Agenda for 1st Committee Meeting, for

By-Products and Hazardous waste categorization dtd. 22.06.2020

Agenda-1

Identify the number of industries required to be amended. (industry statistics)

The data has been extracted from the MPCB Portal for the category of Chemical sector, as per the revised classification of the industry dtd. 07.03.2016, which are enlisted as below...

- > R-22 Organic Chemicals manufacturing,
- > R-25 Organic Chemicals manufacturing and
- ➤ R-58 Pharmaceuticals

While go through the detail it was observed that, 425 No's of units have been mentioned the name of the by-products in the application form.

Agenda-2

Implementation of Hazardous and Other Waste (Management & Transboundry Movement) Rule, 2016...discussion.

In order to strengthen the implementation of environmentally sound management of hazardous waste in the country, the Ministry of Environment, Forest and Climate Change has amended the Hazardous and Other Wastes (Management & Transboundry Movement) Rules, 2016.

"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. Explanation.- for the purposes of this clause,

- 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:

Rule-9, Utilisation of hazardous and other wastes.-

- The utilisation of hazardous and other wastes as a resource or after preprocessing either for co-processing or for any other use, including within the premises of the generator (if it is not part of process), shall be carried out only after obtaining authorisation from the SPCB in respect of waste on the basis of standard operating procedures or guidelines provided by the CPCB.
- 2. Where standard operating procedures or guidelines are not available for specific utilisation, the approval has to be sought from CPCB which shall be granting approval on the basis of trial runs and thereafter, standard operating procedures or guidelines shall be prepared by CPCB: Provided, if trial run has been conducted for particular waste with respect to particular utilisation and compliance to the environmental standards has been demonstrated, authorisation may be granted by the State Pollution Control Board with respect to the same waste and utilisation, without need of separate trial run by CPCB and such cases of successful trial run, CPCB shall intimate all the SPCB regarding the same.
- 3. No trial runs shall be required for co-processing of waste in cement plants for which guidelines by the CPCB are already available; however, the actual users shall ensure compliance to the standards notified under the Environment (Protection) Act,1986 (29 of 1986), for cement plant with respect to co-processing of waste: Provided that till the time the standards are notified, the procedure as applicable to other kind of

utilisation of hazardous and other waste, as enumerated above shall be followed.

Agenda-3

To decide the line of action to follow the guidelines issued by Central Pollution Control Board on May, 2019.

Industrial process may also generate waste(s) and by-product(s) besides products(s). The management of Hazardous and Other wastes in India is regulated as per the Hazardous and Other Wastes (Management and Transboundry Movement) Rules, 2016 (HOWM Rules, 2016).

The "waste" is defined under Clause 3(1) (38) of the HOWM Rules 2016 as follows: 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. The explanation incorporated further for the purposes of this clause states as follows:

- 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.

6.0 Criteria for Identification of material as waste or by-product

6.2 Steps to be followed

- a) **Step-1** Examine the production process and find out whether the material is "intended to be produced" or "not intended to be produced but gets produced". If the material produced is an intended production it is deemed to be a "product". If the material is not intended to be produced but gets produced in the production process and is being claimed as a byproduct go to STEP-2.
- b) **Step-2** Check the classification of the material claimed as by- product as per the HOWM Rules 2016 and find out whether the material is listed in Schedule-III or Schedule-IV or Schedule-VI of these rules. If the material is appearing in the aforesaid schedules, it is deemed to be a hazardous or other waste. In case the material does not appear in any of these three schedules go to next step.
- c) **Step-3** Check whether the material claimed as by- product is listed in Schedule-I of the HOWM Rules 2016. In case it is not listed in this schedule go to Step-4A and if listed in this schedule go to Step-5.
- d) Step-4A Ask the generator of the material being claimed as by- product to conduct a pre-feasibility study for its end uses. The aspects to be covered (but not limited to) in the <u>pre-feasibility study</u> are given in Appendix-I. In case the end use is found to be feasible go to Step-4B. In case the end use is not found feasible the material remains as hazardous or other waste.
- e) **Step-4B** Upon establishing the end use of the material as feasible, ask the generator to conduct environmental & health impact and risk assessment studies covering the different end use scenarios of the material. The

aspects to be covered (but not limited to) in these studies are given in Appendix-II. In case the findings of the studies do not indicate any potential risk to the environment, health or other hazards in any of the end use scenarios the material may be identified as "by-product" subject to preparation and submission of its Safety Data Sheet by its generator (The OSHA- Hazard Communication Standard for Safety Data Sheets is attached at Annexure-III for reference). In case of any potential risk is identified in the studies the material remains a hazardous or other waste.

