

AGENDA ITEMS FOR 44th MEETING OF TECHNICAL REVIEW COMMITTEE (TRC) UNDER HAZARDOUS WASTE RULES, 2008

Date: 19th November, 2015 at 10:00 AM

Venue:- Teesta Conference Hall, First Floor, VAYU Block, Ministry of Environment, Forest & Climate Change, Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi-110003

In the Chair: Shri R.K. Garg

AGENDA

AGENDA ITEM NO 01: Exporting of material bearing precious metals which can be processed in India should be stopped and discussion with regard to shortlisting of certain technologies for processing of e-waste - M/s Hindustan Platinum Pvt. Ltd.

The matter pertains to reviewing of export of precious metal material outside India. The applicant is one of India's largest manufacturers and refiner of precious metal products for industrial application which includes refining of Palladium/Platinum/Silver/Gold, etc. The applicant has also stated that several companies using precious metal catalysts mainly consisting Platinum, Palladium, Rhodium, silver, etc. have started exporting these spent catalysts outside India for refining and recovery of the precious metals. The applicant has state-of-the-art technologies to process this material and is in the process of upgrading these facilities and giving financial returns to customers which are equal or better than established international parties.

The applicant states that they have enough capacity to handle the Indian market and are working at making India an international hub for refining and recovery of precious metal catalysts and are currently in talks with several large oil refinery and petrochemical companies such as Shell, Dow Chemicals, Saudi Aramco, SABIC, etc. who are interested to send such material for processing to Europe or America.

The applicant also has further given reasons as to why several Indian Companies are exporting this material and not sending them for processing due to inefficient tax structures, logistical ease of transporting material and aggressive pricing by international competitors.

The applicant has sought for Government's support to diverge the aforesaid material from the western world to India.

The Committee will review the matter with regard to the Hazardous Waste (Management, Handling & Trans-boundary Movement) Rules, 2008.

AGENDA ITEM NO 02: Clarification for export and onward recycling by M/s MV Kini Law Firm with regard to Export of Photo Voltaic solar modules with thin film cadmium telluride (Cd Te) semi-conductor technology and representation from Indian Solar Manufacturers Association with regard to development of Cadmium based thin film modules in Solar Power plants flouting e-waste (Management & Handling) Rules, 2015 (F.No. 23-150/2015-HSMD)

- The matter of MV Kini was considered in the 39th Meeting of the Technical Review Committee. The Committee took note of the contention of the applicant in respect of classification of waste PV cells/modules that they are non-hazardous in view of their listing in Part D of Schedule III of HW Rules, 2008 (1040-Scrap assemblies from electrical power generation) as well as their classification as non-hazardous by US and EU. The Committee also considered the presence of hazardous constituents namely Cadmium and Tellurium in them which are hazardous in nature and categorized under Schedule III A (1020). In view of this the Committee recommended that the applicant may be asked to provide details like total concentration of Cadmium and Tellurium in the material exported as well as the TCLP values. The Committee also recommended that the applicant may be asked to make a presentation.
- Referring to the photovoltaic (PV) Solar modules with thin film cadmium telluride (CdTe) semi-conductor Indian Solar Manufacturers Association have stated that the CdTe modules are not in conformity to the e-waste (Management and Handling) Rules, 2011 of Ministry of Environment and Forests. Further, responsibility of collection and recycling of CdTe at end to life is not provided by the producer of these photovoltaic solar modules violating “Extended Producer Responsibility” (EPR) as prescribed by e-waste (Management and Handling) Rules, 2011 of this Ministry.

They have informed that Cadmium is known carcinogen and its usage is controlled by similar legislations worldwide limiting the percentage of Cadmium by weight in a product. Further, Rule 13 under the e-waste rules, 2011 forbids items containing Cadmium percentage more than threshold limit of 0.01% by weight. The Cadmium content in CdTe Thin Film modules is 0.059% by weight which is higher than the threshold limit set under the Rules. Rule 4 of the Rules on EPR has been elaborated in the communication,

wherein the producer of electrical and electronic equipment is given the responsibility of managing such equipment after its end of life; thus the producer is responsible for their products once the consumer discards them.

The contention is that the CdTe modules are dumped into India by USA based First Solar LLC. The same is evident from the investigations carried by Directorate General of Anti-Dumping, Ministry of Commerce and Industry and Government of India & from abnormally higher Market penetration of the product in India as compared to global penetration level in spite of lower efficiencies and technological disadvantages of the product.

The applicant has requested the Ministry to take cognizance of this immediately and impose ban over the development of Cadmium based Solar Modules in the country.

The Committee will review the matter with regard to the Hazardous Waste (Management, Handling & Trans-boundary Movement) Rules, 2008 and e-waste (Management & Handling) Rules, 2011.

AGENDA ITEM NO 03: Requirement for deletion of Polychlorinated Biphenyls (PCBs) in Schedule V of Draft Hazardous Waste Management Rules, 2015 and Sl. No. 9 of Draft Order on Regulation of PCBs Order, 2015 or review of these provisions thereof – reg.

The Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008 describes 'Used Oil' and 'Waste Oil' as follows:

'Used oil': any oil

- (a) derived from crude oil or mixtures containing synthetic oil including used engine oil, gear oil, hydraulic oil, turbine oil, compressor oil, industrial gear oil, heat transfer oil, transformer oil, spent oil and their tank bottom sludges; and
- (b) suitable for reprocessing, if it meets the specification laid down in Part-A of Schedule – V but does not include waste oil;

'Waste oil':

means any oil which includes spills or crude oil, emulsions, tank bottom sludge and slop oil generated from petroleum refineries, installations or ships and can be used as fuel in furnaces for energy recovery, if it meets the specifications laid down in Part-B of Schedule- 5 either as such or after reprocessing.

