

**CUSTOMS, EXCISE AND SERVICE TAX APPELLATE TRIBUNAL  
MUMBAI**

**WEST ZONAL BENCH**

**CUSTOMS APPEAL NO: 87903 OF 2014**

[Arising out of Order-in-Original No: CCP/ADJ/DKS/14/2013 dated 28<sup>th</sup> March 2014 passed by the Commissioner of Customs (Preventive), Mumbai.]

**Reliance Infrastructure Ltd**

Reliance Energy Centre, Western Express Highway  
Santacruz (E), Mumbai - 400055

*... Appellant*

*versus*

**Commissioner of Customs (Preventive)**

New Custom House, Ballard Estate, Mumbai - 400001

*...Respondent*

APPEARANCE:

Shri Prakash Shah, Advocate for the appellant

Shri Sydney D'Silva, Additional Commissioner (AR) for the respondent

**CORAM:**

**HON'BLE MR C J MATHEW, MEMBER (TECHNICAL)**

**HON'BLE MR AJAY SHARMA, MEMBER (JUDICIAL)**

**FINAL ORDER NO: A /86077/2023**

DATE OF HEARING:

27/02/2023

DATE OF DECISION:

05/07/2023

PER: C J MATHEW

The issue for resolution in this appeal of M/s Reliance

Infrastructure Ltd, against order<sup>1</sup> of Commissioner of Customs (Preventive), Mumbai, is their cavil that it was not legally proper to have substituted the classification claimed by them leading to the adjunct detriment of recovery of duties of customs, arising from denial of concessional rate of duty, in imports effected by them between 17<sup>th</sup> March 2012 and 28<sup>th</sup> February 2013. Both sides, and not unexpectedly, lay claim to conformity of the impugned goods with specific descriptions corresponding to the two tariff items in controversy. In the factual matrix of the rival claims, there are three preliminary aspects, all legal, that may be relegated to insignificance only at the cost of erroneous perspective of the controversy itself.

2. The first of these stems from the structuring of the First Schedule to Customs Tariff Act, 1975, with international consensus of enumeration at the 'four digit' and 'six digit' level - referred to as 'heading' and 'sub-heading' - leaving further inclusions at the 'eight digit' level, referred to as 'tariff item', for national determination, and, more particularly, the overarching governance of the General Interpretative Rules to the Import Tariff in identifying the most apt tariff item therein. That hierarchical ordering of articles brooks no variation and, in the scheme of design, goods under import must correspond, or as nearly as possible, to the descriptions at each level before such at the next subordinate level. It may not be out of place to

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<sup>1</sup> [order-in-original no. CCP/ADJ/DKS/14/2013 dated 28<sup>th</sup> March 2014]

also take note of the foundation statement, viz,

*'1. The titles of Sections, Chapters and sub-chapters are provided for ease of reference only; classification shall be determined according to the terms of the headings and any relative Section or Chapter Notes and, provided such headings or Notes do not otherwise require, according to the following provisions:.....'*

in The General Rules for the Interpretation of Import Tariff in the Customs Tariff Act, 1975.

3. The other, pertaining to sequence of onus should there be dissonance, is the rule of engagement laid down by the Hon'ble Supreme Court in *HPL Chemicals Ltd v. Commissioner of Central Excise, Chandigarh [2006 (197) ELT 324 (SC)]* thus

*'28. This apart, classification of goods is a matter relating to chargeability and the burden of proof is squarely upon the Revenue. If the Department intends to classify the goods under a particular heading or sub- heading different from that claimed by the assessee, the Department has to adduce proper evidence and discharge the burden of proof. In the present case the said burden has not been discharged at all by the Revenue.....'*

and thus, in *Hindustan Ferodo Ltd v. Commissioner of Central Excise, Bombay [(1997) 2 SCC 677]*,

*'It is not in dispute before us as it cannot be, that onus of establishing that the said rings fell within Item No. 22-F lay upon the Revenue. The Revenue led no evidence. The onus*

*was not discharged. Assuming therefore, the Tribunal was right in rejecting the evidence that was produced on behalf of the appellants, the appeal should, nonetheless, have been allowed.'*

to ensure that there is no unfillable vacuum or, by exigency, allow resort to any inapt tariff item merely upon crossing 'point of no return' by rejection of classification claimed by importer in bill of entry..

4. It is also evident from the observation of the Hon'ble Supreme Court, in *Collector of Customs, Bombay v. Business Forms Ltd [2002 (142) ELT 18 (SC)]*, thus

*'2.... Clearly, therefore, the HSN explanatory notes are entitled to far greater consideration than the tribunal has given here.'*

in the context of the order impugned therein having declined to place reliance on such authority, and relegating it to 'persuasive value' at best, that the *Explanatory Notes* to the Harmonized System of Nomenclature (HSN) are relevant for resolving any difficulty in classification.

