

## **Decisions of 58<sup>th</sup> meeting of the Technical Review Committee (TRC) under the Hazardous Waste (Management, Handling and Trans-boundary Movement) Rules, 2008 held on 29<sup>th</sup> and 30<sup>th</sup> November 2016 under the chairmanship of Shri R.K.Garg**

### **AGENDA ITEM NO 01: ISSUES PERTAINING TO HAZARDOUS AND OTHER WASTES (MANAGEMENT AND TRANS-BOUNDARY MOVEMENT) RULES, 2016**

#### **Agenda 1.1: Request for clarification with regard to the definition of “Zinc Ash” and Zinc Skimmings as specified in Schedule III Part B under Basel No. 1080 and Schedule III Part D under Basel No. B1100 of HW Rules,2016-Representation from Shri Krishan Kumar Rathi**

There is a public grievance(MOEF/E/2016/00643) received in this Ministry from the applicant requesting clarification on the definition of ‘Zinc Ash’ and ‘Zinc skimming’ as specified in Schedule III Part B under Basel no. B1080 and Schedule III Part D under Basel No. B1100 of Hazardous and other Wastes (Management, Handling and Trans-Boundary Movement) Rules, 2016. The matter was deliberated upon in the 57<sup>th</sup> meeting of the Expert Committee. The Committee had then noted that in order to resolve this issue the Indian Lead and Zinc Development Association (ILZDA) along with a technical representative may be invited in the next TRC meeting. The applicant also may be invited in the same meeting.

The ILZDA has confirmed their presence for the meeting.

#### **Decision:**

*The Committee heard the views Mr. L.Pugazhenthly, Executive Director India Lead Zinc Development Association of (ILZDA) in respect of difference between Zinc Ash and Zinc Skimmings. He clarified that from batch galvanizer’s prospective Zinc Ash and Zinc Skimmings are the same as both of them are essentially oxides of Zinc. Notwithstanding the very small quantities of Aluminium, Lead, Cadmium etc. both Ash and Skimmings are predominantly containing Zinc Oxide. The Committee on the basis of discussion concluded that since Zinc Ash and Skimmings are the same, the Zinc Skimmings entry from B1100 of Part D, Schedule III should be brought to B1080 of Schedule III Part ‘B’. Accordingly, the Committee recommended following AMENDMENT in the HW Rules, 2016:*

- a. B1080 of schedule III B should read as “Zinc Ash and Zinc Skimmings and residues including Zinc alloys residues in dispersible form unless they contain any of the constituents mentioned in Schedule II in concentration such as to exhibit Part C characteristics”.*
- b. The entry in part D of Schedule III at B1100 the last but one item i.e Zinc Skimmings should be deleted.*

**This pertains to AMENDMENT in the existing Rules and will be processed separately.**

**Agenda 1.2: Proposed Amendment in Hazardous and Other Wastes (Management, Handling and Trans-boundary Movement) Rules, 2016- Representation from Madhya Pradesh Waste Management Project**

The applicant has suggested amendment in following clauses of the rules with justifications:

- i. Rule 6(2)- Grant of Authorisation for managing hazardous and other wastes;
- ii. Rule 13 (2) Procedure for import of hazardous and other wastes;
- iii. Rule 16 Treatment, storage and disposal facility for hazardous and other wastes;
- iv. Rule 17 Packaging and Labelling;
- v. Rule 18 Transportation of hazardous and other wastes;
- vi. Schedule II- List of waste constituents with concentration limits

The matter was deliberated in the 57<sup>th</sup> Meeting of the Technical Review Committee. The Committee had then recommended calling the applicant for discussion with regard to requested amendments in HW Rules, 2016. The applicant has now confirmed for presentation.

