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 74th Meeting of the Technical Review Committee (TRC) held on 20th September, 2022-reg.

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

Agenda 1.1 Request for de-listing FGD Gypsum as 'Hazardous' under the MoEFCC's notified "Hazardous & Other Wastes (Management and Transboundary Movement) (HOWM) Rules, 2016" – Ministry of Power, Govt. of India

Ministry of Power has informed that Thermal Power Plants are installing Flue Gas Desuphurisation (FGD) equipment for compliance to SO2 emission norms as per the MoEFCC notification dated 31.03.2021. However, M/o Power vide letter dated 03.05.2022 has also requested MoEFCC to consider providing additional timelines of 2 years above the timelines stipulated in the MoEFCC Notification dated 31.03.2021.

M/o Power had constituted a Task Force to recommend standards for usage of FGD Gypsum having acceptability to various end users, regulators and also evaluate hazardous nature of FGD gypsum for feasibility and acceptability for usage of Gypsum as a byproduct of Installation of Flue Gas De-sulphurisation (FGD) in Thermal Power Plants.

The report submitted by Task Force stated that the results of CPCB, IIT Bombay, CPRI and ICAR-CSSRI for concentration of heavy/trace metals and leachability confirm that FGD Gypsum is non-hazardous in nature. Further, two of the recommendations of the Task Force are as follows:

"FGD Gypsum, which is produced in coal based thermal power plants where wet limestone based FGD systems are installed, is a non-hazardous "By-product". Accordingly, MoEFCC may include FGD Gypsum in the exclusion category of hazardous wastes.

Reference Guidelines/SOPs need to be issued for safe handling, storage, etc. of FGD Gypsum while considering the various aspects brought out in this report."

In this regard, M/o Power has requested to kindly de-list FGD Gypsum as 'Hazardous' under the MoEFCC's notified "Hazardous & Other Wastes (Management and Transboundary Movement) (HOWM) Rules, 2016". M/o Power further requested to advice CPCB to issue guidelines/SOPs for handling, storage and utilization of the FGD Gypsum while considering the various points brought out in the report. Further, FGD Gypsum may be allowed to be monetized/sold/auctioned by Thermal Power Plants to user agencies, on a commercial basis so that TPPs may factor the same in reducing the overall electricity tariff for consumers.

Deliberation: The committee deliberated upon the issue.

Recommendation: After detailed deliberation on the issue and keeping in mind that the report submitted by Task Force stated that the results of CPCB, IIT Bombay, CPRI and ICAR-CSSRI for concentration of heavy/trace metals and leachability confirms that FGD Gypsum is non-hazardous in nature, the committee recommended that FGD Gypsum may be treated as non-hazardous. The committee further recommended that CPCB may prepare guidelines/ SOPs for handling, storage and utilization of the FGD Gypsum while considering the various points brought out in the report of the Task Force.

Agenda 1.2.

 Request for consideration of spent acid containing HCl as Co-product/byproduct rather Hazardous Waste – M/s KLJ Organics Limited, Jhagadia, Gujarat

This is a representation of M/s KLJ Organics Limited, Jhargadia, Gujarat dated 24.05.2022 for consideration of spent acid containing HCl as Co-product/by-product rather Hazardous Waste. The unit manufactures Paraffin Wax and Benzyl products that produces spent acid containing Hydrochloric Acid.

They state that HCL was consented as Co-product (produced during chlorination of Paraffin) to them in EC, NOC and CCA in 2010; but in 2016, when they applied for addition of Benzyl Product (produced from chlorination of Toluene), the same was consented as Hazardous Waste in Environmental Clearance. Then they applied to the MoEFCC on 06.12.2018 for exemption of their product HCI from Hazardous Waste category under Rule – 9 along with all the tests reports (including all parameters as per Schedule II of Hazardous Waste Rules, 2016) and Pre-feasibility Reports. All the results of our product, namely HCL, were within the prescribed norms.

The matter was heard in the Technical Committee meeting of MoEFCC on 17.01.2018 and then, MoEFCC vide letter dated 17.05.2019 directed them to get HCl analyzed in respect of two additional parameters, viz. Toluene and other chlor-compounds, from NABL accredited laboratory. As per their instructions, they got HCL tested from NABL accredited laboratory and submitted the analysis report to MoEFCC on 01.08.2019. The results of both the parameters were within the prescribed limits. Then, MoEFCC vide letter 13.01.2020 informed them that the matter was transferred to GPCB for taking decision.

