### MINERAL ECONOMICS AND BUSINESS

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### Week 1

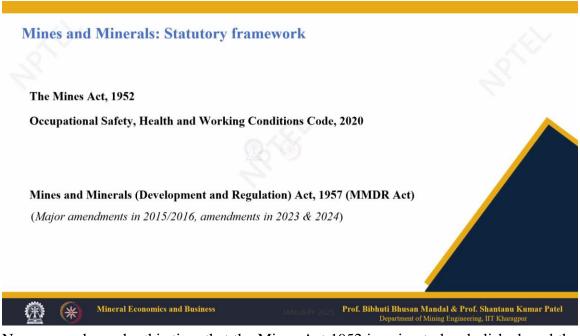
### Lecture 04: Acts and Regulations - I

Hello, welcome to this fourth lecture in the course Mineral Economics and Business in which we will be focusing on the statutory provisions like the acts and regulation. This is the first part and there will be another lecture on the same subject, but Time to time we will also refer to this acts and regulation when we go further through the course forward because that would be appropriate having a proper context. Now, the concepts that we cover mainly are the statutory framework overall and the major act that is the mines and minerals development and regulation act 1957. the subordinate legislations that means, the rules and regulations that has been made under the MMDR act.



Certain preliminary rules and regulations which are related to the prospecting and mining operations, then prospecting licenses and mining leases. Not everything from the act will be discussed here, but will have the measure in a portion or the main portion that will be discussed here. Rest of the things are to be read and if the practicing mining engineers we are who are interested in the regulations, they must go through the act and registration thoroughly. But in our case we will try to have touch those important points which are very much relevant to this course.

In the mining industry The broad statutory framework is divided into two major parts, two major sectors rather of our mining practices. Number one is the occupational safety and health. The safety and health is actually covered under the Mines Act 1952. And here the statutory body is implementation and inspection authority lies with the directorate general of mine safety DGMS Dhanbad.



Now, as we know by this time that the Mines Act 1952 is going to be abolished, and the new code has come. And this is called the Occupational Safety, Health, and Working Conditions Code 2020, in which the Mines Act, along with other acts, has been amalgamated. This is about the safety and health aspects of the mines and minerals, but what about the regulation and development—that means the conservation part and the optimal utilization part—this part, the mining part rather. So, that is covered under the

Mines and Minerals Development and Regulation Act 1957, which is popularly known as the MMDR Act. A major amendment in this act took place in 2015 and 2016 also.

Further, followed by 2023 and 2024, there are minor revisions. But a major overhauling—rather, a complete rewriting in many respects—where the technical and policy matters, following the policy of the government, these major amendments have been done. Now, the acts which are the principal acts—Mines and Minerals Development and Regulation—where the conservation, development, and utilization, all these things are covered. We have certain subordinate legislation—that means the rules and regulations that have been framed under the purview of the Mines and Minerals Development and Regulation Act. Here, a major rule is known as MCDR.

### Mines and Minerals: Statutory framework

Mines and Minerals (Development and Regulation) Act, 1957

### Mineral Conservation and Development Rules, 2017 (MCDR)

Focuses on sustainable mining practices and conservation of mineral resources. Includes provisions for:

- · Mining plans and mine closure plans.
- · Rehabilitation and reclamation of mined areas.
- · Reporting on production, reserves, and environmental compliance.







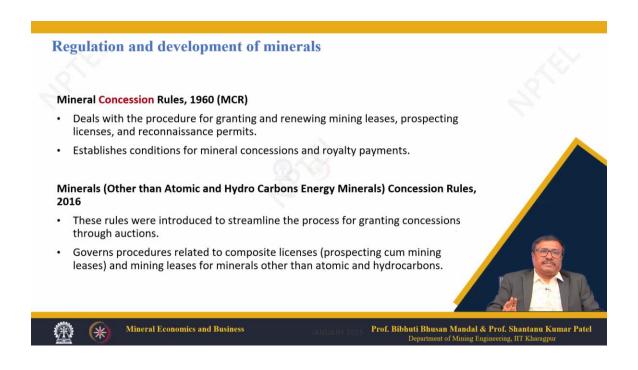
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You must have heard these things: MCDR mines, MCDR returns. So, a major rule is MCDR, and the latest version is 2017. This focuses on sustainable mining practices, which we will take up separately in the next lecture, and the conservation of mineral resources, which is very important. So, this includes the provisions for the mining plants. Mine closure plans, rehabilitation and reclamation of mined areas, and, of course, the reporting procedures performed on the production reserve and environmental compliance.