**Decision:**

***All the issues raised by the representatives of Madhya Pradesh Waste Management Project related to guidelines prepared by CPCB in respect of hazardous waste treatment, storage and disposal facilities and guidelines to be prepared in respect of pre-processing etc. and implementation of the HW Rules, 2016 including lack of auditing of the TSDFs. The Committee suggested to them to approach CPCB in respect of all these issues.***

***Another issue related to the proposal of having recycling or pre-processing facilities within the TSDF's premises. Since the land allotted for TSDF's facilities was for the specific purpose, for carrying out any other activity permission from the land allotting authority needs to be obtained. So far as HW Rules, 2016 are concerned there is no prohibition on carrying out other activities like pre-processing like recycling etc.***

**Agenda 1.3 : Export of Solid Bath Material to India- Representation from Abdul Mohsin Mahmood Al Mahmood, Baharain, Basel Convention Focal Point**

Aluminium Bahrain which is ranked as one of the largest Aluminium smelters in the world and is known for its technological strength and high quality aluminium has submitted that they would like to send Solid Bath Material to direct buyer in India for re use directly. Solid Bath Material is actually generated while adjusting bath level in smelting cells, this tapped bath collected in molds and is then crushed and stored in closed yard as piles or in plastic bags. It is used in pot

room especially during the startup of the pot and this material can be re-used in another factory. It is a by-product, according to Bahrain's regulation and Basel convention it is not classified as hazardous waste, but the applicant has submitted that the "No objection" from Indian Environment Authority is required before giving a green light to export.

**Decision:**

***The Committee recommended that the applicant may be asked to submit the chemical composition specifying quantum of fluoride in the solid bath material proposed to be imported and after obtaining this analysis the representatives of any large aluminium producer including that of Jawaharlal Nehru Aluminium Research Institute, Nagpur may be invited for technical discussion in the next meeting of TRC.***

**Agenda 1.4 : Grant of permission for the import/export of hazardous and other waste under Hazardous and other Wastes (Management and Trans-boundary Movement) Rules, 2016- Representation by CPCB.**

CPCB has submitted that they receive letters from MoEF&CC for inspection of units desirous of import/export of hazardous and other wastes based on which permission for import/export is issued by this Ministry. CPCB has proposed that wherever Standard operating Procedures are available verification of the facility may be carried out by concerned SPCBs/PCCs.

**Decision:**

***The Committee's experience so far has been that even where the SOP has been prepared and circulated, the inspection by CPCB or Sub Committee has shown a number of deficiencies which have been pointed out and have been rectified by the applicants before their request for import is considered. Apparently these units had already been granted CTO by the SPCB/PCC. In view of this, the Committee has been recommending site visits by CPCB or a Sub-Committee wherever it has been considered necessary. The Committee is of the view that this practice of site visit on case to case basis should continue.***

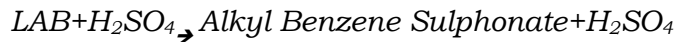
**Agenda 1.5 : Categorization of sulphuric acid as a by-product rather than as a hazardous waste- Representation by M/s Nirma Limited**

The applicant has submitted that they are having their Synthetic Detergent & Single Super Phosphate (SSP) manufacturing facility at Moraiya, Ta. Sanand, Dist. Ahmedabad, Gujarat. Sulphuric Acid (80%) is generated from the unit as well as other units of Nirma Ltd. along with its sister industries and is as such used as a raw material in manufacturing of SSP.

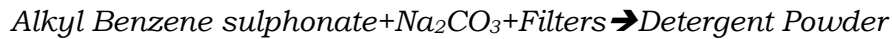
While manufacturing the synthetic detergent, sulphuric acid with ranging concentration of 80-86% is generated and is as such reused as a raw material for manufacturing of SSP. Production of synthetic detergent is mainly done in two steps viz Acid slurry preparation and Synthetic detergent powder preparation.

- i. Production of acid slurry is done by sulfonation of linear alkyl benzene (LAB) with 22% Oleum and sulphuric acid and circulation of cooling water. When sulphonation is completed after five to six hours, the charge is allowed to

settle and lower layer which is composed of sulphuric acid is separated and further as such utilized in manufacturing of SSP.



