

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 89th Meeting of the Technical Review Committee (TRC) held on 23rd October, 2024.

Venue: Narmada Conference Hall (Hybrid Mode)

PROCEEDINGS

Opening Remarks of the Chairman: The Chairman extended welcome to members and other participants.

The Committee deliberated in detail on various technical issues for clarifications sought under the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.

Agenda-wise details of deliberation and corresponding recommendations of the committee are as given below:

Agenda.1. Request for permitting the use of Spent Sulphuric Acid for manufacturing of Single Super Phosphate (SSP) by M/s Gujarat Dyestuff Manufacturers Association (GDMA) and Ankleshwar Industries Association (AIA)

M/s Gujarat Dyestuff Manufacturers Association GDMA and AIA *vide* letters dated 16th April, 2024 & 18th April, 2024 has requested to consider Spent Sulphuric acid, a common by- product of the chemical industry which plays a critical role in the manufacturing process of phosphate fertilizers like SSP. However, it is categorized as hazardous under Hazardous & Other Waste Rules, 2016.

2. They further stated that recently CPCB conducted 33rd Technical Evaluation Committee meeting, proposing that manufacturers intending to use hazardous waste like spent sulfuric acid in land applications, human consumption, animal feed, drugs or similar end uses should seek approvals from relevant authorities such as the Department of Fertilizers, FSSAI, Pharmacopoeia commission and others. This approval process has hindered manufacturer's ability to utilize spent sulfuric acid, posing a significant challenge to SSP production.

3. They informed that during FY23, the total annual production capacity of SSP plants was 12.250 million MT. Two new SSP plants were commissioned in Gujarat during the same period. In India, there are 102 SSP plants out of which 93 were operational in FY 2023. Based on the usage pattern of various zones in India viz. East, West, North & South, 61 % of SSP is produced using spent sulphuric acid route, so any restriction will result in supply gap of 3,443 KT of SSP. This may also increase in the import demand of both pure Sulphuric acid/Sulphur and Di-ammonium Phosphate (DAP) as a substitute leading to higher carbon footprint.

4. The utilization of spent acid in the manufacturing of SSP plays a vital role in promoting circularity and reducing carbon footprint. If spent acid is not used in manufacturing so alternative disposal mechanism needs to be identified, other than in cement industry as the amount generated is much higher than the demand in the cement industry.

Agenda.2. Request to amend the Classification of Spent Sulphuric acid generated from LABSA process as "Hazardous Waste" to "By product" in new SOP issued by CPCB – Representation from M/s Indian Phosphate Limited, Udaipur

Indian Phosphate Limited, Udaipur has requested for amendment in the new SOP issued

by CPCB for Classification of Spent Sulphuric acid generated from LABSA process as “Hazardous Waste” to “By product”. They have mentioned various concerns/observations which arise due to classification of Spent Sulphuric acid (from LABSA Process) as Hazardous Waste instead of By-Product.

2. It is mentioned that the raw material used for manufacturing process of LABSA are (a) Linear Alkyl Benzene (LAB) & (b) Sulphuric acid (98%). During the process LABSA is produced along with dilute sulphuric acid after completing the reaction. This dilute acid is having similar product characteristics that of sulphuric acid with only difference that the dilution varies from 70% to 80%.

3. In India, since many decades the dilute acid produced from LABSA process (generation of approx. 8 lac MT/year is being used in manufacturing of SSP Fertilizer). As per Fertilizers association of India, Ministry of Chemicals & Fertilizers, during 2022-23 the total production of SSP was 56 lakh MT approx. out of which 16 lakh MT was produced using dilute acid from LABSA process.

4. The compliance of new SOP will restrict the SSP industries to buy dilute sulphuric acid which may lead to closure of the LABSA industries. Therefore, they have requested to amend the Classification of Spent Sulphuric acid generated from LABSA process as “Hazardous Waste” to “By product” in new SOP issued by CPCB.

Agenda 1 & 2 were last discussed in 88th TRC meeting and the committee noted that there is already a committee constituted in each SPCB to decide whether a particular material is a waste or by product. Further, very recently, after a prolonged study, on request of some applicant, CPCB has come out with a detailed SOP under Rule 9 of HOWM Rules for use of Spent sulfuric acid in the superphosphate industry. The representative of the applicant could not explain what exactly was the issue being agitated before the TRC, but presumably they would like Spent sulfuric acid to be classified uniformly as a by-product.