5. In the grounds of appeal, the appellant has been at pains to suggest, and develop, the proposition that the specific description corresponding to the tariff item claimed by them must be allowed to prevail over the relative vagueness of the description corresponding to

the tariff item that customs authorities preferred. We are unable to concede to this line of argument as the elongation of the codes, to afford uniformity on transition to 'eight digit' enumeration, by The Customs Tariff (Amendment) Ordinance, 2003 with effect from 1<sup>st</sup> February 2003 and so inconvenienced the proposition of the appellant, contrived 'sub-heading' descriptions, if only for want of progeny descriptions at the 'tariff item' level attributable to policy disinclination of the national administration, to be fastened thus; that, however, does not detract from its primal assignment as a 'sub-heading' amenable to comparison only with any other 'sub-heading' under the same heading in the First Schedule to Customs Tariff Act, 1975. For our conclusion thus, we rely upon the General Explanatory Notes in the Customs Tariff Act, 1975, for elucidation of the architecture of the listing, making it abundantly clear that the descent of '---' / '----' from '-' lies inevitably only through '--' in the classification hierarchy. The decisions cited in support of this proposition of the appellant have not been rendered in similar context.

6. There also appears to be some conceptual commotion in the manner in which the tariff 'easement' for coal used in generation of energy has been drawn up by policy makers for we find that, over a few years, the grant of exemption intended thus

*'184. Domestic producers of thermal power have been under stress because of high prices of coal. I propose to ease the*

*situation by providing full exemption from basic customs duty and a concessional CVD of 1 per cent to Steam coal for a period of two years till March 31, 2014...'*

by the Hon'ble Finance Minister in Budget speech of 2012 and revision thereon

*'166. Steam coal is exempt from customs duty but attracts concessional CVD of one per cent. Bituminous coal attracts a duty of 5 per cent and CVD of 6 per cent. Since both kinds of coal are used in thermal stations, there is rampant misclassification. I propose to equalize the duties on both kinds of coal and levy 2 per cent customs duty and two per cent CVD.'*

by the Hon'ble Finance Minister in Budget speech of the following year also yields no clarity on intent. We are unable to comprehend if it was the rampant misclassification consequent to deliberate distinguishment of 'bituminous coal' and 'steam coal' to the advantage of the latter or the belated realization of unintended discrimination between 'bituminous coal' and 'steam coal' owing to difference in duty structure which prompted policy re-direction. In either event, it would appear to us that the internationally accepted grading of 'coal', transcending the trifurcation in the Indian tariff, was not taken into account. It is not for us to delve into the mysteries of policy making that fail to manifest intent in the instruments of consequence and so we do not; but we cannot fail to record our impression that a dispute which need not have been is and, more

especially, sequestered in the canvass of 'bituminous coal' in the Harmonized System of Nomenclature (HSN) thus broadened, unintentionally, by tax policy.

7. With this backdrop, we may now proceed to ascertain the facts leading to the controversy over the import of coal of Indonesian origin between 17<sup>th</sup> March 2012 and 28<sup>th</sup> February 2013. The appellant had filed eleven bills of entry for clearance of 5,75,389.741 MTs of 'steam coal', valued at ₹ 276,73,40,865, corresponding to tariff item 2701 1920 of First Schedule to Customs Tariff Act, 1975 and claiming effective rate of duty extended by notification no. 12/2012-Cus dated 17<sup>th</sup> March 2012 (at sl. no. 123). Along with the declaration, 'certificate of sampling and analysis (CoSA)' from load port furnished by the consignor, M/s Century Exports Ltd, Hongkong and, as spelt out in the supply contract requiring compliance with American Society for Testing and Materials (ASTM)/ISO standards, evincing 'gross calorific value (GCV)' of less than 5810 kcal/kg on 'as received basis (ARB)' was submitted. The case of the customs authorities is that the 'gross calorific value (GCV)' of the coal, in reality, exceeded 5833 kcal/kg, the benchmark prescribed in sub-heading notes of chapter 27 of First Schedule to Customs Tariff Act, 1975, for fitment as 'bituminous coal' corresponding to tariff item 2701 1200 of First Schedule to Customs Tariff Act, 1975. Proceedings were initiated by notice dated 19<sup>th</sup> April 2013 for recovery of ₹

29,35,83,216 under section 28 of Customs Act, 1962 along with interest as applicable. Learned Counsel for applicant informed that appellant had, during the course of investigations and 'under protest', paid ₹ 50,00,000, ₹17,47,97,225 and ₹ 11,37,89,966 on 30<sup>th</sup> March 2013, 12<sup>th</sup> April 2013 and 21<sup>st</sup> August 2013 towards duties of customs with ₹ 1,91,05,040 and ₹ 3,64,27,173 on the later two occasions towards interest, thus totaling remittance of ₹ 34,91,19,404.