Accordingly, they applied to GPCB for exemption of their product HCl from Hazardous Waste under Rule 9. GPCB formed a Committee and then, heard their case and asked them to submit fresh reports analysed by GCMS machines. Then, they got their HCl from NABL accredited laboratory as per advice of the Committee and submitted the reports. They state that in this case also, all the parameters were well within the limits. However, during the last hearing held on 25 th March, 2022, they found their case rejected on the following grounds:

- a. GPCB has taken samples from two manufacturers of CPW i.e. Payal & Shivtech, of their HCl and found the organic matter in their HCl.
- b. GPCB informed us that HCl is corrosive in nature.

Then, GSPCB forwarded their application with pre-feasibility study report to TRC with its non-acceptance to their proposal to declare spent acid generated as by-product and, thus, the

unit can only send/sell the spent acid as hazardous waste to facilities authorized under Rule 9, Hazardous Waste Management Rules.

The unit had also informed that GSPCB as well as few other SPCBs have declared similar waste as by-product, thereby affecting utilization of their spent acid in the market for being labeled as 'hazardous waste'. The other reasons quoted are (i) other SPCBs do not have authorized facilities under Rule 9 and (ii) Transportation of hazardous waste becomes an issue between the States.

Now, CPCB, while referring the case to Technical Review Committee (TRC) for further examination vide letter dated 01.06.2022, urged TRC to examine the reason based on which GSPCB has denied declaring the spent acid from M/s KLJ Organics Limited as by-products, while they allegedly identified same waste from other industries as by-product. The CPCB assured TRC of providing any technical assistance in this case.

ii. Request for consideration of hydrochloric acid 20-36% and sodium hypochlorite generated through industrial process as by product – M/s Shivtek Industries Private Limited.

The unit belongs to MSME sector, export products and manufactures chlorinated paraffin plasticizer with process of chlorination with Paraffin and olefins. They state vide letter dated 09.07.2022 that their by-product hydrochloric acid 20-36% and sodium hypochlorite of more than 100 gpl have been declared as Hazardous waste since GPCB has caught many traders in throwing Hydrochloric Acid in Nala & barren land which causes pollution.

They state that hydrochloride acid produced by them is of 30-36% concentration and meets all parameters of by-product as defined in IS 265 1993 and meets all requirements of by-product in Hazardous Waste Management Handling and Transboudary Movement Rules as amended in 2016 and calling our product as spent acid is totally unjustified. They state that hydrochloric acid 30-36% is by product in all states of India except Gujarat.

They refer to two Orders of GPCB where GPCB has already approved hydrochloric acid and sodium hypochlorite as by-product for export. The orders are as mentioned below:

- i. GPCB/BRCH-B/CCA-224/ID-27544/555392 dated 20/02/2022
- ii. GPCB/BRCH-B/CCA-224/ID-27544/564904 dated 20/07/2022

They state that they the Committee agreed to their submission and assured to visit their plant but the Committee has not visited the same so far. The state that they have installed state of art machinery with separator, buffer, knock out drums, condensers, coolers for HCl (30-36%), gravity filters & resin absorbers and air conditioning, plate heat enhance for sodium hypochlorite.

In view of above, M/s Shivtek Industries Private Limited requests for consideration of hydrochloric acid 20-36% and sodium hypochlorite generated through industrial process as by product.

iii. Request for recognizing the HCl of Chlorinated Paraffin as by-product and application for recognizing Purified Hydrochloric Acid (Pharmaceutical Grade 33-35%) as product instead of Hazardous waste - M/s Payal Polyplast Pvt Limited.

M/s Payal Polyplast Pvt Limited, Bharuch, Gujarat, vide letter dated 04.08.2022 addressed to Ministry has stated that they manufacture (a) Chlorinated Paraffins and Sulpho-Chlorinated Parafinns, (b) Plasticizers, (c) Epoxidised Oils (d) Plastic compounds (Polymers), and (e) Purified Hydrochloric acid (33-35%) – Pharmaceutical grade.

They invite attention to SPCB's amendment in CC&A issued to them on 12.07.2022 for the material wherein SPCB recognized HCL as hazardous waste due to which their supplies to pharmaceutical industries are getting badly affected due to protocol for these industries to not to use any hazardous waste in their process.

