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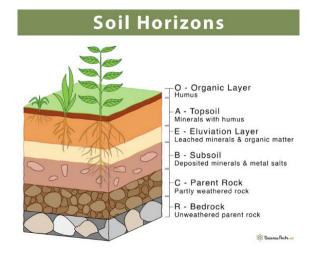
Jayanta Bhattacharya Hony. Chief Editor

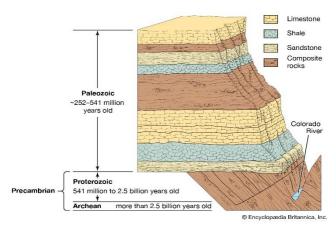
Legality™

Can Ordinary Earth be Considered as a Minor Mineral without any Qualification? Is asking Royalty for ordinary earth Justified? (Part-1)

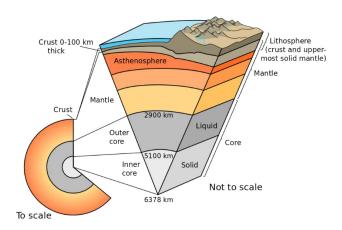
The Conundrum

In the path of infrastructure development digging and excavating earth or soil is often a choice that cannot be substituted. In many such events, the state governments are considering ordinary earth or ordinary soil or common earth/soil, as they may be referred in the documents, as "mineral" and hence applicable for royalty. This aspect is variously managed or mismanaged. Some state governments are encouraging the royalty value as per the tons of material to be excavated, to be included in the quotations and some are charging with retrospective effect, after the work order has been issued and then claiming the soil or earth as mineral and hence good for royalty claim. In the first case, where royalty payment by the company is directly pro-rata compensated — credit and debit — in the same work, it does not make any sense as it is a typical "zero-sum" case. In fact, this is very much inefficient; it is unnecessary paper work-yielding no purpose to the idea of royalty collection. In the latter case of retrospective payment, as being directed to pay after the work order has been issued, it fails to satisfy the condition to explain that the vendor should be transparently told of all the liabilities before being engaged for a work. It is constitutionally unfair to the vendor to press for any payment or service beyond the scope of the work order; it only encourages all kind of corruption and under-valuation. As many as 10 construction sites are faced with this conundrum where lengthy litigations have started to decide what should be done or what should have been done.





Soil and Rock



Earth Layer by Layer

What is a Mineral

In one way, Cambridge dictionary describes the word mineral as "a valuable or useful chemical substance that is formed naturally in the ground." (https://dictionary. cambridge.org/dictionary/english/mineral). The Oxford Dictionary considers "a substance that is naturally present in the earth and is not formed from animal or vegetable matter, for example gold and salt...." (https:// www.oxfordlearnersdictionaries.com/definition/english/ mineral#:~:text=%2F%CB%88m%C9%AAn%C9%99r% C9%991%2F-

,%2F%CB%88m%C9%AAn%C9%99r%C9%99l%2F,co untry%20rich%20in%20mineral%20resources) . Other definitions are rather inconsequential to this discussion. If you consider "valuable or useful" in the context, then the buyer or seller shall have the opportunity either to monetize the substance or to get in-kind advantages, in exchange of the substance. Or in other words, if a substance is so used that the buyer or the user does not have any monetary advantage or is so used that another entity does not get any financial, situational or any other transactable advantage, it cannot be called a mineral. In the same count, if the society at large does not give any value to a substance, inorganic or organic, available in the earth, how can that be considered as mineral?

Is Ordinary Earth a Mineral

The 2017 list of minor minerals that the State Government is entitled to putroyalty as levy is shown as the following (https:// ibm.gov.in/index.php?c=pages&m=index&id=1027, accessed on 7th March, 2022):

30.1	Barytes
30.2	Bentonite
30.3	Calcite
30.4	Corundum and Sapphire 🗹
30.5	Diaspore d
30.6	Dolomite
30.7	Dunite&Pyroxinite 4
30.8	Felspar
30.9	Fireclay
30.10	Fuller's Earth 🖟
30.11	Granite
30.12	Gypsum and Selenite 📶
30.13	Kaolin, Ball Clay, Other Clays and Shale $\overline{\blacksquare}$
30.14	Laterite d
30.15	Marble
30.16	Mica
30.17	Ochre de la contraction de la
30.18	Other Calcareous Materials
30.19	Pyrophyllite 4
30.20	Quartz and Other Silica Minerals
30.21	Slate, Sandstone and Other Dimension Stones
30.22	Talc, Soapstone and Steatite

N.B. dis related to some more information but on the day was not accessible.

