPERATING STANDARDS HAS BEEN NOT MAINTAINED BY DEALER SO FOLLOWING CRUSHER UNIT HAS BEEN SEALED |
| 63 | SANTOSH JAISWAL | NIMGACHI | DURING INSPECTION DONE BY DISTRICT MINING TASK FORCE COMMITTEE ON DATED 27/02/18 IN ORDER OF INSPECTION TASK FORCE TEAM FOUND THAT THE DEALER HAS BEEN OPERATED CRUSHER UNIT WITHOUT ALL PRIOR CLEARANCES, CONDITION OF DEALER RULE AND OPERATING STANDARDS HAS BEEN NOT MAINTAINED BY DEALER SO FOLLOWING CRUSHER UNIT HAS BEEN SEALED |

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| PANCAJ GUPTA | MUNDU | DURING INSPECTION DONE BY DISTRICT MINING TASK FORCE COMMITTEE ON DATED 27/02/18 IN ORDER OF INSPECTION TASK FORCE TEAM FOUND THAT THE DEALER HAS BEEN OPERATED CRUSHER UNIT WITHOUT ALL PRIOR CLEARANCES, CONDITION OF DEALER RULE AND OPERATING STANDARDS HAS BEEN NOT MAINTAINED BY DEALER SO FOLLOWING CRUSHER UNIT HAS BEEN SEALED |
| RAVI CHOURASIYA | MUNDU | DURING INSPECTION DONE BY DISTRICT MINING TASK FORCE COMMITTEE ON DATED 27/02/18 IN ORDER OF INSPECTION TASK FORCE TEAM FOUND THAT THE DEALER HAS BEEN OPERATED CRUSHER UNIT WITHOUT ALL PRIOR CLEARANCES, CONDITION OF DEALER RULE AND OPERATING STANDARDS HAS BEEN NOT MAINTAINED BY DEALER SO FOLLOWING CRUSHER UNIT HAS BEEN SEALED |
| RAJIV RANA | MUNDU | DURING INSPECTION DONE BY DISTRICT MINING TASK FORCE COMMITTEE ON DATED 27/02/18 IN ORDER OF INSPECTION TASK FORCE TEAM FOUND THAT THE DEALER HAS BEEN OPERATED CRUSHER UNIT WITHOUT ALL PRIOR CLEARANCES, CONDITION OF DEALER RULE AND OPERATING STANDARDS HAS BEEN NOT MAINTAINED BY DEALER SO FOLLOWING CRUSHER UNIT HAS BEEN DEMOLISHED |
| PINTU SINGH | MUNDU | DURING INSPECTION DONE BY DISTRICT MINING TASK FORCE COMMITTEE ON DATED 27/02/18 IN ORDER OF INSPECTION TASK FORCE TEAM FOUND THAT THE DEALER HAS BEEN OPERATED CRUSHER UNIT WITHOUT ALL PRIOR CLEARANCES, CONDITION OF DEALER RULE AND OPERATING STANDARDS HAS BEEN NOT MAINTAINED BY DEALER SO FOLLOWING CRUSHER UNIT HAS BEEN DEMOLISHED |
| RAM BHAROSHAE JAISWAL | MUNDU | DURING INSPECTION DONE BY DISTRICT MINING TASK FORCE COMMITTEE ON DATED 27/02/18 IN ORDER OF INSPECTION TASK FORCE TEAM FOUND THAT THE DEALER HAS BEEN OPERATED CRUSHER UNIT WITHOUT ALL PRIOR CLEARANCES, CONDITION OF DEALER RULE AND OPERATING STANDARDS HAS BEEN NOT MAINTAINED BY DEALER SO FOLLOWING CRUSHER UNIT HAS BEEN SEALED |
| 69 PAKUA STONE WORKS | SUNDERPUR KODARJANNA | DURING INSPECTION DONE BY DMO SAHIBGANJ ON DATED 09/11/17 IN ORDER OF INSPECTION TASK FORCE TEAM FOUND THAT THE DEALER HAS BEEN OPERATED CRUSHER UNIT WITHOUT ALL PRIOR CLEARANCES, CONDITION OF DEALER RULE AND OPERATING STANDARDS HAS BEEN NOT MAINTAINED BY DEALER SO FOLLOWING CRUSHER UNIT HAS BEEN SEALED AND TERMINATE THE LICENSE |
| 70 SHIV NARAYAN | OKMARI | DURING INSPECTION DONE BY DMO SAHIBGANJ ON DATED 09/11/17 IN ORDER OF INSPECTION TASK FORCE TEAM FOUND THAT THE DEALER HAS BEEN OPERATED CRUSHER UNIT WITHOUT ALL PRIOR CLEARANCES, CONDITION OF DEALER RULE AND OPERATING STANDARDS HAS BEEN NOT MAINTAINED BY DEALER SO FOLLOWING CRUSHER UNIT HAS BEEN SEALED |



DISTRICT MINING OFFICE, SAHIBGANJ
REPORT RELATED TO ACTION TAKEN BY DISTRICT MINING TASK FORCE
AGAINST ILLEGAL MINING, STORAGE AND TRANSPORTAION

| SL NO. | FROM YEAR 2019 TO JANUARY 2020 | NAME OF POLICE STATION WEAR FIR HAS BEEN FILED | NO. OF CASE | DESCRIPTION OF RELEVANT LETTER WITH DATE | REMARKS/ ACTION TAKEN REPORT |
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| 1 | 1 | 2 | 3 | 4 | 5 |
| 2 | Jan-19 | P.s- Radhanagar | 1 | Letter No. 60 dt. 11.01.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, TWO TRACTORS WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION |
| 3 | | P.s- Radhanagar | 1 | Letter No. 73 dt. 13.01.19 | IN ORDER OF INSPECTION ON THE BASIS OF CONFIDENTIAL INFORMATION DERIVED BY COMPETENT AUTHORITY UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE AGAINST ILLEGAL TRANSPORTATION OF MENERAL BY WATERWAYS. UNDER THE PENAL PROVISION OF MMDR ACT 1957 SECTION 21'A' AND 21'6', RULE 54 OF JMMCR 2004 AND SECTION 175, 379 AND 414 UNDER THE COGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED FOR FURTHER CRIMINAL PROCEEDINGS AGAINST 3 BOAT SELLER AND PURCHASER OF ILLEGALLY PROCURED MINERAL. |
| 4 | | P.s- Radhanagar | 1 | Letter No. 163 dt. 31.01.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, THIRTEEN TRACTORS WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |
| 5 | | P.s- Muffasil | 1 | Letter No. 137 dt. 29.01.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, SIXTEEN TRUCK WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |

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| | Feb-19 | P.s.- Jirwabadi | 1 | Letter No. 1 dt. 12.02.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, TWO TRACTORS WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION |
| 7 | | P.s- Nagar Thana | 1 | Letter No. 253 dt. 25.02.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, ONE TRUCK WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION |
| 8 | Mar-19 | P.s- Mirzachouki | 1 | Letter No. 299 dt. 02.03.19 | IN ORDER INSPECTION OF ILLEGAL MINING AND TRANSPORTATION UNDER THE SUPERVISION OF DISTRICT MINERAL TASK FORCE, SEIZED THE EXCAVATOR AND OTHER MINING TOOLS USED IN ILLEGAL MINING UNDER SECTION 21'A' AND 21'6' OF THE MMDR ACT AND RULE 54 OF JMMCR 2004 AND 379, 414 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATION FOR FURTHER ACTION. |
| 9 | | P.s- Radhanagar | 1 | Letter No. 305 dt. 04.03.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, ONE TRACTORS WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION |
| 10 | | P.s- Barhat | 1 | Letter No. 2 dt. 16.03.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, FIVE TRACTORS WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION |

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| | P.s- Muffasil | 1 | Letter No. 1 dt. 17.03.19 | IN ORDER OF INSPECTION ON THE BASIS OF CONFIDENTIAL INFORMATION DERIVED BY COMPETENT AUTHORITY UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE AGAINST ILLEGAL TRANSPORTATION OF MENERAL BY WATERWAYS. UNDER THE PENAL PROVISION OF MMDR ACT 1957 SECTION 21'A' AND 21'6', RULE 54 OF JMMCR 2004 AND SECTION 175, 379 AND 414 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED FOR FURTHER CRIMINAL PROCEEDINGS AGAINST 1 BOAT SELLER AND PURCHASER OF ILLEGALLY PROCURED MINERAL. |
| 12 | P.s- Muffasil | 1 | Letter No. 1 dt. 18.03.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, FIVE TRACTORS WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FIURTHUR ACTION |
| 13 | P.s- Muffasil | 1 | Letter No. 1 dt. 24.03.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, ONE TRACTORS WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FIURTHUR ACTION |
| 14 | P.s- Nagar Thana | 1 | Letter No. 1 dt. 27.03.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, FOUR TRACTORS WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FIURTHUR ACTION |
| 15 | P.s.- Jirwabadi | 1 | Letter No. 1 dt. 28.03.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, THREE TRACTORS WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FIURTHUR ACTION |