- ii. Acid slurry is further neutralized with soda ash and sodium salt of LAB to obtain standard synthetic detergent powder.



Sulphuric acid generated from the process is considered as D2 category waste of Schedule II under the Hazardous Waste, Rules, 2008 and Rule 11 of the said Rule which is presently considered as Rule 9 as per the HW rules, 2016. Utilization of such waste can be possible after getting permission from CPCB.

However the definition of "Hazardous Waste" in the HW Rules, 2016 is provided as "Hazardous Waste means any waste which by reason of characteristics such as physical, chemical, biological, reactive, toxic, flammable, explosive or corrosive causes danger is likely to cause danger to health or environment, whether alone or in contact with other wastes or substances". The definition provided is exclusively considering the waste material only. As per the definition of "waste" means materials that are not products or by-products, for which the generator has no further use for the purposes of production, transformation or consumption.

Which is further explained as:

- (i) waste includes the materials that may be generated during, the extraction of raw materials, the processing of raw materials into intermediates and final products, the consumption of final products, and through other human activities and excludes residuals recycled or reused at the place of generation; and
- (ii) by-product means a material that is not intended to be produced but gets produced in the production process of intended product and is used as such;

From the definitions provided in the Rule, the applicant has inferred that if any material has no further use to the generator for the purpose to the generator for the purpose of production, transformation or consumption, than only it can be considered as waste material.

Accordingly, they have asked to clarify the sulfuric acid generated in their unit as 'by-product' under the HW Rules, 2016.

**Decision:**

***The Committee deliberated on the issue raised by M/s Nirma Ltd.. The Committee is well aware of the fact that during the sulphonation process Sulphuric Acid of concentration 60-80% is generated and goes by the name of Spent Sulphuric Acid. Normal Sulphuric Acid is produced in concentration of 98% and is used for various application including the sulphonation of LAB. Spent Acid on the other hand is used only for specific application like production of Single Super Phosphate and depends upon the demand nearby its location of***

***generation. In some cases where there is no demand it is neutralized by Lime to produce Gypsum which again is considered as a waste which may however be used in cement plant if the logistics favours. Thus, the fact of utilization alone cannot qualify the item to be called by-product. The Committee suggested that the applicant may take permission under Rule 9 of the HW Rules, 2016.***

***This pertains to AMENDMENT in the existing Rules and will be processed separately.***

**Agenda 1.6 : Exemption from submission of documents as required under HW Rules, 2016 for the import of waste Paper- Representation from Indian Agro & Recycled Paper Mills Association**

Indian Agro & Recycled Paper Mills Association is one of the apex body of paper mills manufacturing paper out of non-wood raw materials namely wheat straw, rice straw, baggase and recycled fibre (waste paper). Seventy percent of the paper production in the country is contributed by the non-wood segments out of which more than 50 percent is contributed by paper mills using waste paper as the feed stock.

Since the waste paper recovery in India is less, which is estimated to be around 20-25% as compared to almost 80-85% in Europe, USA, etc. therefore they are heavily dependent on importing the waste paper as raw material to meet the requirement of the paper industry. These mills are importing waste paper from Europe, USA and also from Middle East where the collection mechanism is far superior to India.

As per the Schedule VIII of newly notified HW, Rules 2016 whereby various documents are to be verified by Custom Authorities for importing of waste specified in Part D of Schedule III (copy enclosed). In the serial no. B 3020 in which the waste paper importer in general are required to fill up Form 6 and also other documents such as pre-shipment certificate and authorization and consent to operate.

The applicant has further submitted that the paper mills are already providing pre-inspection certificate issued by inspection agency of the exporting country or certified agency approved by the DGFT, Ministry of commerce. However, the mills are now finding difficulty in clearance of goods from the port as the mills are asked to submit the authorization from SPCB over and above the consent to operate under the Air and Water Act.

