



GEONESIS

Indian Mining & Exploration Updates

Volume 11 - Issue 08

CENTRE EXPANDS AREA LIMITS BY OVER 4X TO BOOST CRITICAL MINERALS MINING



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The move comes after the Centre faced a setback in its initial auction of critical mineral blocks earlier this year.

The Centre has increased the area granted to individual players by more than four fold in order to boost mining of critical minerals. Issuing an order on Tuesday, the government said, for mining leases, the area has been expanded from the current limit of 10 sq km to 50 sq km. For prospecting licences (granted in the case of composite licence), the limit has been increased from 25 sq km to 100 sq km.

“The Central Government, in exercise of the powers conferred under the proviso to clause (b) of sub-section (1) of section (6) of the MMDR Act, 1957, hereby increases the area limit for prospecting licence and mining lease in respect of each of the 24 critical minerals listed in Part-D of the First Schedule to the MMDR Act, 1957, to 100 sq km and 50 sq km, respectively, for each of the States (sic),” the order said.

The move comes after the Centre faced a setback in its initial auction of critical mineral blocks earlier this year. Business Standard first reported about the move on July 14. A total of 28 blocks out of the 38 announced in the first two auctions were annulled by the Centre due to lack of interest from potential bidders.

This policy shift aims to address the unique challenges associated with mining critical minerals, which are often found in deep-seated deposits and have a lower recovery rate compared to bulk minerals like limestone and iron ore.

Originally, the area limits were set under the Mines and Minerals Development and Regulation (MMDR) Act to prevent cartelisation in the mining sector.

However, given the strategic importance of critical minerals for various industries and national security, the government has decided to revise these limits.

“Critical minerals require extensive exploration and extraction efforts due to their deep-seated nature and low recovery rates from ore. Increasing the permissible area for mining and prospecting is crucial to make these operations economically feasible,” said an official, adding that the decision has been taken within the ambit of the MMDR Act.

The MMDR Act gives the Centre the power to increase the area but only if it is in the interest of development of a mineral or the industry.

As the Centre increases the area for individual players, sector experts emphasise the need to enhance technology to fully extract minerals from the mines.

“There is an alarming trend of using broad terms such as ‘strategically important’ and ‘national security’ to support certain sectors or industries. And then, selectively relaxing environmental compliances and public scrutiny,” Debadiityo Sinha, lead for climate and ecosystems at Vidhi Centre for Legal Policy, had told Business Standard.

-Nitin Kumar

Source: Business Standard

HOW IS INDIA'S HUNT FOR CRITICAL MINERALS GOING? | EXPLAINED

Why are lithium, copper, cobalt, graphite and others essential for the economy's green transition? In which States have reserves been found? Why have there been hiccups in the auction process? What lies ahead? Which country dominates global supplies?

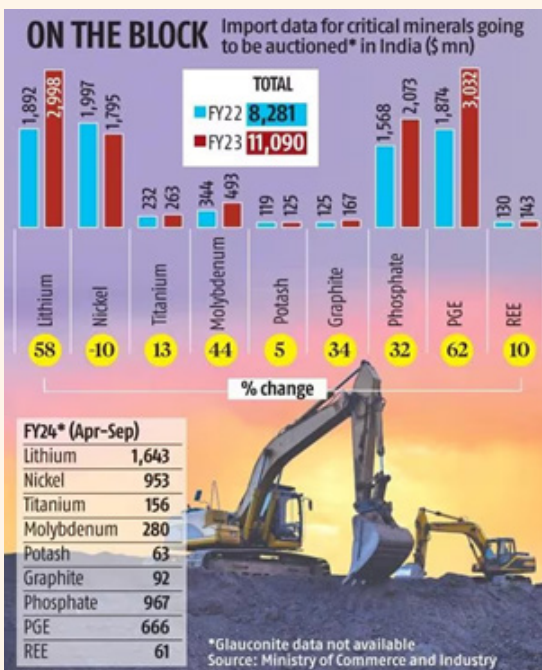
The story so far: In late June, the Centre declared the winning bidders for mining rights in six blocks of critical minerals, including graphite, phosphorite and lithium, for which India largely relies on imports. These are the first private players awarded such rights under the revamped Mines and Minerals law.