Committee felt that more discussion is required regarding the grading of the spent sulphuric acid, equipment/technology, demand & supply ratio, tracking of movement etc. Committee also desires to have the views of some of the SPCBs and have technically knowledgeable persons present the case on behalf of the applicants. Therefore, committee recommended to defer the case for further discussion in the next meeting.

GPCB vide mail dated 4th October, 2024 informed the following:

- The trial run for utilization of Spent Sulphuric acid generated from LABSA process in manufacturing of Single Super Phosphate (SSP) for use as fertilizer has been carried out at M/s Nirma Limited, Gujarat during dated 08/09/2020 and 09/09/2020.
 - The subsequent toxicology report, Chemical analysis results of SSP by CSIR- IITR Lucknow, long term study report etc. was carried out and submitted to CPCB, Delhi.
 - This case has been discussed multiple times in various CPCB TEC meetings after which the SOP was finalized and published on 04/06/2024.
 - The typical characteristics of spent sulphuric acid generated from LABSA have been listed in the SOP No. 102 published by CPCB.
- Further, the trial run for utilization of spent sulphuric acid generated during Diazotization Reaction, Nitration and Sulphonation Reaction in manufacturing of Single Super Phosphate (SSP) was carried out at M/s. Aarti Industries Ltd, Vapi during 22/11/2022 to 24/11/2022. Unit has submitted letters to CPCB to issue TOR for long term study which is awaited.
- As it was proposed during 38th TEC, since the long term study will at least take 2 years, so it is suggested that conditional permission to units may be issued prescribing

necessary precautionary measures viz. purity >70%, pre-treatment to reduce TOC < 500 mg/L in spent sulphuric acid, following online manifest system (as done in Gujarat) and maintaining consumption records etc.

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

Agenda.3. Appeal on Standard Operating Procedure (SOP) with respect to Utilization of Spent/ Diluted Sulphuric Acid produced during the production of Linear Alkyl Benzene Sulphonic Acid (LABSA) – Representation from All India Federation of Soaps, Detergents & Homecare Products’ Manufacturers

All India Federation of Soaps, Detergents & Homecare Products’ Manufacturers has mentioned that the Standard Operating Procedure (SOP) issued by the Central Pollution Control Board (CPCB) in June 2024, which reclassifies SSA generated during the LABSA process as hazardous waste instead of a by-product, has far –reaching and detrimental consequences. This reclassification has led to significant operational challenges, including operational difficulties, increased documentation, formalities and transportation issues associated with handling hazardous waste; hence it is clearly against Government of India Policy of Ease of Doing Business.

2. It is mentioned that LABSA is sold as a finished raw material to detergent manufacturing industry and diluted sulphuric acid is sold as finished raw material to manufacturers of SSP, Magnesium Sulphate, Alum, Di-Calcium Phosphate etc. Many facts are there which are supporting the utility of the Sulphuric acid generated from manufacture of SSP production and its non- hazardous nature, some of them are as follows.

- The toxicology study was carried out (by CSIR-IITR Lucknow) for utilizing with SSP produced from 100% Spent sulphuric acid generated from LABSA and 100% pure sulphuric acid.. The experimental results show that no fish mortality was observed with the SSP manufactured from both spent sulfuric acid and pure sulfuric acid.
- The Ministry of Chemicals and Fertilizers, in their letter dated 13/05/2024 to CPCB concluded that it is further important to mention here that as per the long term study (conducted by the Anand Agricultural University for SSP manufactured from spent acid and pure acid), it was concluded that there was no difference found in various parameters of study with the use of SSP produced either from Spent Sulphuric Acid or Pure Sulphuric Acid. Therefore, there should not be any restriction or labeling on use of Spent Sulphuric Acid for production of SSP”.

3. In view of the above, it is requested to reassess and reverse the classification of spent/Dilute Sulphuric Acid generated from LABSA process as hazardous waste. Accordingly, the matter is placed before TRC.

Deliberation and Recommendation in respect of Agenda 1-3:

Deliberation: The committee deliberated upon the details submitted by the GPCB and heard the views of the representatives of CPCB and the applicants. The applicants raised the concern that considering Spent Sulphuric Acid as hazardous is contrary to the HOWM Rules, 2016 & framework issued by CPCB in 2019 and many facts are there which are supporting the utility of the Sulphuric acid generated from LABSA process for manufacturing of SSP (Single Super Phosphate). The applicant also informed that SPCB while granting renewal to the unit located in West Bengal asked them to apply under hazardous waste though initially the Consent was granted mentioning the Spent Sulphuric acid as by-product.