The consent is an authorization for a unit to function and any further authorization for the imports of waste paper will add to problems on account of delay in obtaining and other procedures involved therein. Further, it is also stipulated that the chemical analysis report of the waste paper being imported is also to be submitted prior to the clearance of the good. In case of waste paper the chemical analysis report would be difficult from the exporting countries as:

- i. It would delay the export and;
- ii. It would add to the cost of the waste paper that is imported.

Many exporters have not agreed to provide the chemical analysis report of waste paper, as such reports are not provided by any lab. In view of the problems

mentioned above, the consignments are being held up and demurrages are accruing in various ports, particularly in Tuticorin Port and other Southern Ports.

Ministry has been requested to kindly intervene and help in getting all clearance of import of waste paper by issuing following clarifications-

- i. Consent to operate the unit is to be treated as the valid authorization;
- ii. Exempting waste paper from the chemical analysis report.

**Decision:**

***The Committee deliberated on the issues mentioned above and also sought clarifications whether the SPCBs were not issuing combined consent to operate cum authorization from the representatives of Indian Agro & Recycled Paper Mills Association. The representative stated that in view of definition of authorization in the HW Rules, 2016, SPCBs “other wastes” have been mentioned under Rule 6 for grant of authorization.***

***In order to avoid any mis-interpretation of the Rules and to simplify the procedure for import of other wastes listed in Schedule III D, the Committee recommended following AMENDMENT to the Rules:***

- i. ***the definition of authorization under 3(3) may be AMENDED to read as follows as “authorisation” means permission for generation, handling, collection, reception, treatment, transport, storage, reuse, recycling, recovery, pre-processing, utilisation including co-processing and disposal of hazardous and other wastes granted under sub-rule (2) of rule 6;***
- ii. ***Schedule VIII,5, item B3020 should read as follows:***

***Paper, paper board and paper products waste***

***The following material, provided they are not mixed with hazardous, municipal or bio-medical waste.***

- iii. ***Schedule VIII, item 5 (e) to be deleted, since the chemical analysis requirement is not relevant to waste paper;***

**Agenda 1.7: Removal of De-inking Sludge from Hazardous Waste Category-Representation of Gujarat Paper Mills Association forwarded by Gujarat Pollution Control Board(23-146/2016-HSMD)**

De-Inking Sludge falls in hazardous waste category in the newly notified Hazardous Waste Rules, 2016. This is similar to its status in the previous Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008. The applicant has requested for de-categorization of de-inking sludge of paper mills from the hazardous waste category under Hazardous Waste Rules, 2016. In this regard the applicant has got evaluated the matter by an independent consultant, M/s ERM India Pvt. Ltd. They have attached the detailed Technical report submitted by ERM India Pvt. Ltd on “Assessment of De-inking Sludge for categorization under HW Rules, 2008: Vapi, Gujarat” for Shah Paper Mills Limited.

GPMA has contended that according to the report, all parameters of the de-inking sludge are below the standards prescribed in the Rules. In the case of Absorbable Organic Halides (AOX) the suggested limit of AOX has not been notified

as a standard by the Government of India either in HW Rules or in any other statute. However, as per the Article "Development of AOX Standards for Large Scale Pulp and Paper Industries", that was published by the Central Pollution Control Board, in the year 2007, a mass based concentration limit of AOX was suggested for consideration by Ministry as 2.5 Kg/MT of dry sludge (i.e. 2,500 mg/kg) as against their result of AOX in the de-inking sludge which is 263 mg/kg as per the report of ERM.

They have also enclosed the copy of report of Confederation of European Paper Industry (CEPI) wherein they are using De-Inking Sludge for various purposes mainly for land restoration and mine filling. As per their report, it is classified that land restoration covers the use of dried sludge as a product applied on derelict land, damaged industrial sites topsoil, or during road constructions, topping of landfills, mine filling etc. They have also informed that GIZ and GCPC has studied for Vapi paper cluster for one year and have prepared a report which indicate that de-inking sludge under the category of land management option which includes land spreading & land restoration.