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| | | P.s- Mirzachouki | 1 | Letter No. 1 dt. 30.03.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, TWELVE TRACTORS WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FIRIHER ACTION |
| 17 | Apr-19 | P.s- Muffasil | 1 | Letter No. 1 dt. 01.04.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, TWO TRUCK & TWO TACTOR WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |
| 18 | | P.s- barhet | 1 | Letter No. 1 dt. 02:04.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, THREE TRACTORS WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION |
| 19 | | P.s- Barharwa | 1 | Letter No. 1 dt. 02.04.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, THREE TRACTORS WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION |
| 20 | | P.s- Ranga | 1 | Letter No. 451 dt. 03.04.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, ONE TRACTORS WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION |
| 21 | | P.s- Muffasil | 1 | Letter No. 01 dt.03.04.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, TWO TRACTORS WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION |

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| 23 | P.s- Muffasil | 1 | Letter No. 02 dt.04.04.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, ELEVEN TRUCK WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION |
| 24 | P.s- Kotalphokhar | 1 | Letter No.459 dt.04.04.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, ONE TRACTORS WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION OF MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION |
| 25 | P.s- Mirzachouki | 1 | Letter No.456 dt.04.04.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, FIVE TRUCK & FIVE TRACTORS WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION OF MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |
| 26 | P.s- Muffasil | 1 | Letter No.01 dt.06.04.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, TWO TRUCK WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION OF MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |
| 27 | P.s- Mirzachouki | 1 | Letter No.01 dt.07.04.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, FIVE TRUCK WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION OF MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004. RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION |
| | P.s- Barharwa | 1 | Letter No.465 dt.09.04.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, TWO TRACTORS WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION |

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| 29 | P.s- Muffasil | 1 | Letter No.469 dt.11.04.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, TWO TRUCK WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION OF MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |
| | P.s- Taljhari | 1 | Letter No.468 dt.11.04.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, TWO TRUCK WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION OF MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |
| 30 | P.s- Jirwabadi | 1 | Letter No.473 dt.12.04.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, ONE TRUCK WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION OF MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |
| 31 | P.s- Mirzachouki | 1 | Letter No.476 dt.15.04.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, ONE TRUCK WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION OF MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |
| 32 | P.s- Ranga | 1 | Letter No.488 dt.14.04.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, ONE TRUCK WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION OF MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |

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| 34 | | P.s jirwabadi | 1 | Letter No.02 dt.18.04.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, ONE TRUCK WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION OF MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |
| | | P.s- Nagar Thana | 1 | Letter No.01 dt.18.04.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, TWO TRUCK & ONE TRACTOR WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION OF MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |
| 35 | May-19 | P.s Rajmahal | 1 | Letter No.531 dt.04.05.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, TWO TRUCK WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION OF MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |
| 36 | | P.s Barhet | 1 | Letter No.538 dt.05.05.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, ONE TRUCK WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION OF MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |
| 37 | | P.s.Tinpahar | 1 | Letter No.543 dt 10.05.19 | IN ORDER TO CONDUCT ILLEGAL MINING RAID BY COMPETENT AUTHORITY, WITHOUT HOLDING VALID MINING LEASE UNDER VILLAGE MALITOK 3 ACCUSED PERSONS WHO ILLEGALLY OPERATED MINING QUARRYING AND EVICTION OF MINERAL UNDER SECTION 21'A' AND 21'6' OF THE MMDR ACT AND RULE 54 OF JMMCR 2004 UNDER THE COGNIZABLE AFEECE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |
| 38 | | P.s Barharwa | 1 | Letter No.550 dt.11.05.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, ONE TRACTORS WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |

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| 40 | P.s Barhet | 1 | Letter No.554 dt.11.05.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, ONE TRUCK WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION OF MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |
| 41 | P.s Barhet | 1 | Letter No.553 dt.11.05.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, TWO TRUCK WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION OF MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |
| 42 | P.s- Mirzachouki | 1 | Letter No.551 dt.11.05.19 | IN ORDER OF INSPECTION ON THE BASIS OF CONFIDENTAL INFORMATION DERIVED BY COMPETENT AUTHORITY UNDER MIRZACHOUKI PS. JURISDICTION WITHOUT HOLDING A DEALER LICENSE ILLEGIMATE PERSON WHO INDULGE IN MINERAL TRANSACTION REGARDING ILLEGALLY OPERATED 12 STONE CRUSHER HAVE SEALED AND HAVE REPORTED FOR FURTHER PROCEEDINGS UNDER THE JHARKHAND MINERALS (PREVENTION OF ILLEGAL MINING, TRANSPORTATION AND STORAGE) RULES 2017 FURTHER PROCEEDING HAVE STARTED AGAINST PURCHASER WHO TRANSACT MINERAL ILLEGALLY. |
| 43 | P.s- Barhet | 1 | Letter No. 601 dt.21.05.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, ONE TRUCK WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION OF MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |
| | P.s- Barhet | 1 | Letter No. 650 dt.30.05.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, ONE TRUCK WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION OF MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |

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| | | P.s- Ranga | 1 | Letter No. 651 dt.30.05.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, TWO TRACTORS WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |
| 45 | Jun-19 | P.s- Muffasil | 1 | Letter No. 1 camp dt.08.06.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, FIVE TRUCK WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION OF MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |
| 46 | | P.s- Muffasil | 1 | Letter No. 1 camp dt.13.06.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, TWELVE TRUCK WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION OF MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |
| 47 | Jul-19 | P.s- Muffasil | 1 | Letter No. 1 camp dt.03.07.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, ONE TRUCK WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION OF MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |
| 48 | | P.s. Jirwabadi | 1 | Letter No. 870 M dt.03.07.19 | IN ORDER TO CONDUCT ILLEGAL MINING RAID BY COMPETENT AUTHORITY, WITHOUT HOLDING VALID MINING LEASE UNDER VILLAGE SIMARIA 2 PERSONS WHO ACCUSED OF ILLEGALLY OPERATED MINING QUARRYING AND EVICTION OF MINERAL DURING RAID UNDER SECTION 21'A' AND 21'6' OF THE MMDR ACT AND RULE 54 OF JMMCR 2004 UNDER THE COGNIZABLE AFFECE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |

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| | P.s- Kotalphokhar | 1 | Letter No. 882 M dt.06.07.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, ONE TRUCK WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION OF MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |
| 50 | P.s- Nagar Thana | 1 | Letter No. 883 M dt.06.07.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, ONE TRUCK WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION OF MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |
| 51 | P.s-Barhet | 1 | Letter No. 895 M dt.06.07.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, ONE TRUCK WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION OF MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |
| 52 | P.s-Barhet | 1 | Letter No. 940 M dt.12.07.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, ONE TRUCK WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION OF MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |
| 53 | P.s-Muffasil | 1 | Letter No. 952 M dt.15.07.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, ONE TRUCK WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION OF MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |
| 54 | P.s-Muffasil | 1 | Letter No. 953 M dt.15.07.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, TWO TRACTORS WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |

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| 56 | P.s-Barharwa | 1 | Letter No. 979 M dt.18.07.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, FIVE TRACTORS WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINERALS ILLEGALLY AS PER PROVISION MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |
| 57 | P.s-Jirwabadi | | Letter No. 980 M dt.18.07.19 | IN ORDER OF INSPECTION ON THE BASIS OF CONFIDENTIAL INFORMATION DERIVED BY COMPETENT AUTHORITY UNDER JIRWABARI PS. JURISDICTION WITHOUT HOLDING A DEALER LICENSE ILLEGIMATE PERSON WHO INDULGE IN MINERAL TRANSACTION REGARDING ILLEGALLY OPERATED 1 STONE CRUSHER HAVE DEMOLISHED AND HAVE REPORTED FOR FURTHER PROCEEDINGS UNDER THE JHARKHAND MINERALS (PREVENTION OF ILLEGAL MINING, TRANSPORTATION AND STORAGE) RULES 2017 FURTHER PROCEEDING HAVE STARTED AGAINST PURCHASER WHO TRANSACT MINERAL ILLEGALLY. |
| 58 | P.s-Barharwa | 1 | Letter No. 982 M dt.18.07.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, ONE TRUCK WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINERALS ILLEGALLY AS PER PROVISION OF MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |
| | P.s-Barhet | 1 | Letter No. 983 M dt.18.07.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, ONE TRUCK WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINERALS ILLEGALLY AS PER PROVISION OF MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |

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| | | P.s-Barhet | 1 | Letter No. 988 M dt.18.07.19 | UNDER THE DISTRICT MINING TASK FORCE, IN ORDER OF INSPECTION BY THE COMPETENT AUTHORITY ON THE PLOT OF THE TENANT KANHU HENBORAM IN MOUZA-BARHAGARHI PLOT NO- 684 OVER THE AREA OF 6 BIGHA 3 KATHA 19 DHUR HAVING 3600 CFT OF ILLEGAL SAND WAS STORED AND ON PLOT 1159 APPROX 1400 CFT ILLEGAL SAND FOUND ACCORDING TO THE PROVISION AGAINST 12 PERSON INVOLVED IN THE ABOVE ILLEGIMATE WORK FIR REPORT HAS BEEN PROCEED AND CONSIFICATION OF MINERAL HAS BEEN DONE UNDER SECTION 21'A' AND 21'6' OF MINES AND MINERAL DEVOLPMENT ACT 1957 AND RULE 54 OF JMMCR 2004 |
| 60 | | P.s-Mirzachoki | 1 | Letter No. 1000 M dt.22.07.19 | IN ORDER TO CONDUCT ILLEGAL MINING RAID BY COMPETENT AUTHORITY, WITHOUT HOLDING VALID MINING LEASE UNDER VILLAGE DAMINBHITTA 3 PERSONS WHO ACCUSED OF ILLEGALLY OPERATED MINING QUARRYING AND EVICTION OF MINERAL DURING RAID UNDER SECTION 21'A' AND 21'6' OF THE MMDR ACT AND RULE 54 OF JMMCR 2004 AND UNDER THE COGNIZABLE AFFECE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION |
| 61 | Aug-19 | P.s-Ranga | 1 | Letter No. 1055 M dt.03.08.19 | CASE FILLED AGAINST ILLEGAL MINERAL TRANSACTION |
| 62 | | P.s-Barhet | 1 | Letter No. 1052 M dt.03.08.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, THREE TRUCK WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION OF MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |
| 63 | | P.s-Borio | 1 | Letter No. 1camp M dt.25.08.19 | ONE TRUCK HAS BEEN REPORTED FOR SAFE CUSTODY TO CONCERNED PS. FOR IMPOSITION OF PENALTY |
| 64 | Sep-19 | P.s-Taljhari | 1 | Letter No. 1camp M dt.05.098.19 | IN ORDER TO CONDUCT ILLEGAL MINING RAID BY COMPETENT AUTHORITY, WITHOUT HOLDING VALID MINING LEASE 2 UNKNOWN ILLEGIMATE PERSONS WHO ACCUSED OF ILLEGALLY OPERATED MINING QUARRYING AND EVICTION OF MINERAL DURING RAID 2 PERSONS HAVE NOMINATED FOR CRIMINAL PROCEEDING UNDER SECTION 21'A' AND 21'6' OF THE MMDR ACT AND RULE 54 OF JMMCR 2004 UNDER THE COGNIZABLE AFFECE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION |

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| | Sep-19 | P.s-Barhet | 1 | Letter No.1288 M dt.19.09.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, TWO TRACTORS WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION |
| 66 | Sep-19 | P.s-Barhet | 1 | Letter No.1295 M dt.20.09.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, SEVEN TRACTORS WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION |
| 67 | Sep-19 | P.s-Barhet | 1 | Letter No.1342 M dt.27.09.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, FIVE TRACTORS WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION |
| 68 | Nov-19 | P.s-Mirzachoki | 1 | Letter No.01 KMP dt.4-11-19 | IN ORDER OF INSPECTION ON THE BASIS OF CONFIDENTIAL INFORMATION DERIVED BY COMPETENT AUTHORITY UNDER MIRZACHOUKI PS. JURISDICTION WITHOUT HOLDING A DEALER LICENSE ILLEGIMATE PERSON WHO INDULGE IN MINERAL TRANSACTION REGARDING ILLEGALLY OPERATED 6 STONE CRUSHER HAVE DEMOLISHED AND HAVE REPORTED FOR FURTHER PROCEEDINGS UNDER THE JHARKHAND MINERALS (PREVENTION OF ILLEGAL MINING, TRANSPORTATION AND STORAGE) RULES 2017 FURTHER PROCEEDING HAVE STARTED AGAINST PURCHASER WHO TRANSACT MINERAL ILLEGALLY |
| 69 | Nov-19 | P.s-Ranga | 1 | Letter No.1510 dt.14.11.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, ONE TRUCK AND ONE MAN WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |

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| | Nov-19 | P.s-Ranga | 1 | Letter No.1511 dt.14.11.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, TWELVE TRUCK & ONE TRACTORS WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |
| 71 | Nov-19 | P.s-Muffasil | 1 | Letter No.1 camp dt.17.11.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, FOUR TRUCK WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |
| 72 | Nov-19 | P.s- Ranga | 1 | Letter No1537 dt.19-11-19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, SEVEN TRUCK WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |
| 73 | Nov-19 | P.s-Muffasil | 1 | Letter No1546 dt.20.11.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, SEVEN TRUCK WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |
| 74 | Nov-19 | P.s-Kotalphocar | 1 | Letter No 1550 dt.23-11-19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, ONE TRUCK WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |
| 75 | Nov-19 | P.s-Barharwa | 1 | Letter No1551 dt.23-11-19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, ONE TRUCK WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |

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| | Nov-19 | P.s-Muffasil | 1 | Letter No 1615 dt.30.11.19 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, FOUR TRUCK WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINERALS ILLEGALLY AS PER PROVISION MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE COGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION |
| 77 | Jan-20 | P.s-Muffasil | 1 | Letter No 01 camp dt.03.01.20 | IN ORDER OF INSPECTION ON THE BASIS OF CONFIDENTIAL INFORMATION DERIVED BY COMPETENT AUTHORITY UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE AGAINST ILLEGAL TRANSPORTATION OF MINERAL BY WATERWAYS. UNDER THE PENAL PROVISION OF MMDR ACT 1957 SECTION 21'A' AND 21'6', RULE 54 OF JMMCR 2004 AND SECTION 175, 379 AND 414 UNDER THE COGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED FOR FURTHER CRIMINAL PROCEEDINGS AGAINST 5 BOAT, 5 DRIVER, 7 BOAT OWNER, SELLER AND PURCHASER OF ILLEGALLY PROCURED MINERAL. |
| 78 | Jan-20 | P.s-Borio | 1 | Letter No 01 camp dt.10.01.20 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, THREE TRUCK WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINERALS ILLEGALLY AS PER PROVISION MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE COGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION |
| 79 | Feb-20 | P.s-Mirzachouki | 1 | Letter No 01 camp dt.01.02.2020 | IN ORDER TO CONDUCT ILLEGAL MINING RAID BY COMPETENT AUTHORITY, WITHOUT HOLDING VALID MINING LEASE UNDER VILLAGE BELBHADRI NAMED MD. RIZWAN AND RAVINDRA YADAV, ACCUSED OF ILLEGALLY OPERATED MINING QUARRYING AND EVICTION OF MINERAL DURING RAID ALSO SEIZED MINING MACHINERY 2 JCB, 2 STONE BREAKER, 6 TRUCK, 1 TRACTOR, 1 MOTOR CYCLE UNDER SECTION 21'A' AND 21'6' OF THE MMDR ACT AND RULE 54 OF JMMCR 2004 UNDER THE COGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION |

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| | Feb-20 | P.s- Muffasil | 1 | Letter No 01 camp dt.03.02.2020 | IN ORDER OF INSPECTION ON THE BASIS OF CONFIDENTIAL INFORMATION DERIVED BY COMPETENT AUTHORITY UNDER THE CHAIRMAN SHIP OF DEPUTY COMMISSIONER RAID WAS JOINTLY HELD BY AND DISTRICT MINING OFFICER SAHIBGANJ REGARDING ILLEGALLY STORAGE TRANSPORTATION OF MINERAL BY WATER WAYS IN CHARGE OF ILLEGAL OPERATION 5 BOATS WERE SEIZED AND 7 ILLEGAL OFFENDER WERE NOMINATED FOR CRIMINAL PRCEARRESTED UNDER THE PENAL PROVISION OF MMDR ACT 1957 SECTION 21'A' AND 21'6', RULE 54 OF JMMCR 2004 AND SECTION 175, 379 AND 414 UNDER THE COGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED FOR FURTHER CRIMINAL PROCEEDINGS AGAINST 1 BOAT SELLER AND PURCHASER OF ILLEGALLY PROCURED MINERAL. |
| 81 | Feb-20 | P.s- Muffasil | 1 | Letter No 221M dt.29.02.2020 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, 4 TRUCKS WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION |
| 82 | Feb-20 | P.s- Mirzachouki | 1 | Letter No 225M dt.03.03.2020 | IN ORDER TO CONDUCT ILLEGAL MINING RAID BY COMPETENT AUTHORITY, WITHOUT HOLDING VALID MINING LEASE UNKNOWN ILLEGIMATE PERSONS WHO, ACCUSED OF ILLEGALLY OPERATED MINING QUARRYING AND EVICTION OF MINERAL DURING RAID 7 PERSONS NOMINATED FOR CRIMINAL PROCEEDING UNDER SECTION 21'A' AND 21'6' OF THE MMDR ACT AND RULE 54 OF JMMCR 2004 UNDER THE COGNIZABLE AFFECE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION |
| 83 | Mar-20 | P.s- Taljhari | 1 | Letter No 230M dt. 04.03.2020 | IN ORDER TO CONDUCT ILLEGAL MINING RAID BY COMPETENT AUTHORITY, WITHOUT HOLDING VALID MINING LEASE UNKNOWN ILLEGIMATE PERSONS WHO ACCUSED OF ILLEGALLY OPERATED MINING QUARRYING AND EVICTION OF MINERAL DURING RAID SEIZED 2 TRACTOR AND 1 TRUCK AND NOMINATED 1 PERSON FOR CRIMINAL PROCEEDING UNDER SECTION 21'A' AND 21'6' OF THE MMDR ACT AND RULE 54 OF JMMCR 2004 UNDER THE COGNIZABLE AFFECE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION |

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| | Mar-20 | P.s- Jirwabadi | 1 | | IN ORDER OF INSPECTION ON THE BASIS OF CONFIDENTIAL INFORMATION DERIVED BY COMPETENT AUTHORITY UNDER JIRWABARI PS. JURIDICION WITHOUT HOLDING A DEALER LICENSE ILLEGIMATE PERSON WHO INDULGE IN MINERAL TRANSACTION REGARDING ILLEGALLY OPERATED 14 STONE CRUSHER HAVE SEIZED AND HAVE REPORTED FOR FURTHER PROCEEDINGS UNDER THE JHARKHAND MINERALS (PREVENTION OF ILLEGAL MINING, TRANSPORTATION AND STORAGE) RULES 2017 FURTHER PROCEEDING HAVE STARTED AGAINST PURCHASER WHO TRANSACT MINERAL ILLEGALLY. |
| 85 | May-20 | P.s- Jirwabadi | 1 | Letter No 613 M dt. 18.05.20 | UNDER THE DISTRICT MINING TASK FORCE, IN ORDER OF INSPECTION BY THE COMPETENT AUTHORITY ON THE BASIS OF CONFIDENTIAL REPORT RAID WERE JOINTLY CONDUCT BY DTO, DMO, POLICE STATION INCHARGE PERSON WITHOUT HOLDING A DEALER LICENSE STORED MINERAL AND INDULGE IN ILLEGAL MINERAL TRANSACTION DURING RAID 5 PERSONS INDULGE IN ILLEGAL STORAGE UNDER SECTION 21'A' AND 21'6' OF MINES AND MINERAL DEVOLPMENT ACT 1957 AND RULE 54 OF JMMCR 2004 AND UNDER THE COGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION |
| 86 | May-20 | P.s- Ranga | 1 | Letter No 1camp dt. 25.05.20 | IN ORDER TO CONDUCT ILLEGAL MINING RAID BY COMPETENT AUTHORITY, SO AS PER PROVISION OF JHARKHAND MINERAL PREVENTION OF ILLEGAL MINING, TRANSPORTATION AND STORAGE RULES 2017 COMPETENT OFFICER SEIZED 1 TRUCK WITH ILLEGAL MINERAL ALONG WITH ARRESTING OF TRUCK DRIVER UNDER SECTION 21'A' AND 21'6' OF THE MMDR ACT AND RULE 54 OF JMMCR 2004 UNDER THE COGNIZABLE AFFECE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION |
| 87 | May-20 | P.s- Boriyo | 1 | Letter No 625 M dt. 27.05.20 | IN ORDER TO CONDUCT ILLEGAL MINING RAID BY COMPETENT AUTHORITY, SO AS PER PROVISION OF JHARKHAND MINERAL PREVENTION OF ILLEGAL MINING, TRANSPORTATION AND STORAGE RULES 2017 COMPETENT OFFICER SEIZED 7 TRUCKS WITH ILLEGAL MINERAL AND ARRESTED 4 PERSONS INDULGE IN ILLEGAL TRANSPORTATION UNDER SECTION 21'A' AND 21'6' OF THE MMDR ACT AND RULE 54 OF JMMCR 2004 UNDER THE COGNIZABLE AFFECE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION |

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| | May-20 | P.s- Rajmahal | 1 | Letter No 1camp dt. 31.05.20 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, 16 TRUCK WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINERALS ILLEGALLY AS PER PROVISION MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE COGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |
| 89 | Jun-20 | P.s- Mirzachouki | 1 | Letter No 646 M dt. 03.06.20 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, 139 FABRICATED TRANSPORT CHALLAN HAS DEDUCTED IT WAS FOUND THAT FROM AUTHENTIC COPIES OF TRANSPORT CHALLAN THROUGH MAKING UNPROPER CHANGES MADE FOR CHALLAN AGAINST ILLEGIMATE PERSON WHO INDULGE IN THIS CRIME HAVE ARRESTED AS PER PROVISION MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE COGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |
| 90 | Jun-20 | P.s- Muffasil | 1 | Letter No 649 M dt. 04.06.20 | IN ORDER OF INSPECTION ON THE BASIS OF CONFIDENTIAL INFORMATION DERIVED BY COMPETENT AUTHORITY UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE AGAINST ILLEGAL TRANSPORTATION OF MINERAL BY WATERWAYS. UNDER THE PENAL PROVISION OF MMDR ACT 1957 SECTION 21'A' AND 21'6', RULE 54 OF JMMCR 2004 AND SECTION 175, 379 AND 414 UNDER THE COGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED FOR FURTHER CRIMINAL PROCEEDINGS AGAINST 3 BOAT, 3 DRIVER, BOAT OWNER, SELLER AND PURCHASER OF ILLEGALLY PROCURED MINERAL. |
| 91 | Jun-20 | P.s- Mirzachouki | 1 | dated 04.06.2020 | IN ORDER OF INSPECTION ON THE BASIS OF CONFIDENTIAL INFORMATION DERIVED BY COMPETENT AUTHORITY UNDER MIRZACHOWKI PS. JURISDICTION WITHOUT HOLDING A DEALER LICENSE ILLEGIMATE PERSON WHO INDULGE IN MINERAL TRANSACTION REGARDING ILLEGALLY OPERATED 2 STONE CRUSHER HAVE SEIZED AND HAVE REPORTED FOR FURTHER PROCEEDINGS UNDER THE JHARKHAND MINERALS (PREVENTION OF ILLEGAL MINING, TRANSPORTATION AND STORAGE) RULES 2017 FURTHER PROCEEDING HAVE STARTED AGAINST PURCHASER WHO TRANSACT MINERAL ILLEGALLY. |

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| | Jun-20 | P.s- Mirzachouki | 1 | dated 15.06.2020 | IN ORDER OF INSPECTION ON THE BASIS OF CONFIDENTIAL INFORMATION DERIVED BY COMPETENT AUTHORITY UNDER THE CHAIRMAN SHIP OF DEPUTY COMMISSIONER RAID WAS JOINTLY HELD BY SUB DIVISIONAL POLICE OFFICER AND DISTRICT MINING OFFICER SAHIBGANJ DURING RAID REGARDING ILLEGAL TRANSPORTATION OF MINERAL BY TRUCK IN CHARGE OF ILLEGAL OPERATION 1 TRUCK & 1 TRACTOR WERE SEIZED UNDER THE PENAL PROVISION OF MMDR ACT 1957 SECTION 21'A' AND 21'6', RULE 54 OF JMMCR 2004 AND SECTION 175, 379 AND 414 UNDER THE COGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED FOR FURTHER CRIMINAL PROCEEDINGS. |
| 93 | Jun-20 | P.s- Taljhari | 1 | dated 16.06.2020 | IN ORDER OF INSPECTION ON THE BASIS OF CONFIDENTIAL INFORMATION DERIVED BY COMPETENT AUTHORITY UNDER THE CHAIRMAN SHIP OF DEPUTY COMMISSIONER RAID WAS JOINTLY HELD BY SUB DIVISIONAL POLICE OFFICER AND DISTRICT MINING OFFICER SAHIBGANJ DURING RAID REGARDING ILLEGAL TRANSPORTATION OF MINERAL BY TRUCK IN CHARGE OF ILLEGAL OPERATION 9 TRUCKS WERE SEIZED UNDER THE PENAL PROVISION OF MMDR ACT 1957 SECTION 21'A' AND 21'6', RULE 54 OF JMMCR 2004 AND SECTION 175, 379 AND 414 UNDER THE COGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED FOR FURTHER CRIMINAL PROCEEDINGS |
| 94 | Jun-20 | P.s- Rajmahal | 1 | dated 16.06.2020 | UNDER THE DISTRICT MINING TASK FORCE, IN ORDER OF INSPECTION BY THE COMPETENT AUTHORITY ON THE BASIS OF CONFIDENTIAL REPORT RAID WERE JOINTLY CONDUCT BY DMO, POLICE STATION INCHARGE NEAR PHULWARIA MORE IN CHARGE OF ILLEGAL SAND STORAGE DURING RAID 2 PERSONS HAS ARRESTED UNDER SECTION 21'A' AND 21'6' OF MINES AND MINERAL DEVOLPMENT ACT 1957 AND RULE 54 OF JMMCR 2004 AND UNDER THE COGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |

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| | Jun-20 | P.s- Jirwabadi | 1 | dated 17.06.2020 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, 2 HYVA WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINERAL ILLEGALLY NEAR MADANSAHI GHAT OF SAHIBGANJ MUFFASIL PS. JURIDICION AND ALSO ARREST 3 PERSON WHO INDULGE IN ILLEGAL MINERAL TRANSACTION AS PER PROVISION MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |
| 96 | Jun-20 | P.s- Mirzachouki | 1 | letter no 705 dated 20.06.2020 | IN ORDER OF INSPECTION ON THE BASIS OF CONFIDENTIAL INFORMATION DERIVED BY COMPETENT AUTHORITY UNDER VILLAGE PAHARPUR & BELBHADRI WITHOUT HOLDING A DEALER LICENSE ILLEGIMATE PERSON WHO INDULGE IN MINERAL TRANSACTION REGARDING ILLEGALLY OPERATED STONE CRUSHER 9 CRUSHER HOLDER HAVE INDUCT IN FIR UNDER THE PENAL PROVISION OF MMDR ACT 1957 SECTION 21'A' AND 21'6', RULE 54 OF JMMCR 2004 AND SECTION 175, 379 AND 414 UNDER THE COGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED FOR FURTHER CRIMINAL PROCEEDINGS |
| 97 | Jun-20 | P.s- Taljhari | 1 | dated 24.06.2020 | IN ORDER OF INSPECTION ON THE BASIS OF CONFIDENTIAL INFORMATION DERIVED BY COMPETENT AUTHORITY UNDER THE CHAIRMAN SHIP OF DEPUTY COMMISSIONER RAID WAS JOINTLY HELD BY SUB DIVISIONAL OFFICER AND DISTRICT MINING OFFICER SAHIBGANJ IN ORDER OF INSPECTION 1 TRUCK AND 1 TRACTOR WERE SEIZED WITH ILLEGAL MINERAL IN UNDER THE PENAL PROVISION OF MMDR ACT 1957 SECTION 21'A' AND 21'6', RULE 54 OF JMMCR 2004 AND SECTION 175, 379 AND 414 UNDER THE COGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED FOR FURTHER CRIMINAL PROCEEDINGS AGAINST SELLER, TRANSPORTER AND DRIVER WHO ILLEGALLY PROCURED MINERAL. |

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| | Jun-20 | P.s- Jirwabadi | 1 | letter no 732 dated 25.06.2020 | IN ORDER OF INSPECTION ON THE BASIS OF CONFIDENTIAL INFORMATION DERIVED BY COMPETENT AUTHORITY RAID HAVE CONDUCTED JOINTLY BY DMO, RFO, POLICE STATION INCHARGE OF JIRWABARI UNDER LOHANDA REGION WITHOUT HOLDING A DEALER LICENSE ILLEGIMATE PERSON WHO INDULGE IN MINERAL TRANSACTION REGARDING ILLEGALLY OPERATED STONE CRUSHER 9 CRUSHER HOLDER HAVE INDUCT IN FIR UNDER THE PENAL PROVISION OF MMDR ACT 1957 SECTION 21'A' AND 21'6', RULE 54 OF JMMCR 2004 AND SECTION 175, 379 AND 414 UNDER THE COGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED FOR FURTHER CRIMINAL PROCEEDINGS |
| 99 | Jul-20 | P.s- Jirwabadi | 1 | letter no 813 dated 13.07.20 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, 1 TRUCK WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINERAL ILLEGALLY NEAR MADANSAHI GHAT OF SAHIBGANJ MUFFASIL PS. JURIDICTION AS PER PROVISION MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |
| 100 | Jul-20 | P.s- Jirwabadi | 1 | letter no 820 dated 15.07.20 | UNDER THE DISTRICT MINING TASK FORCE, IN ORDER OF INSPECTION BY THE COMPETENT AUTHORITY ON THE BASIS OF CONFIDENTIAL REPORT RAID WERE JOINTLY CONDUCT BY DTO, DMO, POLICE STATION INCHARGE MUFFASIL, NEAR SAKSHARTA MORE PERSON WITHOUT HOLDING A DEALER LICENSE STORED SAND AND INDULGE IN ILLEGAL MINERAL TRANSACTION DURING RAID 1 TRUCK & 2 TRACTORS WITH ILLEGAL SAND MINERAL WAS SEIZED AND 3 PERSONS INDULGE IN ILLEGAL SAND STORAGE UNDER SECTION 21'A' AND 21'6' OF MINES AND MINERAL DEVOLPMENT ACT 1957 AND RULE 54 OF JMMCR 2004 AND UNDER THE COGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER REPORTED AND COMMUNICATED FOR FURTHER ACTION |
| 101 | Jul-20 | P.s- Muffasil | 1 | letter no 821 dated 16.07.20 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, TWO TRUCK WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINERAL ILLEGALLY NEAR KALUWA VILLAGE OF SAHIBGANJ MUFFASIL PS. JURIDICTION AS PER PROVISION MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |

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| | Aug-20 | P.s- Jirwabadi | 1 | letter no camp 01 dated 09.08.20 | IN ORDER OF INSPECTION ON THE BASIS OF CONFIDENTIAL INFORMATION DERIVED BY COMPETENT AUTHORITY UNDER THE CHAIRMAN SHIP OF DEPUTY COMMISSIONER RAID WAS JOINTLY HELD BY DISTRICT MINING OFFICER SAHIBGANJ AND POLICE STATION INCHARGE JIRWABARI UNDER VILLAGE SOUTI CHOUKI, MADANSAHI, CHANAN REGARDING ILLEGALLY STORAGE TRANSPORTATION OF MINERAL BY WATERWAYS IN CHARGE OF ILLEGAL OPERATION 5 BOATS WERE SEIZED UNDER THE PENAL PROVISION OF MMDR ACT 1957 SECTION 21'A' AND 21'6', RULE 54 OF JMMCR 2004 AND SECTION 175, 379 AND 414 UNDER THE COGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED FOR FURTHER CRIMINAL PROCEEDINGS AGAINST 1 BOAT SELLER AND PURCHASER OF ILLEGALLY PROCURED MINERAL. |
| 103 | Aug-20 | P.s- Barhet | 1 | letter no camp 01 dated 12.08.20 | UNDER THE DISTRICT MINING TASK FORCE, IN ORDER OF INSPECTION BY THE COMPETENT AUTHORITY ON THE BASIS OF CONFIDENTIAL REPORT RAID WERE JOINTLY CONDUCT BY DMO, DTO, CO, POLICE INSPECTOR UNDER BARHAIT CIRCLE IN CHARGE OF ILLEGAL SAND TRANSPORTATION DURING RAID 4 TRACTORS WITH ILLEGAL SAND MINERAL WAS SEIZED UNDER SECTION 21'A' AND 21'6' OF MINES AND MINERAL DEVOLPMENT ACT 1957 AND RULE 54 OF JMMCR 2004 |
| 104 | Aug-20 | P.s- Radhanagar | 1 | letter no 910 . dated 14.08.20 | UNDER THE DISTRICT MINING TASK FORCE, IN ORDER OF INSPECTION BY THE COMPETENT AUTHORITY ON THE BASIS OF CONFIDENTIAL REPORT RAID WERE JOINTLY CONDUCT BY DMO, POLICE INSPECTOR UNDER MOUZA- MOHANPUR UDWA IN CHARGE OF ILLEGAL SAND TRANSPORTATION DURING RAID 8 TRACTORS WITH ILLEGAL SAND MINERAL WAS SEIZED UNDER SECTION 21'A' AND 21'6' OF MINES AND MINERAL DEVOLPMENT ACT 1957 AND RULE 54 OF JMMCR 2004 |
| 105 | Aug-20 | P.s- Rajmahal | 1 | letter no 964 dated 21.08.20 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, TWO TRUCK WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINERAL ILLEGALLY NEAR GUDRA GHAT OF RAJMAHAL PS. JURIDICION AS PER PROVISION MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |

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| | Aug-20 | P.s- Mirzachouki | 1 | letter no 978 dated 28.08.20 | IN ORDER OF INSPECTION ON THE BASIS OF CONFIDENTIAL INFORMATION DERIVED BY COMPETENT AUTHORITY UNDER VILLAGE NIMGACHI & BELBHADRI WITHOUT HOLDING A DEALER LICENSE ILLEGIMATE PERSON WHO INDUL IN MINERAL TRANSACTION REGARDING ILLEGALLY OPERATED STONE CRUSHER 6 CRUSHER HOLDER HAVE INDUCT IN FIR UNDER THE PENAL PROVISION OF MMDR ACT 1957 SECTION 21'A' AND 21'6', RULE 54 OF JMMCR 2004 AND SECTION 175, 379 AND 414 UNDER THE COGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED FOR FURTHER CRIMINAL PROCEEDINGS. |
| 107 | Aug-20 | P.s- Mirzachouki | 1 | letter no 999 dated 30.08.20 | IN ORDER TO CONDUCT ILLEGAL MINING RAID BY COMPETENT AUTHORITY, WITHOUT HOLDING VALID MINING LEASE UNDER VILLAGE BHUTAHA NAMED MONU JAISWAL, ACCUSED OF ILLEGALLY OPERATED MINING QUARRYING AND EVICTION OF MINERAL DURING RAID ALSO SEIZED MINING MACHINERY4 EXCAVATOR UNDER SECTION 21'A' AND 21'6' OF THE MMDR ACT AND RULE 54 OF JMMCR 2004 UNDER THE COGNIZABLE AFFECE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION |
| 108 | Sep-20 | P.s- Muffasil | 1 | letter no 1037 dated 11.09.20 | IN ORDER TO CONDUCT ILLEGAL MINING RAID BY COMPETENT AUTHORITY, WITHOUT HOLDING VALID DEALER LICENSE ILLEGIMATE PERSONS WERE, ACCUSED OF BUY OR SALE OR ENGAGE IN TRANSACTION OF MINERAL TRANSPORTATION SO AS PER PROVISION OF JHARKHAND MINERAL PREVENTION OF ILLEGAL MINING, TRANSPORTATION AND STORAGE RULES 2017 COMPETENT OFFICER SEIZED TWO TRUCK AND TWO TRACTORS WITH ILLEGAL MINERAL IN OCCURENCE PLACE UNDER SECTION 21'A' AND 21'6' OF THE MMDR ACT AND RULE 54 OF JMMCR 2004 UNDER THE COGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION |
| 109 | Sep-20 | P.s- Nagar Thana | 1 | letter no 1038 dated 11.09.20 | UNDER THE DISTRICT MINING TASK FORCE, IN ORDER OF INSPECTION BY THE COMPETENT AUTHORITY ON THE BASIS OF CONFIDENTIAL REPORT RAID WERE JOINTLY CONDUCT BY DTO DMO POLICE INSPECTOR IN ORDER OF INSPECTION DURING RAID 6 TRUCK WITH ILLEGAL SAND MINERAL WAS SEIZED UNDER SECTION 21'A' AND 21'6' OF MINES AND MINERAL DEVOLPMENT ACT 1957 AND RULE 54 OF JMMCR 2004 |

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| | Sep-20 | P.s- Barhet | 1 | letter no 1052 dated 14.09.20 | UNDER THE DISTRICT MINING TASK FORCE, IN ORDER OF INSPECTION BY THE COMPETENT AUTHORITY ON THE BASIS OF CONFIDENTIAL REPORT RAID WERE JOINTLY CONDUCT BY DTO, DMO, POLICE INSPECTOR UNDER MOUZA- GOPALDIH HARWADIH AND NEAR BY AREA DURING RAID 7 TRACTOR WITH ILLEGAL SAND MINERAL WAS SEIZED UNDER SECTION 21'A' AND 21'6' OF MINES AND MINERAL DEVOLPMENT ACT 1957 AND RULE 54 OF JMMCR 2004 |
| 111 | Sep-20 | P.s- Muffasil | 1 | letter no 1074 dated 22.09.20 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, THREE TRUCK WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINENALS ILLEGALLY AS PER PROVISION MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE CONGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION |
| 112 | Oct-20 | P.s- Muffasil | 1 | letter no 1169 dated 15.10.20 | IN ORDER TO CONDUCT ILLEGAL MINING RAID BY COMPETENT AUTHORITY, WITHOUT HOLDING VALID DEALER LICENSE UNDER VILLAGE GARAM GHAT ILLEGIMATE PERSONS WERE, ACCUSED OF BUY OR SALE OR ENGAGE IN TRANSACTION OF MINERAL TRANSPORTATION SO AS PER PROVISION OF JHARKHAND MINERAL PREVENTION OF ILLEGAL MINING, TRANPORTATION AND STORAGE RULES 2017 COMPETENT OFFICER SEIZED TWO TRACTORS WITH ILLEGAL MINERAL AND ARRESTED TWO PERSON INDULGE IN ILLEGAL STORAGE AND TRANSPORTATION UNDER SECTION 21'A' AND 21'6' OF THE MMDR ACT AND RULE 54 OF JMMCR 2004 UNDER THE COGNIZABLE AFFECE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION |
| 113 | Oct-20 | P.s- Muffasil | 1 | letter no 1168 dated 15.10.2020 | IN ORDER OF INSPECTION ON THE BASIS OF CONFIDENTIAL INFORMATION DERIVED BY COMPETENT AUTHORITY UNDER VILLAGE TETARIA REGARDING ILLEGALLY OPERATED STONE CRUSHER IN CHARGE OF ILLEGAL OPERATION 7 PERSON HAVE FIR AN ARRESTED ALONG WITH 10 HYVA AND 1 EXCAVATOR WERE SEIZED UNDER THE PENAL PROVISION OF MMDR ACT 1957 SECTION 21'A' AND 21'6', RULE 54 OF JMMCR 2004 AND SECTION 175, 379 AND 414 UNDER THE COGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED FOR FURTHER |

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| | Oct-20 | P.s- Muffasil | 1 | letter no 1206 dated 03.10.20 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, FOUR TRUCK WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINERALS ILLEGALLY AS PER PROVISION OF MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE COGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION. |
| 115 | Nov-20 | P.s- Taljhari | | letter no 1208 dated 04.11.20 | IN ORDER TO CONDUCT ILLEGAL MINING RAID JOINTLY HELD BY SDPO AND DMO SBG, WITHOUT HOLDING VALID MINING LEASE UNDER VILLAGE BANSKOLA ILLEGIMATE PERSON ACCUSED OF ILLEGALLY OPERATED MINING QUARRYING AND EVICTION OF MINERAL DURING RAID ALSO SEIZED MINING MACHINERY SEIZED 3 HYVA 3 TRACTOR 1 COMPRESSOR MACHINE 3 MOTOR CYCLE UNDER SECTION 21'A' AND 21'6' OF THE MMDR ACT AND RULE 54 OF JMMCR 2004 UNDER THE COGNIZABLE AFFECE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION |
| 116 | Nov-20 | P.s- Mirzachouki | 1 | letter no 1235 dated 11.11.20 | IN ORDER TO CONDUCT ILLEGAL MINING RAID BY COMPETENT AUTHORITY, WITHOUT HOLDING VALID MINING LEASE UNDER VILLAGE DAMIN BHITTA, ACCUSED OF ILLEGALLY OPERATED MINING QUARRYING AND EVICTION OF MINERAL DURING RAID ALSO SEIZED MINING MACHINERY 6 TRUCK, 1 EXCAVATOR UNDER SECTION 21'A' AND 21'6' OF THE MMDR ACT AND RULE 54 OF JMMCR 2004 UNDER THE COGNIZABLE AFFECE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION |
| 117 | Nov-20 | P.s-Muffasil | 1 | letter no 1238 dated 12.11.20 | IN ORDER OF INSPECTION ON THE BASIS OF CONFIDENTIAL INFORMATION DERIVED BY COMPETENT AUTHORITY UNDER THE CHAIRMAN SHIP OF DEPUTY COMMISSIONER RAID WAS JOINTLY HELD BY DISTRICT MINING OFFICER SAHIBGANJ AND POLICE STATION INCHARGE MUFFASIL UNDER VILLAGE SUKRA GHAT REGARDING ILLEGALLY STORAGE TRANSPORTATION OF MINERAL BY WATER WAYS IN CHARGE OF ILLEGAL OPERATION 6 PEOPLE HAVE ARRESTED UNDER THE PENAL PROVISION OF MMDR ACT 1957 SECTION 21'A' AND 21'6', RULE 54 OF JMMCR 2004 AND SECTION 175, 379 AND 414 UNDER THE COGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED FOR FURTHER CRIMINAL PROCEEDINGS |