This is a major rule under the purview of the MMDR Act 1957. Other than MCDR, there are other rules also, like the details for renewing mining leases, prospecting licenses, and reconnaissance permits. So, this will be dealt with in the Mineral Concession Rules 1960,

called MCR. So, for the minerals, the Mineral Concession Rules establish the conditions for mineral concessions and royalty payments. Again, we have another Mineral Concession Rules called the Minerals (Other than Atomic and Hydrocarbon Energy Minerals) Concession Rules 2016.



These were introduced to streamline the process for granting concessions through auctions. This is about minerals other than atomic and hydrocarbon energy minerals. It governs the procedures related to composite licenses, like prospecting mining licenses and mining leases for minerals other than atomic and hydrocarbons. We have a very important rule called the Mineral Auction Rules 2015. So, for opening the industry to all kinds of investors and removing many obstacles, this auction rule provides a framework for auctioning mineral blocks.

for mining leases and, of course, composite licenses. This ensures transparency and fairness in the allocation of mining concessions. We have another National Mineral Exploration Trust Rules 2015, as exploration is a basic requirement before we take the detailed project report and then invite investors to participate. Now, unless we have a proper and robust mineral exploration policy, we cannot think that our mining industry will sustain, develop, or grow. So, these Mineral Exploration Trust Rules govern the

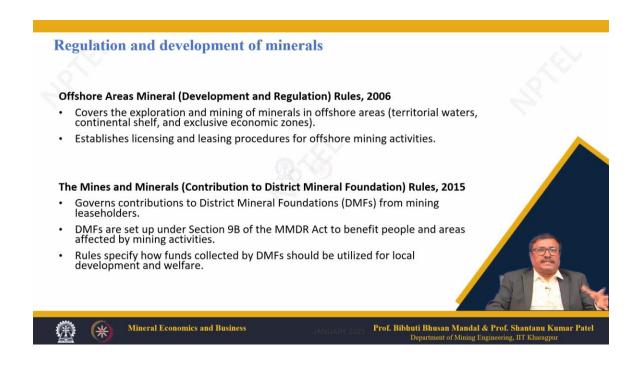
functioning of NMET and specify the collection and utilization of funds for regional and detailed exploration.



When you are mining any mineral, then a certain part—that we will discuss later—will come to the National Mineral Exploration Trust, and this money will be utilized for further exploration purposes. So, automatically, the industry will support its own growth in the future, which is a vital development in recent years. The Offshore Areas Mineral Development and Regulation Rules, 2006, provide for the exploration and mining of minerals in offshore areas like the territorial waters, continental shelf, and the exclusive economic zones. It also establishes the licensing and leasing procedures for offshore mining activities. This is very important because we are discovering more minerals and larger reserves in offshore mining areas.

These rules will govern how to allocate those lease areas and who will mine those deposits. The Mines and Minerals contribution to the District Mineral Foundation—we have a special discussion on the District Mineral Foundation in this course. This rule was framed in 2015. The government has already decided that, through the District Mineral Foundation, mining lease holders will pay a certain amount under Section B of the MMDR Act. That money will be used to provide benefits to the people and areas affected by mining activities within that district.

So, that money will be utilized for development and social work specifically for that district. These rules specify how the funds collected by the DMF should be utilized for local development and the welfare of society. Now, in general, I must go back and say that Indian mining laws date back to colonial times. That means the first properly framed rules and regulations started in the British period and have since evolved. This evolution is due to economic growth, demand, priority choices, and different policies framed by the government.