8. As seen from the records, and also from submissions of Learned Authorized Representative, coal is categorized in the American Society for Testing and Materials (ASTM) standards by rank, according to the degree of metamorphism, or progressive transformation from 'lignite' stage, which, by the range of physical and chemical properties, assist in predicting 'behaviour' of coal at the stage of consumption. The 'certificate of sampling and analysis (CoSA)', in addition to 'gross calorific value (GCV)' for each sample, included moisture content – total and inherent – ash content, volatile matter content and sulphur content. We notice that the 'volatile matter', in each and every sample, varies between 34.98 kcal/kg and 42 kcal/kg leaving no room for doubt that, owing to 'volatile matter (VM)' being more than 14% spelt out in sub-heading note 1 in chapter 27 of First Schedule to Customs Tariff Act, 1975, the impugned goods are other than 'anthracite coal' of sub-heading 2701 11 of First Schedule to Customs Tariff Act, 1975. We also notice that 'gross

calorific value (GCV)' varies between 4293 and 5811 kcal/kg and, thereby, appearing to extricate it from the purview of 'bituminous coal' of sub-heading 2701 12 of First Schedule to Customs Tariff Act, 1975, with threshold of 5833 kcal/kg, as spelt out in sub-heading note 2 in chapter 27 of First Schedule to Customs Tariff Act, 1975. Yet, the dispute does not end there for, according to customs authorities, the 'as received basis (ARB)/(as dry basis (ADB)' values of the coal at load port, after adjustment for factoring in the other details in 'certificate of sampling and analysis (CoSA)', was in excess of the benchmark of heating potential in the relevant Note in chapter 27 of First Schedule to Customs Tariff Act, 1975. And on that, the dispute turns.

9. It is also worth noticing that the importer claims to have been declaring its import under the residual subheading of 2701 19 of First Schedule to Customs Tariff Act, 1975 and it was only with the advent of notification 12/2012-Cus dated 17<sup>th</sup> March 2012, exempting 'coking coal' (at sl no. 122, across the spectrum of heading 2701) and 'steam coal' (at sl no.123, specific to tariff item 27011920 and subject to 'additional duty' of 1%) while charging 5% ad valorem (at sl no.124, across the spectrum of 'coal, whether or not pulverized, but not agglomerated'), only to be withdrawn from the following year, that customs authorities, till then oblivious to the 'hotter' distinction among coal types, save that of 'coking coal' with its exceptional

status, as notification no. 66/2004-Cus dated 9<sup>th</sup> July 2004 imposed uniform 25% *ad valorem* on coal across the three sub-headings in heading 2701 of First Schedule to Customs Tariff Act, 1975. The appreciation of the technical aspects of coal typology in the impugned order must be viewed through that prism.

10. Learned Counsel for appellant submits that the quality standards, including that of 'gross calorific value (GCV)', are contractual aspects of a commercial transaction and that bills of entry had, with reference to 'certificate of sampling and analysis (CoSA)' of load port furnished by their suppliers, declared accordingly. These, he demonstrated, comprised four shipments in which the 'gross calorific value (GCV)', reported on 'as received basis (ARB)', and the remaining seven, on 'air dried basis (ADB)', were below the threshold in the sub-heading notes relied upon in the show cause notice. He contended that no other construction, including that of inexpert testing organizations such as the Central Revenue Control Laboratory (CRCL), need be placed on technical compliance with the contracted type of coal, *viz.*, 'steamed coal', intended for utilization in generating power. Drawing attention to the compilation of various indices in the tabular presentation of load port analysis, he submitted that no test, advertent to a different result, has been relied upon by customs authorities and that only a Parr formula, culled out of some reference work unrelated to the rubric of classification, has been cited in the

findings of the adjudicating authority; he contended that the purpose behind resort to the formula, other than the obvious one of shifting classification for denial of exemption, is not comprehensible either in the impugned order.

11. He further submitted that the only justification in the impugned order for resort to mathematical derivation of 'gross calorific value' above the threshold *supra* was a report of Joint Director, Central Revenue Control Laboratory (CRCL) that the 'ash content', 'sulphur content' and 'Btu' were to be applied on 'air dried basis' for the adjustment of which, the investigators unearthed the Parr formula; he argued that the adjudicating authority had not considered it necessary to explain the factoring of 1.80 to kcal/kg value for deploying Btu.

12. He submitted that usage of 'steam coal' for generation of power has more to do with average size and could be sourced from any of the three rank classification – anthracite, bituminous and sub-bituminous – while specifically excluding 'coking coal' and 'lignite' from consideration and that ASTM has designated D388 as standard with 'agglomerating' as character of relevance in anthracite and higher level bituminous for distinguishment from sub-bituminous on its 'non-agglomerating' character. His argument is that 'sub-bituminous' is not a derivative of 'bituminous' coal but in a class of its own permitting further divisions thereto. Citing the authority of Coal Production and

Preparation Report<sup>2</sup>, he argued that ‘coking coal’ is, invariably, ‘bituminous’ and if the sub-heading note in chapter 27 were to be the determinative criterion, separate description in the Indian tariff is redundant.