They cite their justification to recognize the HCl from CPW process as By-product as mentioned below:

- a. With change in technologies and demand of market, CPW manufacturing involves the usage of filtered water for scrubbing of HCl gas, hence, the chances of metallic impurities are least. It was not a practice of old time CPW manufacturers.
- b. The scrubbers for HCl gas absorption are of graphite and no metallic part comes in contact with HCl.
- c. A series of non-metallic knot out drums with packed media are installed to trap the organic mist to make the HCl organic free.
- d. Unlike the old technologies used for CPW manufacturing, where the lead line reactors were used, their plant is equipped with only Glass lined reactors and no lead part is involved in the manufacturing plant.

The state that they have obtained test certificate of HCL from MoEF approved laboratory, stating the purity of HCl as more than 33% and absence of impurities, making it acceptable for processing in various chemical industries.

As regards, justification to recognize the purified HCl 33-35% (Pharmaceutical Grade) from CPW process as product, they have following submissions:

- a. The have installed the purification plant to manufacture "Hydrochloric acid 33-35% (Pharmaceutical Grade) as per the technology developed by IIT, Kanpur having a specific grade of adsorbents to purify the HCl. It adsorbs the traces of Organic content and other heavier contents, if present. This further assures the quality of HCl to be suitable for Pharmaceutical Industries.
- b. Amendment of their purified HCl 33-35% pharmaceutical grade from product to hazardous waste will increase the burden of another 9850 MT/month on Indian Industrial Infrastructure. Keeping our HCl as Product as per the country but brings foreign exchange to our country also, as they were exporting approximately half of their total HCl production. The submitted the data in this regard to GPCB.

They state that they have installed the plant for purification of HCl after getting appropriate CTE and CCA from Gujarat Pollution Control Board with a huge investment to consume the by-product HCl. A sudden change in the category of this well-established product will impact the feasibility of this plant badly.

Considering the criticality of HCl, they assure that they will:

- a. Ensure that their all vehicles handling HCl as Product/By-product will be GPS tracked and they will keep the data available for Authority for last one year.
- b. They will send material to end users only in India. They will make sure to have an MoU with a valid consent of end user prior to Dispatch.

Deliberation: The committee deliberated upon the issue and heard the views of representatives of KLJ Organics, Shivtek Industries and Payal Polyplast. The committee also discussed the matter with CPCB representatives and Member Secretary of Gujarat Pollution Control Board. The committee noted that HCl is produced during the manufacture of caustic soda and also during the chlorination of organic compounds including paraffins. The committee also noted that HCl obtained during the manufacture of caustic is usually treated as a byproduct, whereas there seems to be varied treatment as far as HCl generated during chlorination of paraffins is concerned. The committee also noted the concern of GPCB that there is likely an oversupply of HCL in the Indian market, which may result in or is actually resulting in a negative value, with the consequent possibility of such HCl being dumped into the environment and that some such cases of dumping have actually occurred, The committee however noted that classification of HCl as a hazardous waste is coming in the way of exports and also use of such HCl in pharmaceutical industry.

Recommendation: It was decided that the CPCB will prepare inventory of the HCl produced in the country, analysis of different grades of HCl and compare the treatment of HCl in different SPCB jurisdictions. Also, the data available in public domain will be analyzed. The matter will be reconsidered by the TRC in forthcoming meeting.

Agenda 1.3 Relaxation in transportation of Dilute Acetic Acid, (Hazardous waste, for utilization under Rule 9 of H&OWM Rules, 2016 – M/s Jubilant Ingrevia Limited.

M/s Jubilant Ingrevia Limited Manufactures Acetic Anhydride and caters to various chemical manufacturing industries. It has three manufacturing units at (1) Nira, Maharashtra (2) Bharuch, Gujarat and (3) Gajraula, Uttar Pradesh. The acetic acid is the primary raw material for manufacturing Acetic Anhydride. The client industries utilize the Acetic Anhydride for manufacturing various products and the Dilute Acetic Acid is generated in these industries as by-product from the manufacturing process about which the company states that its units are authorized under Rule 9 of the H&OWN Rules, 2016 for utilization of this Dilute Acetic Acid from client industries under its installed facilities.

It has also been stated that the Acetic Acid and Acetic Anhydride are hazardous chemicals governed by the stringent regulations for transportation of hazardous chemicals and substances under the Motor Vehicles Rules.