- f) **Step-5** If the material claimed as by-product is listed in Schedule-I of the HOWM Rules, 2016, check whether the process of production is also listed in the projects or activities which require Environment Clearance (EC) under the EIA Notification 2006 as Amended. In case listed in the EIA notifications go to Step-6 else go to Step-4A.
- g) **Step-6** Ask the generator to apply to the concerned authority for obtaining EC for the production of the material as by-product. The studies to be conducted for this purpose should include the aspects given in Appendix-I and Appendix-II. In case the EC is granted the material may be identified as a "**by-product**" subject to preparation and submission of its Safety Data Sheet by its generator as mentioned in Step 4B above. In case EC is not granted the material remains a "**hazardous or other waste**".

It is proposed to have Evaluation Checklist as follows considering CPCB guidelines

	Evaluation checklist as Per CP	· · · · · · · · · · · · · · · · · · ·
teps	Guideline	Status / Remark
I	whether the material is "intended	
	to be produced" or "not intended	
	to be produced but gets	
	produced"	
II	Whether the material is listed in	
	Schedule-III or Schedule-IV or	
	Schedule-VI of these rules.	
III	Check whether the material	
	claimed as by- product is listed in	
	Schedule-I of the HOWM Rules	
	2016. In case it is not listed in this	
	schedule go to Step-4A and if	
	listed in this schedule go to Step-	
	5.	
4A	Ask the generator of the material	
	being claimed as by- product to	
	conduct a pre-feasibility study for	
	its end uses. The aspects to be	
	covered (but not limited to) in the	
	pre-feasibility study are given in	
	Appendix-I. In case the end use is	
	found to be feasible go to Step-4B	
4B	Upon establishing the end use of	
	the material as feasible, ask the	
	generator to conduct	
	environmental &health impact	

		and risk assessment studies	
		covering the different end use	
		scenarios of the material. The	
		aspects to be covered (but not	
		limited to) in these studies are	
		given in Appendix-II. In case the	
		findings of the studies do not	
		indicate any potential risk to the	
		environment, health or other	
		hazards in any of the end use	
		scenarios the material may be	
		identified as "by-product" subject	
		to preparation and submission of	
		its Safety Data Sheet by its	
		generator	
	5	If the material claimed as by-	
		product is listed in Schedule-I of	
		the HOWM Rules, 2016, check	
		whether the process of	
		production is also listed in the	
		projects or activities which	
		require Environment Clearance	
		(EC) under the EIA Notification	
		2006 as Amended. In case listed in	
		the EIA notifications go to Step-6	
		else go to Step-4A.	
	6	Ask the generator to apply to the	
		concerned authority for obtaining	
		EC for the production of the	
		material as by-product. The	
		studies to be conducted for this	
		purpose should include the	
		aspects given in Appendix-I and	
		Appendix-II. In case the EC is	
		granted the material may be	
		identified as a "by-product"	
		subject to preparation and	
		submission of its Safety Data	
		Sheet by its generator as	
		mentioned in Step 4B above	
Agenda-4	Casas fo	or discussion:-	

Agenda-4

Cases for discussion:-

1. M/s. ANSHUL SPECIALITY MOLECULES PVT LTD.

- Existing Consent to Operate:- Industry has obtained C to O for the manufacturing of manufacturing of "Speciality Chemicals" vide Format 1.0/BO/AST/UAN No. 0000081366/CC-2002001093 dtd. 25.02.2020 which is valid up to 31.10.2023.
- ➤ **Old C to O**:- Previously, Board has granted C to O on 02.08.2018 mentioning the products (30 No's) and by-products (Total 14 No's).
- **Environmental Clearance:-** Not obtained.
- Applied for:- Industry applied for amendment in existing Consent to Operate for shift the three chemicals namely

- o Hydrochloric Acid,
- o Sodium Hypochlorite and
- Hydro-bromic Acid

to by-product as they are mention in the Hazardous waste.