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| | Nov-20 | P.s-Radhanagar | 1 | letter no 1254 dated 19.11.20 | IN ORDER OF INSPECTION ON THE BASIS OF CONFIDENTIAL INFORMATION DERIVED BY COMPETENT AUTHORITY UNDER THE CHAIRMAN SHIP OF DEPUTY COMMISSIONER RAID WAS JOINTLY HELD BY DISTRICT MINING OFFICER SAHIBGANJ AND POLICE STATION INCHARGE UDWA CIRCLE SUB INSPECTER UNDER VILLAGE UDHWA REGARDING ILLEGALLY EXCAVATION OF SOIL. WAS REPORTED IN CHARGE OF ILLEGAL SOIL EXCAVATION FOUR TRACTOR WERE SEIZED UNDER THE PENAL PROVISION OF MMDR ACT 1957 SECTION 21'A' AND 21'6', RULE 54 OF JMMCR 2004 AND SECTION 175, 379 AND 414 UNDER THE COGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED FOR FURTHER CRIMINAL PROCEEDINGS |
| 119 | Nov-20 | P.s-Radhanagar | 1 | letter no 1279 dated 26.11.20 | UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, ONE TRUCK WERE SEIZED WITH ILLEGAL MINERAL IN ORDER TO TRANSPORT MINERALS ILLEGALLY AS PER PROVISION MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE COGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION |
| 120 | Nov-20 | P.s-Muffasil | 1 | letter no 01 dated 30.11.20 | IN ORDER OF INSPECTION ON THE BASIS OF CONFIDENTIAL INFORMATION DERIVED BY COMPETENT AUTHORITY UNDER THE CHAIRMAN SHIP OF DEPUTY COMMISSIONER RAID WAS JOINTLY HELD BY DISTRICT MINING OFFICER SAHIBGANJ AND POLICE STATION INCHARGE MUFFASIL UNDER VILLAGE SUKRA GHAT REGARDING ILLEGALLY STORAGE TRANSPORTATION OF MINERAL BY WATER WAYS IN CHARGE OF ILLEGAL OPERATION 2 BOATS WERE SEIZED UNDER THE PENAL PROVISION OF MMDR ACT 1957 SECTION 21'A' AND 21'6', RULE 54 OF JMMCR 2004 AND SECTION 175, 379 AND 414 UNDER THE COGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED FOR FURTHER CRIMINAL PROCEEDINGS AGAINST 1 BOAT SELLER AND PURCHASER OF ILLEGALLY PROCURED MINERAL. |
| 121 | Nov-20 | Sahibganj | 1 | letter no 1270/M dated 24-11-2020 | As per directives of District Mining Task force Concerned Ex. Engineer. Electricity (C&R) instructed to remove HT< electric Connection to those crusher who not have valid statutory clearances and not transact mineral through valid medium |

| | | | | | |
|-----|--------|---------------|---|-----------------------------------|--|
| | Nov-20 | Sahibganj | 1 | letter no 1270/M dated 24-11-2020 | As per directives of District Mining Task force Concerned MS (JSPCB) ranchi Instructed that those Crusher who not completed minimum standard distance required to cancelled CTE and CTO so such Crusher operation have stopped |
| 123 | Dec-20 | P.s-Muffasil | 1 | letter nocamp 01 dated 03.12.20 | IN ORDER OF INSPECTION ON THE BASIS OF CONFIDENTIAL INFORMATION DERIVED BY COMPETENT AUTHORITY UNDER THE CHAIRMAN SHIP OF DEPUTY COMMISSIONER RAID WAS JOINTLY HELD BY SUB DIVISIONAL OFFICER AN DISTRICT MINING OFFICER SAHIBGANJ UNDER VILLAGE SAMDA GHAT REGARDING ILLEGALLY STORAGE TRANSPORTATION OF MINERAL BY WATERWAYS IN CHARGE OF ILLEGAL OPERATION 7 BOATS WERE SEIZED AND 4 ILLEGAL OFFENDER WERE ARRESTED UNDER THE PENAL PROVISION OF MMDR ACT 1957 SECTION 21'A' AND 21'6', RULE 54 OF JMMCR 2004 AND SECTION 175, 379 AND 414 UNDER THE COGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED FOR FURTHER CRIMINAL PROCEEDINGS AGAINST 1 BOAT SELLER AND PURCHASER OF ILLEGALLY PROCURED MINERAL. |
| 124 | Dec-20 | P.s-Jirwabadi | 1 | letter no 1396 dated 10.12.20 | IN ORDER OF INSPECTION ON THE BASIS OF CONFIDENTIAL INFORMATION DERIVED BY COMPETENT AUTHORITY UNDER THE CHAIRMAN SHIP OF DEPUTY COMMISSIONER RAID WAS JOINTLY HELD BY SUB DIVISIONAL OFFICER AN DISTRICT MINING OFFICER SAHIBGANJ UNDER VILLAGE TETARIA REGARDING ILLEGALLY OPERATED STONE CRUSHER IN CHARGE OF ILLEGAL OPERATION 7 PERSON HAVE FIR AN ARRESTED ALONG WITH 10 HYVA AND 1 EXCAVATOR WERE SEIZED UNDER THE PENAL PROVISION OF MMDR ACT 1957 SECTION 21'A' AND 21'6', RULE 54 OF JMMCR 2004 AND SECTION 175, 379 AND 414 UNDER THE COGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED FOR FURTHER CRIMINAL PROCEEDINGS |

125

Dec-20

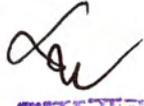
P.s-Taljhari

1

letter no 1404 dated 11.12.20

UNDER THE SUPERVISION OF DISTRICT MINING TASK FORCE, ONE TRUCK WAS SEIZED WITH ILLEGAL MINERAL OF SAND IN ORDER TO TRANSPORT MINERALS ILLEGALLY AS PER PROVISION MMDR ACT SECTION 21'A' & 21(6) AND RULE 54 OF JMMCR 2004, RULE 379 AND 175 UNDER THE COGNIZABLE OFFENCE CATEGORY OF IPC FIR HAS BEEN REPORTED AND COMMUNICATED FOR FURTHER ACTION.


विभाजन प्रदायका
साहेबराज


उपायुक्त
साहेबराज

(खनन शाखा)

पत्रांक 1220/एम0, दिनांक 24/11/2020

प्रेषक :

उपायुक्त,
साहेबगंज।

सेवा में,

कार्यपालक अभियंता, विद्युत (C & R)
विद्युत आपूर्ति अंचल, साहेबगंज।

विषय : दिनांक 18.11.2020 को जिला टास्क फोर्स (खनन) की आहूत बैठक के संबंध में।

महाशय

उपर्युक्त विषय के आलोक में दिनांक 18.11.2020 को जिला टास्क फोर्स (खनन) की आहूत बैठक निर्णय लिया गया कि जिलान्तर्गत जितने भी बिजली द्वारा संचालन क्रशर मशीन को खनन अनुज्ञप्ति प्राप्त नहीं है तथा कुछ अनुज्ञप्ति प्राप्त क्रशर संचालको द्वारा बिना परिवहन चालान व्यवहार के ही अवैध रूप से पत्थर को क्रस कर पत्थर चिप्स इत्यादि का बिक्री किया जाता है, जिससे सरकारी राजस्व का बडे पैमाने पर क्षति पहुँचाई जा रही है।

अतः सरकारी राजस्व हित को ध्यान में रखते हुए बिना भंडारण अनुज्ञप्ति / CTO के बिद्युत कन्केशन नहीं दिया जाय एवं जिलान्तर्गत बिजली से चल रहे क्रशर मशीन (सूची संलग्न) का बिद्युत विच्छेद करते हुए प्रतिवेदन अधोहस्ताक्षरी को उपलब्ध कराया जाये।

Sum
24/11/2020

विश्वासभाजन
[Signature]
उपायुक्त
साहेबगंज।

| अनुज्ञप्तिधारी का नाम एवं पता | मौजा | अंचल / थाना | अभ्युक्ति |
|---|--------------------------------|-------------|-----------|
| 1 मे० पीयूष स्टोन वर्क्स, प्रो० श्री राजकुमार भगत | महादेववरण | मंडरो | |
| 2 मे० महादेव स्टोन वर्क्स प्रो० श्री अजय कुमार जायसवाल | महादेववरण | मंडरो | |
| 3 मे० अंकित स्टोन वर्क्स, प्रो०-श्री अर्जुन प्र० जायसवाल, | महादेववरण | मंडरो | |
| 5 मे० मा गायत्री स्टोन वर्क्स, प्रो०- श्री शंभु कुमार जायसवाल, | महादेववरण | मंडरो | |
| 6 मे० शिल्पी स्टोन वर्क्स, प्रो०- शैलेन्द्र कुमार जायसवाल | महादेववरण | मंडरो | |
| 8 मे० आदित्य स्टोन वर्क्स, प्रो०- श्री मोहन यादव, | छोटी भगियामारी | तालझारी | |
| 9 मे० किशोर कुमार, प्रो० किशोर कुमार | अम्बाडीहा | तालझारी | |
| 10 मे० शांति स्टोन वर्क्स, प्रो०- श्री हरेन्द्र यादव, पिता- श्री राम जतन यादव, | अम्बाडीहा | तालझारी | |
| 11 मे० देव स्टोन वर्क्स, प्रो०- श्री रंजीत कुमार सिंह, | छोटा भगियामारी | तालझारी | |
| 14 मे० सिंह स्टोन वर्क्स, प्रो० श्री मोहन सिंह, पिता-श्री रामानुज सिंह | अम्बाडीहा | तालझारी | |
| 15 मे० सरस्वती स्टोन वर्क्स, प्रो० हीरा लाल यादव, | अम्बाडीहा | तालझारी | |
| 17 मे० कमलेश स्टोन वर्क्स, प्रो० श्री लल्लु सिंह, पिता श्री गजाधर प्रसाद सिंह | अम्बाडीहा | तालझारी | |
| 18 मे० विकास स्टोन वर्क्स, प्रो० श्री अनिल कुमार यादव, पिता- श्री राम भवन यादव, ग्राम | छोटी भगियामारी | तालझारी | |
| 19 मे० हरहर महादेव स्टोन वर्क्स, प्रो०- श्री अशोक यादव, पिता- श्री यमुना प्रसाद यादव, | छोटी भगियामारी | तालझारी | |
| 20 किशोर कुमार राय | अम्बाडीहा | तालझारी | |
| 21 लोहा यादव | अम्बाडीहा | तालझारी | |
| 22 बबलू यादव | अम्बाडीहा | तालझारी | |
| 23 पिंकी अग्रवाल | छोटा भगियामारी | तालझारी | |
| 24 मोहन यादव | छोटा भगियामारी | तालझारी | |
| 25 श्लोक यादव | छोटा भगियामारी | तालझारी | |
| 26 रातदरेश यादव | गदवा | तालझारी | |
| 27 मोहन यादव | छोटा भगियामारी | तालझारी | |
| 28 अखिलेश यादव | छोटा भगियामारी | तालझारी | |
| 29 व्यास यादव | छोटा भगियामारी | तालझारी | |
| 30 ननीष चौरसिया, पिता- प्रभात चौरसिया | छोटा भगियामारी | तालझारी | |
| 31 गोपाल यादव | छोटा भगियामारी | तालझारी | |
| 32 प्रमेन्द्र अग्रवाल (उर्फ पिंकी) | छोटा भगियामारी लोहण्डा माको | बोरियो | |