Company states that the movement of Acetic Acid and Acetic Anhydride occurs inter-state across multi-states and the Dilute Acetic Acid (Haz Waste) generated also requires inter-state transportation across multi-states. However, in complying with the provisions of H&OWM Rules, 2016, the inter-state transportation of these chemicals is currently a big challenge for Dilute Acetic Acid, due to following reasons:

- a. Non-availability of adequate number of tankers registered with SPCBs having Motor vehicle permits for inter-state transport of Hazardous Waste.
- b. Uneconomical cost of inter-state transportation of Dilute Acetic Acid through multi-state to our Acetic Anhydride manufacturing facilities, due to high inter-state road tax and also the tankers have to run empty in one direction.
- c. Higher carbon emission footprint due to one was empty of Hazardous Waste tanker.

Therefore, while the Motor vehicle rules for transportation of Hazardous Chemicals substances allows any vehicle complying with the stipulation to transport fresh Acetic Acid and Acetic Anhydride, these tankers are prohibited from transporting Dilute Acetic Acid under H&OWM Rules, 2016.

To facilitate utilization of Dilute Acetic Acid in manufacturing of Acetic Anhydride, it is requested by M/s Jubilant Ingrevia Limited that specific relaxation may be granted for all its units for transportation of Dilute Acetic acid in tankers registered for transportation of Hazardous Chemicals Substances be allowed as per the Motor Vehicle Act, with few relaxations under H&OWM Rules, 2016.

Deliberation: The committee deliberated upon the issue and heard the views of representatives of Jubilant Ingrevia who explained that they proposed to transport the dilute acetic acid generated at the plant of their consumers to their plants for recovery of Acetic acid and Acetic anhydride . However, they were unable to explain the present mode of disposal of this waste acetic acid.

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 HOWM Rules, 2016 and does not require any amendment at present. However, the committee also suggests that CPCB may make an inventory of and obtain details of the present mode of disposal of the waste dilute acetic acid.

Agenda 1.4 Incorrect Classification of Cosmetic Products under category 28.4 & 28.5 of Schedule I of the Hazardous Waste (Management and Transboundary Movement) Rules, 2016 - representation from M/s Procter& Gamble Home Products Private Limited (P&G), Baddi, Solan, H.P.

M/s P&G has stated that they manufacture cosmetic products and detergents at Baddi P lant and if any products are found to contain packaging defects or grammage issues ("End of Line Rejects" or "EOL Rejects"), such secondary cosmetics products are segregated separately and are not sold to end consumers.

In March, 2018, the applicant received a notice from HPSPCB stating that EOL rejects falls under Hazardous Waste Category. Also, the CPCB vide its letter dated 10 th October, 2019 had clarified that these off specification & date expired products generated from production/formulation of drugs/pharmaceutical and health care product respectively comes under Schedule I of HW Rules, 2016.

However, the applicant again approached CPCB vide its letter dated 23 rd September, 2020 claiming incorrect Classification of Cosmetic Products under category 28.4 & 28.5 of Schedule I of the Hazardous Waste (Management and Transboundary Movement) Rules, 2016. Then the CPCB vide its letter dated 12 th October, 2020 informed applicant to approach TRC constituted by MoEF&CC for identification of off specification & date expired products as non-hazardous.

Accordingly, the applicant has now requested the Ministry to consider these EOL rejects as non-hazardous.

The matter was discussed in the 70th Meeting of TRC held on 17th November, 2021 and as no representative of the company joined the meeting, the committee therefore deferred the case for next meeting for better understanding of the case.

The matter was then discussed in 71st Meeting of the Technical Review Committee (TRC) held on 4th February, 2022 and the committee noted that although the off-specification date-expired products (shampoo, conditioner, etc.) generated gels, production/formulation of drugs/pharmaceutical and health care product falls under category 28.4 & 28.5 of Schedule I of the Hazardous Waste (Management and Transboundary Movement) Rules, 2016. But, during presentation the representative of P&G stated that during production, if any products are found to contain packaging defects, weight variations or grammage issues ("End of Line Rejects" or "EOL Rejects"), such Secondary Cosmetics Products are segregated separately and are not sold to end consumers. These EOL rejects are sold separately to vendors who used these EOL rejects for use in Car Wash/ floor wash but other than human use and it is non-hazardous in nature. The committee was of the opinion that these EOL rejects are waste but it may not be hazardous in nature as per Hazardous Waste (Management and Transboundary Movement) Rules, 2016. After deliberation the committee recommended to refer the matter to CPCB to confirm the same. Accordingly, CPCB was informed about the same.

This case was again discussed in the 72nd Meeting of the Technical Review Committee (TRC) held on 30th May, 2022 but due to paucity of time, the committee decided to discuss this case in the next TRC meeting.

