Dear Chief Secretary,

I am pleased to inform that a Mining Surveillance System (MSS) through space technology has been launched by Hon'ble Minister of State (IC) for Coal, Power, New & Non Renewable Energy and Mines on 15th October 2016 from New Delhi. The Ministry of Mines, through Indian Bureau of Mines (IBM), has developed the MSS, in coordination with Bhaskaracharya Institute for Space Applications and Geo-informatics (BISAG), Gandhinagar and Ministry of Electronics and Information Technology (MEITY), for curbing illegal mining activity in the country by the use of space technology and remote sensing imagery.

2. The system has been launched for 'major mineral' leases. The Khasra/Cadastral maps of mining leases were digitised and superimposed on the latest available satellite remote sensing scenes obtained from National Remote Sensing Centre (NRSC). The system then checks a region of 500 meters around the existing mining lease boundary to search for any unusual activity which is likely to be illegal mining activity. If any discrepancy is found in that zone indicative of mining activity, it is flagged-off as a 'trigger'. These triggers would be transmitted by the Remote Sensing Control Centre (RSCC-IBM) to the State DMG or the district level mining officials for field verification, who would check for illegality and report back within 7 days, using mobile app. or 'online portal'.

3. Ministry of Mines has sent a detailed communication to all the State Governments for their support in this effort to curb illegal mining in the country vide letter no. 31/2/2016-MIII dated 18.10.2016 (copy enclosed), giving out the modalities of field verification of triggers by the State Government officials and reporting back in MSS.

4. This system can also be leveraged for cubing illegal mining in minor minerals, where it is more rampant. As the ‘minor minerals’ are fully within the purview of the States, the work of MSS implementation for ‘minor minerals’ needs to be taken up by the State Governments. The digitisation of the minor mineral leases may be done through the State Remote Sensing centres.

5. For handholding the States, a familiarisation of the process which has been followed for MSS, may be organised at BISAG by RSCC-IBM. The State Nodal officer along with an official from the SRSAC may be sent after taking dates in consultation with the RSCC-IBM. Some States such as Haryana, Telangana and Chhattisgarh have given willingness for a pilot launch by digitising all their minor mineral leases and are requested to do the same by November end, while other may do the same by December end.
6. Shri Darshan Deep Bhardwaj, Senior Asst. Controller of Mines, IBM is the nodal officer of the RSCC; IBM who may be contacted for assisting in adoption of the MSS for minor minerals. In case of any difficulty or further clarification, Ministry of Mines Officials, Shri. Subhash Chandra Joint Secretary, (8800921468, subhash.chandra65@gov.in) and Shri Prithul Kumar, Director (9717644922, prithul.kumar@nic.in) may be contacted.

7. I shall be grateful if your state government could take up expeditious implementation of the MSS for minor minerals and support the endeavour for curbing the menace of illegal mining in the country.

With warm wishes,

Yours sincerely,

To

Chief Secretary to all State Governments

(Balvinder Kumar)
Government of India
Ministry of Mines

No. 31/2/2016-MIII

Prl. Secretary/Secretary/DMG,
In-charge of Mining Department
All State Governments

Date-18.10.2016

Subject: Launch of Mining Surveillance System (MSS) and Way Forward

It is to inform that Mining Surveillance System (MSS) has been launched by Hon'ble Minister of State (IC) for Coal, Power, New & Non Renewable Energy and Mines on 15th October 2016 from New Delhi. The Ministry of Mines, through Indian Bureau of Mines (IBM), has developed the MSS, in coordination with Bhaskaracharya Institute for Space Applications and Geo-informatics (BISAG), Gandhinagar and Ministry of Electronics and Information Technology (MEITY), for curbing illegal mining activity in the country by the use of space technology and remote sensing imagery. The MSS has been hosted on the National Centre of Geo-Informatics portal: www.ncog.gov.in/mining/login.

2. In the MSS, Khasra/Cadastral maps of mining leases (major minerals) were first scanned. The scanned maps were geo-referenced on to the satellite maps and digitized by the IBM with the help of BISAG. These digitized maps were validated by the IBM officials of respective regional offices at BISAG. The geo-referenced mining leases are superimposed on the latest available satellite remote sensing scenes obtained from National Remote Sensing Centre (NRSC) of CARTOSAT.

3. The system checks a region of 500 meters around the existing mining lease boundary to search for any unusual activity which is likely to be illegal mining activity. If any discrepancy is found in that zone indicative of mining activity, it is flagged-off as a ‘trigger’. These triggers would be examined at the Remote Sensing Control Centre (RSCC) of IBM and then transmitted to the State DMG or the district level mining officials for field verification, who would check for illegality and reported back using mobile app or online portal.

4. A user-friendly mobile app has already been created which will be used by these officials to submit compliance reports of their inspections. This mobile app also aims to establish a participative monitoring system where the citizens also can use this app and generate ‘trigger’ by reporting unusual mining activity.

5. In the initial phase, a total of 296 ‘triggers’ covering a total area of 3994.87 hectares, have been generated in the MSS software across the country. The field verification of these triggers will need be done by the district/regional mining officials of the State Government.
6. The success of MSS would entirely depend on the support of the respective State Governments by taking timely action. The State Governments are requested to take following action —

   a. Nominate one officer in the Secretariat/DMG as the State Nodal Officer for MSS.
   b. Provide area-wise contact details – Area (District level or Block level or Village level), Name of the field verification official, designation, mobile number and email, to whom the trigger would need to be transmitted for field verification. The Login ID and Password for all such persons of State Government would be generated.
   c. Initial triggers generated in MSS are being transferred to the respective State Governments by the Remote Sensing Control Centre of IBM within 1-2 days.
   d. Triggers to be verified by the local or any other official of the DMG of the State Government. The report has to be submitted within 7 days.
   e. Field verification report of the triggers may be submitted through Mobile App. or through the online portal. The geo-tagged photograph of the site would be desirable with the field verification either directly through mobile app or by uploading it to the online portal.
   f. The system can also be leveraged for cubing illegal mining in minor minerals, where it is more rampant. The States of Haryana, Telangana and Chhattisgarh have given willingness for a pilot launch by digitising all their minor mineral leases and are requested to do the same by November end. Other state governments have been asked to implement MSS for minor minerals by digitizing all minor mineral leases, by December end. The digitisation of the minor mineral leases may be done through the State Remote Sensing centres. A familiarisation of the process which has been followed for MSS, will be organised at BISAG by RSCC-IBM. The State Nodal officer along with an official from the State Remote Sensing centres may be sent after taking dates in consultation with the Nodal Officer-RSCC, Shri DD Bhardwaj.

Shri Darshan Deep Bhardwaj, Senior Asst. Controller of Mines is the Nodal Officer of the RSCC, IBM. All information may be directly relayed to him. In case of any difficulty or further clarification, he can be reached anytime on his mobile No.9413418448 or through email on mss@ibm.gov.in or darshandeep2011@gmail.com.

Yours Sincerely,

(Prithul Kumar)
Director,
Ministry of Mines, Government of India
prithul.kumar@nic.in, Tel: 23070260