So, the laws are evolving still today, and it is continuously evolving—a dynamic document, you can say. The objective of the mining regulations is to promote systematic and scientific mining. That means no haphazard mining, no unsystematic mining, and no illegal mining activities. So, it is to prevent all illegal activities in the mining areas. Now, this safeguard has to protect the environmental and social interests as part of the regulation.

And we also see that we can optimize resource utilization, called conservation in general, for the growth of the nation at a steady rate. There are certain words you will see continuously appearing throughout the act, like the mineral concession. So, it is either a reconnaissance permit, a prospecting license, mining lease, a composite license, or an exploration license, or a combination of any of these, and the expression concession shall

be construed accordingly. That means this can be any of these permits or concession licenses, or a combination of these, and can be called a mineral concession.



Now, for the prospecting license, a license is granted for prospecting operations; we will call it a prospecting license. Similarly, for exploration, a license is granted for undertaking reconnaissance operations or prospecting operations, or both, in respect of minerals specified in the 7th schedule of the act. And the composite license, as I said earlier, is a two-stage concession—that means we can take up exploration, and if the government permits according to these laws and rules, then we can proceed to mining—that means a two-stage concession: prospecting operations followed by mining operations. So, if a company has the composite license, it can seamlessly transition from one stage to the other. The leased area is legally defined; it is specified in the mining lease where mining operations can occur, including approved non-mineralized areas also.

So, the mining lease is a lease granted for mining operations, including subleases for the same purpose. And you will hear repeatedly about the minor minerals. What are these minor minerals? So, this includes building stone, gravel, ordinary clay, ordinary sand other than the sand used for prescribed purposes. And any other mineral that is notified by the central government. These are called the minor minerals. And what are notified minerals?

### Important definitions in the MMDR Act, 1957 (Section 3)

- Mineral Concession: Either a reconnaissance permit, prospecting license, mining lease, composite license, exploration license or a combination of any of these and the expression "concession" shall be construed accordingly
- · Prospecting License: A license granted for prospecting operations.
- Exploration License: A license granted for undertaking reconnaissance operations or prospecting operations or both in respect of minerals specified in the Seventh Schedule
- Composite License: A two-stage concession combining prospecting operations followed by mining operations.







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These are the minerals listed in the fourth schedule of the act, but they have a specific purpose: they have national economic importance. Then, what do you mean by prospecting operations? As we know, these are activities undertaken to explore, locate, or prove mineral deposits. So, that is called prospecting operations. Reconnaissance operations are any operations undertaken for preliminary prospecting.

- Leased Area: The area specified in the mining lease where mining operations can occur, including approved non-mineralized areas.
- Mining Lease: A lease granted for mining operations, including sub-leases for the same purpose.
- Minor Minerals: Includes building stones, gravel, ordinary clay, ordinary sand (other than sand used for prescribed purposes), and any other mineral notified by the Central government
- · Notified Minerals: Minerals listed in the Fourth Schedule of the Act.





- Prospecting Operations: Activities undertaken to explore, locate, or prove mineral deposits.
- Reconnaissance Operations: Any operations undertaken for preliminary
  prospecting of a mineral through regional, aerial, geophysical or geochemical
  surveys and geological mapping, and include pitting, trenching, drilling and subsurface excavation.
- Mineral Reserve: The economically mineable part of a measured and indicated mineral resource.







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That means we start with reconnaissance operations, then we get prospecting and exploration, and then we develop the database using the information we get from regional, aerial, geophysical, geochemical surveys, geological mapping, and all these things. We take samples also and drill boreholes to get the borehole data. All that information we gather, and from there we can calculate the mineral reserve. That means the economically mineable part of a measured and indicated mineral resource.