Meanwhile, CPCB has vide its letter dated 16th June, 2022 has mentioned that they have examined the matter and observed that EOL Rejects are not sold to end consumers. These rejects are sold separately to vendors for final use as car wash/floor wash, other than human use. In this regard, CPCB has prepared Standard Operating Procedure (SoP) for utilization of Off-Specification Products (Shampoo, Detergent & Creams) for recycling under Rule 9 of HOWM Rules, 2016. This SoP defines the end use of product for car & floor washing, tyre polishing and tent houses to wash their tent clothes and carpets. The CPCB is of the opinion that these rejects shall be managed in accordance to the said SoP & HOWM, Rules, 2016 for proper utilization, recycling, disposal and requested to take appropriate action may be taken accordingly.

Recommendation: The committee noted that though the issue is raised by a particular manufacturing unit, the same issue would be there in regard to such other units. The committee therefore suggests that CPCB may obtain details of the volume of such rejects from the major manufacturers of such products and the present disposal methodology. The committee further recommended that M/s Procter& Gamble Home Products Private Limited (P&G), Baddi, Solan, H.P. may follow the SOP prepared by CPCB for utilization of Off-Specification Products (Shampoo, Detergent & Creams) for recycling under Rule 9 of HOWM Rules, 2016 as these SOP defines the end use of product for car & floor washing, tyre polishing and tent houses to wash their tent clothes and carpets.

Agenda 1.5 Regarding Categorization of ETP Sludge as non-hazardous waste - Representation from M/s NTPC Limited

M/s NTPC Limited (NTPC) has mentioned in their representation that they are operating a number of thermal power plants across the country which have water treatment plants and effluent treatment plants. It is further mentioned that the sludge from these plants are non-hazardous in nature as none of the parameters in the sludge exceed the Hazardous Waste limits as mentioned in Schedule-II of Hazardous and other Wastes (Management & Trans-boundary Movement) Rules, 2016.

However, MP Pollution Control Board (MPPCB) while renewing the Hazardous Waste Authorization granted vide consent no. H-54101 dated 02/09/21 for Vindhyachal STPS of NTPC against application no. 1069219 dated 20/04/21 has included 'Chemical sludge from wastewater treatment (Cat 35.3)' in the list of Hazardous substances with authorization for disposal through Co-processing or TSDF.

Further, NTPC requested MPPCB for exclusion of ETP sludge from the hazardous waste authorization on the basis of the exemption granted in the footnote of Schedule-I in the Hazardous Waste Rules which mentions that "The inclusion of wastes contained in this Schedule does not preclude the use of Schedule-II to demonstrate that the waste is not hazardous" but MPPCB, in its letter dated 14/10/21 has informed that the matter needs to be taken up with the Technical Review Committee of MoEF&CC for resolution.

The ETP sludges of NTPC Power Plants were tested through MoEF&CC accredited third party laboratories for all the heavy metals, Nitrate, Sulphide, Fluoride and Total Petroleum Hydroxide (TPH). As per the test report, none of the parameters in the sludge exceeds the Hazardous Waste limits as mentioned in Schedule-II of Hazardous and other Wastes (Management & Transboundary Movement) Rules, 2016.

In view of the above, NTPC requested that the ETP Sludge from Thermal Power Plants may be considered as non-hazardous waste and an advisory in this regard may kindly be issued to SPCBs.

The matter was discussed in the 71st Meeting of the Technical Review Committee (TRC) held on 4 th February, 2022 wherein the Committee deliberated upon the issue and heard the presentation made by representative of the company. The committee recommended that in first instance, requisite number of samples may be drawn by CPCB and analyzed for parameters given in schedule II of HOWM Rules, 2016. On receipt of the analysis result from CPCB, the matter will be reconsidered.

Accordingly, CPCB was requested for the analysis. Thereafter, CPCB vide its letter dated 27 th June, 2022 has stated that the samples of ETP sludge were collected from M/s Vindhyachal Super Thermal Power Station (NTPC – Vindhanagar), Singrauli on 08/05/2022. Then, CPCB analyzed parameters (shortlisted based on the unit process) such as pH, moisture, mercury & other 12 heavy metals in CPCB, Delhi. The analysis results of the ETP Sludge reveal that concentrations of analyzed parameters were found within the permissible limits except Manganese (Mn). The highest concentration of Manganese was reported as 16.21 mg/L in one of the samples, as against the permissible limit of 10 mg/L. In view of the findings, CPCB has informed that the proposal of M/s NTPC Limited to consider ETP sludge as non-hazardous may not be considered.

