

EPCA Report No 107**Pet Coke: Report on application by Indian Steel Association; BALCO and Nobel Cause Foundation****December 12, 2019**

On 18.11.2019, the Hon'ble Supreme Court directed EPCA to file its report on the following applications in four weeks. This report is filed in compliance with the directions:

IA Nos 100194, 102169 and 108253/2018 (Applications for intervention/permission/directions and clarification of order dated 26.7.2018 on behalf of Indian Steel Association

IA Nos 113743 and 113750/2019 (Applications for implement and directions on B/O M/S Bharat Aluminium Company Ltd

IA Nos 153800 and 153803/2019 (Application for intervention and directions on B/O Noble Cause Foundation with SLP © No 13208/1998

1. Examination of issues in IA Nos 100194, 102169 and 108253/2018: Applications for intervention/permission/directions and clarification of order dated 26.7.2018 on behalf of Indian Steel Association

The Indian Steel Association is seeking permission for usage of imported low-sulphur pet coke in steel plants. It is their contention that steel plants do not use pet coke as a fuel but as an additive.

They have categorised this use as an additive saying “feedstock is more of a raw material used for the manufacture of a product. In the case of coke ovens, coal is the feedstock for making coke in coke ovens. Additive on the other hand refers to any substance added in small quantities to the raw material to improve the quality of the product. In the case of steel industry pet coke is an additive to coal, which is added to improve the quality of coke, the product from coke ovens.”

Furthermore, it states, that the use of imported pet coke for feedstock has been permitted by the Hon'ble Supreme Court vide its order dated 13.12.2017,

and that the case of steel industry is very similar as its uses of low-sulphur imported pet coke is as an additive and not as a fuel.

EPCA has made its position clear in its previous reports (see list below) that pet coke is an extremely polluting fuel and its use should be severely restricted and stopped.

December 1, 2016: EPCA report on Furnace Oil (FO) and Pet coke recommended for the consideration of the Hon'ble Court a ban on sale and use of FO and pet coke in NCR because of high sulphur and toxic metal content.

April 4, 2017: EPCA report No 72 examining the reports of CPCB and NEERI on the pollution potential of pet coke and recommending, once again, a ban on the distribution, sale and usage of FO and pet coke, other than in cement industry where it is used as a feedstock and not fuel.

November 9, 2017: EPCA report No 76 responding to applications filed by different sectors in industry that they should be allowed to use pet coke and FO as either cost of alternative fuel was high or it was unavailable. EPCA recommended that the Hon'ble Supreme Court's order of October 24, 2017, banning the use of pet coke and FO from November 1, 2017 should not be modified as the cost of pollution from the use of dirty fuels would be extremely high and alternatives were available.

July 11, 2018: EPCA report No 87 in response to the affidavit filed by MoEF&CC on 9.7.2018 regarding the issue of ban on import of pet coke and the use of pet coke for gasification and in the steel industry. EPCA had recommended for the consideration of the Hon'ble Court that the government may be asked to take a decision on the ban on imported pet coke at the earliest. On the permission for use of pet coke for gasification by Reliance, it recommended that it could be allowed but with the use of domestic pet coke. On the issue of use by steel industry, EPCA took the view that "this should not be permitted as it will open floodgates in terms of use of pet coke and defeat the very purpose of the ban."

October 6, 2018: EPCA report No 91 on the question of import of pet coke for aluminium, calciner and steel industry. EPCA recommended for the consideration of the Hon'ble Court that while calciner and aluminium industry

may be allowed to import pet coke for use as feedstock, this permission should not be extended to the steel industry.

August 16, 2019: EPCA Report No 101 regarding applications of M/s Rain CII Carbon Vizag Ltd asking for increase in the annual import allocation of pet coke and by Guwahati Carbon Ltd and others regarding the non-sale of domestically produced low-sulphur anode grade pet coke. EPCA had recommended, for the consideration of the Hon'ble Court, that the order of 9.10.2018 should not be modified and that the DGFT position on this matter of allocation should be maintained. EPCA had also recommended that MoPNG may be directed to discuss how the sale of domestically available low-sulphur pet coke could be increased and to revise its policies accordingly.