Minerals such as copper, lithium, nickel, cobalt are known as critical minerals, as they along with some rare earth elements, are essential for the world's ongoing efforts to switch to greener and cleaner energy. As per the International Energy Agency (IEA), lithium demand rose by 30% in 2023, followed by nickel, cobalt, graphite and rare earth elements which saw an 8% to 15% growth, with the aggregate value of such minerals pegged at \$325 billion. In its Global Critical Minerals Outlook 2024 report, the agency has flagged that the world's goal to limit global warming to 1.5 degrees Celsius in the net zero emissions scenario, would translate into very rapid growth in demand for these minerals. By 2040, the demand for copper is expected to rise 50%, double for nickel, cobalt and rare earth elements, quadruple for graphite and eightfold for lithium, which is crucial for batteries. The development of sustainable supply chains for such minerals is, therefore, an unavoidable task. In India, the lack of ready reserves of critical minerals has resulted in 100% import dependence for minerals like lithium, cobalt, and nickel. Late last month, Union Mines Minister G. Kishan Reddy highlighted that 95% of India's copper requirements are met through imports. China is a key supplier or processor of many of these items.



Why in the news?

- In June, the Ministry of Mines launched the fourth tranche of critical minerals auction, offering 21 blocks across 14 states.
- To incentivize exploration, the ministry announced a scheme to reimburse up to Rs 20 crore in exploration expenses for licence holders.
- Licence holders can claim up to Rs 20 crore for exploration activities and may receive additional reimbursements if they hand over a block for mining lease within three years.



What are Critical Minerals?

- Critical minerals are raw materials essential for economic and national security, often used in high-tech industries and renewable energy technologies.
- They are typically rare, difficult to mine and substitute, and often vulnerable to supply chain disruptions due to limited global production and geopolitical factors.
- The growing demand for these minerals, driven by technological advancements and the global transition to green energy, underscores their critical importance.
- Securing a stable supply of critical minerals is a strategic priority for many countries to ensure economic stability and technological progress.

Examples of Critical Minerals:

Lithium:

Uses: Lithium-ion batteries for EVs, consumer electronics, and energy storage systems.

Reserves: Australia and Chile hold the largest reserves of lithium according to the US Geological Survey (USGS).

Cobalt:

Uses: Battery production, aerospace components, and high-strength alloys.
 Reserves: The Democratic Republic of Congo (DRC) is the largest global supplier, with almost half of all cobalt reserves.

Graphite:

Uses: Batteries, fuel cells, and high-temperature applications.
 Reserves: In 2023, China had the world's largest reserves of natural graphite, approximately 78 million metric tons.

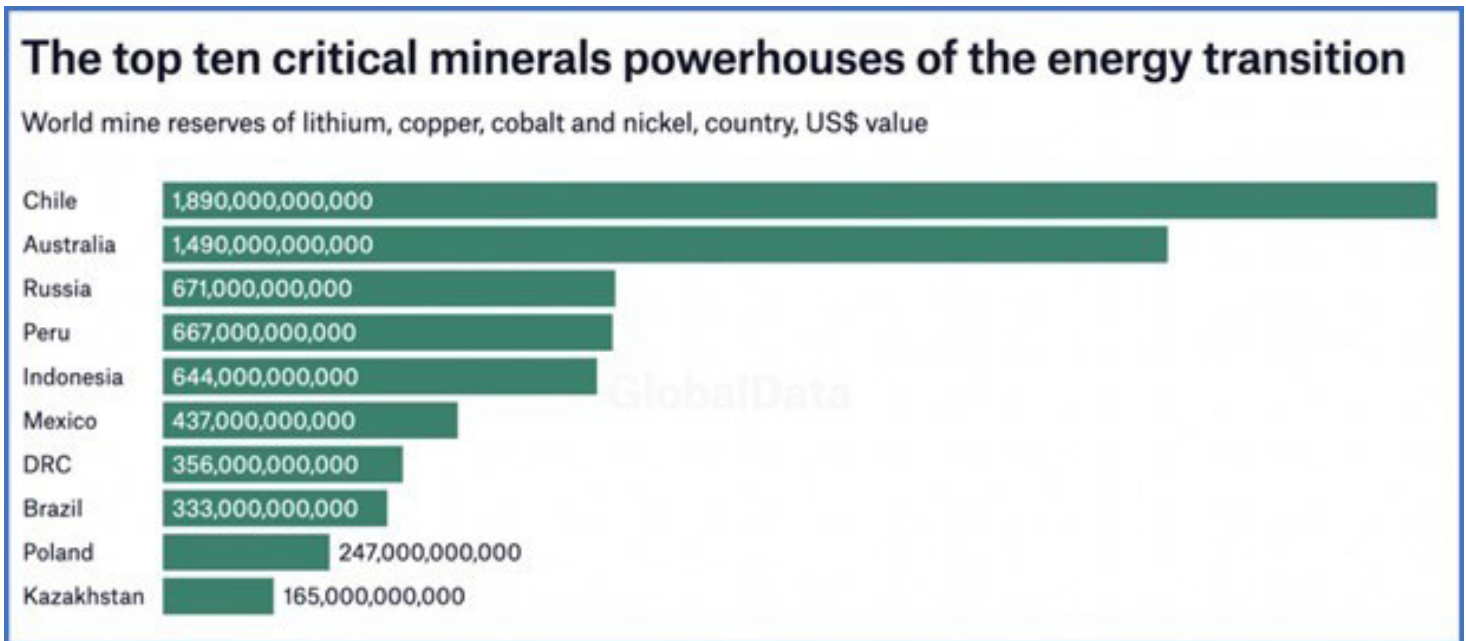
Nickel:

Uses: Stainless steel production and battery manufacturing.
 Reserves: Australia and Indonesia have the largest reserves of nickel.

Rare Earth Elements (REEs):

Uses: Manufacturing electronics, magnets, and military applications.
 Reserves: Worldwide reserves are approximately 110 million metric tons, with China holding the largest share (about 44 million metric tons). Other major reserves are found in Vietnam, Russia, and Brazil.

Critical Minerals Reserves in the World & India:



India's Situation:

India does not have reserves of nickel, cobalt, molybdenum, rare earth elements, neodymium, and indium.
 The country's requirement for copper and silver is higher than its current reserves.

Why Critical Minerals are Important for India?

Foundation of Modern Technology:

- Critical minerals are essential for modern technology.
- They are used in products ranging from mobile phones and solar panels to electric vehicle batteries and medical applications.

Energy Transition:

- Critical minerals are vital for renewable energy technologies needed to meet global "Net Zero" commitments.
- These minerals are necessary for building solar panels, semiconductors, wind turbines, and advanced batteries for storage and transportation.

Futuristic Economy:

- The future global economy will rely on technologies dependent on minerals like lithium, graphite, cobalt, titanium, and rare earth elements.
- These minerals are the building blocks for the green and digital economy.

Self Reliance:

- Identifying critical minerals will help India plan for their acquisition and preservation, considering the country's long-term needs.

- This strategy will reduce India's import dependency, as the country is currently 100% import-dependent for certain elements.

What Factors Impact the Criticality of Minerals?

Two Main Parameters:

Economic Importance:

- Assesses how raw materials are distributed across different industrial uses.
- Evaluates the impact on industries when certain minerals are unavailable in the supply chain.

Supply Risk:

- Examines how global production of raw materials is concentrated in specific countries.
- Considers the governance and environmental practices of supplier countries.
- Look at reliance on imports and trade restrictions in other countries.

What are the Initiatives Taken for Critical Minerals in India?

Planning Commission:

- In 2011, a report by the Planning Commission (now NITI Aayog) highlighted the need for assured availability of mineral resources for India's industrial growth.

- Identified 12 strategic minerals: Tin, Cobalt, Lithium, Germanium, Gallium, Indium, Niobium, Beryllium, Tantalum, Tungsten, Bismuth, and Selenium.

Ministry of Mines:

- Constituted a steering committee in 2011 to review the availability of rare-earth elements (REE) and energy-critical elements.
- Conducted a study titled “Rare Earths and Energy Critical Minerals: A Roadmap and Strategy for India” to review production, consumption, and reserves.

Council on Energy, Environment and Water (CEEW):

- Conducted a study highlighting the lack of research in India regarding mineral resource security for the manufacturing sector.
- Identified 13 minerals as most critical by 2030: Rhenium, Beryllium, Rare Earths (Heavy), Germanium, Graphite, Tantalum, Zirconium, Chromium, Limestone, Niobium, Rare Earths (Light), Silicon, and Strontium.

Geological Survey of India (GSI):

- Submitted a strategic plan for enhancing REE exploration in India in collaboration with the Atomic Mineral Division (AMD).
- Emphasised securing rare earth elements for India.

Centre for Socio and Economic Progress (CSEP):

- Released a working paper in 2023 titled “Assessing the Criticality of Minerals in India”.
- Evaluated the criticality of 43 non-fuel minerals based on economic importance and supply risks.

What is the Mandate of the New Committee on Critical Minerals?

- The Ministry of Mines constituted a committee to identify critical and strategic minerals.
- Chaired by Dr. Veena Kumari Dermal, Joint Secretary, Ministry of Mines.
- Concluded that the categorization of critical minerals depends on factors such as availability, monopoly on resources, use for frontier technologies/clean energy, substitutability, supply risk, and recycling.