The above list does not show any particular reference as earth as "mineral". The author does not know of any other Indian reference to this effect.



Common minerals



Rocks (Courtesy: U.S. National Park Service)

Legality TM can Ordinary Earth be Considered as a Minor Mineral without any Qualification? Is asking Royalty for Ordinary Earth Justified? (Part-2)

Court Intervention and Interpretation

In the Supreme court of India, civil appellate jurisdiction civil appeal no. 2088 of 2007 M/s. SomDatt Builders Ltd. as Appellant Versus Union of India and Ors. as respondents, the court said,.. The core issue that calls for determination in these appeals is whether 'ordinary earth' used for filling or levelling purposes in the construction of embankments, roads, railways, buildings has validly been declared to be a 'minor mineral' by the Central Government vide notification dated February 3, 2000 issued under Section 3(e) of Mines and Minerals (Development and Regulation) Act, 1957 (for short, 'Act, 1957'). Various demand notices are said to have been issued to the appellant towards royalty for lifting 'ordinary earth' necessitating them to approach the High Court of Judicature at Allahabad challenging the constitutional validity of notification dated February 3, 2000 issued by the Central Government. They also challenged the amendment brought in the First Schedule by the State of Uttar Pradesh in Uttar Pradesh Minor Minerals (Concession) Rules, 1963 (for short, 'Rules, 1963') fixing royalty for the use of 'ordinary earth' at the rate Rs. 4/- per cubic meter. "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 Section 3(e), Central Government issued the following notification on February 3, 2000: "G.S.R.95(E).--In exercise of the powers conferred by clause(e) of Section 3 of the Mines and Minerals (Development and Regulation) Act, 1957 (67 of 1957), the Central Government hereby declares the 'ordinary earth' used for filling or levelling purposes in construction of embankments, roads, railways, buildings to be a minor mineral in addition to the minerals already declared as minor minerals hereinbefore under the said clause.". The Supreme Court observed that a substance has to be mineral before it can be notified as a 'minor mineral' pursuant to the power under Section 3(e) of the Act of 1957 is not in dispute. Whether 'ordinary earth' is a mineral is the primary question for consideration. The question is a little intricate one because the definition of 'minerals' in the Act, 1957 is not of much help in finding answer to the question. The word 'mineral' has come up for judicial interpretation from time to time.

In a case in a different jurisdiction, in Lord Provost and Magistrates of Glasgow v. Farie, the issue before the House of Lords was whether clay is included in 'other minerals' under the Waterworks Clauses Act, 1847. Lord Halsbury, L.C said: 1 (1888) LR 13 Appeal Cases 657 4 "There is no doubt that more accurate scientific investigation of the substances of the earth and different modes of extracting them have contributed to render the sense of the word "minerals" less certain than when it originally was used in relation to mining operations. I should think that there could be no doubt that the word "minerals" in old times meant the substances got by mining, and I think mining in old times meant subterranean excavation. I doubt whether in the present state of the authorities it is accurate to say that in every deed or in every statute the word "minerals" has acquired a meaning of its own independently of any question as to the manner in which the minerals themselves are gotten." Lord Watson in his opinion stated that "mines" and "minerals" are not definite terms: they are susceptible of limitation or expansion, according to the intention with which they are used.

