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2MEOGA

Is Excavating and Transporting "Ordinary" Earth Legally Tenable for Paying Royalty: the Context and the Case?

Jayanta Bhattacharya

Editor-in-Chief

1.0 Brief Statement of Facts

M/s. CEC-ITD CEM-PPL Joint Venture (hereinafter referred to as 'the querist') is a joint venture of M/s. Paradip Projects Limited, M/s. ITD Cementation India Ltd. and M/s. Continental Engineering Corporation. The querist has been awarded Package 4 of the Mumbai Metro Underground Line 3. The scope of the work awarded to the querist would involve the excavation and construction of underground tunnels for the Metro Trains as well as the excavation and construction of underground Metro stations. I have received a Brief for Opinion from the querist vide Mr. Sriram Sridharan M/s. Lakshmikumaran & Sridharan Attorneys through e-mail dated 22.10.2021. I have been asked to provide my technical opinion in relation to certain queries relating to Writ Petition No. 334 of 2021 filed by the querist before the Hon'ble Bombay High Court.

I, Dr. Manmatha Bhattacharya, state that I am a Professor of the Department of Mining Engineer, IIT Bharatpur from February 1987 till the present date. I was also the Chairman, School of Environmental Science and Engineering, IIT Bharatpur. My qualifications are as follows: a graduate and post doctorate degree in Mining engineering as well a Doctorate in Mining Engineering. Hence, on account of my qualifications and my experience in the field of Mining Engineering. I state that I am qualified to provide the present opinion. M/s. Lakshmikumaran & Sridharan Attorneys have provided me a copy of Writ Petition No. 334 of 2021 and a copy of the Affidavit-in-Reply date 10.03.2021 filed by Mr. Arun Alag, Additional Collector, Mumbai City. I have perused the papers and proceedings of the said Petition and the Affidavit-in-Reply and have made myself fully conversant with the facts of the case. Hence, I state that I am fully conversant with the facts of this case and able to opine as follows.

The querist has informed me of the following facts so as to enable me to provide my opinion in the present matter:

i. The querist is a Joint Venture formed by M/s. Paradip Projects Ltd. with M/s. ITD Cementation India Ltd. and M.S. Continental Engineering Corporation.
ii. Vide Tender dated 26.11.2014, the Mumbai Metro Rail Corporation Limited (hereinafter referred to as "MMRCL") invited Bids for the excavation and construction of underground tunnels for the Mumbai Metro and the excavation and construction of underground Metro stations. Vide Bid dated 12.05.2015, the querist made its offer to MMRCL.
iii. The querist's bid was accepted and Contract dated 24.08.2016 was executed between the querist and MMRCL. Vide the said Contract, the querist was awarded with Package 4 of the Mumbai Metro Underground Line 3. The querist's scope of work extended to the excavation and construction of underground tunnels from Worli to Dharavi as well as the construction of metro stations at Sidhivinayak, Dadar and Shitladevi Temple.

iv. Vide Letter dated 13.01.2017, the querist had applied to the Additional Collector (R/B), Mumbai (hereinafter referred to as the "Collector") for the permission for excavation and disposal of excavated material for the design and construction of underground sections at Sidhivinayak, Dadar and Shitladevi Temple and associated tunnels. Similarly, vide letter dated 18.02.2017, the querist had applied for the permission of excavation at its Naya Nagar Shaft Launching site and the disposal of the excavated muck.

v. Crucially, I am informed that the material being excavated by the querist is being disposed as waste material and is not being re-used by the querist or being commercially sold/exploited by the querist.

vi. Subsequently, I am informed that a lot of correspondence was exchanged between the querist and the Collector wherein the bone of contention appears to be the payment of royalty on the material excavated by the querist. I am informed that the minute details of these correspondences are not pertinent for the provision my technical opinion.

vii. In a nutshell, I am informed that it is the view of the querist that it is not liable to pay royalty on the excavations being carried out by it. More specifically, I am informed that it was the view of the querist that the excavations being carried out by it were not liable to the levy of royalty under the provisions of the Mines and Minerals (Development and Regulation) Act, 1957 ("MMDR Act") or the Mineral Concession Rules, 1960 (hereinafter referred to as the "Central Mining Rules") or the Maharashtra Minor Mineral Extraction (Development and Regulation) Rules, 2013 (hereinafter referred to as "State Mining Rules"). The querist also relied on the judgment of the Supreme Court in Promoters and Builders Association of Pune v. State of Maharashtra & Ors. (2015 12 SCC 736) to support its view.

