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 77th Meeting of the Technical Review Committee (TRC) held on 12th April, 2023.

AGENDA No. 1. Clarification with respect to Hazardous and other Wastes (Management & Trans-boundary Movement) Rules, 2016

Agenda 1.1.Request to acknowledging de-lined Copper Inserted Cathode Bars (CICBs)
non-hazardous under category 3D of Basel Convention and necessitating
State Pollution Board to issue necessary approval and allow to import these
CICBs – Tata International Limited.

Products for Aluminium Industry (PAI) Division of TATA International Limited supplies Cathode bars, Anode bars and Copper Inserted Cathode Bars (CIBs) to Aluminium Smelters across Oceania, Asia, middle East, Africa, Europe and North America. TATA supplies more than 60,000 MT Cathode bars, Anode bars and CIBs annually from India. PAI Division of TATA International Limited wants to recover the precious metal copper along with steel scrap (HMS) from spent steel bars. The process to extract is purely mechanical using operation of saw cutting and Gas cutting, and no Thermo - Chemical process is involved. The material extracted shall also remain in solid state in nature and would not change.

TATA International Limited has mentioned that an authorization has been issued to M/s Aditya Aluminum Limited by PCB, Odisha for similar processing as the used collectors bars are not considered in the list of hazardous items. Since, there was precedence, TATA International Limited requested Andhra Pradesh Pollution Control Board for seeking clarification and NOC w.r.t. importing the scrap bars along with report of Schedule II test result from NABL accredited laboratory.

TATA International Limited also requested CPCB for approval of issuance of CFE for recovery of copper from used cathode bars and acknowledging de-lined CICBS as Non Hazardous. APPCB cited the clarification of CPCB and specific approval of MoEF&CC for import of copper inserted bars along with chemical composition of surface of the spent bars. In this regards a test report by SV Enviro Lab (recognized by MoEF&CC, accredited by NABET and NABL) on all the possible toxic elements & other heavy metals via TCLP was found to be within the PCB/ LPCBs standards.

APPCB has direct to M/s Hayagreevaya Enterprises (Tata's external processing agent) that in case of dispute the matter has been referred to TRC constituted by MoEF&CC. CPCB also asked M/s Hayagreevaya Enterprises to submit schedule I report for the Used CICB's. Though Tata International Limited submitted an application in July, 2022 to MoEF&CC clarifying that these Bars are metal scrap (Steel and Copper) does not require Schedule testing & in this regard Schedule II test report is being submitted.

The schedule II test report submitted by NABL Accredited Varsha Bullion & Elemental Analab, SV Enviro Lab, Vishakhapatnam & report from Andhra University confirms that the material is non-hazardous in nature.

In this regard, Tata International Limited has requested to kindly for de-lined Copper Inserted Cathode Bars (CICBs) as non-hazardous under category 3D of Basel Convention and direct State Pollution Control Board to issue necessary approval.

The matter was discussed in 75th meeting of TRC held on 17.11.2022 and recommended that a detailed presentation may be given by TATA International Limited. Committee also recommended that Tata International Limited may also submit the observation/clarification on the difference between the category given in the authorization issued to M/s Aditya Aluminum Limited by PCB, Odisha and applied by TATA International Limited to PCB Andhra Pradesh.

In view of above recommendation, the matter was again considered in 76th meeting held on 24.02.2023 of TRC and the committee deliberated upon the issue and heard the presentation made by the applicant who explained that Copper Inserted Cathode Bars (CICBs) has copper rods inserted with steel bars. Committee also discussed other relevant aspects and past decisions on similar issues. It was felt that more discussion is required on the subject. Accordingly, the matter reconsidered by the TRC in this meeting.

- **Deliberation:** The committee deliberated upon the issue and heard the presentation made by the applicant who explained that they will extract the Copper from de-lined Copper Inserted Cathode Collector Bars through mechanical process using operation of saw cutting and Gas cutting and no Thermo Chemical process is involved. The material extracted shall also remain in solid state in nature and would not change. The applicant also submitted schedule II test report from NABL Accredited Varsha Bullion & Elemental Analab, SV Enviro Lab, Vishakhapatnam & report from Andhra University confirms that the material is non-hazardous in nature.
- Recommendation: After detailed deliberation on the issue the committee recommended that de-lined Copper Inserted Cathode Collector Bars may be considered as non-hazardous. The Committee further recommended that there shall be no graphite and carbon material from the cathode attached to them.
- Agenda 1.2 Request to allow import of washed Polyethylene Terephthalate (PET) Flakes (made from waste PET bottles) to actual PET bottles recyclers who are manufacturing recycle polyester staple fiber (PSF) and polyester filament yarn (P.F.Y.) where production in the year 2020-21 & 2021-22 is less than 70% of the consented capacity by M/s All India Recyclable Fibre & Yarn (AIRFY).

TRC in its 73rd Meeting has recommended the following:

i. A unit should be eligible for import only if it has used domestic waste to the extent at least 70% of the capacity in the previous year (e.g. production of 2021-22 to be considered for 2022-23 permissions).