Criteria for Identifying Critical Minerals:

Three-Stage Assessment:

- Study of International Strategies: Analysed critical mineral strategies from

countries like Australia, USA, Canada, UK, Japan, and South Korea.

- Inter-Ministerial Consultation: Engaged with various ministries (e.g., Ministry of Power, Ministry of New and Renewable Energy, Department of Atomic Energy) to identify sector-specific critical minerals.
- Statistical Analysis: Conducted a detailed statistical exercise to compute factors like substitutability index, minerals cross-cutting index, and import reliance.

Outcome:

Identified a total of 30 minerals as most critical for India.

Included two minerals specifically critical as fertiliser minerals.

When is Domestic Production likely to Begin?

- Current Status: The commercialization of India’s domestic mineral blocks is still in the early stages of exploration.
- Future Prospects: Significant benefits from domestic production are unlikely to materialise by 2030, as assessed by ICRA.

Government Initiatives:

- The Indian government is actively promoting exploration activities to accelerate the development of domestic mineral resources.
- Efforts include incentivizing exploration and attracting more miners to participate in mineral extraction projects.
- India is pursuing overseas mineral acquisitions as a strategy to secure critical resources. For instance, a joint venture named Khanij Bidesh India Limited has been established to develop a lithium brine mine in Argentina.

International Collaboration:

- India has joined the U.S.-led Mineral Security Partnership, which involves major global stakeholders in critical minerals.
- This partnership aims to enhance India’s mineral security by fostering cooperation among significant buyers and sellers of critical minerals worldwide.

Conclusion:

India’s focus on clean energy and emissions reduction highlights the critical importance of minerals for electric vehicles and renewable energy systems. They are essential for India’s transition to a greener and more sustainable future, driving growth, competitiveness, and sustainable development.

Source: The Hindu

ATMANIRBHAR BHARAT: INDIA'S GROWING COAL MINING CAPACITY

Under Atmanirbhar Bharat, India's Gevra and Kismunda coal mines in Chhattisgarh have achieved global recognition, ranking 2nd and 4th among the world's largest coal mines.

Chhattisgarh-based Coal India subsidiary South Eastern Coalfields Limited's Gevra and Kismunda coal mines have secured the second and fourth spots, respectively, in the list of the world's 10 largest coal mines released by WorldAtlas.com. Located in Korba district of Chhattisgarh, these two mines produce more than 100 million tonnes of coal annually, accounting for about 10 per cent of India's total coal production, the Ministry of Coal said on Thursday.

The Gevra opencast mine has an annual production capacity of 70 million tonnes and produced 59 million tonnes of coal in FY 23-24. The mine started operations in 1981 and it has enough coal reserves to meet the country's energy requirements for the next 10 years. The Kismunda opencast mine produced more than 50 million tonnes of coal in FY 23-24, only the second mine in India after Gevra to achieve this feat.

These mines have deployed some of the world's largest and most advanced mining machines such as the 'Surface Miner' that extracts and cuts coal without blasting for eco-friendly mining operations, according to the Coal Ministry statement. For overburden removal (the process of removing layers of soil, stone, etc. to expose the coal seam), the mines use some of the world's largest HEMMs (Heavy Earth Moving Machinery) such as 240-tonne dumpers, 42 cubic metre Shovel along with Vertical Rippers for environment-friendly and blast-free OB removal.

South Eastern Coalfields Limited CMD Prem Sagar Mishra said it is indeed a proud moment for Chhattisgarh that two of the world's five largest coal mines are now in the state.

The following are the ten largest coal mines by production across the world in 2023, according to GlobalData's mining database.

1. Black Thunder Mine

The Black Thunder Mine is a surface mine situated in Wyoming, United States. Owned by Arch Resources, the greenfield mine produced an estimated 62.68 mtpa of coal in 2023

2. Gevra OC Mine

Located in Chhattisgarh, India, the Gevra OC Mine is owned by Coal India. The surface mine produced an estimated 60 mtpa of coal in 2023. The

mine will operate until 2036.

3. North Antelope Rochelle Mine

The North Antelope Rochelle Mine is a surface mine located in Wyoming, United States. Owned by Peabody Energy, the greenfield mine produced an estimated 56.25 mtpa of coal in 2023. The mine will operate until 2047. Buy the profile here.

4. Kismunda OC Mine

Owned by Coal India, the Kismunda OC Mine is a surface mine situated in Chhattisgarh, India. The greenfield mine produced an estimated 50 mtpa of coal in 2023. The expected mine closure date is 2036.