Further, CPCB has informed that they have prepared a comprehensive report on "Categorization of ETP sludge generated from waste water treatment of thermal power plant (M/s NTPC Limited) as hazardous or non-hazardous, which summarizes the monitoring details, analysis results, observations & recommendations.

Deliberation: The committee deliberated upon the reply submitted by CPCB and heard the views of representative of NTPC.

Recommendation: After detailed deliberation on the issue the committee recommended that more number of samples may be collected/drawn by CPCB from different plants of NTPC and analyzed for parameters given in schedule II of HOWM Rules, 2016. On receipt of the analysis result from CPCB, the matter will be reconsidered.

Agenda 1.6 Representation from Gujarat Paper Mill Association regarding Streamlining of Import of Waste Paper.

Gujarat Paper Mill Association (GPMA) has requested to withdraw the present norms under the Hazardous and Other Wastes (Management & Transboundary Movement) Rules 2016 and its subsequent amendments and OM issued by MOEF&CC dated 11-May-2010, specifying different out-throws for different kinds of waste paper. GPMA has also requested to merge all grades as only one item Waste Paper and have a uniform allowable non-fiber as per below chart:

| Norms Proposed for import of Waste paper | | |
|---|---|--|
| Item | % | Remarks |
| All Kind of Plastic | 5 | |
| Wood | 2 | Combined max allowed |
| Sand | | |
| Metal | | |
| Textile | | |
| Glass | | |
| Bio Medical Waste, Municipal Solid Waste, Post Consumer domestic waste | 0 | If found, will be sorted out and sent to C ement Factory for co-incineration |

Further, they have mentioned that in the rare case of higher prohibitive content received, currently the matter is put to litigation and drags on for years and some shipments are abandoned. Under the vision of "Vivad Se Vishwas", such contaminations from rare shipments should be allowed to be incinerated at Kiln in Cement Industries for swift resolution, since Container detention and Ground rent at Port multiply daily leading to huge cost implications and Port congestions. Material can be taken to the paper mill, rejects to be sorted out and sent to Cement factory. Compliance format may be submitted to customs and SPCB's.

GPMA has further requested to stop Imports of all kinds of Waste Paper by Traders. This will ensure only genuine users are importing waste paper with sense of Responsibility and not profit only agenda.

The matter was last discussed in $72^{\text{ nd}}$ Meeting of TRC and the recommendation of the committee is as follows:

"Due to paucity of time, the committee only have an introductory meeting with representative of Gujarat Paper Mill Association (GPMA) and informed them that matter will be discussed in the next TRC meeting".

In the 73rd Meeting of the TRC, the Committee after detailed deliberation on the issue and recommended that the capacity utilization and import data of last 2 years may be submitted by GPMA. Committee also recommended that Ministry may request CPPRI to provide the maximum percentage of plastic allowed for coating with paper and CPPRI also indicate the maximum reasonable impurities in the waste paper. Till then, the matter was deferred till the receipt of aforesaid information.

Accordingly, a letter has been sent to CPPRI. Also, applicant has been requested to provide the data. Now the applicant has submitted the data and CPPRI has submitted its reply.

Deliberation: The committee deliberated upon the reply submitted by CPPRI and heard the views of representatives from Gujarat Paper Mill Association (GPMA).

Recommendation: The committee noted that CPPRI has just forwarded the views/inputs received from Indian Agro & Recycled Paper Mills Association (IARPMA). IARPMA has also support the proposed 5% allowable for all types of plastic and 2% other impurities to be allowed in import of waste paper. In view, the TRC recommended to again ask CPPRI for their own specific views/comments on maximum percentage of plastic allowed for coating with paper and also indicate the maximum reasonable impurities in the waste paper to be allowed. Committee also requested GPMA to provide capacity utilization and import data of last 2 years may be submitted by GPMA. The matter deferred till the receipt of aforesaid information.

Agenda 1.7 Representation from M/s Greenspace Eco Management Pvt Ltd for consideration of machine/equipment capacity not the area for finalizing the capacity of recycler.