- ii. The imports for the year 2022-23 should be restricted to 20% of the production in the year 2021-22 and thereafter, 15% of the actual capacity utilised in the preceding year.
- iii. An additional import up to 10% may be considered against exports of the products.
- iv. Units would be eligible for import after at least one year of production.
- v. The decision may be reviewed after 1 year for continuation of import of PET Flakes.

Thereafter, based on the decision of TRC, in 116th meeting of Expert Committee held on 24th August, 2022, EC considered the applications for revision and one of the recommendation was *Cases where production of the unit(s) in the year 2020-21 or in 2021-22 is less than 70% of the consented capacity, the criteria would be put up before TRC for reconsideration and then these cases will be put up before EC.*

AIRFY has mentioned that due to COVID restrictions and shortage of raw materials during year 2020-21 and 2021-22, some of the recyclers were not able to utilize more than 70% of the consented capacity. However, in current year i.e. 2022-23 (in first 6 months from April to September), the capacity utilization of these units is more than 70%.

In view of the above, AIRFY had requested to relax the condition of 70% utilization and consider their application for permission to import PET Flakes.

The matter was listed in 76th meeting of TRC held on 24.02.2023. Due to paucity of time TRC decided to discuss the matter in the next meeting. Accordingly, the matter reconsidered by the TRC in this meeting.

- **Deliberation:** The committee deliberated upon the issue and heard the view of representatives of AIRFY. The representatives of AIRFY informed that they had requested to consider the cases where production of the unit in the year 2020-21 or in 2021-22 is less than 70% of the consented capacity. However, as the Financial Year has changed and now the import quantity will be considered based on the production of FY 2022-23, so there is no requirement of relax of 70% utilization condition. The committee also deliberated upon the recommendation of committee made in its 73rd meeting where it was mentioned that the decision may be reviewed after 1 year for continuation of import of PET Flakes.
- Recommendation: After detailed deliberation on the issue the committee is of the opinion that since the new financial year has started and the unit will be eligible for import based on the production data of FY 2022-23, so there is no requirement to relax 70% utilization condition made for FY 2020-21 or in 2021-22. The Committee recommended that the applicant may apply afresh in the current FY based on their production data of FY 2022-23. The committee also recommended that the decision of import of PET flakes may be continued as of now.

Agenda 1.3. Transportation of Spent Catalyst through non-Hazardous Waste Vehicles by M/s Hindustan Platinum Private Limited, Navi Mumbai, Maharashtra.

M/s Hindustan Platinum Private Limited, Mumbai, Maharashtra has mentioned that while getting the Hazardous Waste authorized vehicle for movement of Spent Catalyst (Precious Metals based) from all over India to their plant in Navi Mumbai, they are facing many issues which are as follows:

- It is very difficult to find out Hazardous Waste transporter in any state for intrastate movement. The situation becomes worse and extremely painful to manage in case of interstate movement because the number of transporters in this category is almost negligible.
- With a lot of effort and difficulty even if succeed in getting Hazardous Waste authorised transporter, they charge an unaffordable high cost. The situation is so bad that the transporter asks for 5 to 6 times more freight as compared to the normal vehicle.
- There is high level of un-ionisation in this category of vehicles therefore they are forced to use only these vehicles and pay hefty cost which in some cases can go up to even ten times, then too the vehicles are not available on time.
- Due to the transportation issue Spent Catalyst which they buy or take for job work after spending hundreds of crore rupees get stuck for one to two months that leads to very heavy cost in interest and at times even loss of business.

Further, the applicant has submitted Toxicity Characteristic Leaching Procedure (TCLP) report for various Catalysts which clearly shows that there is no hazardous material present in the catalyst that they process. They have also submitted the Consent from Maharashtra Pollution Control Board, authorization from Maharashtra Pollution Control Board as per Rule 9 and CPCB Conditional permission for utilization of Hazardous Wastes & Capacity Enhancement under Rule 9 of HOWH rule, 2016.

In view of the above, the applicant has requested to allow them to use the non-Hazardous Waste vehicle for Spent Catalyst movement if the material analysis report falls in non-hazardous waste.

The matter was listed in 76th meeting of TRC held on 24.02.2023. Due to paucity of time TRC decided to discuss the matter in the next meeting. Accordingly, the matter reconsidered by the TRC in this meeting.

Deliberation: The committee deliberated upon the issue and heard the views of the representative of Hindustan Platinum Private Limited who explained that they face several issues while getting the Hazardous Waste authorized vehicle for movement of Spent Catalyst. However, Toxicity Characteristic Leaching Procedure (TCLP) report for various Catalysts that they process clearly shows that there is no hazardous material present in the catalyst and requested to allow them to use the non-Hazardous Waste vehicle for Spent Catalyst movement if the material analysis report falls in non-hazardous waste.

Recommendation: After detailed deliberation on the issue the committee is of the opinion that Transportation of the hazardous and other wastes is well covered under Rule 18 of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and does not require any amendment at present.

Agenda 1.4. Proposal regarding categorization of Industrial Sludge produced in nonhazardous industrial clusters as non-hazardous waste and notifying compulsory use in Cement Industry, Bricks Industry and for Highways/ Pavements etc - Representation by Dr. Anil Kumar Gupta, Board Member, CPCB.