13. It was further contended that residual moisture is of no significance in determining values of coal and that of the several variants of ‘gross calorific value (GCV)’, viz., ‘as received basis (ARB)’, ‘air dry basis (ADB)’ and ‘dry basis’, the last is a theoretical measure as per Kentucky Geological Survey. In the absence of a proper understanding of the product, mechanical replication of the proposal in the notice by the adjudicating authority in the impugned order is, in his view, far too inadequate to be credible. He urged acceptance of the report of M/s Stewart Surveyors and Assayers Pvt Ltd which has endorsed the testing undertaken at load port.

14. He relied upon the decision of the Tribunal in *Coastal Energy Pvt Ltd v. Commissioner of Customs, Central Excise & Service Tax, Nagpur [2014 (310) ELT 97 (Tri-Bang)]*, which also disposed off appeals of *M/s Davangere Sugars Co Ltd* and *M/s Maruthi Ispat & Energy Pvt Ltd*, and in particular to

‘69. As regards the submission that the burden of proof as to why the product is not steam coal is on the Revenue, it is felt that it is not for the Department to show that what is

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<sup>2</sup> [United States of America, Federal Department of Energy]

*imported is not steam coal. Department has to correctly classify the same. Once the Department depending upon the definition and specifications comes to the conclusion that the product is bituminous coal and it fulfils the definition given therein and in view of the settled law that when there is a specific definition available in the tariff, trade parlance is not relevant. What is required the Department is to show that what is imported fulfils the definition as given in the tariff and if in trade parlance the product has another name, that could not make a difference to the classification issue. In any case, it is nobody's case, that bituminous coal is always called as steam coal. In fact, steam coal is also bituminous coal but vice versa is not always true. Therefore if the Department is able to show that what is imported is bituminous coal, in our opinion, the Department need not travel further especially in view of the fact that bituminous coal can be coking coal or steam coal also and tariff has chosen to give them separate headings and therefore it becomes necessary to classify coal imported as coking coal or steam coal only if and when it does not covered by the definition of bituminous coal given in the tariff.*

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74. *As regards the submission that when chapter note refers only to the particular calorific value limit, how the Department has adopted gross calorific value, the determination of calorific value is according to the standard literature. Further detailed arguments were also pressed as regards the tests conducted and whether it should be as determined basis or as received basis. The objection was that if the Department conducts the test on the basis of ADB (As Determined Basis) instead of ARB (As Received Basis), it would represent the samples of imported coal with its natural*

*and inherent moisture level. However, in all these submissions, we did not find one submission that the appellants' own test reports conducted at load port show that the classification cannot be done under bituminous coal. In the absence of a categorical submission that the appellants load port report or own tests were entirely different and according to those tests, the product could not and did not come under the bituminous coal, we consider that other issues really are not that important and are not required to be considered. Such a categorical submission was not made by the appellants in this case. A lot of technical points were urged regarding the difference between ARB and ADB, gross calorific value, calorific value etc. but the main point as to whether the load port report or the appellants test report was in accordance with bituminous coal or not was not mentioned.'*

to contend that, with the distinguishment of facts therein from that of the appellant, the findings would not also apply to them. It was also pointed out that the Bangalore bench had, and at the stage of disposal of application for stay, in *Maheshwari Brothers & others v. Commissioner of Central Excise & Service Tax*<sup>3</sup> found itself unable to arrive at the same categorical conclusion and deemed it appropriate to remand the matter back for fresh proceedings. He argued that the reference for constitution of a larger bench in *Tamil Nadu Generation & Distribution Corporation Ltd v. Commissioner of Customs, Tuticorin [2015 (316) ELT 305 (Tri-Chennai)]* was also indicative of the weak foundations of the case of customs authorities for alternative

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<sup>3</sup> [misc order nos. 22821-22828/2014 dated 28.10.2014]

classification.

15. Learned Counsel also deprecated the manner in which the appellant was literally forced to remit ₹ 34,91,19,404 during the pendency of investigation towards alleged duty and interest liability even as it could well have awaited adjudicatory outcome. He contended that this undue haste was not warranted as the appellant had substantial investment in a project that was not going anywhere else and as the issue in dispute was of such technical determination as to even hint at any motive to the contrary. He submitted that the entire exercise of Revenue evidenced *mala fides* as declaration of 'steam coal' in bills of entry for their regular imports in the past had not been objected to except with grant of exemption and, that too, with no dispute over 'end use' of the imported coal. He argued that if every policy intent of the State was to be fettered by whims of customs formations to jeopardize financial stability of critical infrastructure facilities, the State and the people are the ultimate sufferers. According to him, a salutary message of dire consequences alone would curtail tax over-enthusiasm that goes for the jugular of industry.