5. Northern Shaanxi Mine

The Northern Shaanxi Mine is a surface and underground mine situated in Shaanxi, China. Owned by Shaanxi Coal and Chemical Industry Group, the greenfield mine produced an estimated 41.34 mtpa of coal in 2023.

6. Sangatta Mine

The Sangatta Mine is a surface mine situated in East Kalimantan, Indonesia. Owned by Bumi Resources, the greenfield mine produced an estimated 40.9 mtpa of coal in 2023.

7. Belchatow Mine

Located in Lodz, Poland, the Belchatow Mine is owned by PGE Polska Grupa Energetyczna. The surface mine produced an estimated 40.43 mtpa of coal in 2023. The mine will operate until 2040.

8. FTB Project

The FTB Project is a surface mine located in East Kalimantan, Indonesia. Owned by Bayan Resources, the greenfield mine produced an estimated 37.4 mtpa of coal in 2023. The mine will operate until 2055.

9. Tutupan Mine

Owned by Adaro Energy, the Tutupan Mine is a surface mine situated in South Kalimantan, Indonesia. The brownfield mine produced an estimated 36.39 mtpa of coal in 2023.

10. Borneo Indobara Mine

The Borneo Indobara Mine is a surface mine situated in South Kalimantan, Indonesia. Owned by Dian Swastatika Sentosa, the greenfield mine produced an estimated 35.03 mtpa of coal in 2023. The mine is expected to operate until 2036.

Source: The Hindu

LET'S CHANGE THIS...': VEDANTA'S ANIL AGARWAL URGES GOVT TO PRIVATISE GOLD MINING IN INDIA TO BOOST PRODUCTION

Agarwal shed light on the country's reliance on imports to meet almost all of its demand and called for a change in the situation. "But it's a paradox that our gold production today is only 1.4 tonnes per year," he wrote on X (formally Twitter).

Anil Agarwal, Chairman of Vedanta Group, suggested that the government should focus on steps to ramp up the country's gold production to reduce dependency on gold imports.

The Vedanta chairman in a post on X (formally Twitter), shed light on the country's forex situation and wrote "it is so amazing to see RBI buying gold for its reserves. Thirty-three years ago, in early 1991, RBI had to ship its gold overseas so that we could get forex to help deal with our economic crisis. How well we have done since then!"

Agarwal shed light on the country's reliance on imports to meet almost all of its demand and called for a change in the situation. "But it's a paradox that our gold production today is only 1.4 tonnes per year. We import 99.8% of our gold requirement. Let's change this," he wrote.

The chairman of the mining major called for privatising the now closed Bharat Gold Mine and Hutti Gold Mine where production is stagnant. With investment and technology, these mines have huge potential to produce gold, generate jobs and save forex, he said.

The selling of any public sector asset in pieces will never serve the larger national purpose, Agarwal said.

The incoming entrepreneur should have a proven track record, the ability to take measured risks, access the required funds, bring in the best of experts and the latest technology, and move ahead without retrenching a single employee, he added.

Meanwhile, Agarwal on July 10 said that the group is going ahead with the proposed demerger of its businesses that will lead to formation of six firms and unlocking of massive value.

The company has received approvals from the majority of its creditors for a proposed demerger of businesses.

Addressing shareholders during the 59th Annual General Meeting, the

chairman said, "We are going ahead with the demerger of our businesses, which will lead to the creation of 6 strong companies, each a Vedanta in its own right. This will unlock massive value."

Each demerged entity, he said, will plan its own course but follow Vedanta's core values, its enterprising spirit and global leadership. Each entity will have more independence with regard to capital allocation and their growth strategies, the chairman said, adding investors will have the freedom to invest in the industries of their choice, broadening the overall investor base for Vedanta assets.

"For every one share of Vedanta Ltd that shareholders currently own, they will additionally receive one share of each of the five newly listed companies," he said.

Bharat Gold Mines Limited

Bharat Gold Mines Limited (BGML), erstwhile public sector undertaking was incorporated in April, 1972 under the administrative control of Department of Mines with its office at KGF. BGML was engaged in (i) mining and production of gold mainly in KGF and (ii) in a few smaller operations in Andhra Pradesh. When the BGML operations become economically unviable, operations of BGML were closed with effect from 01.03.2001. In 2006, the Cabinet had decided to dispose the assets through a global tender with first right of refusal in favour of the ex-employees society.