M/s Greenscape Eco Management Pvt Ltd (GEMPL) has mentioned that they face hardship whenever company approaches to producers with respect to targets under EPR [E-waste (Management) Rules, 2016], producers start discussing with regard to space and land area as per requirements and do not consider capacity of plant & machinery and recycling and storage etc. as per production/recycling capacity of the plant and machinery. GEMPL invested heavily in recycling facilities as per International Standards and working with almost all MNCs in E-waste domain. The companies, which are adopting technology i.e. advanced automatic and semi-automatic machines should be dealt not as generally framed rules. Once, the unit is inspected and certified by the Chartered Engineer and capacity of the plant is determined, the same should be considered by the producers and State Pollution Control Board. Once recycler installs state-of-the-art automatic and semi-automatic plants, the storage requirement and space requirement

reduces substantially. In that case, the storage requirement for per square meter for dismantling and recycling will be lower than 50 square meter as against 300-500 square meter.

GEMPL has requested to consider capacity of recycler based on the plant and machinery and not on the area of the plant.

Recommendation: The representative of the CPCB informed that CPCB is in process of revising Implementation Guidelines for E-Waste (Management) Rules, 2016. The committee therefore deferred the case till the preparation of guidelines by CPCB.

Agenda 1.8 Representation from MAIT on the interpretation and application of the certain rules under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.

MAIT has stated that HW Rules apply to the management of waste, particularly 'hazardous' and 'other wastes.' The term 'waste' has been defined under the HW Rules to mean 'materials that are not products or by-products, for which the generator has no further use for the purposes of production, transformation or consumption.' Further, we note that by way of explanation it has been clarified that the term '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.

MAIT has further mentioned that they have received enquiries from their members, dealing in export of electronic devices in relation to the applicability of the HW Rules seeking to export a refurbished electronic device outside India. It is pertinent to clarify here that we are referring to a case where the devices, either manufactured in India or imported as brand new devices as per the applicable laws and regulations, are subsequently refurbished within the country. It is these refurbished electronic devices which may be exported outside India for further sale.

For added clarity and in the context of such queries, refurbished electronic devices refer to devices:

- a. whose boxes were opened (i.e., seal was broken) by the customers and returned back immediately after purchase to the seller;
- b. which were used for 2 or 3 days, and then returned by the customers under the seller's return policy;
- c. which were returned as 'warranty returns' when customer noticed a defect within the warranty period; and
- d. which were damaged, and hence, could not be sold as such to a customer.

The aforesaid devices are thereafter refurbished (i.e. to make the devices look new/ new-like again, by performing functions such as repair, cleaning, etc.) by the manufacturers/ authorised sellers of these devices either on their own or through a third-party service provider and certified as refurbished.

Given this background, they have tried to analyse the HW Rules to understand its scope and extent. As discussed above, the definition of 'waste' explicitly excludes from its ambit products that are intended for further consumption or have a usable life. Given this understanding, they are of the view that such devices (which have a usable life, certifiable by a chartered engineer) should not qualify as 'waste' under the HW Rules and thereof not subject to the provisions of

the HW Rules. Having said that, they have requested to confirm their fundamental understanding on the applicability of the HW Rules and requested to provide the necessary clarity.

Deliberation: The committee deliberated upon the issue and heard the views of representatives of MAIT.

Recommendation: The committee noted that the entries under B 1110 in Part B and Part D of Schedule III of HOWM Rules 2016 are clear and those should be followed.

Agenda 1.9 Clarification on provisions of "Other wastes" as per HOWM Rules, 2016 – M/s Jubilant Generics Limited

M/s Jubilant Generics Limited vide letter dated 19.04.2022 had requested CPCB for Clarification on whether the provisions of "Other wastes" in HOWM Rules, 2016 is applicable to wastes, namely, (i) Waste paper, cardboards, corrugated boxes & (ii) Scrap Waste (scrapped machinery parts and waste consisting of Mild Steel, Aluminium). The same has been forwarded by CPCB to MoEFCC vide its letter dated 03.06.2022 for kind perusal.

M/s Jubilant Generics Limited, through its letter, familiarizes CPCB that they have received two notices from KSPCB wherein they have directed to file an application for obtaining authorization under HOWM Rules, 2016 for items mentioned above.

They interpret "Other Wastes" as per Rules 3(23) of HOWM Rules, 2016, as such wastes generated indigenously within the country but destined for Exports only and the requirement is to trace back to the commitment to the UN Charter under Basel Convention to prohibit transboundary proliferation of Hazardous Wastes.

It has been brought to notice that MoEFCC vide Notification G.S.R. 789 (E) dated 12.11.2021 has notified the amendment in HOWM Rules, 2016, where in redefined "Other Wastes" as – wastes specified in Part B and Part D of SCHEDULE III for the purpose of import and export and include such indigenously produced wastes as may be notified from time to time.