On enquiring from the applicant about the issue faced by them while

complying with SOP issued by CPCB, they objected that if it is not falling under waste category then it becomes an extra burden imposed upon them. CPCB informed that the HOWM Rules, 2016 defines 'waste' and 'by-product' and CPCB has issued Framework on identification of material generated from industrial processes as "wastes" and "by-products". As per the said framework, a material may be classified as "waste" or "by-product" by the concerned SPCBs/PCCs following the procedures specified therein. The committee also showed concerns on unethical dumping of waste and discussed various methods to monitor the same.

Applicants from GDMA and AIA mentioned that TEC (Technical Evaluation Committee) has raised objection to certain products where Spent Sulphuric Acid is used (for example- For manufacturing of Single Super Phosphate fertilizer, Di-calcium phosphate which is used in animal - fodder/nutrient). TEC has recommended detailed study on Soil & Crops for land application products such as fertilizers and on animals for animal supplement nutrient, until then its usage is restricted. Further, Department of Fertilizer has recommended to CPCB that the temporary permission may be granted to the companies (Non LABSA based) to continue the usage of the spent sulphuric acid as by product as the long term study will take 1-2 years. In this regard, CPCB informed that the TEC has recommended the conditions for conducting the long term study (for a period of 18 to 24 months) for the SSP manufactured from Spent Sulphuric acid (generated from non-LABSA processes) and the TOR for long term study to be conducted for DCP manufactured from Spent acids to be finalized by CPCB upon receipt of comments from Ministry of Fisheries, Animal Husbandry & Dairying.

Recommendation: After deliberation, the committee recommended the following:

a) Utilization of Spent Sulphuric generated from LABSA process in manufacturing SSP:

The committee noted that the spent sulfuric acid generated in the manufacturing of LABSA is not the primary or intended product and has hazardous characteristic. For it not to be a hazardous waste, it is necessary to demonstrate unequivocally that it has a commercial use as such, without any pre-treatment. It is clear that spent acid with strength >70% and TOC <200 mg/l is used as such in the superphosphate industry as it is, but whether such use is commercially viable will depend on the overall demand and supply situation of spent sulphuric acid. Further, the commercial viability may be different for different units and State/UT, depending on the transport cost to the potential user units.

CPCB has already issued framework regarding identification/classification of materials generated from Industrial Processes as Wastes or By-products. The committee after detailed deliberations recommended that the units may apply to the concerned SPCBs to classify the Spent Sulphuric Acid (generated from LABSA process) as "by-product" and the SPCBs may examine the application based on the framework issued by CPCB and may take appropriate decisions on case to case basis.

However, the committee also opined whether it is classified as a hazardous waste or by-product, there should be proper monitoring of

the movement and the committee therefore suggests the following:

- i. Spent sulphuric acid should have strength >70%, TOC<200 mg/litre and such other characteristics as specified by CPCB.
- ii. Sales to be made only to end users and no sales to be allowed to traders.
- iii. Submission of details of end users to whom the spent sulphuric acid is to be supplied and verification of the same by the SPCB of the requirement of such end users, especially their capacity to use such spent sulphuric acid purchased.
- iv. The movement of sulphuric acid from Producer to End User under GPS tracking.
- v. Quarterly report of sulphuric acid produced and supplied by a unit to end user supported by GST invoices and e-way bills should be submitted to the concerned SPCBs/PCCs.
- vi. Such other conditions for environmentally safe handling as may be considered necessary by the SPCB for both the generating and using facilities

In case of such companies where there is captive utilization of the Spent Sulphuric Acid, since there is no requirement of GST invoice and there may not be movement under E-way bills, the SPCBs may ensure that utilization of Spent Sulphuric Acid is in the stoichiometric proportion of the generation and with a record of proper material balance.

b) Utilization of Spent Sulphuric (generated from Non-LABSA processes) in manufacturing SSP:

In case of GDMA & AIA representations, the committee recommended that the applicants may set up study as per TOR given by TEC (Technical Evaluation Committee) of CPCB. Further, TRC concurred with the recommendation of said TEC (in its 38th meeting held on 14th March, 2024) for a temporary conditional permission to conduct the long term study for a maximum period of 24 months to the unit carrying out such long term study, provided the study is initiated within two months. Committee asked the industries to work in coordination with CPCB regarding the same.

