

## **Query No. 26**

**Subject: Recognition of inventories of iron scrap embedded in slag.<sup>1</sup>**

### **A. Facts of the Case**

1. A Company (hereinafter referred to as ‘the Company’), which is a Maharatna Public Sector Undertaking (PSU), is the leading steel-making company in India having five integrated steel plants and three special steel plants. The Company produces both basic and special steels for domestic construction, engineering, power, railways, automotive and defence sector and also for sale in export markets. The turnover of the Company in the year 2019-20 was approximately Rs. 62,646 crore.

2. Iron ore contains various impurities. During the process of converting iron ore into molten iron (Hot Metal) in the blast furnace, the impurities in the ore are removed in the form of slag. Blast furnace slag is generated in hot, molten condition and is transported to the slag yard, where it is dumped and stored. The slag contains a small proportion of iron scrap (around 2-3% by weight) which is extracted contractually on regular basis through magnetic separators and either consumed internally in the production process or sold in market through auction. Thus, the embedded iron scrap in the slag has economic value to the company.

3. The slag yard in one of the plants of the Company is situated on a large, flat-topped elevated base of slag on which multiple railway tracks have been laid. The locomotives carry the slag ladle to the edge of the dump and unload the slag. The total volume of slag in this yard is about 10 million cubic meters. The recovery of iron scrap from this slag yard was not done for many years since the area is unsafe for working as molten slag is dumped from a height, and also because excavation of slag from the base would result in collapse of the railway track. Since the embedded iron scrap in the slag was not extractable for reasons mentioned above, and therefore not available for gainful utilisation, the company did not value the inventory of such embedded iron scrap.

4. However, during the financial year 2019-20, one side of the slag yard had become unsafe for dumping due to the sharp curvature of the railway track. Accordingly, the plant management declared the track as abandoned, and removed the track altogether so that locomotives could not travel on that line. As a result, the entire slag dump became available for processing and recovery of scrap.

5. The Company then conducted a sample survey of the quantity of scrap available in the dump. The volume of the entire slag dump was accurately surveyed by drone measurement. Around 2500 tonnes of slag was processed and the embedded iron scrap was recovered magnetically. Based on the weight of scrap recovered, the percentage of embedded scrap in the total slag dump was assessed and recognised as inventory.

6. The querist has stated that the above recognition of inventory was done in accordance with paragraphs 6(a), 6(c) and 8 of Indian Accounting Standard (Ind AS) 2, ‘Inventories’, which state as follows:

**“Inventories are assets:**

- (a) held for sale in the ordinary course of business;**
- (b) in the process of production for such sale; or**
- (c) in the form of materials or supplies to be consumed in the production process or in the rendering of services.”**

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<sup>1</sup> Opinion finalised by the Committee on 18.1.2021 to 20.1.2021.

“8. ... Inventories also encompass finished goods produced, or work in progress being produced, by the entity and include materials and supplies awaiting use in the production process ...”.

7. The joint statutory auditors accepted such valuation of inventory in the financial statements for the financial year (F.Y.) 2019-20 after giving due consideration to the above referred paragraphs. Joint statutory auditors in their independent auditors’ report on the financial statements of the Company for the financial year 2019-20 had drawn attention to the above-mentioned valuation under Emphasis of Matter.

8. However, Comptroller and Auditor General of India (C&AG), while conducting the supplementary audit for the F.Y. 2019-20, commented that, “Valuation of scrap embedded in the slag is not justified because slag, in its present form, can neither be sold nor used for consumption in production process. Since there was no physical existence of iron/steel scrap ... in hand as on 31<sup>st</sup> March, 2020, it can not be considered as inventory in terms of para 6 of Ind AS 2.”

### **B. Query**

9. In view of above, the opinion of the Expert Advisory Committee of the Institute is sought as to whether the iron and steel scrap embedded in slag meets the definition of ‘inventories’ as per Ind AS 2.

### **C. Points considered by the Committee**

10. The Committee notes that the basic issue raised in the query relates to recognition of stock of iron and steel scrap embedded in the slag as ‘inventory’ in the financial statements of the Company. The Committee, has therefore, considered only this issue and has not examined any other issue that may arise from the Facts of the Case, such as, classification of inventory as by-product, co-product or joint product, appropriateness of methodologies used for assessing percentage of scrap embedded in the slag, measurement and valuation of embedded scarp in the total accumulated slag at the plants/units of the Company, revenue recognition in respect of sale of iron scrap, appropriateness of accounting for the accumulated iron and steel slag at the time of their origination, impairment, if any, relating to rail tracks or inventory, accounting treatment of any other product etc. The Opinion expressed hereinafter is purely from accounting perspective and not from legal perspective. Further, the accounting Standards referred hereinafter are Indian Accounting Standards, notified under the Companies (Indian Accounting Standards) Rules, 2015, as amended/revised from time to time.

11. With regard to the issue raised, the Committee notes the definition of ‘inventories’ as per Indian Accounting Standard (Ind AS) 2, ‘Inventories’:

**“Inventories are assets:**

- (a) held for sale in the ordinary course of business;**
- (b) in the process of production for such sale; or**
- (c) in the form of materials or supplies to be consumed in the production process or in the rendering of services.”**

From the above, the Committee notes that inventories are assets which are held for sale in the ordinary course of business or in the production process of such sale or to be consumed in the production process. The Committee notes from the Facts of the Case that the querist has mentioned that small portion of iron scrap contained in the slag is extracted contractually on regular basis through magnetic separators and either consumed internally in the production process or sold in market through auction and thus, has economic value to the Company. However, at one of the plants of the Company, the recovery of iron scrap from the slag yard

was not done for many years since the area is unsafe for working as molten slag is dumped from a height, and also because excavation of slag from the base would result in collapse of the railway track. From this, it appears that till 2018-19, although the iron scrap embedded in the slag in that plant was always saleable/useable to the Company, the same could not be used or sold due to the method/process selected for storing the scrap/slag. Therefore, till F.Y. 2018-19, the Company did not value such embedded iron scrap. However, from the financial year 2019-20 onwards, due to change in conditions at the slag yard (removal of the track), the stock of slag could be extracted and became available for processing. Thus, the iron scrap is now a valuable resource from which future economic benefits are expected to arise to the Company and can be considered as an 'asset' for the Company. As far as the nature of such asset, the Committee is of the view that although the slag, in its present form, can neither be sold nor used (as also commented by CAG); however, since the slag generated in the original process of production of iron ore would be further processed before generating and selling the final product, it can be considered to be in the process of production for sale and therefore, should be considered as 'inventories' as per paragraph 6(c) of Ind AS 2.

#### **D. Opinion**

12. On the basis of above, the Committee is of the opinion that the iron and steel scrap embedded in slag meets the definition of 'inventories' as per Ind AS 2, as discussed in paragraph 11 above.

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