

Minutes of 38th meeting of the Technical Review Committee (TRC) under the Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2008 held on 23rd July 2015 under the chairmanship of Shri R.K.Garg

The decisions of the Ministry as per the agenda are as follows:

AGENDA ITEM NO 01: Representation from Lubok Carbon, Narbada Polymers, Shreemukh Industries and Prasanth Sai engineering works with regard to re-review of the Standard Operating Procedures with respect to Tyre Pyrolysis Oil (F.No. 23-121/2015-HSMD)

Lubok Carbon from Rajasthan and Narbada Polymers, Shreemukh Industries and Prasanth Sai engineering works from Telangana have sent representations with regard to Standard Operating Procedures formulated by in the 36th Meeting of the TRC for manufacture of Tyre Pyrolysis Oil.

The representatives from Telangana had highlighted the provision of the SOP which says that “the feeding of used tyres into the reactor should be devoid of steel”. Through a video representation they have depicted that they feed the bundle of tyres mechanically with the help of a hydra crane and there is no incidence of human entry into the reactor for this purpose. Further, to avoid carbon emission while removing the steel from the reactor, they de-carbonize the steel by spraying water through a pipe in a forceful way inside the reactor itself thereby washing the carbon particles adhering to the steel and again the hydra crane is used to remove the bundled up steel to eliminate manual intervention. Due to this there is no spillage and/or emission of Carbon into the atmosphere accordingly tyres devoid of steel shall not be mandatory requirement for feeding into the reactor.

M/s Lubok Carbon, Rajasthan has suggested that with regard to use of crumb rubber in the Operating procedure, rubber crumb is the most suitable material for continuous pyrolysis process but not for batch process. Flaring of excess gas shall be accompanied with a provision of storage of excess gas produced.

Decision: *The Committee listened to the presentation made by one company from Rajasthan and the video shown jointly by three companies from Telangana. All of them feed the full tyres, the only difference being that the unit from Rajasthan is feeding it manually one by one whereas*

the units in Telangana feed the tyres in bundles with the help of a crane. The remaining process of heating and cooling the furnace after the reaction is similar. The removal of carbon in all the units is without any manual intervention. The removal of steel wires from the furnace after carbon removal is manual in the Rajasthan unit whereas it is again by the help of the crane in case of the units from Telangana. The Telangana units also showed some water spraying on the steel wires while removing from the furnace to remove the adhering carbon. However, to what extent the carbon is removed and there is no spillage outside cannot be ensured. However the actual practice during operation of the plant may be difficult to monitor as to whether the operation is entirely manual or with the help of the crane. In view of this the Committee is of the view that most of the steel wire in the tyre should be removed before it is fed into the furnace. The only modification that can be made in the SOP already circulated that after removal of steel wire the tyre can be put either in the form of crumbs or chips (which can be made simply by cutting without going for the shredding process). This way the removal of steel wire from the furnace either manually or with the crane can be avoided and the possibility of carbon spillage will be eliminated.

AGENDA ITEM NO 02: Representation from N.C. John & Sons (P) Ltd. with regard to import of re-cycled tyres in powder form (F.No. 23-122/2015- HSMD).

The applicant has given a representation with regard to import of re-cycled tyres in powder form which is a raw material for them to manufacture rubber mats and rubber/coir mats for export to US and Europe. As per the applicant, it has become mandatory in these countries to ship mats which are phthalate free and compliant with EU and US standards. This process is not possible with raw material that is today available in India and as it is not phthalate free.

Decision: *The proposed rubber powder to be imported is derived from waste pneumatic tyres. The import of such rubber powder can be allowed as per the provisions of Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2008. The applicant accordingly may be asked to apply under the provisions of the Rules.*

AGENDA ITEM NO 03: Representation from Bhartiya Reserve Bank Note Mudran (P) Limited (BRBNMPL) with regard to environmentally sound management of ink sludge generated at BRBNMPL (F.No. 23-120/2015-HSMD)

BRBNMPL, mysore is entrusted with the sovereign function of production and supply of Indian Bank notes. During the process of printing of currency notes, a waste ink sludge approximately 1.4 MT/day is

generated which has been declared as hazardous as per the older regulations.