CPCB vide its letter dated 2nd February, 2023 has forwarded the proposal received from Sh. A.K. Gupta, Board Member, CPCB regarding categorization of Industrial Sludge produced in non-hazardous industrial clusters as non-hazardous waste and notifying compulsory use in Cement Industry, Bricks Industry and for Highways/ Pavements etc.

In the representation, it is mentioned that the Hazardous Waste Management Rules describe the Hazardous Waste as: "a solid waste, or combination of solid wastes which is because of its quantity, concentration or physical or infectious characteristics may cause significant mortality or irreversible or incapacitating illness or pose a substantial potential hazard to human health or environment when improperly stored, transported or disposed of or managed". Characteristics of the Hazardous waste are: ICRT: Ignitability, Corrosivity, Reactivity, and Toxicity. The waste may be non-specific source (generic waste from industrial process)/ specific sourced/specific commercial chemical product, mixture or substance or intermediate.

The Industrial Clusters in Delhi are regulated in orange Category and no Hazardous Industry is allowed to operate in NCT Delhi. Most of the Factories are small MSME. The outlet of the waste water from Industrial Clusters through CETP's does not contain any Phenolic Compounds, Cyanide content, infectious waste, Xenobiotics. Most of the CETP's reuse their water for Horticulture within the CETP Premises or to PWD sites. The characteristics of the sludge stored in the CETP's are Non Hazardous.

The current policy requires dumping of the sludge from Industrial clusters to some TSDF sites. The TSDF sites are not a permanent solution as new sites will be required when the old fills up. The outcome of this whole exercise is waste of land and other social costs. As the sludge in Non Hazardous there is no point keeping the burden on the Industrial/ CETP societies to store or manage it for costs.

The concept of Circular Economy is catching up. A change in Policy is therefore urgently required to reduce the social cost of handling sludge and increasing the profitability by utilizing this Non Hazardous sludge as raw material to: Bricks, blocks, tiles, fibre cement sheets, pipes, boards, panels; Cement manufacturing; Construction of road and fly over embankment, Geopolymer based construction material; Filler material for Construction of dam, filling up of low lying area etc.

The CPCB discussed the matter in its 198th Board Meeting held on 26th December, 2022 wherein it was recommended to refer the proposal to TRC, MoEF&CC. Accordingly, the matter is placed before the TRC for deliberation/decision.

Deliberation: The committee deliberated upon the proposal.

Recommendation: After detailed deliberation on the issue the committee is of the opinion that it is not feasible to categorize Industrial Sludge produced in nonhazardous industrial clusters as non-hazardous waste and notifying compulsory use in Cement Industry, Bricks Industry and for Highways/ Pavements etc.

Agenda 1.5 Non-applicability of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 on import of used "Spine Instrumentation Set".

India Medtronic Pvt. Ltd. ("Medtronic India") filed an application in Directorate General of Foreign Trade ("DGFT") for import of "Spine Instrumentation Set /SIS". The "Spine Instrumentation System" is a combination of various specialized medical equipment customized for performing complex surgical procedure / operations for treating ailments related to spine. The DGFT forwarded the application to MoEF&CC seeking clarification regarding Import Policy of second hand medical equipments namely, Spine Instrumentation System. The Ministry vide OM dated 14th November, 2022 has informed that as per the HoWM rules 'Used Electrical and electronic assemblies including used medical devices/equipment' having Basel Number B1110 fall under Part 'B' of Schedule III and may be imported by the actual user only after obtaining necessary permission from Ministry of Environment, Forest and Climate Change'. However, in case the used items fall under [Schedule III Part D (Basel No. B1110)] of HOWM, Rules, 2016, Ministry's permission is not required for their import by actual users from Original Equipment Manufacturers (OEM) only, but those imported equipments have to be compulsorily re-exported within one, two and three years, as the case be and verification of documents specified in Schedule VIII of the said rules has to be made by the Custom Authorities. Also, as per the Ministry OM dated 1st June, 2015, for import of predominantly mechanical machinery which falls under Basel Number B1110 fall under Part 'B' of Schedule III, Ministry permission is not required.

Now, M/s India Medtronic Pvt. Ltd. vide email dated 22nd February, 2023 has informed that DGFT stated that the clarification is issued in respect of "import of predominantly mechanical machinery fitted with electric motor" and it is not clear whether import of mechanical machinery (without electric motor), such as Spine Instrumentation System/Set, would be covered by such clarification. In view of this, M/s India Medtronic Pvt. Ltd. requested that a clear clarification specific to Spine Instrumentation System may be issued to DGFT.

Deliberation: The committee deliberated upon the issue and heard the views of the representative of India Medtronic Pvt. Ltd. who explained that the Spine Instrumentation System/Set proposed for import is purely mechanical machinery and combination of various specialized medical equipment customized for performing complex surgical procedure/operations for treating ailments related to spine. Also, there is no electric motor attached to it.

Recommendation: After detailed deliberation on the issue the committee recommended that Ministry permission is not required for import of Spine Instrumentation System/Set which is purely mechanical machinery and there is no electric motor attached to it.