- Submitted documents:
 - o Application form for amendment,
 - o Identification of material as a by-product,
 - o Material analysis reports (self-certified)
 - Material Balance.

Recommendations:

- **1.** Material claimed by-products are **not** listed in Schedule-III or Schedule-IV or Schedule-VI of HOWM Rules 2016.
- **2.** Material claimed as by- product is **not** listed in Schedule-I of the HOWM Rules 2016.
- **3.** We may ask **M/s. ANSHUL SPECIALITY MOLECULES PVT LTD.** to conduct a pre-feasibility study for its end uses & submit the report before the committee.

2. M/s. Aarti Industries Ltd., Plot no. K-17/18/19, MIDC Tarapur, Palghar.

- Existing Consent to Operate:- MPCBCONSENT-0000053726/0/CC-1907000242 dated- 04.07.2019 which is valid upto 30.04.2020. Applied for renewal of consent to operate, approved in 4th CC-meeting and waiting for SRO's verification report.
- **Environmental Clearance:**-Industry has obtained Environmental Clearance vide No. SEIAA-EC-0000000222 dated 17/3/2018.
- ➤ **Applied for:** Industry applied for amendment in existing Consent to Operate for shift the three chemicals namely
 - o Recovered Acetic Acid,
 - o Recovered Sodium Chloride,
 - o Recovered Sodium Sulphate

to by-product as they are mention in the Hazardous waste.

The case was approved in the CC-meeting dtd. 20.03.2020 and It was decided to consider the amendment in existing consent to operate for change in disposal path of HW and shifting of recovered acid by-product to product considering the guidelines published by CPCB as the same by-product shown in Environmental Clearance.

Recommendations:

AS PP has already obtained EC vide No. SEIAA-EC-0000000222 dated 17/3/2018, with above named by-Products, hence we may consider the case for approval.

3. M/s Vinati Organics Limited, Plot No. A-20, MIDC Lote Parshuram, Tal. Khed, Dist. Ratnagiri.

- ➤ **Consent to Operate** Format 1.0/B0/CAC-Cell/UAN No. 0000044299/2nd CAC-1810000547 dtd. 12/10/2018 which is valid up to 28/02/2020. Applied for renewal of Consent to Operate, approved in 2nd CAC meeting held on 04/05/2020.
- ➤ Consent to Establish -Format 1.0/BO/CAC-Cell/UAN No. 0000047352/E/5th CAC-1903001301 dtd. 25/03/2019 which is valid up to 25/03/2024. Applied for Consent to 1st Operate for expansion, approved in 21st CAC meeting held on 30/01/2020.
- Environmental Clearance:- Industry has obtained Environmental Clearance vide No. SEIAA-EC-0000000208 dtd. 12/03/2018.

➤ **Applied for :-** Industry applied for renewal of Consent to Operate for mfg. of products and by-products as per the EC.

The cases were approved in the CAC meeting dtd. 30/01/2020 & 04/05/2020 and it was decided to grant renewal of Consent to Operate for mfg. of synthetic organic chemicals by clubbing with Consent to 1st Operate application UAN No. 0000080507 which was approved in CAC dtd. 30.01.2020.

Recommendations:

AS PP has already obtained EC vide No. SEIAA-EC-0000000208 dtd. 12/03/2018, with above named by-products, hence we may consider the case for approval to place by-products in product list.

- 4. M/s Vinati Organics Ltd., Plot Nos. B-12, B-13/1, B-4, B-5, B-6, MIDC Mahad, Tal. Mahad, Dist. Raigad.
 - > Consent to Operate:- Format 1.0/BO/CAC-Cell/UAN No. 0000033941/5th CAC-1903001299 dtd. 25/03/2019 which is valid up to 31/01/2020. Applied for renewal of Consent to Operate, approved in 4th CAC meeting held on 05/06/2020.
 - ➤ Environmental Clearance:- Industry has obtained Environmental Clearance vide No. SEAC-2016/CR-123/TC-2 dtd. 27/09/2016.
 - > **Applied for :-** Industry applied for renewal of Consent to Operate for mfg. of