Accordingly, the HOWM Rules, 2016, in the Schedule III as applicable to Rule 3 (23) in Part B and Part C is also expressly mentioning the applicability to Import and Export of such wastes and does not stipulates its applicability for indigenously generated waste and managed domestically, until it is specifically notified by the MoEFCC.

Schedule III, Part B (List of other wastes applicable for import and export and not requiring Prior Informed Consent and Schedule III, Part D (List of other wastes applicable for import and export without permission from Ministry of Environment, Forest and Climate Change.

Further, the MoEFCC vide its Notification G.S.R. 789 (E) dated 12.11.2021 has amended the Rule 19 to include 19(7) as "The provisions of this rule shall not be applicable to other wastes as listed in Part D of Schedule III".

Therefore, the Rule 19 deliberates on movement document/Manifest system for hazardous waste to be used within the country only, further confirming our understanding that provision of Rules of authorization and disposal does not apply for "Other Wastes" within the country, until specifically notified.

M/s Jubilant Generics Limited seek specific clarifications on the under mentioned queries before their submission to KSPCB:

- a. Is the provisions of Authorization under HOWM Rules, 2016 applicable to "Other Wastes" is applicable to the following waste domestically managed.
- i. Waste paper, cardboards, corrugated boxes.
- ii. Scrap waste (scrapped machineries part and waste consisting of MS Steel, Aluminium)
 - b. Whether a generator of the waste as below, require prior approval from the SPCB for its disposal domestically.
- i. Waste paper, cardboards, corrugated boxes.
- ii. Scrap waste (scrapped machineries part and waste consisting of MS Steel, Aluminium)

Deliberation: The committee deliberated upon the issue and heard the views of representatives of Jubilant Generics Limited.

Recommendation: After detailed deliberation on the issue the committee is of the opinion that definition of "Other Wastes" as per the Notification amended vide G.S.R. 789 (E) dated 12.11.2021 is "Wastes specified in Part B and Part D of SCHEDULE III for the purpose of import and export and include such indigenously produced wastes as may be notified from time to time." and therefore provisions of Authorization under Rule 6 of HOWM Rules, 2016 does not apply to the indigenously produced wastes listed in Part B and Part D of Schedule III of HOWM Rules, 2016. However, provisions of Rule 19 of HOWM Rules, 2016 does not apply to the Part D of Schedule III of HOWM Rules, 2016 only.

Agenda 1.10 Consideration of Mixed Salt from ZLD Plant as Non-Hazardous Solid Waste or By-product as per the provisions of Hazardous & Other Waste Rules, 2016-M/s Grasim Industries Limited .

M/s Grasim Industries Limited has mentioned that they have commissioned Zero Liquid Discharge (ZLD) Plant in Staple Fibre Division at Nagda, Madhya Pradesh. The ZLD Plant is purely a water and salt recovery plant and not an effluent treatment plant. The ZLD plant, implemented with State-of-the Art technologies, is the World's first ZLD plant in the Viscose Staple Fibre Industry.

They have further stated that, in the ZLD plant, they are able to recover water and good quality of sodium sulphate salt (first of its kind technology). However, around 40 TPD of mixed salt is also generated from ZLD plant. In view of this, they have following submissions as under:

- 1. Mixed salt is not a waste as it mainly contains around 75-90 % sodium sulphate. Analysis report of mixed salt is provided.
- 2. The mixed salt is generated in ZLD plant. The ZLD plant is purely a water/salt recovery plant and not an effluent Treatment Plant. Hence, mixed salt is not falling under any category of Schedule-I of Hazardous & Other Wastes Rules, 2016.

They also have following submissions that:

- 1. They have made provisions for safe & secured storage of mixed salt in a scientific manner as per the guidelines given in Hazardous & Other Wastes Rules, 2016
- 2. They are closely working with other Industries to explore the best usage of mixed salt in other industries to avoid land filling.

In view of the above, they have requested to consider the mixed salt, produced from ZLD plant, as non-hazardous or by-product.

Deliberation: The committee deliberated upon the issue and heard the views of representatives of Grasim Industries Limited.

Recommendation: After detailed deliberation on the issue the committee recommended that in first instance, requisite number of samples may be collected/drawn by CPCB and analyzed for parameters given in schedule II of HOWM Rules, 2016. On receipt of the analysis result from CPCB, the matter will be reconsidered.