16. The contention of Learned Authorized Representative is that the claim of precedence for 'steam coal' at the tariff item level over 'bituminous coal' at the sub-heading level, though dressed up as tariff

item, is not consistent with the General Rules for Interpretation of the Import Tariff in Customs Tariff Act, 1975 and that delineation of 'bituminous coal' below 'anthracite coal' by the definitional formula permits no deviation at all by concession to trade parlance or ultimate deployment. Countering the technical presentation made by Learned Counsel, he argued that 'inherent moisture' requirement necessitates elimination of surface moisture which 'as received basis (ARB)' cannot be held out to have. He placed reliance on

*'The dry, mineral-matter free basis for coal analysis is calculated from the coal sample and expressed as though total moisture and mineral water have been removed..... Mineral matter is the parent material from which ash is derived upon combustion. The minerals associated with it are altered during combustion, resulting in a different, generally lower weight for ash than for its source minerals.*

*The moist mineral-matter free basis for coal analysis is calculated from the coal sample and expressed as though the natural inherent moisture is present but mineral matter has been removed...Moist coal does not include visible water on the surface.'*<sup>4</sup>

17. He urged us to discard the contention of the appellant that the tests, carried out at their instance by the laboratory at Dahanu, indicating 'gross calorific value (GCV)' below threshold confirmed the ones at load port as the tests in India were, admittedly, in accordance with IS *desiderata* and only ASTM defined tests mattered.

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<sup>4</sup> [United States Energy Information Administration; <https://www.eia.gov>]

Reliance was placed on the decision of the Hon'ble Supreme Court in *BK Industries v. Union of India* [1993 (65) ELT 465 (SC)] holding that

*'The Finance Minister's speech is not law. The Parliament may or may not accept his proposal. Indeed, in this case, it did not accept the said proposal immediately but only a year later. It is only from the date of repeal that the said levy becomes inoperable.'*

insofar as it was contended that the intent of exempting all coal deployed for power generation is evident in the Budget speech and he further contended that the decision of the Hon'ble Supreme Court in *Commissioner of Customs, Kolkata v. Rupa & Company Ltd* [2004 (170) ELT 129 (SC)] does not come to the aid of the appellant. We do not wish to make any comments on the marginalization of a significant element of parliamentary procedure for approval of 'ways and means' for the government by reference to judgements, such as in *re BK Industries*, concerned with repeal of a levying law as opposed to a responsible statement by a high functionary of the State before the supreme collegium of citizen power on intent to grant exemption from levies through an executive empowerment and only because, to us, the dispute, as well as the resolution, lies entirely within the technical domain of estimation of values concatenated with the simplicity that is the lifeblood of tariff listing.

18. At the core of the dispute is the assertion of the adjudicating

authority that 'steam coal' of a particular kind is classifiable only in tariff item corresponding to description as 'bituminous coal' and that the scheme of segregation espoused in the relevant sub-heading notes permits determination with reference to any formula that is mutually agreed upon between buyer and seller. The claim of the appellant that the tests, in accordance with prescription of American Society for Testing and Materials (ASTM), at load port and that, in accordance with IS stipulation, at port of discharge, conformed to the exclusion by application of the very same sub-heading note was repelled in the impugned order.

19. There is no dispute that essential values, commonly used for estimation of worth of coal and for conformity with the regulatory framework, are available in the reports that were generated at load port; there is no contention that the values were fraudulently employed in the reports or that the reports pertain to some other lot. Indeed, there is no allegation of any taint to the 'certificate of sampling analysis (CoSA)', as such, or that any of the certifications indicate 'gross calorific value (GCV)' to be in excess of the threshold; indeed, the re-determination has been worked on certain interpretations of the values in the formula which Revenue claims to be implicit in the formulation as incorporated as sub-heading notes in chapter 27 of First Schedule to Customs Tariff Act, 1975. The formulation referred to are the specifications for standardizing test reports, *i.e.* 'volatile

matter on dry, mineral-matter free' basis and 'calorific value on moist, mineral-matter free' basis which, according to the impugned order, requires re-adjustment according to the state of the sample.

20. It would, however, be misconception and, indeed, presumptuous for customs authorities to convince that standards, such as American Society for Testing and Materials (ASTM) and Indian Standard (IS), have been devised for ease of tax administration. The standards have existed, and guided by commercial imperatives, for decades in an uncoordinated trading universe and its availability for the customs tariff to draw upon for elaboration of the hierarchy of enumeration in the chapter for coal is only fortuitous. There is no formulation for 'steam coal' in the First Schedule to Customs Tariff Act, 1975 and, though, one does for 'bituminous coal', dichotomizing of 'steam coal' within that is not readily apparent thus opening up possibility for dispute for that very reason. And it has done so in this very instance.