Now, in section 4, the provision is there for regulation of mining operation. That means, under ah if you want to undertake or prospecting or mining, you must be having a valid

### Prospecting or mining operations to be under license or lease (Section 4)

- Regulated Mining Operations: No person can undertake reconnaissance, prospecting, or mining without a valid permit, exploration license, or mining lease as per provisions in the Act.
- Exceptions for Specific Entities: The provisions do not apply to operations by certain government bodies such as the Geological Survey of India, Indian Bureau of Mines, and the Atomic Minerals Directorate.
- State Government Involvement: State Governments can, after consulting the Central Government, undertake mining operations in areas not already covered under existing mineral concessions.







permit. A permit issued by the government, statutory authority for say, exploration license or mining leave as as per the provisions of the act. Now, there are of course, exceptions where the government bodies come into play like the Geological Survey of India, Indian Bureau of Mines or Atomic Mineral Directorate. For that government of specific provisions not lying in the with the general provisions as we said earlier. So, the state government involvement where it is state governments can after consulting in the same with the ah the the central government, they can undertake mining operations. in areas not already covered under existing mineral concessions. If the lease is available or the area is free, then the state government, I mean without following the standard or the regulated mining operations as we said, the standard practice for the valid permit exploration license

# Termination of prospecting licenses, exploration licenses or mining leases (Section 4A) 1) Premature Termination by Central Government: The Central Government can request the State Government to terminate a prospecting license, exploration license or mining lease prematurely for reasons like environmental preservation, flood control, pollution prevention, public health, or safety of infrastructure. 2) Premature Termination by State Government: The State Government can similarly terminate a mining lease or prospecting license for minor minerals if it is deemed necessary for regulation, environmental protection, or public safety. 3) Right to be heard: No premature termination order can be made without giving the license or lease holder a reasonable opportunity to be heard. 4) Lease Lapse for Inactivity: A mining lease will lapse if production and dispatch do not commence within two years or are discontinued for two years, with an option for a one-time extension of up to one year due to uncontrollable reasons. Prof. Bibhuti Bhusan Mandal & Prof. Shantanu Kumar Patel

So, the state government can directly consulting the with due consultation with the central government can undertake mining operations as a special case in those areas where the mining lease or mining permits or the licenses are not yet issued. Once this is given, then what should you do? Like the say we will start with number 4 rather, the lease lapse for inactivity. a mining lease will lapse if you do not start production or dispatch do not commence within 2 years or they are discontinued for 2 years. So, lease will lapse.

Of course, with an option for a one time extension up to 1 year due to uncontrollable reasons that means, reasons beyond the control of the leasing leaseholder. Premature termination by central government can occur. So, the central government can request the state government to terminate a prospecting license, exploration license, mining lease prematurely if they think that this is in the interest of the environmental preservation, flood control, pollution prevention, public health or safety of infrastructure which was not previously thought of, but in the process it was found that the mining operations as being carried out by the lease holder or the license holder is going is is threatening the environmental preservation or it is it may cause flood undue and the ah it can cause more pollution or it is a concern for public health or safety of any infrastructure then this can be terminated ok. Now, the premature termination by state government can similarly occur, if they also think that it is deemed necessary for the regulation environmental protection of the public safety.

Of course, in all these cases there is a right to be heard that means, when you are terminating say prematurely then of course, the lease holder will have the will get the reasonable opportunity to be to be heard in the court of law definitely that will be there. Now the restrictions on the grant of mineral concessions. So, the for the mineral concession they can only be granted to Indian nationals or companies as defined under the Companies Act 2013. However, the foreign parties can invest this is recent development like up to 100 percent in the equity of such companies through the automatic route under Indian foreign direct investment policy that can be. When you are issuing it, it is actually to ah Indian nationals or companies as defined under the Companies Act.

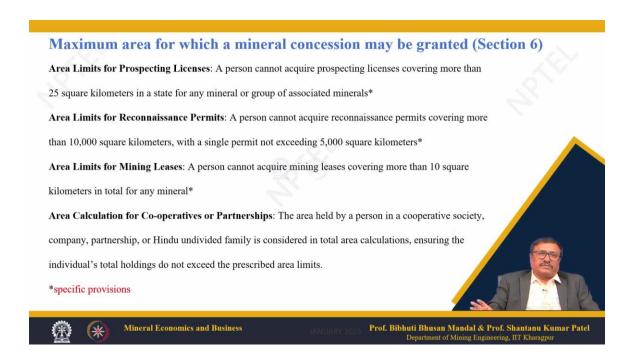
### **Restrictions on the grant of mineral concession (Section 5)**