As can be seen from the above, EPCA has taken the view that the use of pet coke should be restricted, if not banned completely, because of its high pollution impact. It has also recommended use strictly when it has been for feedstock and not as a fuel but has cautioned that any exemption will lead to more industries asking for the use of this polluting fuel, as it is cheaper.

The question now is if the use of imported pet coke as an "additive" should be permitted.

EPCA has discussed this matter with MoEF&CC and representatives of the steel association in meetings. EPCA has also considered CPCB's 2018 study of M/s JSW which found that while in non-recovery type oven as much as 19 per cent of the sulphur content in the coal blend was directly released as SO₂ emissions, this was reduced to 2 per cent in the recovery type oven. This when the blend of pet coke was only 5 per cent. Based on this study, it could be argued that low-sulphur pet coke of up to 5 per cent could be allowed in plants with recovery type coke ovens.

CPCB has also noted, as has EPCA in its previous reports, that monitoring of Hydrogen Sulphide concentration levels in the coke oven plant remains a challenge. This would make monitoring of emissions difficult and therefore, it would mean checking both quantity of the pet coke used in plants and ensuring that the plants have recovery-type coke ovens and also ensuring that the monitoring of emissions is done from coke-oven plants.

EPCA is concerned that the issue of definition of 'additive' verses 'fuel' remains undecided and unclear. The fact is that MoEF&CC and CPCB had recommended

that the cement industry should be allowed to use pet coke as it was a 'feedstock' and not 'fuel'. This was accepted by EPCA and directed by the Hon'ble Supreme Court. Subsequently, only those industries, namely lime kiln, aluminium, graphite and calciner were permitted the use of imported pet coke because of their use was categorised as 'feedstock' – raw material for manufacture of their product.

Now, another category of 'additive' is being sought to be included. There is no clear definition of this. In this case, pet coke is 'added' to the coke oven – which is where coal is combusted – and the definition that the Indian Steel Association has given is that this 'fuel' is 'added' in small quantities for improvement of the quality of the product.

Clearly, this is too vague and will lead to many other industries asking for the use of pet coke in their furnaces; ovens, purporting that it is only for 'additional' value and not for fuel.

This permission, to use pet coke as an 'additive' could as EPCA has previously argued open the floodgates for many other industries to argue that their use is also not as a fuel but as an additive. In the absence of any clear definition, it would be difficult to first differentiate between fuel and additive and then to monitor the quantity of pet coke used in each industry, which would make it not a fuel, but an additive.

CPCB has clarified to EPCA that the current definition of feedstock is the materials which are used as raw materials, like raw petroleum coke (RPC) for making calcined petroleum coke (CPC) or calcined petroleum coke (CPC) for making CPC-anodes for graphite industry.

However, there, is a need to clearly define the use of pet coke as an 'additive' – and to do so in a way that it can be restricted and monitored -- before any further exemptions are given.

2. Examination of issues IA Nos 113743 and 113750/2019 (Applications for impleadment and directions on **B/O M/S Bharat Aluminium Company Ltd**

M/s Bharat Aluminium Company Ltd (BALCO) has filed this application. M/s Vedanta has also written to EPCA on November 26, 2019 regarding this matter.

According to them, EPCA in its Report no 91 has given the aluminium production capacity of the M/s BALCO as 5,00,000 MT per annum, while its capacity is 5,95,000 MT/annum as per the consent granted by the state pollution board. This difference is affecting the proportionate import allocation of calcined pet coke.

However, their own application notes that the Ministry of Commerce and Industry has issued a public notice notifying the procedure for allocation of quota for import of calcined pet coke (0.5 million tonnes per annum). This notification specifies that importing industries are required to obtain consent and registration from concerned state pollution control boards.

According to the application, BALCO approached DGFT to allocate import quote of 30,000 MT as per its then requirements. DGFT finalised the quota to the 4 aluminium industries based on their requirements and BALCO was allotted 27,288 MT against its application of 30,000 MT for the 6 month period of 2018.