Agenda 4. Consideration of Hydrochloric Acid as by-product/ co-product as per the provisions of Hazardous and Other Waste Rules, 2016

- i. Request for consideration of Hydrochloric Acid (HCL with purity 32 % and above) (Category: Schedule-II (B15)) as by-product produced from consented/permitted Benzyl products i.e. Benzyl Chloride, Benzaldehyde and Benzyl Alcohol - M/s KLJ Organics Limited (Unit II), Jhagadia, Gujarat

M/s KLJ Organics Limited, Jhagadia, Gujarat has requested for consideration of Hydrochloric Acid (HCL with purity 32 % and above) (Category: Schedule – II (B 15)) as by- product from Benzyl products i.e. Benzyl Chloride, Benzaldehyde and Benzyl Alcohol.

They have mentioned that in Environment Clearance (EC) and Consent to Establish (CTE), HCL produces having purity 32% and above were obtained as By Product /Co-product from Product Benzyl Chloride, Benzaldehyde & Benzyl

Alcohol but in subsequent CC&A Amendment it is produced as Hazardous Waste. They have submitted the following documents:

- Equipment /technology available to get HCL with Purity 32% and above Analysis Reports for said purity of HCL issued by NABL and MoEFCC approved laboratory
- Certificate issued by Institute of Chemical Technology (Mumbai) stating that produced HCL (32% and above) by M/s KLJ Organic Limited (Unit II) is not falling under Hazardous waste category in Schedule I, III, IV & VI of Hazardous & Other Waste (Management & Trans Boundary Movement) Rules, 2016 and it is a By- Product.
- List of End users to whom the HCL is to be supplied along with MoU

ii. Request for consideration of Hydrochloric Acid as by-product produced from manufacturing process of Benzo Trichloride (BTC) & Vinylidene Difluoride (VDF) - M/s Gujarat Fluorochemicals Limited, Bharuch, Gujarat

The applicant has mentioned that HCL produced during the manufacturing process are not hazardous but SPCB recognized HCL as hazardous waste due to which their supplies to end user industries are getting badly affected due to protocol for these industries to not to use any hazardous waste in their process and the high economy loss is tuned. They have further requested to consider the HCL as by-product.

iii. Request for consideration of Hydrochloric Acid as by-product produced from manufacturing process of R-22 & R -142b - M/s Gujarat Fluorochemicals Limited, Panchmahal, Gujarat

The applicant has mentioned that HCL produced during the manufacturing process are not hazardous but SPCB recognized HCL as hazardous waste due to which their supplies to end user industries are getting badly affected due to protocol for these industries to not to use any hazardous waste in their process and the high economy loss is tuned. They have further requested to consider the HCL as by-product.

Agenda.5. Consideration of Hydrochloric Acid generated from manufacturing of Monochloroacetic acid (MCA) as product/ by-product/ co-product as per the provisions of Hazardous & Other Waste Rules, 2016 by M/s Anaven LLP, Valsad, Gujarat

M/s Anaven LLP, a joint venture company of Atul and Nouryon (erstwhile known as Akzonobel), Netherland is the largest manufacturer of Monochloroacetic acid (MCA) in India. The Company manufactures MCA using Nouryon's state-of-the-art proprietary technology involving the reaction of acetic acid with chlorine. MCA is presently imported largely from China and it is used for manufacturing of pharmaceuticals like Ibuprofen, agrochemicals, liquid soaps, detergent and other cleaning products.

2. The plant is having valid Environment Clearance (EC) no. J-11011|286|2018 |IA II (I) dated August 11, 2020 and valid Consent to Operate (CTO) no. AWH 119535 dated July 27, 2022. Later we also received an EC EC22A021GJ120716 dated December 03, 2022 and subsequently CTO amendment no. WH 131858 respectively for the expansion in the capacity from 32,000 TPA to 38,400 TPA. MoEFCC has given HCl as a product in both the ECs granted. Also the analysis report in this regard from NABL and MoEFCC certified laboratories are provided by the applicant.

3. Despite all the above approvals and documents submitted to GPCB for consideration of Hydrochloric Acid generated from manufacturing of Monochloroacetic acid (MCA) as product/ by-product/ co- product as per the provisions of Hazardous & Other Waste Rules, 2016, GPCB granted HCl as a waste making whole predicated business calculations wrong as it cannot be sold in open market neither can be export though company invested Rs. 4.5 Cr for the purification of HCl. This investment apart from the recurring cost is in vein.

4. GPCB are additionally asking for the recommendation letter issued from the HSM division to consider HCl as a product. Therefore, applicant requested Ministry to consider the same for decision.