Hutti gold mines

Hutti Gold Mines is a company owned by the Karnataka government that operates two mines in Raichur district. Hutti is the only active gold mine in India, producing about 1.8 tonnes of gold per year. The mine has a history of over 2,000 years, as it was mentioned in the ancient Hindu texts of Mahabharata and Ramayana. The mine uses both underground and open-pit mining methods, and has a processing plant that can handle 3,000 tonnes of ore per day

Source: Business Times



SAIL-ROURKELA'S ODISHA MINES MAKE NEW BENCHMARKS IN IRON ORE PRODUCTION, DISPATCH

The Odisha Group of Mines (OGO M), operating under SAIL, Rourkela Steel Plant (RSP), has achieved unprecedented milestones in iron ore production and dispatch for the fiscal year 2023-24.

The group recorded its highest ever annual iron ore production, reaching 14.304 million tonnes (MT), a 2.76 per cent increase from the previous year's 13.92 MT. Concurrently, the group achieved a record annual iron ore dispatch of 14.154 MT, a 3.84 per cent increase from the previous best of 13.810 MT in 2021-22.

Several individual mines within the group have also set new records. Bolani Ore Mines reported its best ever annual iron ore production of 7.20 MT, surpassing the previous record of 7.11 MT in 2022-23. Similarly, Taldih Iron Mines reached its highest annual production since inception, with a total of 1.489 MT of iron ore, up from 1.34 MT the previous year. This included a record production of 0.559 MT of iron ore lump and 0.930 MT of iron ore fines, both exceeding their respective previous bests.

Kalta Iron Mines also contributed to the success with a record production of 1.964 MT of iron ore fines, marginally higher than the previous year's 1.959 MT. Additionally, best ever monthly production figures were recorded across the mines in December 2023. Bolani achieved 476,875 tonnes of

fines and a total production of 745,955 tonnes, while Taldih produced 177,641 tonnes. The Odisha Group of Mines collectively reached 526,857 tonnes of lumps and 983,331 tonnes of fines, setting new monthly benchmarks.

On the dispatch front, Bolani Ore Mines achieved its best ever annual iron ore dispatch of 7.39 MT, with iron ore fines and lumps dispatching 4.71 MT and 2.68 MT respectively. Taldih Iron Mines reported a record dispatch of 1.448 MT, including 0.549 MT of lumps and 0.903 MT of fines. Kalta Iron Mines also marked its highest dispatch of 1.927 MT of iron ore fines.

Adding to these achievements, the group commenced the dispatch of manganese ore from the 6.9 Sq. Mile lease of Bolani Ore Mines. The inaugural shipment of 1136 tonnes was dispatched to Rourkela Steel Plant on August 30, 2023, marking a significant milestone in expanding the mine's operational portfolio.

These accomplishments underscore the Odisha Group of Mines' commitment to operational excellence and its pivotal role in supporting RSP. The group continues to strive for higher benchmarks, contributing significantly to the steel industry's supply chain.

Source: News Reving

MINING NO CRIME UNDER PMLA': HC RESTRAINS ED ACTION

The ED had filed its Enforcement Case Information Report (ECIR) last September against contractors and other suppliers of machineries, including excavators allegedly over illegal sand mining case.

The Madras High Court has ordered the Enforcement Directorate (ED) not to take any further action on a sand mining case in Tamil Nadu stating that mining is not a scheduled offence under the Prevention of Money Laundering Act (PMLA).

The ED had filed its Enforcement Case Information Report (ECIR) last September against contractors and other suppliers of machineries, including excavators allegedly over illegal sand mining case.

A division bench of Justices M S Ramesh and Sunder Mohan passed the order on Tuesday, on a batch of petitions filed by among others, the contractors — K Rethinam, P Karikalan and S Ramachandran — seeking to quash the ECIR stating that the central agency lacks jurisdiction.

“The respondents (ED) shall not continue further action pursuant to the ECIR in so far as the petitioners are concerned till such time the statutory and other requirements that we have pointed out above are complied with,” the court said in its order.

The court also quashed ED orders provisionally attaching the properties of the contractors. “We are thus of the view that unless an information with regard to any case in the scheduled offence is registered and such an of-

fence has generated proceeds of crime, which is dealt with by the petitioners, no action can be initiated,” the court said. “As stated earlier, the materials collected and the reasons shown in the Provisional Attachment Order, even if accepted to be true only suggests that the respondents have unearthed large scale illegal sand mining and that may have generated illegal money.”