| | | | |
|----|--|----------------|---------|
| 33 | सुनील साहनी | छोटा भगियामारी | तालझारी |
| 34 | पिन्दु यादव | अम्बाडीहा | तालझारी |
| 35 | मै० शाति स्टोन वर्क्स, प्रो०- श्री हरेन्द्र यादव, पिता- श्री | गदवा | तालझारी |
| 36 | दिनेश यादव पिता- हीरा यादव | किरोकुरिया | तालझारी |
| 37 | शैलेन्द्र जायसवाल | महादेववरण | मंडरो |
| 38 | संजय जायसवाल | महादेववरण | मंडरो |
| 39 | जय प्रकश साह | महादेववरण | मंडरो |
| 40 | गणेश भगत | मुंडली | मंडरो |
| 41 | रवि चौरसिया | मुंडली | मंडरो |
| 42 | अभ्यानद भगत, पिता- बलराम भगत | मुंडली | मंडरो |
| 43 | अभय जायसवाल | मुंडली | मंडरो |
| 44 | प्रमोद जासवाल | बड़तल्ला | मंडरो |
| 45 | रिद्धी स्टोन वर्क्स, प्रो० रवि जायसवाल | महादेववरण | मंडरो |
| 46 | आयुसमान स्टोन वर्क्स, राकेश जायसवाल | महादेववरण | मंडरो |
| 47 | शालीग्राम भगत | मुंडली | मंडरो |
| 48 | पंकज कुमार सिंह | प्रतापगंज | मंडरो |
| 49 | राजीव सिंह | प्रतापगंज | मंडरो |
| 50 | अवधेश सिंह पिता- सहदेव सिंह | प्रतापगंज | मंडरो |
| 51 | शोनाथ चौधरी | बड़तल्ला | मंडरो |
| 52 | मुन्ना चौधरी | बड़तल्ला | मंडरो |
| 53 | मा० आजाद | बड़तल्ला | मंडरो |
| 54 | मदन सिंह | बड़तल्ला | मंडरो |
| 55 | विनोद चौधरी | बड़तल्ला | मंडरो |
| 56 | श्याम चौधरी | बड़तल्ला | मंडरो |
| 57 | राहुल तिवारी, पिता- नीलु तिवारी | बड़तल्ला | मंडरो |
| 58 | बिनाद चौधरी | बड़तल्ला | मंडरो |
| 59 | राजेश शंकर सिंह | बड़तल्ला | मंडरो |
| 60 | राजेश सिंह | बड़तल्ला | मंडरो |
| 61 | राजेश तारा स्टोन वर्क्स, प्रो०- सफीकुल इस्लाम | पीपलजोरी | बरहरवा |
| 62 | राजेश एस०स्टोन, प्रो०- नजरुल इस्लाम | फतेहपुर | बरहरवा |
| 63 | राजेशसिव स्टोन वर्क्स प्रो०- ईलियास | धातपाडा | बरहरवा |
| 64 | राजेश रहिम स्टोन वर्क्स, दीनानाथ प्रसाद भगत | पीपलजोरी | बरहरवा |
| 65 | राजेश आर० स्टोन वर्क्स | पीपलजोरी | बरहरवा |
| 66 | राजेश एस० स्टोन वर्क्स, सोमनाथ घोष | पीपलजोरी | बरहरवा |
| 67 | राजेश रुददीन शेख | धातपाडा | बरहरवा |
| 68 | राजेश एस० पाण्डेय स्टोन वर्क्स, प्रो०- वेदानंद पाण्डेय | हाथीगड | बरहरवा |
| 69 | राजेश स्टोन वर्क्स राम शंकर | | |

जिला समाहरणालय, साहेबगंज
(खनन शाखा)

पत्रांक 1269/एम0, दिनांक 24/11/2020

प्रेषक :

उपायुक्त,
साहेबगंज।

सेवा में,

सदस्य सचिव

झारखंड राज्य प्रदूषण नियंत्रण पर्वद, रांची।

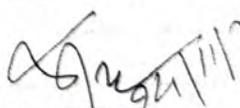
विषय : दिनांक 18.11.2020 को जिला टास्क फोर्स (खनन) की आहूत बैठक के संबंध में।

महाशय

उपर्युक्त विषय के आलोक में दिनांक 18.11.2020 को जिला टास्क फोर्स (खनन) की आहूत बैठक जिसमें क्षेत्रीय पदाधिकारी, प्रदूषण नियंत्रण पर्वद की उपस्थिति में निर्णय लिया गया कि माननीय NGT के द्वारा दिये गये आदेश के अनुरूप N.H, S.H सड़को से सटे 100 मीटर के अंदर अवस्थित क्रसर प्लांट को निर्गत CTE/CTO को रद्द किया जाये, (सूची संलग्न) ताकि माननीय NGT के आदेशों का अनुपालन सुनिश्चित कराया जा सके।


24/11/2020

विश्वारभाजन


उपायुक्त
साहेबगंज।

जिला खनन कार्यालय, साहबगंज

एन०एच०, एस०एच० रेलवे लाईन के किनारे अवस्थित क्रशर मशीन

| अनुज्ञप्तिधारी का नाम एवं पता | मौजा | अंचल / थाना | अभ्युक्ति |
|---|----------------|-------------|-----------|
| नरनाथ पाण्डेय, पिता- स्व० परमा पाण्डेय | हाथीगढ़ | तालझारी | |
| नरनाथ पाण्डेय, पिता- स्व० मुरलीधर पाण्डेय | हाथीगढ़ | तालझारी | |
| मदनकांत, पिता- स्व० दुधनाथ चौधरी | हाथीगढ़ | तालझारी | |
| बिक्रम यादव, समदानाला | हाथीगढ़ | तालझारी | |
| सजल गुहा, मु०- एन एस० कालोनी, साहेबगंज। | जुमनी | तालझारी | |
| शांति स्टोन वर्क्स, प्रो०- राजेश्वर सिंह | जुमनी | तालझारी | |
| नुरारी केजरीवाल | छोटा भगियामारी | तालझारी | |
| बिनय गुप्ता | नीमगाछी | मंडरो | |
| दीना नाथ महतो | नीमगाछी | मंडरो | |
| राजकुमार महतो | नीमगाछी | मंडरो | |
| पंकज कुमार सिंह | प्रतापगंज | मंडरो | |
| राजीव सिंह | प्रतापगंज | मंडरो | |
| अवधेश सिंह, पिता- सहदेव सिंह | प्रतापगंज | मंडरो | |
| श्रीनाथ चौधरी | बड़तल्ला | मंडरो | |
| मुन्ना चौधरी | बड़तल्ला | मंडरो | |
| मो० आजाद | बड़तल्ला | मंडरो | |
| मदन सिंह | बड़तल्ला | मंडरो | |
| बिनोद चौधरी | बड़तल्ला | मंडरो | |
| रुपेश चौधरी | बड़तल्ला | मंडरो | |
| राहुल तिवारी, पिता- नीलु तिवारी | बड़तल्ला | मंडरो | |
| बिनोद चौधरी | बड़तल्ला | मंडरो | |
| रवि शंकर सिंह | बड़तल्ला | मंडरो | |
| अशोक सिंह | बड़तल्ला | मंडरो | |