



PETROFED

Ref. No.: PF/9
July 29, 2016

Shri K. D. Tripathi
Secretary
Ministry of Petroleum & Natural Gas
Shastri Bhavan
New Delhi – 110 001

Sub.: PIL to Stop the Usage of Pet Coke

Dear Sir,

PetroFed received a copy of the Public Interest Litigation (PIL) filed by Sh. Pritam Singh in the National Green Tribunal from its member companies. PIL seek to stop the usage of Petroleum Coke (Pet Coke) produced by oil refineries. NGT has made MoP&NG as 'Respondent No. 3' in this case. In this regard, PetroFed on behalf of OMCs, would like to place the following facts for your kind consideration:

1. Pet Coke is a product from the Delayed Coking Units in the refineries where heavy residue from the crude is thermally cracked to recover lighter fuels like LPG, Gasoline, Aviation Fuel and Diesel. The balance residue gets converted to solid coke. This technology is deployed worldwide to convert low cost residue to high value fuels to improve availability of above mentioned fuels which are in high demand and also to improve the refinery margins.
2. India is a hydrocarbon deficit country and import dependence is to the extent of 80 % in case of oil. As per the forecasts, this dependency may increase in future. Hence a diverse basket of imported crude oils is not only essential from energy security point of view but also it gives cost advantage as heavier crudes are cheaper compared to lighter crude.

In order to process the diverse basket of crude, refineries install Delayed Coking Unit which provide them better operational flexibility and also the higher margins. This strategy for refinery configuration is used worldwide. In India, out of 23 operating Refineries, Delayed Coking Units are in operation in 13 Refineries. Further Delayed Coking Units are under installation in another three refineries. The capacities of these Delayed Coking Units vary from about 20 to 40% of their Crude Processing Capacities.

3. Pet coke is an important raw material for a large cross section of industries across the globe including developed economies. It is used in the manufacturing of steel, graphite, aluminium, titanium oxide, paper, ammonia, fertilizers and petrochemicals. It is also used as a fuel for power generation and also in the cement, glass and brick manufacturing industries. In India low sulphur pet coke from North East and Barauni refineries, after calcination, is used in the manufacturing carbon electrodes for use in Aluminium industry. This pet coke is also used in graphite and steel industry as a source of carbon.

Petroleum Federation of India

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4. The largest consumer of high sulphur pet coke from other refineries in India is Cement Industry which consumes almost 60 % of the high sulphur pet coke consumed in India. . With rise in demand of cement due to economic growth, this sector in India is not only consuming indigenously produced pet coke but also import from other international producers to meet the demand. Also cement manufacturing process absorbs sulphur dioxide from coke and convert it into gypsum which otherwise is externally added in the cement.
5. Ban on the use of Pet coke will result in stoppage of all the Delayed Coking Units and will lead to generation of low value black oil (Furnace Oil), for which demand in India is reducing at a very fast pace. This will adversely impact the production of fuels like LPG, Gasoline and diesel fuels which will reduce the availability of these high demand fuels besides reducing the refinery margins. North East refineries with low capacities and complexities, processing Assam crude only may have to shut down or operate on sub-economic levels if there is no route of Coking to process residue available to them.
6. Wherever, Pet coke is being used as a solid fuel in industrial applications, pollution control technologies are in place. It has no linkage with BS IV or BSVI standards for vehicular emissions. The statement of the petitioner that the sulphur extracted from diesel to meet BS IV standards is diluted with (mixed with) pet coke is not correct. Sulphur extracted from liquid fuels is converted to elemental sulphur and is sold to the industry using sulphur as raw material for manufacturing chemicals like sulphuric acid.
7. On environmental issues, pet coke has higher calorific values (heat content) and low ash content than coal. Replacement of pet coke with coal will result in higher fuel consumption and ash generation.

Above facts establish that pet coke is an essential material for both users as well as producers. Ban on its use will upset not only the refineries operations but a very large cross section of industry in India which is manufacturing essential items like steel, aluminium, paper, graphite and power etc. It will also adversely impact India's import crude basket which will shrink resulting in increased cost of imports. Other adverse impacts will be higher dependence on inefficient fuel like coal, sub-optimal operations of refineries and higher cost of alternate raw materials for user industries.

We humbly request that MOP&NG may kindly consider the above facts and place the same suitably before NGT.

Thanking you,

Yours faithfully,



Dr. R.K. Malhotra
Director General