

Decision of Ministry of Environment, Forest and Climate Change with respect to discussion on issues pertaining to clarifications sought on Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016, as approved by the Competent Authority on the basis of recommendation of the 90th Meeting of the Technical Review Committee (TRC) held on 20th December, 2024.

Venue: Online Mode

Agenda.1. Request to ban on export of Black mass – Representation by M/s Attero Recycling Private Limited, Noida

M/s Attero Recycling Private Limited, Noida mentioned that India is in the midst of a global raw materials race for strategically important critical minerals, REE, and precious metals. At the crux of the race for securing materials for the manufacture of batteries is 'black mass, the shredded remains of old lithium-ion batteries that contain critical minerals such as Lithium, Cobalt, Nickel, Manganese, Rhenium, Silicon, Tin, Titanium, Graphite, Iron etc. While India does not have many mines or resources from which these can be procured, waste streams of Electrical Electronics and Lithium-Ion batteries can be a rich sources of these extremely important materials.

2. From manufacturing solar panels and electric vehicles to all electronic devices, such critical minerals are vitally needed for modern technologies, and the net-zero economy. Several countries have started to impose strict regulation and bans on the export of these materials including - Black Mass which is a mixture of critical materials produced after the shredding of Lithium- ion battery cells.

3. In view of the above, it is requested that a ban on the export of Black Mass and other precious metals bearing waste may be imposed so that these critical and rare materials which are not available in India are kept available within India for domestic manufacturing.

The matter was last discussed in 89th TRC meeting held on 23rd October, 2024 and after deliberating the issue the committee recommended that the applicant may be asked to provide the details about the stakeholders considering or declaring black mass as waste or product.

Now, the applicant has submitted the requisite details. Accordingly, the matter is placed before TRC for deliberation/decision.

Deliberation: The committee noted that there were two aspects to the issue, whether black mass is a waste or an intermediate product and, if a waste, whether it has the composition, characteristics necessary to classify it as a hazardous waste. The representatives of the applicant referred to their communication and clarified that black mass is classified as a hazardous waste in China and very likely to get classified as hazardous waste in E.U as well. A few states in USA also consider it as hazardous waste. They also pointed out that black mass may contain metals beyond the permissible concentration limits. They also highlighted the need for conserving black mass within the country to improve domestic availability of battery metals.

Committee noted the submissions of the applicant. Further, committee was apprised that, Ministry has not given any permission for import/export of Black mass and no application has been received so far. The committee noted that to arrive at a considered recommendation, data on black mass production, export and imports and the present classification of black mass in the consents issued by SPCBs is needed. It also pointed out that if export of black mass is banned,

it may have the unintended consequence of adversely affecting domestic waste battery collection.

Recommendation: The committee after deliberation recommended that CPCB/ applicant may be asked to provide the details of stakeholders producing Black mass along with details of domestic recycling capacity available and quantity exported. The committee also recommended that CPCB may be requested to provide inputs on the classification of black mass in consents issued by SPCB and their view on whether Black mass is a waste or intermediate product. The matter may be deferred till next meeting.

Agenda.2. Granting permission for import of Scrap tyres for 10 years for manufacturing of rCB (recovered Carbon Black) – Representation from M/s Birla Carbon SCM India Private Limited, Worli, Mumbai

The applicant *vide* letter dated 10th October, 2024 stated that Birla Carbon is one of the leading global suppliers of carbon-based solutions. In India, Birla Carbon has become a partner in Finster Black Private Limited to manufacture and supply rCB at large scale to the Indian tyre manufacturers looking for more circular raw materials. It is therefore requested to consider the original request of M/s Finster Black Private Limited for granting NOC for import of Scrap tyre for a 10-year period for a volume of 50,000 TPA.

The matter was last discussed in 139th EC meeting held on 29th November, 2024 and the committee found that Birla Carbon has already introduced the Continua brand for sustainable carbonaceous material in Europe and has announced plans to do the same in partnership with Finster. They are looking at upgrading the facilities and laboratory at Finster, which would require substantial investments. It was also stated that the supplies to tyre companies usually involve medium to long term contracts, and assurance of supply of raw materials will help in tying up such contracts. The committee also desired to know what steps applicants would take to source material domestically and how they would assure that all imported material would be used for manufacturing rCB only. The committee after hearing the views of the applicant recommended that the applicant may be asked to provide details as discussed in the meeting to the Ministry for further deliberation/decision in the matter in TRC meeting.

Now, the applicant *vide* email dated 10/12/2024 has provided the reply stating that in order to supply the Indian market with rCB, Birla Carbon has taken a stake in Finster Black. Also, they are upgrading the emission norms at Finster Black to align with stringent European standards. This involves substantial capital investment and increased operational costs, underscoring our commitment to producer responsibility and environmental stewardship. In order to meet international benchmarks, including ISCC PLUS, ISO, and REACH certifications, investment in technologies, training, continuous monitoring and reduction of variance resulting in higher compliance costs will be required.

Companies like Apollo or CEAT will commit only if the production facility meets the highest global environmental standards and if rCB supply is secured for several years. In order to achieve the “expected large rCB volumes” from the tyre manufacturers, large volumes of spent tyres of similar natures need to be available. Further, they are investing significantly in establishing a high-end R&D laboratory in Finster Black, complementing their centralized world class testing facility in Atlanta, USA, for rCB and rubber compound testing. They have tried to source Indian ELT locally but have not been able to identify any stable sources at the volume and homogeneity required. The main reason seems to be the presence of small scale

recycling facilities within 10-20 km radius of ELT collection.

As a consequence, in order to achieve consistent ELT access, the Finster group has invested 50 crores in collection facilities across the USA. So, the approval for a 10-year NOC to import 50,000 TPA of scrap tyres will secure their operational sustainability to produce large volume of rCB.

Accordingly, the matter is placed before TRC for deliberation/decision in the matter.

Deliberation: The committee deliberated upon the issue and heard the views of the applicant. The committee expressed concern regarding the applicant's investment plans of the 50 crores over the period of 10 years and asked applicant to provide a clarity and firm commitment on that. The committee also desired to get assurance on shorter timeline of investment, supply of ELT and how they will help in building domestic supply chain.

Recommendation: **The committee after deliberation on the issue recommended that the applicant may be asked to provide a detailed project report specifying their investment plans vis-à-vis upgrading the facilities and laboratory at Finster Black Private Limited, plan for using rCB in manufacturing of new tyre, assurance on developing the domestic supply chain etc. Till then the matter is deferred.**

ANY OTHER ITEMS WITH PERMISSION OF THE CHAIR