21. Coal is a bounty of Nature that occurs as localised concentrations and, by its very remoteness from places of deployment, implies voluminous shipments with appropriate commercial stake. Coal draws worth from its combustion capacity – by direct application of heat in manufacturing process or indirectly by generation of steam used for deriving energy of one sort or another. The heating capacity

is proportional to carbon content which, being a natural element, not only varies from source to source but is also contingent upon presence of retarding extraneous matter. A contemporary handicap is the polluting potential of extraneous matter, particularly sulphur. Coal is, essentially, dead vegetation whose decay has been terminated by pressure of layering over that pushes existing debris further into the earth and, over a period of time, to such depths that it acquires its typical solidity. Thus, uncut peat transforms into lignite and thereafter to anthracite after passing through the phase of bituminous. Several factors combine in accelerating the progression before it reaches inaccessible depths and the most significant of all is temperature; it is, therefore, not necessary that the most evolved coal is found only at the deepest layers and it is these factors that influence location of the coal types at different places.

22. Anthracite coal is considered superior and relatively scarce; its characteristic of very high carbon permits deployment at the high end of the spectrum in sophisticated equipment. Bituminous coal is most widespread and is primarily used in heating for generation of thermal power; the oozing of the tarry substance, from which the name is derived, renders such coal unsuitable in direct application that would clog equipment. The higher end variant of this coal may, by a process of controlled heating, yield 'coke' (met coke) that could supplement anthracite coal use and is categorised as 'coking coal' which, possibly,

owing to potential for transformation beyond bituminous has earned a separate entry for customs classification too. Possibly, 'steam coal', which has specific potential too, was separately categorised in the customs classification at the national level in similar policy formulation. No one, however, has chosen to ascertain that from an authentic source and, consequently, we are left that less enlightened; all that we are able to confirm is that evident prejudice against availment of exemption has coloured fair determination of that critical aspect.

23. Leaving aside the handicap, unlike 'coking coal' having meaning assigned to it in the exempting notification, of lack of definition of 'steam coal' in the tariff and unavailability of policy inputs on intent of incorporating separate entry for 'steam coal', supposedly of impliedly low 'gross calorific value (GCV)' below sub-heading corresponding to 'others' in heading 2701 of First Schedule to Customs Tariff Act, 1975, it would appear that vagaries of distribution in coal formation, involving logistical complexities and deployment uncertainty, necessitated establishment of standards for contractual compliance in high stake commercial negotiations. We are, here, concerned with 'bituminous coal' and its most significant commercial characteristic, as incorporated in the tariff too, is 'gross calorific value (GCV)' or the heating potential. Traditionally designated as Btu, it is the heat required to raise the temperature of

one pound of water by one degree Fahrenheit and is expressed as 'Btu/lb' or as 'kcal/kg' in the metric system. The accepted test procedure, known as 'proximate analysis' of a sample is expressed as 'fixed carbon', 'ash', 'volatile matter' and 'moisture' content with 'ultimate analysis', which is not relevant here, isolating the elements that make up 'volatile matter' in the coal sample.

24. The sub-headings in chapter 27 of First Schedule to Customs Tariff Act, 1975 adopted definitions consistent with the standards developed, and accepted, over the long period of increasing dependence on coal for industry, transportation and energy. The evaluation of 'fixed carbon', at or more than 86% (on dry, mineral matter free basis) with 'volatile matter' constituting the remaining 14% or less, as the determinant of 'anthracite' bears the insignificance of 'heating value' insofar as coal of this rank is concerned. For the rest, it is "gross calorific value" of 5833 kcal/kg (on moist, mineral matter-free basis) that segregates 'bituminous coal' from 'other coal' for the purposes of setting tariff level enumeration in accordance with national priorities. This distinction, by coal rank, is of insignificance if tariff policy chooses not to distinguish among them; it is the rate on the right-hand side that assigns importance to this distinction and it is a responsibility upon distinguishment, when appended to 'rate fitment', for the intent to be unambiguous. Therefore, attaching too much of relevance, in the absence of standard for reference, to the

terms, such as on 'dry, mineral matter free basis' and 'on moist, mineral matter-free basis', is demonstrative of lack of appreciation of the purpose of that designating. It is carbon that, upon ignition, provides heat and to the extent that there is hardly any residue, with potential for clogging the system, description in terms that place emphasis on absence of moisture and mineral matter is appropriate. On the other hand, for coal of lesser rank, the residue could impact 'cleanliness' of operation and even cause dispersal that may not be regulation-compliant while moisture is clear indicator of the compensatory quantity requirement for generating desired level of energy; hence the weightage to moisture. Above all, it must be remembered that coal is not subjected to beneficiation at the consumer end and is utilized as it is which, generally, implies inherent moisture content and mineral matter as received. The adjudicating authority has placed too much premium on the said expressions in the sub-heading notes without considering relevance to the 'certificate of sampling and analysis (CoSA)' or the significance of formula, and more especially, in conversion. Doubtlessly, the investigation, and we use the word advisedly as there has been no scrutiny of the tabulated information by the adjudicating authority who has merely approved the arrangement in Annexure B to the show cause notice, are happy with their mathematical reformulation which carries that derived 'gross calorific value (GCV)' beyond the threshold to reaches of higher duty

liability.