Agenda 3 & 4 were l a s t discussed in 88th TRC and the committee was of the opinion that non-compliance of the condition stipulated in Ministry's OM dated 23rd February, 2023 allowing that the HCL generated from manufacturing of Chlorinated Paraffin Wax (CPW) with purity 32% and above may be considered as product/by-product by the respective SPCBs (state of origin), to be supplied to end user only subject to certain condition is still a matter of high concern as its impact on the environment is irreversible. In the instant cases wherein HCL is generated from the process other than the manufacturing of CPW, its grading and comparison of its purity must be analyzed. Committee felt that more discussion is required in the matter. Therefore, committee recommended that views/comments from CPCB/SPCB may be obtained for further discussion/deliberation on the issue.

Now, GPCB vide mail dated 04/10/2024 informed the following:

- This office was in receipt of letter from CPCB, Delhi dated 27/12/2023 with reference to discussion done during 81st TRC held on dated 6/09/2023 to co-ordinate with CPCBRD- Vadodara for joint inspection, monitoring and report preparation of the three units (M/s KLJ Organics Limited (Unit II), Jhagadia, M/s Gujarat Fluorochemicals Limited, Bharuch and M/s Gujarat Fluorochemicals Limited, Panchmahal).
- Subsequent to which officers from corresponding Regional Offices, GPCB joined CPCB-RD, Vadodara officials in monitoring. Report has been prepared by CPCB-RD, Vadodara and it is understood that the report is submitted directly to CPCB, New Delhi.
- It is suggested that monitoring by CPCB shall be arranged for the inspection and sampling for the analysis of the parameters for the TOC in case of M/s Anaven LLP, Valsad, Gujarat.

Deliberation and Recommendation in respect of Agenda 4&5:

Deliberation: The committee deliberated upon the issue and heard the views of the representative of CPCB and the applicants. Committee showed its concerns on violation of conditions specified in its 75th meeting by some units as advised by GPCB that the units are not following TRC conditions for generation of HCL from manufacturing of CPW (Chlorinated Paraffin Wax).

Recommendation: After detailed deliberations and as advised by CPCB, the committee opined that the HCL with purity 32% and above may be considered as by-product by the respective SPCBs/PCCs (state of origin), to be supplied to end user only, subject to the following:

- i. Units should have proper equipment/technology to produce HCl with purity of 32 per cent and above, which only can be

declared as by-product.

- ii. **Sales to be made only to end users and no sales to be allowed to traders.**
- iii. **Submission of details of end users to whom the HCL is to be supplied and verification of the same by the SPCB of the requirement of such end users, especially their capacity to use such HCL purchased.**
- iv. **The movement of HCL from Producer to End User under GPS tracking.**
- v. **Quarterly report of HCL produced and supplied by a unit to end user should be submitted to the concerned SPCBs/PCCs.**

The above details may be furnished to the SPCB which will place the matter before the committee constituted for this purpose in SPCB which may classify the HCL as by-product if the above conditions are complied with. SPCBs may regularly check and ensure compliance of the condition stipulated in the permission granted to them.

Committee also recommended that monitoring by CPCB shall be arranged for the inspection, sampling and analysis of the TOC in case of M/s Anaven LLP, Valsad, Gujarat. Committee further recommended that the matter will be reviewed after 06 months on the basis of its proper implementation by the applicants.

Agenda.6. Request to permit import of scrap tyre for pyrolysis – Representation from All India Rubber & Tyre Recyclers Association (AIRTRA).

AIRTRA has requested to allow import of scrap tyres for pyrolysis plants. They have mentioned that all categories of manufacturers should be allowed to import scrap tyres as long as they are meeting the norms of state pollution control board and import SOP. Since the import is restricted for pyrolysis, so there is no advancement in technology as entrepreneurs are not investing huge amount due to lack of raw material assurance.