- (1) Eligibility for Mineral Concession: Mineral concessions can only be granted to Indian nationals or companies as defined under the Companies Act, 2013. (However, foreign parties can invest up to 100% in the equity of such companies through the automatic route under Indian FDI policy.)
- (2) No mining lease shall be granted by the State Government unless it is satisfied that:
  - (a) there is evidence to show the existence of mineral contents in the area for which the application for a mining lease has been made in accordance with such parameters as may be prescribed for this purpose by the Central Government
  - (b) there is a Mining Plan duly approved by the Central Government, or by the State Government, in respect of such category of mines as may be specified by the Central Government, for the development of mineral deposits in the area concerned.





And of course, again no mining lease shall be granted by the state government unless it is satisfied that ah that there is evidence that means, there is proved exploration records and it has evidence to show that the mineral contents exist in that area. And for which the application for a mining lease has been made in accordance with the provisions of the law, which is prescribed by the central government. There is a mining plan approved by the central government or by the state government in respect of such category of mines. So, this is prescribed by the in the law itself. So, it has to be known, there has to be ample evidence that the mineral contents exist.



and properly prepared mining plan is submitted. These are major things there are other things like the fees to be submitted or other formalities are there, but these are two things which are major in related to the grant of mining leases. Now, what are the areas that you can give? How much how much area you can give? So, a person cannot acquire prospecting license covering more than 25 square kilometers in a state for any mineral or group of associated minerals.

About the re-economization permits, a person cannot acquire Reconnaissance permit covering more than 10,000 square kilometers large scale prospecting huge, but with a single permit you cannot go beyond 5000 square kilometer. So, total not more than 10,000 and a single permit will never exceed 5000. And for the mining leases, a person

cannot acquire mining leases covering more than 10 square kilometres in total for any mineral. This is the these are the limitations. So, area calculation for cooperatives we have rules.

# Periods for which prospecting licenses may be granted or renewed (Section 7) Maximum Duration for Reconnaissance or Prospecting: The period for which a

 Renewal of Prospecting License: A prospecting license can be renewed if needed, with the total duration not exceeding five years.

reconnaissance permit or prospecting license is granted shall not exceed three years.

Central Government Approval for Certain Minerals: For minerals listed in Part A
and Part B of the First Schedule, prospecting license renewal requires prior approval
from the Central Government.







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So, if it the area is held by a person in a cooperative society, a company partnership then accordingly the calculation has to be made. So, that we can ensure that the individuals individuals total holding do not exceed the prescribed area limits that we have discussed earlier. Now, there is a specific provisions there are rather specific provisions that say if you are if if we are limiting something like a 25 square kilometer or a mining mining area mining lease in 10 square kilometer. you may see that only 2 square kilometer or 3 square kilometers is left in that area which is which is not being granted mining lease because we are saying that it is only 10 square kilometer.

The government, in the interest of mineral conservation and development, may allow that extra small patch to be given in addition to the legal limits. So, in all respects of prospecting, reconnaissance, and mining lease, the government has kept a provision through this act and regulation that this additional part can be given if it is in the interest of the nation's development. Now, for renewal, etc., the maximum duration for reconnaissance prospecting for which a reconnaissance permit or prospecting license can be granted should not exceed 3 years. Now, renewal of a prospecting license, if required,

should not exceed 5 years, with the total duration at different stages not exceeding 5 years.

### Periods for which mining leases may be granted or renewed (Section 8)

The provisions of this section shall apply to minerals specified in Part A of the First Schedule (Coal and lignite) only.

- Maximum Mining Lease Duration: The maximum period for which a mining lease can be granted is 30 years, with a minimum of 20 years.
- Renewal of Mining Lease: A mining lease can be renewed for up to 20 years, but renewal
  requires prior approval from the Central Government.

### Important points to note:

Government Companies' Mining Lease Duration: The period for mining leases held by
government companies or corporations is determined by the Central Government, with potential
extensions for non-auctioned leases through additional payments as specified in the Fifth Schedule.