A detailed study was taken up BRBNMPL, Mysore through NEERI on “Environmentally Management of Ink Sludge”. The analysis of the study recommended that the ink sludge generated can be classified as non-hazardous waste as per the Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2008. The analysis of the study recommended that the ink sludge generated can be classified as non-hazardous waste as per the Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2008. The ink sludge possesses a high calorific value which can be used as an alternate fuel. Considering the calorific value and absence of organo-chlorine compounds, it can be used as supplementary fuel in incineration operations.

In the meantime, BRBNMPL had taken initiatives and sought approval from CPCB and Karnataka state Pollution Control Board (KSPCB) under Rule 11 of HWM rules, 2008 for conducting trial runs at m/s Heidelberg Cement India Ltd., Tumkur and M/s J K Tyre, Industries, Mysore for utilization of hazardous wastes as a supplementary resource or for energy recovery. The trial runs were conducted as per the norms prescribed by the regulatory bodies and monitored by Vimta Labs Hyderabad. The observations during the trial runs showed that the ambient air quality was found to be normal representing the industrial activities. CPCB had accorded approval for regular co-processing of ink sludge i.e. mixing 2 % of the ink sludge as fuel mix along with regular fuel at M/s Heidelberg Cement Works, Ammasandra, Tumkur for a period of two years.

Ministry has been requested to re-classify the ink sludge as a supplementary fuel in incineration operations enabling for an environmentally sound management of Ink Sludge.

Decision: *The paint and ink sludges are categorized as hazardous waste as per Schedule I and are recyclable as per Schedule IV. Thus, the question of their removal from the hazardous waste category does not arise. The Committee observed that the applicant has already gone through the process of getting approval from CPCB under Rule 11 of the Rules to use this waste as energy recovery in cement plant/ Boiler. The applicant was accordingly advised to continue sending the ink sludge to Cement Plant/boiler.*

AGENDA ITEM NO 04: Analysis Report of Spent alumina as decided in the 34th Meeting of the Technical Review Committee (F.No. 23-191/2013-HSMD).

The matter pertains to review of the issue related to categorizing spent alumina generated by Panipat Naphtha Cracker complex of Indian oil Corporation Limited as non-hazardous waste.

The matter was considered in the 34th Meeting of Technical Review Committee held on 10th December 2014.

The Committee recommended that Central Pollution Control Board(CPCB) may be requested to draw samples (one sample of material lying accumulated and another sample of freshly removed spent catalyst) and analyze for Cyanide, PAH and heavy metals. Thereafter the matter will be reconsidered.

The Analysis Report of Spent alumina samples' collected from Naphtha Cracker Unit, Panipat Refinery of Indian Oil Corporation has been submitted to the Ministry by Central Pollution Control Board. The samples have been analyzed for relevant constituent parameters i.e. poly aromatic hydrocarbon (PAH), total inorganic cyanide and heavy metals. The concentration values of PAH and cyanide was not exceeding the limit prescribed in Schedule-II of the HW Rules, 2008. The TCLP value of heavy metal was also not exceeding the prescribed concentration value to classify the waste as hazardous.

Decision: *The decision on the matter has been deferred by the Ministry due to a pending matter i.e. O.A. no. 284 of 2015 in the matter of Jugal Kishore vs Union of India filed in the NGT pertaining to the issue of Spent Alumina being generated by Panipat Refinery referring it as hazardous in nature.*

AGENDA ITEM NO 05: Import of non-hazardous tapestry fluff for use in Cement Kiln by M/s ACC Limited, Thane (F.No. 23-249/2013-HSMD).

The application pertains to import of tapestry fluff from united Kingdom for use at Wadi Cement Works and Kymore Cement Works. The applicant has furnished SGS analysis report, photograph of tapestry fluff and plants, CTO and acknowledgement from concerned CPCB.

Tapestry Fluff are the cut pieces of old and new carpet (production waste) from collection. It contains less than 5 % moisture and has a net calorific value of more than 4500 kcal/kg. This material is non-hazardous and falls in the open category for imports with Hs Code 57050019. This would help to reduce the consumption of coal which is in short supply and have to be supplemented by imports resulting in out go of foreign

exchange. Import of tapestry fluff as compared to coal would, therefore be very economical.

Decision: *The Committee observed that the item with the description as given above is not covered in the Hazardous Waste (Management, Handling & trans-boundary Movement) Rules, 2008 being administered by this Ministry.*