The minutes of DGFT (EPCA report 101/Annexure 5/page 30-31) show that Vedanta Limited have requested for a periodic review of the imports made by the Aluminium industry to check utilisation of the allocated amounts by each smelter so that the unutilised quantity can be surrendered and re-allocated to other smelters. DGFT Committee has noted that this has already been provided for and based on actual import, half yearly reviews will be done.

In the case of BALCO, the minutes note that as the SPCB certificate has been adopted as the criteria for the sake of uniformity and equity, the committee did not find any ground for change in the quantity allocated.

Therefore, it is clear that while the EPCA report no 91 has provided for the overall demand of the Aluminium industry for low-sulphur calcined grade pet coke 0.5 million tonnes, the actual allocation is being done as per the directions of MoEF&CC and DGFT based on SPCB certificates.

The same minutes show that M/s BALCO had applied on 28.3.2019 for 81,235 MT of calcined pet coke for the year 2019-20; the production capacity as per SPCB certificate was 62,500 MT and M/s BALCO was allocated 44,961 MT based on proportionate allocation.

In fact, as the minutes make apparent, all aluminium industries – NALCO, HINDALCO, Vedanta – have received less than the production capacity as per the SPCB certificate and that this allocation has been done proportionately keeping in mind equity between the companies.

In these circumstances, EPCA sees no reason why the Hon'ble Supreme Court order of 9.10.2018 should be sought to be modified.

In fact, EPCA would like to draw the attention of the Hon'ble Supreme Court to its report no 101 dated August 16, 2019 where it has discussed the issue of excess availability of domestically produced anode grade pet coke.

In this report, EPCA has noted that there is a gap between the quantity applied by the Aluminium industry and what has been allocated. This gap should have been filled by the domestically available anode grade pet coke. However, this domestically available, low-sulphur pet coke, is not being sold and is putting domestic industry into hardship.

The Ministry of Petroleum and Natural Gas (MoPNG) has also informed EPCA that domestically manufactured low-sulphur anode grade pet coke is 0.462 Million Metric Tonnes (MMT).

But according to M/S Guwahati and others that since Aluminium industry has been allowed to directly import 0.5 MMT and the calcined industry permitted to import 1.4 MMT, there is no demand for their product. As a result, they are suffering a loss of livelihood and face closure.

EPCA also found, in its examination of the issue that the possible reasons for the non-sale of anode grade low-sulphur pet coke was as follows:

1. The amendment in BIS specifications (IS 17049:2018), which specify Sulphur content in calcined pet coke (CPC) used for anode making in Aluminium industry is 3.5% max (upward revision from 1.25%). The BIS standard has a footnote which says that based on the available of RPC with varying Sulphur content, RPC with Sulphur content more than 7 per cent is not permitted for making RPC of Sulphur content of 4 per cent maximum. It would mean that Aluminium industry could use RPC of Sulphur content of up to 7 per cent. Given this upward revision of the Sulphur content in the calcined coke requirement for Aluminium industry, the market for low-sulphur (1-1.5 per cent) high value product has declined. In other words, Aluminium industry,

which was earlier required by BIS specifications to procure only low-sulphur pet coke can now higher Sulphur product, which is cheaper and so more economical for this industry.

2. There is a local sale requirement that is followed by Indian Oil Corporation, under which it has to first sell to local calciners based in Assam and Bihar (where its refineries are located), which may have adverse impacts on price-discovery.

3. The pricing strategy of this domestically produced low-sulphur anode grade pet coke may not be competitive in face of imported products. According to data provided by oil companies to EPCA (see Annexure 6), the average price of low-sulphur pet coke is Rs 21,500 per tonne as compared to high Sulphur pet coke, which is between Rs 7500-12,000 per tonne. But domestic calciner industry contends that this price is un-competitive against imports. However, IOC argues that the price is set for a high-value product and cannot be compared to imports, which have higher Sulphur content.

However, what is clear is the following:

There is additional 0.46 million tonnes of domestically manufactured low-sulphur pet coke available that should be used by aluminium or calciner industry before increasing import quotas.