viii. However, I am informed that the Collector did not accept the view expressed by the querist. Hence, I am informed that since the querist did not wish to face any practical difficulties in the execution of its project such as stoppage of trucks or other problems which might lead to stoppage of work, delay in the execution of the project, etc., the querist, without prejudice to its rights and liabilities, paid, under protest, the royalty that would be payable on the materials excavated by it in the course of the construction of the underground tunnels and the Metro stations.

ix. Subsequently, I am informed that a plethora of legal proceedings took place which are not directly pertinent to present opinion. I am informed that these legal proceedings pertained to the claim of the querist for refund of the royalty paid by it under protest.

x. I am informed that the Collector has passed an Order dated 24.12.2019 rejecting the querist's application for refund of the royalty paid by it. In this Order dated 24.12.2019, I am informed references have been made to a Report dated 16.12.2019 by a Dr. Suyog Pratap, Geologist, Geology & Mining Directorate, Kolhapur. I am informed that the querist has challenged the validity of the Order dated 24.12.2019 by the Writ Petition No. 334 of 2021 before the Hon'ble Bombay High Court.

I am informed that my opinion is being sought primarily in relation to certain technical observations made by the Collector in the Order dated 24.12.2019 and the Report dated 16.12.2019 of Dr. Suyog Pratap.

2.0 Queries

2.1 In light of the above, the querist has raised the following queries:

2.1.0.1 In light of the fact that the term 'ordinary earth' is not defined anywhere in law, can the material excavated by the querist be considered as ordinary earth?

2.1.0.2 Is the Collector right in contending (Para No. 28 of the Affidavit-in-Reply) that at the depth where excavation was conducted, it is impossible that only ordinary earth will be found?

2.1.0.3 Does the material excavated by the querist fall under any of the items mentioned in the various Notifications issued by the Central Government notifying various minor minerals or under any of the items mentioned in the Schedule I appended to the State Mining Rules?

2.1.0.4 Whether the material excavated by the querist would amount to 'building stone'?

2.1.0.5 Whether the activities conducted by the querist be said to amount to the excavation of 'stone dust'? What would be the meaning of the term 'stone dust' since it has not been defined anywhere in the law.

2.1.0.6 Are the observations made in the reports of Dr. Pratap technically sound?

2.1.0.7 Are the observations made at Para Nos. 30 to 33 of the Reply technically sound?

3.0 My Opinion

3.1 Query (i):

3.1.1 Any earth material upto the depth of about 30m will consist of soil that is composed of a mixture of sand, silt, clay and gravels that are mostly differentiated in terms of sizes. In my opinion, unless separated from each other, such a mixture can be termed as "ordinary earth".

3.1.2 Such "ordinary earth" (i.e. an unseparated mixture of sand, silt, clay and gravels) has no value or use in the construction of buildings or other construction activities.

3.1.3 In my opinion, unless there is a separation of the various constituents of ordinary earth and classification of the same, the ordinary earth cannot be gainfully used. This is especially so when the sole objective is the construction of underground tunnels and stations. Ordinary earth can neither replace nor can it be used a substitute/additive in the concrete used for making tunnels.

3.1.4 In my opinion, the material excavated by the querist can indeed be considered as 'ordinary earth'.

<Question: What about the excavation beyond the depth of 10m. As per borehole reports, this portion is mainly rocks such as basalt, breccia, etc. Would the breaking and removal of these layers also be removal of 'ordinary earth'? Even if you feel it is rock (and not ordinary earth), would it fall under any of the entries in the Notifications/Schedule?>

In all cases unless the rock is specified of a certain type and is supposed to possess a quality for certain use, it cannot be in any entries. It should be the responsibility of the State to find out the quality and characteristics for a certain use/value of the excavated material that would entail the material to invite royalty. If found after the work order and during excavation, the State must also provide permission for gainful use while asking for royalty.

3.2 Query (ii):

3.2.1 In Para 28 of the Affidavit-in-Reply, it has been stated as follows:

3.2.2 In my opinion, the claim that *"… along with borehole report and photographs clearly shows that it is not ordinary earth …"* can be technically contested.

3.2.3 Borehole reports and photographs do not in any way point or represent to the attributes required for economic or commercial exploitation. This 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 of the material excavated.

<Question: As asked earlier, even if these are not commercially valuable, would this amount to 'ordinary earth'? In other words, even with the rock components, would you call it ordinary earth? Even if you feel it is rock (and not ordinary earth), would it fall under any of the entries in the Notifications/Schedule?>

The presence of some rocks in soil/earth is a common thing. Mere occurrence of rocks is not sufficient to qualify more than ordinary earth. No, as per my understanding and reading, even if it is rock it would not fall under any entries in the Specifications/Schedule without having it said as qualifying for certain use.