Other Judicial Observations

- 1. ".....The word 'minerals' undoubtedly may have a wider meaning than the word 'mines'. In its widest signification it probably means every inorganic substance forming part of the crust of the earth other than the layer of soil which sustains vegetable life."
- 2. "......It is in the first place wrong to assume that mines and minerals must always be subsoil and that there can be no minerals on the surface of the earth. Such an assumption is contrary to informed experience. In any case, the definition of mining operations and minor minerals in Section 3(d) and (e) of the Act of 1957 and Rule 2(5) and (7) of the Rules of 1963 shows that minerals need not be subterranean and that mining operations cover every operation undertaken for the purpose of "winning" any minor mineral. "Winning" does not imply a hazardous or perilous activity. The word simply means "extracting a mineral" and is used generally to indicate any activity by which a mineral is secured. "Extracting", in turn, means, drawing out or obtaining. A tooth is 'extracted' as much as is fruit juice and as much as a mineral. Only, that the effort varies from tooth to tooth, from fruit to fruit and from mineral to mineral."
- 3. "......The expression "minor mineral" as defined in Section 3(e) includes 'ordinary clay' and 'ordinary sand'. If the expression "minor mineral" as defined in Section 3(e) of the Act includes 'ordinary clay' and 'ordinary sand', there is no reason why earth used for the purpose of making bricks should not be comprehended within the meaning of the word "any other mineral" which may be declared as a "minor mineral" by the Government. The word "mineral" is not a term

of art. It is a word of common parlance, capable of a multiplicity of meanings depending upon the context. For example, the word is occasionally used in a very wide sense to denote any substance that is neither animal nor vegetable. Sometimes, it is used in a narrow sense to mean no more than precious metals like gold and silver. Again, the word "minerals" is often used to indicate substances obtained from underneath the surface of the earth by digging or quarrying. But this is not always so as pointed out by Chandrachud J. (as he then was) in Bhagwan Dass v. State of U.P."

The Technical Debate

- 1. Any earth material will consist of soil that is composed of sand, silt, clay and gravels that are mostly differentiated in terms of sizes. Unless separated from each other, the mixture can be termed as "ordinary earth." Together as ordinary earth they have no value or use in building and construction. So unless the separation and classification, claimed by the company or proven, or provided as scope in any contract document, the ordinary earth cannot be gainfully used where it has the stated sole objective to construct the tunnel. Further, ordinary earth can neither replace or nor can be used as substitute or additive in the concrete, used for making tunnel.
- 2. The claim "...the construction borehole report and photographs clearly shows that it is not ordinary earth..." can be technically contested. Borehole report and photographs do not in any way point or represent to the attributes required for economic or value consideration. Such considerations can only be done with appropriate chemical analysis that can identify the mineral constituents of any economic value or commercial scope. Only the concentration and association of the mineral constituents can point to the economic value either to be gained or to be lost.
- 3. Unless strength and other chemical properties like binding, expansion and corrosion are known, which in this case was never reported, building stones, gravel and ordinary clay must not be advised for use in construction.
- 4. Sand in earth and soils is only one of the many constituents. And unless separated and classified, and found or certified good for use, it is not advised for use either industrial or construction purpose.

5. For any material to be qualified as "building stone," it has to have certain physical properties like strength, roughness and attachment, etc. as well as some chemical properties like corrosion-neutrality or volumetric expansion, that need to be ascertained.

The Role of a Geologist

A qualified geologist by training certify the general presence of soil and rocks, their conditions, physical location, association and depth, etc. as well as their age of formation and origin, etc. If he has referred something with prospects of "mining or winning" that he or she cannot do without referring to any certified chemical analysis determining the concentration of minerals/elements present, their association, and the likely available methods of separation-all the parameters required to know the "value" of the mineral. The value is what connected to the concepts of mining or winning of minerals. Without ascertaining the value and worth of the mineral, no prudent organization will consider anything as mineable. For example, "the element aluminum" is plentily available in the ordinary earth, yet it is not considered as "mineral" as on date, worth winning or mining, as aluminum cannot be economically separated or extracted from the soil or the earth. Even for the materials used for building and construction, a chemical analysis is required to find whether it is soluble, corrosive or prone to corrosion, etc., before being considered fit for safe to use in building construction and for "winning".

Unclassified rocks, ordinary earth, fragments of any origin — igneous or metamorphic, or sedimentary are not recommended for any use, without the knowledge of the inherent properties like strength, abrasion, corrosion and other geotechnical/geotechnical properties. Their origin and general composition do not qualify them for use in building and construction without expert approval on the basis of the properties.