EPCA would strongly reiterate this finding even in the case of the application of M/s BALCO. The gap between import quota and demand must be met through purchase of domestically available anode grade, low-sulphur pet coke.

3. Examination of issues IA Nos 153800 and 153803/2019 (Application for intervention and directions on **B/O Noble Cause Foundation with SLP © No 13208/1998**

The Applicant has stated that pet coke is an extremely polluting fuel and its usage should be severely restricted. It has submitted:

a. The domestic pet coke, being low in Sulphur content, leads to lower emissions of SO₂, which lead to lower environment/air pollution

b. The non-use of domestic petroleum coke is leading to a scenario where domestic pet coke is being diverted to industries of unorganized sector, which do not have adequate pollution control measures. And therefore, the pet coke is being used as a fuel and that emissions are not regulated or monitored.

EPCA has examined the issues raised in this application and while there is no merit in the argument that all domestic pet coke is low in Sulphur content, there is no doubt that there is certain amount of domestic pet coke – 0.462 million tonnes, which is produced by refineries in the North East of India, is low-sulphur and high grade.

EPCA has already recommended for the consideration of the Hon'ble Court that domestically available high-grade pet coke and low-sulphur pet coke should first be utilized as against imported pet coke. This matter is before the Hon'ble Supreme Court for its consideration.

The diversion of domestic pet coke to industries in the unorganized sector is definitely a matter of concern.

EPCA has maintained that MoEF&CC should take a decision on the usage of domestic pet coke as a fuel in industries.

Currently, as per the directions of the Supreme Court there is a ban on the import of pet coke, except for the exempted industries and as per the allocation decided in the order of 9.10.2018. There is no clear allocation provided for the cement and lime industry, which is allowed to import fuel grade pet coke for use as feedstock. All these industries are required to adhere to the 10.9.2018 guidelines issued by MoEF&CC for regulation and monitoring of imported pet coke. CPCB is required to collate all data on the importing industries – quantity, usage – and put it on their website.

There is also a ban on the sale, distribution and use of pet coke in all NCR states – Delhi, Haryana, UP and Rajasthan. Only the exempt industries are allowed to use pet coke in these states – domestic or imported.

However, there is no restriction/ban on the usage of pet coke in the rest of the country. All industries can use domestic pet coke, including those in the unorganized sector.

On September 27th DGFT has written to EPCA clarifying that under the National Treatment principle (Article 3 of GATT) there cannot be discrimination between imported pet coke and domestic pet coke.

EPCA is also concerned of the pollution potential of these extremely dirty and high Sulphur fuel in other parts of the country. As per the data provided to EPCA (see annexure 6 in EPCA report no 101) by MoPNG, in 2018-19, as much as 20 per cent of the domestically produced pet coke is being sold to 'manufacturing' and 'other'. Clearly, this will have major impact on pollution.

EPCA would once again recommend that the government should take an urgent decision regarding the use of domestic pet coke in other regions of the country, all of which are also faced with high and toxic air pollution.

4. EPCA's recommendations for the consideration of the Hon'ble Supreme Court

EPCA has held meetings with all stakeholders and applicants to examine the matters. It has also held meetings with CPCB and MOEF&CC on the issue of permission for use of imported pet coke for steel industry.

Based on this, EPCA's recommendations for the consideration of the Hon'ble Supreme Court are as follows:

	Issue for examination	Examination and findings	Recommendation for the consideration of the Hon'ble Court
1.	Steel industry to be permitted usage of imported pet coke	<p>The Hon'ble Supreme Court has permitted the use of pet coke in industries where it is used as a feedstock.</p> <p>The steel industry uses pet coke as an '<u>additive</u>', which according to the one study conducted by CPCB in 2018 of M/s JSW steel, is less relatively polluting when it comes to steel industries with recovery type oven and with the usage of pet coke of 5 per cent in the blend. But this pollution increases in industries with non-recovery type coke ovens. Also, the monitoring of emissions from coke-oven is a challenge.</p>	<p>In the current circumstances, where the definition of 'additive' is not clear, the usage of <u>imported pet coke may not be permitted in the Steel Industry.</u></p> <p>If seen to be necessary, then MoEF&CC and CPCB may be directed to define the term 'additive' as against 'feedstock' and 'fuel'.</p>