3.3 Query (iii):

3.3.1 I have gone through the definition of the term 'minor minerals' in Section 3(e) of the MMDR Act, the various Notifications issued by the Central Government under Section 3(e) and the Schedule appended to the State Mining Rules.

3.3.2 In my opinion, the material excavated by the querist does not fall under Section 3(e) or any of the items mentioned in the various Central Government Notifications or Schedule I appended to the State Mining Rules.

3.3.3 This is for the reason that the materials excavated by the querist would be a mixture of various things such as sand, soils, gravels, clay, etc. This is clear from the borehole reports also. Unless they are separated and classified, they would not be classifiable under the various entries specified in the Notifications or the Schedule. Rather, the material excavated would be covered by nothing other than the term 'ordinary earth'.

3.3.4 Unless the various constituents are separated and unless strength & other chemical properties (such as binding, expansion and corrosion) are known, the material excavated by the querist can never be classified as gravel or clay or sand, soil etc. Without such an exercise (i.e. separation, classification and certified good for use), such material can never be used in in industrial construction activities.

3.4 Query (iv):

3.4.1 Rule 2(g) of the State Mining Rules defines a 'building stone' to be any rock or mineral which is used as building or construction material and includes any minerals specified in the Schedule appended to the Act.

3.4.2 In my opinion, for any material to be qualified as 'building stone', it has to have certain physical properties like strength, roughness and attachment, etc. It must also have some chemical properties like corrosion-neutrality or volumetric expansion. These properties need to be ascertained.

3.4.3 Even if building stone is at all available in the excavated materials, it has to be separated and washed before use in any type of building construction.

3.4.4 In the present matter, neither were the stones perpetrated from the excavated material at any time nor were they physically and chemically tested at any time.

3.4.5 Therefore, the material excavated by the querist is not "building stone".

3.5 Query (v):

3.5.1 The activities conducted in the tunneling work amount to mechanized tunnel boring or blasting by explosives. Both produce fugitive dusts that are small in mass and volume. Normally they are of the sizes more or less close to 10 micrometer or less. During the excavation activities, the dusts remain suspended in air and are carried to the exhaust for the relief of the workers, by the ventilating air for safe disposal. They are too little in mass and volume to be used for any commercially gainful purpose and therefore they cannot be termed as "stone dust".

<*Question: What would be the meaning of stone dust in your opinion?*>

Stone dust would normally be known as particulates of the size of 1-100 micrometers. Lesser than 10 micrometer particulates will remain suspended under normal ventilation velocity inside a tunnel. Higher sized particulates would normally settle on the floor after a short time in suspension.

3.6 Query (vi):

3.6.1 Dr. Pratap is a qualified geologist. As a geologist by training he can 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", he cannot do that without referring to any certified chemical analysis determining the concentration of minerals/elements present, their association, and the likely available methods of separation (i.e. all the parameters required to know the "value" of the mineral).

3.6.2 The word "winning" is ordinarily known and understood to provide a transactional and financial exchange with some "profit motive" for any party or parties. But if the material is merely removed from one site, transported and dumped in another site, it cannot be claimed that such activity amounts "winning".

3.6.3 The value is what is 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 wining or mining, as aluminum cannot be economically separated or extracted from the soil or the earth.

3.6.4 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 use in building construction and for "winning".

3.7 Query (vii): Is ordinary earth generally acceptable/valuable as building material?

3.7.1 No. They are not technically sound. 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 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. Hence, classification of them as anything other than 'ordinary earth' would not be correct.

Caveat and Concern

The above case points to a situation where a commercial venture can suddenly be burdened with tax for which it was not prepared, informed or had kept no provision in the budget. At the same time the state can also lose a lot of royalty revenue if it has not qualified soil, sand, stone and

even minerals that qualify for such charges. Both the state and the central governments must look into the matter very carefully to be justified in its actions, that are legally tenable.

Final words

Chronic shortage of expert manpower in the 2MEOGA sector has forced the persons to don the role for which they are not trained. The obvious long run tragedy is that while all the governments both center and the state ,while overzealously looking for mining royalty and tax they have not been mindful and sincere in employing trained standard practitioners in proper place. As a result, the non-experts began donning the role of experts-brining in desperation and confusion to the parties. Poor hapless small miners are facing the most of the brunt.

Disclaimer: The study reports an actual case. The names have been changed. The author is not interested in sensationalizing the topic but it is a serious issue. Author does not intend to cast aspersions on any individual or company.