The ED had alleged that sand worth Rs. 4,730 crore was illegally mined across five districts of Tamil Nadu. The agency had issued summons to five district collectors — Ariyalur, Karur, Thanjavur, Trichy, and Vellore. The collectors had challenged the ED's summons in the HC which stayed their operation. But, the stay was vacated by the Supreme Court based on ED appeals.

On Tuesday, the Court cited Supreme Court's judgements that in the absence of any scheduled offence that had resulted in proceeds of crime, ED cannot assume jurisdiction to initiate action under PMLA. The court ordered ED not to take any action against the petitioners unless a scheduled offence is registered. “One cannot put the cart before the horse,” the court said. “Therefore, we are of the view that the impugned actions, which are challenged in the Writ Petitions, are without jurisdiction and they are liable to be quashed and as such, stand quashed.”

Source: Hindustan Times



CANADA PUTS ITS BIG MINERS OFF LIMITS JUST AS M&A IS HEATING UP

Canada is making it harder for foreign firms to acquire its biggest mining companies, potentially taking some of the global industry's attractive takeover targets off the table.

The Canadian government will only approve foreign takeovers of large Canadian mining companies involved in critical minerals production "in the most exceptional of circumstances," according to the latest guidelines from Industry Minister Francois-Philippe Champagne. The directive issued on Thursday is part of a sweeping effort by Prime Minister Justin Trudeau's government to protect Canada's critical minerals sector and national security interests.

The move appears to insulate domestic companies from takeovers when the world's biggest mining firms are hunting for metals that underpin the global transition away from fossil fuels. Industry giants such as Glencore Plc, BHP Group Ltd. and Rio Tinto Plc have been seeking to boost exposure to metals like copper as the appetite for large, transformational deals returns across the industry.

Canadian mining firms, in turn, have become appealing targets. Teck Resources Ltd. spent much of last year fending off Glencore's \$23 billion takeover attempt before the Swiss company opted instead to just buy the company's steelmaking-coal business. The federal government approved the \$6.9 billion deal on Thursday, while also setting new criteria for future foreign mining deals.

Canada and its Western allies have become increasingly concerned about securing critical minerals needed for goods ranging from electric vehicle batteries to electronics, prompting them to push to develop supply chains to loosen China's global dominance over the industry.

"This high bar is reflective of the strategic importance of Canada's critical minerals sector and how important it is that we take decisive action to protect it," Champagne said in a statement. The government's list of 34 critical minerals includes copper, zinc, potash and uranium.

A spokesperson for the government declined to comment further on what might constitute exceptional circumstances for transactions. The Mining Association of Canada declined to comment on the new directive.

Foreign takeovers of mining companies have been a touchy topic in Canada ever since a wave of deals 18 years ago took out some of the country's biggest players, including nickel miner Inco Ltd. and aluminum producer Alcan Inc. When BHP proposed a takeover of Potash Corp. of Saskatchewan Inc. in 2010, then-Prime Minister Stephen Harper's government

blocked the deal on the grounds it wouldn't be of "net benefit" to the country.

Teck is one of the few large Canadian metals producers that survived a wave of industry takeovers, even though it has long been coveted by foreign competitors for its copper and zinc assets spread across the Americas. The Vancouver-based company is widely expected to become an acquisition target when founder and top investor Norman Keevil gives up control of the company in the coming years.

"Essentially they are saying to Glencore, don't bother coming back for the other half of Teck," said Canadian mining financier Pierre Lassonde, who launched a competing bid for Teck's coal assets last year. "It looks to me like Ottawa is prepared to ring-fence the Canadian critical metals industry with this new directive."

Bloomberg has reported previously that Rio Tinto had looked in the past at Canadian copper miner First Quantum Minerals Ltd., among other potential deals, although Rio chief executive officer Jakob Stausholm had so far rejected the idea.

Other big Canadian miners include fertilizer producer Nutrien Ltd. and uranium giant Cameco Corp., in addition to Ivanhoe Mines Ltd., which has large copper and zinc operations in the Democratic Republic of Congo.

The new directives go even further than a crackdown on foreign takeovers from state-owned entities that began in October 2022. Champagne's ministry has thwarted several recent attempts by Chinese companies to make inroads in Canada's critical minerals sector through takeovers or major investments. But Thursday's comments signal that the federal government is wary of foreign takeovers even from companies in friendly nations.

Canada's crackdown could also constrict access to capital for companies that rely on foreign investment to fund exploration and mining projects. The government is "limiting" funding to the industry with their "more aggressive statements," said Shane Nagle, a metals and mining analyst with National Bank of Canada. "If that's going to be challenging to do, they'll just go elsewhere."