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And the central government approval for certain minerals states that for minerals listed in Part A and Part B of the first, prospecting license renewal requires prior approval from the central government. We will see these schedules separately and understand why Part A and Part B are so important, where we need prior approval of the central government. Now, for Section 8, the provisions of this section apply to the minerals in Part A of the first schedule, which means coal and lignite only. So, the minimum mining lease duration is

30 years, with a minimum of 20 years. So, the maximum period is 30 years, with a minimum of 20 years, and the renewal of a mining lease can be for up to 20 years, but the renewal requires prior approval of the central government. Now, the important points to note here are that government companies, the duration, the period of mining leases held by government companies or corporations, is determined by the central government. So, that cannot be compared with the general regulations that we have discussed here.

any leasse whether a coal or lignite is used for captive purpose that means, we have the coal mines and you are utilizing this coal for the purpose of a power generation. So, you

can sell such coal previously there was a huge restriction, but now you can sell such coal or lignite up to 50 percent of the total coal or lignite that you produce in a year after meeting the requirement of the end use plant like which is linked with the mine. And in such a manner or it as may be prescribed by the central government and on payment of the fees there has to be some additional payment if you are sailing outside after fulfilling the requirement of the captive use and this is specified in the sixth schedule of the act. Central government of course, can amend this fifth and sixth schedules by notification with reasons recorded in writing thereof. In section 8A that means the grant of mining leases the period

### Periods for which mining leases may be granted or renewed (Section 8)

- Any lessee may, where coal or lignite is used for captive purpose, sell such coal
  or lignite up to fifty per cent. of the total coal or lignite produced in a year after
  meeting the requirement of the end use plant linked with the mine in such manner
  as may be prescribed by the Central Government and on payment of such
  additional amount as specified in the Sixth Schedule
- Central Government Amendments: The Central Government can amend the Fifth and Sixth Schedules by notification, with reasons recorded in writing and effective from a specified date.







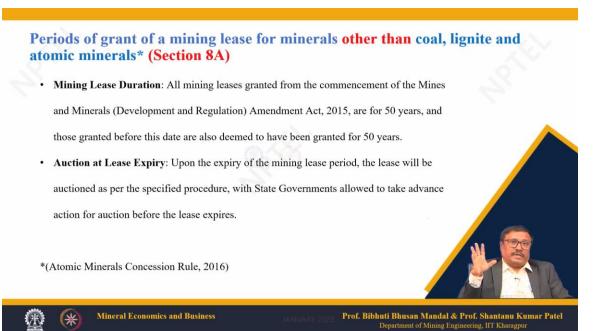
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other than coal, lignite and atomic minerals So, here you see the mining list duration here under this MMDR act 2015 are for 50 years and those granted before this date are deemed to have been granted for 50 years that means, it is a provision of the in the act. This is for prospective and also with the retrospective effect. Now, the auction at lease expiry, when the lease expires upon the expiry of the mining lease period the lease will be auctioned as per the specified procedure.

We in the beginning of this lecture I have mentioned about the mineral auction rule. So, there the detailed procedure is given, but in general this is for the information that when the lease expired according to this act or rules then the lease will be auctioned. So, it

will be open to all for other investors with say as per the specified procedure with state government allowed to take advance action. for auction before the lease expire.



That means, when that the lease expires the process of auctioning that lease will start the state government can start Now in certain cases for the atomic minerals concession rule this this auction and other procedures do not directly apply. So, this we will be discussing or rather mentioning from the atomic minerals concession rule 2016 later on. Now whatever we discussed here are mostly taken from the Indian Bureau of Mines site and the Ministry of Mines. The printed form of the rules and regulations are acts are very much available that we can go through.

And, and we have not covered everything. In fact, only a part of that has been covered here. We have, we have just started the major portions or major items under the Act and Rules. In the next class, we will again try to emphasize or select certain topics which are very much important in our statutory framework and then we will understand how important it is for the conservation and development of the mineral resources and reserves in our country

Thank you.

## **REFERENCES**

### Websites of

- INDIAN BUREAU OF MINES
- Ministry of Mines, GoI