In view of above, they have requested to classify de-inking sludge of paper mill as non-hazardous and grant necessary permission for the utilization of said waste as an additive fuel into the boiler and for land filling/ mine filling.

The matter was considered in the 57th Meeting of the Technical Review committee and was deferred as the applicant was not present for technical discussion. *The Committee noted that as per Schedule I of HW Rules, 2016; under Pulp and paper industry (process) at 32, Process sludge containing organic halides (AOX) at 32.3 is categorized as hazardous waste. The de-inking sludge is generated in the paper and pulp industry based on waste paper, thus is a hazardous waste. The analysis report submitted by the GPMA also indicates that the sludge contains 263 mg/kg of AOX. Although there are no concentration limits indicated in Schedule II, it is known that organic halides are toxic, mutagenic and carcinogenic with potential impact on health and environment. AOX compounds pose a potential concern because they resist breaking down in the environment therefore they have long half-life periods. It is therefore not considered to be prudent to take the sludge containing AOX out of the category of hazardous waste and allow it to be used for landfilling. However, it can be utilized for various purposes with the permission of CPCB under Rule 9 of HW Rules, 2016.*

However, as directed by Competent Authority, applicant was called for presentation.

**Decision:**

**The applicant didn't come for presentation as desired. Accordingly, the matter was deferred.**

**Agenda 1.8: Import of Carpet Fluff as per the HW Rules, 2016- Representation from ACC limited**

ACC Cement Limited (ACL) had applied to MOEF on 27th Aug 2015 for the permission of the import of Tapestry Fluff for use in Cement Kilns. With reference to this application, MOEF gave a clearance for the same vide letter dt. 19 Sept 2015 saying that this subject is not covered under HWM rules 2008, as per the decision of the 38<sup>th</sup> Meeting of the TRC.

Based on this letter, ACC has applied for the Permission from DGFT for the import permit for the Textile Scrap (Carpet/Tapestry Fluff) under ITC code 63109090 (which is a restricted category), based on our application DGFT sought the clearance from Carpet Export Promotion Council of India to which CEPC gave an NOC for the import of the Textile scrap dt. 22<sup>nd</sup> July, 2016. After receiving the NOC from CEPC, DGFT approved the application and gave the permit to import the Textile Scarp (Carpet/Tapestry Fluff) for four ACL Plants to import 10K tons each, valid for 18 months from 15.09.2016. After receiving permit from DGFT the import of the Textile Scrap from Netherlands had been initiated.

In the mean time, under the New HWM rules 2016, Textile scrap has been additionally notified under Basel Code B3035, under Schedule III B of the Rules. Now the applicant has sought for clarification that do they need to apply in Form 5 of HW Rules, 2016 to MOEF (As mentioned under new rules) to import this material for co-processing as alternate fuel in their kilns or can they continue their imports based on the permission previously issued to them.

The copy of the MOEF Letter, CEPC NOC, DGFT permit, DGFT ITC Code, HWM Extract for Import of other waste has been enclosed for Ministry's reference.

**Decision:**

*The Committee noted that the item proposed to be imported is Textile Scrap (Carpet Fluff/Tapestry Fluff). It is observed that there are two items in Schedule III of the HW Rules, 2016 namely item A3120 with the description "Fluff-Light fraction from shredding" and item B 3035 with the description "Waste Textiles floor coverings, Carpets". Thus, the item could be covered under either of the two. From the information provided by the representative of M/s Ambuja Cement Ltd., the item proposed to be imported is shredded carpet/Tapestry. The Committee has suggested to the representative to provide information on the composition of the Waste and its physical state. He has also been asked to submit a sample of the item which has been earlier imported and also the emission data from the kilns where this material was used as supplementary fuel. On receipt of this information the future course of action will be recommended.*

**AGENDA ITEM NO 02: ISSUES PERTAINING TO E-WASTE (MANAGEMENT) RULES, 2016**

**Agenda 2.1: Clarification on Extended Producer Responsibility obligations under E-waste Rules, 2016- Representation from Toshiba India Private Limited**

Toshiba India Private Limited have sought clarification on the scope of their application for Extended Producer Responsibility Authorization ("EPR Authorization") under E-Waste (Management) Rules, 2016, due to unique facts and circumstances. The detail of the issue is as elucidated below.