(By Jacob Lorinc) A view of the world's largest rare-earth mine,

Source: Mining.Com



CHINESE GEOLOGISTS UNEARTH TWO NOVEL MINERALS AT WORLD'S LARGEST RARE-EARTH MINE

Bayan Obo deposit, in Baotou City, north China's Inner Mongolia Autonomous Region. /CFP

Chinese geologists have discovered two new minerals at the world's largest rare-earth mine in north China, the Chinese Academy of Sciences (CAS) has announced.

The two new niobium-scandium minerals, named as Oboniobite and Scandio-fluoro-eckermannite, were discovered in the Bayan Obo deposit in the Inner Mongolia Autonomous Region. The discovery was made through a collaboration between the CAS Institute of Geology and Geophysics, Inner Mongolia Baotou Steel Union Co., Ltd., Baotou Research Institute of Rare Earths, and Central South University, the CAS publicity office confirmed with Xinhua on Thursday.

Li Xianhua, a CAS academician, on behalf of the CAS Institute of Geology and Geophysics, announced the findings, noting that the International Mineralogical Association has confirmed their status as new minerals and approved their naming, according to a CAS press release.

Niobium and scandium are both extremely rare strategically critical metals. Niobium is mainly used in special steels, superconducting materials and aerospace industries, while scandium is widely used in aluminum-scandium alloys and solid oxide fuel cells.

Li said that the new minerals contain valuable elements that have signif-

icant applications in fields such as new materials, new energy, information technology, aerospace, national defense and military industry, and are of great significance to the country's economic and social development.

Li Xiao, general manager of Inner Mongolia Baotou Steel Union Co., Ltd., a major steelmaker in China, said that Bayan Obo has abundant mineral resources, such as iron, niobium, scandium, thorium and fluorite.

Since 1959, 18 new minerals have been discovered in this deposit, and Oboniobite and Scandio-fluoro-eckermannite are the 19th and 20th discovered here, said Li Xiao.

Fan Hongrui, a researcher of the CAS Institute of Geology and Geophysics, said that Oboniobite is yellow-brown to brown in color. It is plate-like and ranges from 20 to 100 micrometers in particle size.

Scandio-fluoro-eckermannite is the first mineral containing scandium ever discovered in China. It is named after the CAS academician Zhai Mingguo in honor of his outstanding contribution in China's study of mineral deposits. It is pale yellow or light blue and columnar, with a particle size of up to 350 micrometers, said Fan.

Source: Xinhua News Agency



MID-YEAR MILESTONES: REFLECT, REFINE, REIGNITE.

As we look back on the first half of this year, we all experience a mixture of emotions. Of course, for some it may not. The million-dollar question is am I where I wish I would be by the middle of the year? Not quite would be the obvious answer for most of the masses.

Such a situation can bring a moment of disappointment, but it doesn't need to. Even if things didn't go according to our plan, it doesn't mean good things didn't happen at all. This is the beauty of life. As a famous quote goes- "The only certainty is that nothing is certain". It means that we can plan as much as we want, but life will still throw at us only unexpected situations or results. And that is totally ok. The wise understanding is that you've probably ended up doing a lot more than your initial plans as well as compared to others who didn't even try, even though it may not be the things you originally planned to.

Six months is a time where a lot can happen and change and it's important to know and acknowledge this.

Here comes the significance of what mid-year reflections are for. So, this is the right moment to contemplate on your journey so far and remind yourself how far you have come and from here on where to move ahead.

1. Take a look at the last six months, and list down your achievements. -The achievement can be small or big, it doesn't matter, because what actually

matters is if the goal is to move from point A to point-B, even a small progress has a great value, irrespective of what others think about you. Achievements can be anything ranging from learning a new skill, a new language, a new hobby or even learning to cook a new recipe.

2. Take a look back on you your gifted capabilities and capacities and rate your growth.

The dimensions of every human existence - physical, emotional, social, intellectual and spiritual whichever you feel needs care, nourishment and growth in order to be an individual who adds value in other people's life, is a great way of reflection.

3. Take a look at the remaining six months and shoot down the targets

By taking a closer look at the first half of this year gives a clear picture of all our positives and negatives, hits and misses, profits and losses, success and failures and if you look hard enough, you can remind yourself how far you've come to become the most amazing human being you are. All the achievement growth and wonderful moments, even though, the last six months hasn't exactly gone according to plan, but beautiful things are likely to happen in future.

Take the ingredients given to navigate through the most mysterious entity called life. Pause a moment to reflect, refine, reignite.

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