25. A measure is no indication of the measuring system and to believe that all parameters in a test report emanate from a single test, amenable to cross-computation for deriving results, is delusional. Values are not the same as composition. This adjuring is necessary when an adjudicatory determination has, apparently, proceeded conversely. 'Gross calorific value' has a definitional standard that is not performed easily and, even if possible, lacks precision; for a kilogram or pound of water to be heated through a degree in Celsius or Fahrenheit scale for determining heating potential would be test of patience rather than a test of content. Hence the instrument known as 'bomb calorimeter' has been engineered for that purpose. The retardants to heating potential of carbon in coal are moisture and volatile matter; the content of the former is determined by weight and of the latter by weight of the ash residue. These ascertainments serve the purpose of estimating the quantity of coal required for obtaining the desired energy level and not for determination of 'gross calorific value' even if a series of experiments may assist in estimating commercial value of coal at a particular source. To perceive conversion formulas as capable of deriving values from composition percentage is neither mathematically acceptable nor scientifically credible. And that has occurred in the present dispute.

26. From what we have seen and heard so far, there is no controversy for the 'proximate analysis', undertaken at load port and conforming to ASTM, indicated 'gross calorific value (GCV)' to be below the threshold for classification as 'bituminous coal' in chapter 27 of First Schedule to Customs Tariff Act, 1975. However, the notation – ARB/ADB for 'gross calorific value (GCV)' and ADB for 'inherent moisture' and 'volatile matter' did. The key contention of customs authorities, in the show cause notice is that

*'9....calculation of calorific value on mineral moist free basis is based on parr formula..'*

as per ASTM D388 specification which warrants adjustment when sample is drawn on 'as received basis (ARB)' or 'air dry basis (ADB)' as was in the impugned consignments. Applying the formula in reverse, the 'gross calorific value (GCV)' was re-worked to arrive at numbers above the threshold and thus deny the classification as well as the benefit of exemption. Bereft of all the hype and the contours of the science involved, the issue for resolution is the appropriateness of the conversion effected within the purpose for which Parr formula was devised. It also appears from

*'11. As per the Coal Classification System of the US Geological Survey Circular 891....*

*Formulae*

*Dry, Mineral matter free FC = 100 (FC-0.15S)/(100-(M+1.08A+0.55S))*

*Dry, Mineral matter free VM = 100 – Dry, Mineral matter free FC.*

*Moist mineral free Btu = 100(Btu-50S)/(100-(1.08A+0.55S))*

*Where*

*Btu = Gross calorific value, Btu/lb*

*FC = Fixed carbon, %*

*VM = Volatile Matter, %*

*M = Moisture*

*A = Ash content, %*

*S = Sulfur, %*

*\*The quantities are all on inherent moisture basis.*

*12. The values of Ash content, sulphur and Btu are to be applied on Air Dry Basis (ADB) as confirmed by the Joint Director, Customs and Central Revenue Control Laboratory (CRCL) vide letter F. No. JNCH/T.o./2012-12 dated 07.03.2013.'*

narrated in the show cause notice, that the 'conversion formula' for 'gross calorific value (GCV)' has been applied by deploying values post 'certificate of sampling and analysis (CoSA)' to arrive at the revisions.

27. However, the adjudicating authority has not ventured to consider the 'chicken and egg' analysis of the method adopted for

measuring ‘gross calorific value (GCV)’ of coal. That this is a ‘mathematical value’, expressed in per kilogram terms to a specific outcome, *viz.*, the raising of temperature of a kilogram of water by one degree on the Celsius scale – a theoretically cumbersome and haphazard process save for the invention by Marcellin Berthelot, the founder of organic chemistry – in bomb calorimeter appears to have been ignored; that such determination from a sample of powder, bereft of moisture and mineral matter, needed adjustment only for the missing element in the qualification was also equally ignored in the eagerness to carry out algebraic permutation for arriving at the desired result to charge higher rate of duty. Several fatal errors have been committed in the impugned proceedings in consequence.