	<p>EPCA is concerned that there is no definition of the category 'additive', which in this case is pet coke added to the coke oven in small quantities.</p> <p>This lack of clarity could lead to many more industries seeking similar exemptions, which would completely negate all the efforts made by the Hon'ble Court to restrict the use of this extremely polluting fuel to select industries, where the use is for feedstock.</p> <p>The Hon'ble Court has been cognizant of the fact that many industrialized countries are exporting at low prices this extremely polluting fuel as they have restriction in their own countries for its usage.</p> <p>The import of this fuel is adding to our health burden and this is why the Hon'ble Court has directed against the import of this fuel and has strictly restricted its use to industries where it is used as a 'feedstock'.</p> <p>The exemption to the steel industry where it is used as an 'additive' could provide a convenient loophole for many other industrial sectors to demand exemption. It would be impossible to monitor the quantity used and to determine if this 'fuel' is an 'additive' or 'fuel'.</p> <p>Furthermore, CPCB's study has found that only in recovery-type coke ovens, the pollution is mitigated and has also noted that monitoring of emissions from coke-ovens remains a challenge. If the exemption is granted, then it would be incumbent on the state pollution control boards to enforce that it is only used in recovery type ovens; that the quantity is small and that the companies can install</p>	<p>However, this definition should also indicate how the imported pet coke will be regulated as an 'additive' and if it will lead to more industries seeking similar exemptions</p> <p>However, as the steel industry has indicated in its application that its usage of low-sulphur pet coke is small, this industry should be able to use <u>domestic</u> low-sulphur pet coke, which is available from refineries of the Northeast.</p> <p>This fuel is not being sold, which is leading to hardship for this industry.</p> <p>It would be best if domestic pet coke is prioritized over imported pet coke as it would provide employment in the country and also India can stand apart from other industrialized countries by not exporting its dirty products.</p>
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		emission monitoring systems. All this, will require a high order of surveillance and enforcement.	
2.	BALCO application requiring upward revision of production capacity so that it can be allocated higher amount of imported pet coke	<p>According to BALCO, EPCA has given its production capacity as 5,00,000 tonnes/annum, while based on NOC from state pollution control board (SPCB) it is 5,95,000 tonnes/annum. BALCO's contention is that because of this under-reported production capacity, it is getting lesser proportion of the import quota through DGFT.</p> <p>EPCA has examined this issue and finds that this argument is fallacious. The fact is that DGFT is allocating import quota based on the notification of MOEF&CC, which clearly specifies that the importing industries are required to obtain consent and registration from the state pollution control boards. DGFT has noted that as SPCB certificate has been adopted as the criteria for allocation, there is no ground for change in the quantity allocated to BALCO.</p>	<p>The order of the Hon'ble Supreme Court of 9.10.2018 may not be modified.</p> <p>There should not be any increase in the import quantity of pet coke, permitted for use by the Aluminium industry.</p> <p>The gap between the demand of Aluminium industry and the permissible import quantities should be met through the domestically available anode grade, low-sulphur pet coke, which is manufactured by refineries of the Northeast and is currently, not being sold, purportedly because of the availability of imported pet coke.</p>
3.	Application of Noble Cause Foundation	<p>This application is asking for the use of domestically available pet coke, but has also cautioned that the non-use of this domestically available pet coke in large industries is leading to diversion to industries in the unorganized sector, which has high pollution potential.</p> <p>EPCA has already examined the issue and has recommended the first use of domestically manufactured high-grade, low-sulphur pet coke as against pet coke.</p>	<p>May direct MOEF&CC and MoPNG to revert back on the previous directions of the Hon'ble Supreme Court on the need for ban on sale, distribution and use of pet coke to be extended to the entire country, to be compliant with WTO requirements and to ensure that pollution is mitigated in other regions as well.</p>