PCB is listed under Annex A (elimination) under the Stockholm Convention.

(a) Under the said Convention each party with regard to the elimination of the use of PCB in equipment (e.g. transformers, capacitors or other receptacles containing liquid stocks) by 2025, subject to review by the Conference of the Parties, take action in accordance with the following priorities:

- i). Make determined efforts to identify, label and remove from use equipment containing greater than 10 per cent polychlorinated biphenyls and volumes greater than 5 litres;
 - ii). Make determined efforts to identify, label and remove from use equipment containing greater than 0.05 per cent polychlorinated biphenyls and volumes greater than 5 litres;
 - iii). Endeavour to identify and remove from use equipment containing greater than 0.005 percent polychlorinated biphenyls and volumes greater than 0.05 litres;
- (b) Consistent with the priorities in sub-paragraph (a), promote the following measures to reduce exposures and risk to control the use of polychlorinated biphenyls:
- i). Use only in intact and non-leaking equipment and only in areas where the risk from environmental release can be minimised and quickly remedied;
 - ii). Not use in equipment in areas associated with the production or processing of food or feed;
 - iii). When used in populated areas, including schools and hospitals, all reasonable measures to protect from electrical failure which could result in a fire, and regular inspection of equipment for leaks;

The Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008 and the proposed Draft amendment to these rules however, prescribes the procedure for management of hazardous wastes (and other wastes), implying that the said wastes can be incinerated in common hazardous incineration facility.

The draft regulation of PCBs Order, 2015 at Sl. No. 9 also prescribes that 'the waste Polychlorinated Biphenyls or Polychlorinated Biphenyls contaminated equipment shall be disposed of as per the provisions of Hazardous wastes (Management, Handling and Transboundary Movement) Rules, 2008'.

The above ambiguity i.e., requirement under Stockholm Convention and existing provisions and proposed rules may require a fresh relook.

AGENDA ITEM NO 04: Illegal import of Rubber Process Oil (RPO) by (1) M/s Apar industries Ltd. (2) M/s Gandhar Oil Refinery (I) Ltd. & (3) M/s Sah Petroleum Ltd. containing Aromatic constituent more than non-aromatic constituent to be classifiable under CTH-2707 and found hazardous under Hazardous Waste (Management, Handling & Trans-boundary Movement) Rules, 2008. (F.No.11-10/2013-HSMD)- Office of Commissioner of Customs Mumbai:

The matter was previously considered in the 30th Meeting of the Technical Review Committee. The Committee then after detailed deliberation concluded that the companies have imported goods declaring them as RPO which on testing against BIS standard IS: 15078: 2001 for processed oil in CRCL was not found to meet the standard in respect of density and kinematic viscosity. It was therefore categorized as off-specification product which will be considered as waste as per Schedule III, Part A (A-4140) of Hazardous Waste Rules, 2008. It was subsequently analysed for Poly-Aromatic Hydrocarbon (PAH) and the concentration of PAH at 220 mg/l was found to be more than the limit specified (50 mg/kg) in Schedule- II, Class A (A12- A15). It therefore has to be categorized as hazardous waste and since it has been imported without Ministry's permission it is an illegal import.

The matter herein pertains to import of Rubber Processing Oil (RPO) in the country with reference to which OA and WP were filed by the applicant in NGT and High Court of Bombay, respectively concluding the import as illegal. Ministry has asked for re-export of the consignment under the provision of Hazardous Waste Rules, 2008. Applications from both NGT and High Court were subsequently withdrawn by the applicant then. The RPO was declared hazardous on the basis of reports of CRCL identified under EPA. Test reports from both the laboratory indicated the RPO as not confirming to BIS standard w.r.t. density at 15°C and Kinematic viscosity at 100°C. Both the reports were found to be varying in terms of concentration of PAH under Schedule V A of HW rules, 2008.

Office of commissioner of customs had informed that petitioner has filed an appeal before Customs Excise and Service Tax Appellate Tribunal (CESTAT) for retesting of samples from M/s Sky Lab Analytical Laboratories which is one of the private laboratories approved and recognized by MoEF&CC. This request has been approved by MoEF&CC and accordingly communication was sent to Customs.

Office of the commissioner of Customs (Import-II) has now submitted the report of M/s Sky Lab Analytical Laboratory.

The Committee will review the matter with regard to the Hazardous Waste (Management, Handling & Trans-boundary Movement) Rules, 2008.

AGENDA ITEM NO 05: Escrow account as Corpus fund/contingency fund/insurance policy for post monitoring and remediation of contaminated site w.r.t. Treatment Storage and disposal Facility (TSDF) for Hazardous waste.

As per the existing provisions responsibility of the operator of such TSDF facility is for limited period of 25-40 years. Subsequent to the period of closure of such facilities in case of any eventualities, the responsibility has to be borne by the Central/State Government.

Accordingly, an initiative was taken up by the Ministry on the request of State Government to set up Escrow account and formulate Escrow agreement for post closure monitoring and remediation of such sites in case of untoward incident. The issue was previously deliberated in detail in the Committee constituted under the chairmanship of Shri. R.K. Garg, which then suggested that 2% of the turnover should be deposited by the operators in the ESCROW account. However, the Chairman CPCB didn't agree to the recommendation and suggested to increase the annual contribution by the operator from 2% to 5 % of turnover as remedial activities in the event of contamination in and around the TSDFs was not taken into account by the committee. He also highlighted the liability clause in the HW Rules, 2008 and precautionary principle along with polluter pays principle while defending the proposed increase in contribution towards the Escrow account. Operators of such facilities objected to this 5% contribution and subsequently matter was suggested to be considered by TRC.

The Committee will review the matter with regard to the 5% contribution from the operators.