28. In Annexure B of the show cause notice, adopted as a given in the adjudication order, ‘gross calorific value (GCV)’ – on ‘air dry basis’ – was converted, at a certain point, into ‘gross calorific value (GCV)’ – BTU – by applying a factor of 1.8 without any reasoning for the same and, indeed, the objective of converting a measure in SI to a measure of the British system only to be reversed at a later stage by converse application of the same factor is mystifying to say the least. We can only conjecture that the investigators had a penchant for playing with figures. The sole difference between the two measures is that temperature of one pound-weight of water (instead of one kilogram) is raised by one degree Fahrenheit (instead of Celsius) to be

expressed in terms of pound-weight (instead of kilogram) of coal and while, undoubtedly, both temperature scale and weight are amenable to conversion using appropriate formula, the attempt at conversion for applying that which is claimed to be ASTM stipulations betrays lack of comprehension of both science and mathematics.

29. There is, in addition, lack of comprehension about the conversion of 'gross calorific value (GCV)' in load port 'certification of sampling and analysis (CoSA)' – for being on 'as received basis (ARB)' – into 'gross calorific value (GCV)' – on 'air dry basis (ARB)' by application of factor that coal with inherent moisture bears to moisture free coal which should have sufficed to arrive at 'gross calorific value (GCV)' 'on moist basis'; that, however, would not have suited the investigators for that proved to be below the threshold of '5833 kcal/kg' in the sub-heading notes. Therefore, even going by their own calculation, the investigators carried out a superfluous exercise beyond 'gross calorific value (GCV)' on 'air dry basis (ADB)' to contrive a measure that has no rationale.

30. All that was required to be done was to convert 'moisture free mineral matter free' 'gross calorific value (GCV)' - obtained on bomb calorimeter to inclusion of 'inherent moisture' to qualify in the manner expressed in the sub-headings without having to convert to the British (BTU) system and to be reversed subsequently. The formulae,

sourced from the World Coal Institute, intended for conversion of moisture factor among available measure – on air dry, dry and as received basis – without the need for the supplementary formulae in Annexure B to the show cause notice that the investigators have, incorrectly, presumed to be a chain of computations to arrive at the correct, as it were, heating value.

31. Without ascertaining the method by which ‘gross calorific value (GCV)’ was determined for inclusion in the ‘certificate of sampling and analysis (CoSA)’ issued at load port and in the absence of any finding that this was not directly deduced from bomb calorimeter and as content of ‘moisture’, ‘ash’ ‘volatile matter’ and ‘fixed matter’ in coal sample will not, of itself, derive the heating capacity as ‘kcal/kg’, there is no reason to suppose that it was not ‘steam coal’ to be classified elsewhere. Consequently, the formula devised for reverse working from ‘moisture free mineral matter free’ basis ‘gross calorific value (GCV)’ for computation in terms of any one or other description in sub-heading notes in chapter 27 of First Schedule to Customs Tariff Act, 1975 is not required to be worked out sequentially as the table in Annexure B has done to obtain outcomes that are inexplicable, unfounded and lacking in rationale.

32. It is also disturbing that, in the circumstances of a technical dispute arising from entitlement to exemption accorded for a

particular objective by the Government of India with deployment of imported goods for that purpose by the appellant not being in doubt at all, the customs authorities forced deposit of duty and interest without awaiting adjudicatory outcome. Section 28 of Customs Act, 1962 does not countenance such extra legal measures. A statutorily established agency of the State enforcing its writ thus without according respect to process laid down by law whittles away not only its authority but also the authority of the law itself. The appellant has also been denied access to substantial business asset thereby and it is only appropriate that, in addition to consequential relief, the cost of funds made available to the State without the authority of Article 265 of the Constitution be recompensed with interest of 12% per annum and within four weeks of receipt of this order. That, in our view, is the only rein that customs authorities may take to heart and desist from pursuing such unreasonable and irresponsible solutions.

33. It is, thus, clear that, on ‘as received basis (ARB)’ and ‘air dry basis (ADB)’, the ‘gross calorific value (GCV)’ – comprising both types of moisture and inherent moisture respectively – are below the threshold of ‘bituminous coal’ in all the samples. The attempt by the adjudicating authority to classify the impugned goods within the description ‘bituminous coal’, corresponding to tariff item 2701 1200 in the First Schedule to Customs Tariff Act, 1975, fails. The claim for classification as ‘steam coal’ corresponding to tariff item 2701 1920

of First Schedule to Customs Tariff Act, 1975 remains undisturbed. Eligibility for benefit of notification no. 12/2012-Cus dated 17<sup>th</sup> March 2012 cannot be denied.

34. The impugned order is, therefore, set aside to allow the appeal on the terms set out above.

*(Order pronounced in the open court on 05/07/2023)*

**(AJAY SHARMA)**  
***Member (Judicial)***

**(C J MATHEW)**  
***Member (Technical)***

*\*/as*