**Toshiba India Private Limited (TIPL) laptop business**

Toshiba India Private Limited (TIPL) has submitted that it has discontinued all operations of its laptop business i.e. sales and after sales service of Toshiba laptops



after 30<sup>th</sup> September 2016; and pursuant to discontinuation of sales and after sales service of laptops in India, TIPL no longer remains a producer as per the definition of producer under the e-waste Rules and therefore does not require to obtain an EPR Authorization for the laptops.

Presently, Toshiba Singapore Pte. Ltd ("TSP"), another Toshiba group company, is engaged in sales and after sales service for Toshiba branded laptops through their distributor and service partners in India.

### **TIPL's TV and Home Appliance businesses**

TIPL is currently placing a very limited quantity of EEE in Indian market in the form of TV spare parts to meet its after sales service obligations. Further, TIPL is placing negligible quantity of spare parts for home appliances in the Indian Market as there are very few service requests from its customers.

As TIPL had sold some models of TV and Home Appliances with 3-5 years warranty, it is currently providing after sales services for these products. The warranty for TV will expire by September 2018, for refrigerator by March, 2019, and for washing machine by December 2017.

As TIPL is no longer selling or placing any EEE other than spares of TV and home appliances, they are of the view that TIPL has to apply for EPR Authorization with respect to spare parts only (for TV and Home Appliances). And, for such authorization, scope of TIPL's EPR plan should be limited to fixing of collection targets only for spare parts of TVs and home appliances, instead of the completely built units of TV and home appliances.

Ministry has been requested to provide clarifications to TIPL in order to enable them to apply for EPR Authorization for spare parts of televisions and Home Appliances instead of completely built units of TVs and home appliances.

### **Decision:**

***The Committee noted that the M/s TIPL has stopped selling Toshiba Brand laptop, TVs, Refrigerators and washing machines prior to 30<sup>th</sup> September, 2016.***

***However, as far as laptops are concerned currently that are being sold and service in India by another group company Toshiba Singapore Pvt. Ltd. under the same brand i.e Toshiba Laptops. For home appliances such as TVs, Washing Machines and Refrigerator TIPL shall continue to honour the warranty commitment till March, 2019. Therefore, TIPL shall continue to exist in India as a legal entity to fulfill their warranty obligation.***

***The Committee observed that EPR existed given under the e-waste Rules, 2011. To what extent they have complied with those obligations is not known. The Committee therefore suggested that the TIPL may be invited to clarify this point. Further to what extent their group company namely Toshiba Singapore Pvt. Ltd. who will continue to sell Toshiba Brand laptops in India will take over the responsibility of collection of e-waste under EPR for laptops supplied by TIPL is also to be clarified.***

***Therefore, committee recommended calling the applicant during next meeting of TRC.***

**Agenda 2.2: Review of the Rule 9, Bulk consumers to channelize e-waste to authorized dismantler or recycler either directly or through Producers.**

This provision will create a scenario of competition between recyclers and Producers for e-waste. Further when the target is given to Producers and not to recyclers, it will be for feasible option, both for implementation and monitoring if the e-waste from bulk consumers is channelized to authorized recyclers and dismantlers through Producers.

*The matter was considered in 57th TRC expecting the need of detailed deliberation and noting the time constraint, deferred it for discussion during next TRC.*

**Decision:**

**The Committee deliberated on the need for amendment in the existing Rule 9 (a) in respect of responsibilities of bulk consumer, as to whether they should send the waste to recyclers, dismantlers directly or only through the Producers. The Committee felt that the matter could be discussed after the EPR plans of the producers are available based on their applications for authorization in CPCB.**

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