2. Further, they have suggested that Ministry should impose stricter environmental norms such as installation of thermal oxidizer, dust collector and continuous monitoring system. It is therefore requested that above suggestion of permitting import for pyrolysis be considered for the growth of India Economy, the recycling sector, saving foreign Exchange and Technological advancement

The matter was last discussed in 87th TRC meeting held on 20th May, 2024 and the committee noted that tyre pyrolysis poses significant challenges regarding flue gas treatment, handling of char and possible presence of rubber additive derived contaminants in the tyre pyrolysis oil. The committee also noted that import of waste is allowed only for resource/material recovery and it is for these reasons, import of waste tyres for pyrolysis has not been hitherto considered. The committee however took note of the applicants' argument that pyrolysis oil will substitute for imported fuel, and tyre pyrolysis saves on the energy consumption and carbon emissions inherent in crude refining. The Committee recommended that the applicant may be asked to provide detailed information on standards, technologies and pollution control measures of tyre pyrolysis oil used elsewhere in the world. The applicants may specifically explain why tyre pyrolysis has not become a widely acceptable form of tyre disposal in several parts of the world. The Committee also noted that in the waste treatment hierarchy, material recovery in the form of crumb stood higher compared to pyrolysis. While taking note of the applicants' submission that eventually the downcycled rubber products have to be subjected to pyrolysis to avoid dumping into landfills, the

committee requested the applicants to provide their detailed views on the same. In view of the aforesaid, the Committee felt that the matter may be taken after the receipt of required information. CPCB may also be requested to provide its further input on this issue.

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

Deliberation: The committee deliberated upon the matter and heard the views of representatives of CPCB. The committee noted that import of waste tyres for manufacturing of crumb rubber/reclaim rubber is due to poor quality, scarcity of waste tyres in domestic market. However, the committee found no strong or proper justification for import of waste tyres for pyrolysis. Further, CPCB informed that there are more than 500 pyrolysis units out of which only less than 10 are continuous pyrolysis plants and rest are batch pyrolysis plant. However, the pollution potential is almost equal but pollution prevention or control is more in case of continuous plant.

Recommendation: The committee recommended that the applicants may be asked to provide the proper justification for import of waste/scrap tyre for pyrolysis as the import of waste tyre is prohibited as per the Ministry's notification dated 21st July, 2022. Committee also asked CPCB to compile the data regarding the number of units able to generate the pyrolysis oil w.r.t the specification criteria given by CPCB. Till then the matter is deferred.

Agenda.7. Clarification on categorization of ETP sludge as hazardous or non-hazardous - Representation by M/s United Breweries Limited (UBL)

United Breweries Limited (UBL), a subsidiary of Heineken NV, is India's largest beer company and a market leader. The applicant has mentioned that in the month of January, 2024 UBL had approached the Hon'ble Madras High Court, challenging orders of Tamil Nadu Pollution Control Board (TNPCB) seeking to immediately close the operations in their breweries. During the proceedings, the Hon'ble High Court had appointed National Environmental Engineering Research Institute (NEERI) to conduct inspection.

2. Now, as per NEERI inspection report dated June 5, 2024, the ETP sludge has been found to be non-hazardous. However, observing the fact that there is a difference in the opinion between UBL and TNPCB regarding the hazardous nature of the ETP Sludge, NEERI recommended the matter to be referred to the TRC for clarification on categorization of the waste as hazardous or non-hazardous.

The matter was last discussed in 88th TRC meeting held on 20th August, 2024 and after deliberating the issue committee recommended that M/s UBL has to submit the ETP sludge test report tested by Vimta Labs Limited and SGS India Private Limited as suggested by NEERI. The committee also recommended that there are many breweries in the country and the present practice being followed by different SPCBs may be ascertained by CPCB and also give its views/comments.

Now, M/s United Breweries Limited (UBL) has submitted the test report tested by Vimta Labs Limited and SGS India Private Limited and it is mentioned that the reports demonstrate that the sludge is non-hazardous in nature. Accordingly, the matter is placed before TRC for deliberation/decision.

Deliberation: The committee deliberated upon the report submitted by the applicant. The committee wanted to interact with the applicant but the latter was not present in the meeting.

Recommendation: The committee after deliberation upon the issue recommended that

since this is a process in which there are many other units, CPCB may be asked to review the method of disposal, classification of waste as far as other units are considered so that a uniform decision may be taken. Till then the matter is deferred.

Agenda.8. Request to ban on export of Black mass – Representation by M/s Attero Recycling Private Limited, Noida

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

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

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

Accordingly, the matter is placed before TRC.

Deliberation: The committee deliberated upon the issue and heard the views of the applicant. The committee enquired about the quantity of black mass being exported and the reasons for not getting Black Mass in India. It was found that around forty thousand ton is exported and the applicant himself has twenty thousand tons of recycling capacity. The applicant further mentioned that the Black mass is exported in China as the buyer in China is paying more than the buyer in India.

Recommendation: After deliberation, the committee recommended that the applicant may be asked to provide the details about the stakeholders considering or declaring black mass as waste or product, till then the matter is deferred.