Sr.	Name of Products	Maximum
No.		Quantity &
		UoM
1	Isobutyl Benzene	18000 MT/A
	By-products	
2	Light Hydrocarbon (Mixed Hexane)	1836 MT/A
3	Heavy Hydrocarbon (Normal Butyl Benzene/C-	3744 MT/A
	10/Butyl Benzene)	
4	Off Gases (Mixed Propylene + Propane/ Liquid	3756 MT/A
	Propane)	

The case was approved in the CAC meeting dtd. 05/06/2020 and it was decided to grant consent for short period up to 31.03.2021 by imposing following condition:

- 1. PP shall submit the characteristic and end use effluent which sending the sister concern unit within a month.
- 2. PP shall submit detailed information of the by-products within a month.

Recommendations:

AS PP has already obtained EC vide No. SEAC-2016/CR-123/TC-2 dtd. 27/09/2016, with above named by-products, hence we may consider the case for approval to place by-products in product list.

- 5. M/s. Excel Industries Limited, Plot Nos. 112, 20/1, OS-2, MIDC Area, Dhatav, Tal. Roha, Dist. Raigad.
 - ➤ Industry has applied for renewal of consent to opeate mfg. of Organophosphorous chemical products like Phosphorous Tri Chloride (PCL3), Para Ethoxy Ethyl benzoate (PEEB), Diethyl/Dimethyl Thiophosphoric Chloride, Styrene Phosphonic Acid, Phosphorous Penta Sulphide (P2S5) etc.
 - ➤ **Consent to Operate:**-Format 1.0/B0/CAC-Cell/EIC No-RD- 3195- 15/14th CAC-2648 dtd. 23.02.2026 which was valid upto 30.01.2020.

- **Environmental Clearance:-** Not obtained.
- As per the CAC Minutes of Meeting dtd. 2nd CAC Meeting of 2020-21 (Booklet No. 2) dtd. 04.05.2020 and it was decided to grant renewal of Consent to operate with certain terms and condition.
- Consent shall be issued by placing by-products in hazardous waste category after confirming disposal path.

Industry request:-

PP via e-mail dtd. 22/06/2020 informed that, CAC- MOM of 5 May 2020 Consent UAN No 83769 CAC decided to issue the consent, by placing all the By-products in hazardous waste category.

Out of these HCL , NaSH, OPA, sulphur, etc are the By-products as per the definition given in hazardous waste rule 2016

As per the guidelines of Identification of material as a waste or By-products, industry has requested to give them an opportunity to present them self by carrying out prefeasibility study.

Recommendations:

We may ask **M/s. Excel Industries Limited.** to conduct a pre-feasibility study for its end uses & submit the report before the committee.

- 6. M/s Lubrizol India Private Limited, 9/3, Thane- Belapur Road, Turbhe, Navi Mumbai.
 - ➤ **Consent to Operate:** Format 1.0/BO/CACCell/UAN No. 0000070247/ 0&A / 5th CAC-1911000093 dtd. 02/11/2019 which is valid up to 31/01/2020. Applied for renewal of Consent to Operate, approved in 2nd CAC meeting held on 04/05/2020.
 - **Environmental Clearance:-** Not obtained / available.
 - > **Applied for:-** Industry applied for renewal of Consent to Operate for mfg. of products and by-products.
 - The case was approved in the CAC meeting dtd. 04/05/2020 and it was decided to grant renewal of Consent to Operate for mfg. of chemical adhesive inclusive of metal working oil additives, dispersant of additives extreme pressure additives, viscosity index improves, pour point dispersants and flow improves 5,000 MT/M & Nitrogen 1,500 MT/M.

Industry request:-

PP via e-mail dtd. 22/06/2020 informed that following two by-products were categorized as hazardous waste in the last Consent issued by the board -

- 1. Hydrochloric Acid (up to 33% strength), and
- 2. Sodium Hydrogen Sulphide solution (up to 35% strength).

As per the guidelines of Identification of material as a waste or By-products, industry has requested to give them an opportunity to present them self by carrying out prefeasibility study.

Recommendations:

We may ask **M/s. Lubrizol India Private Limited.**, to conduct a pre-feasibility study for its end uses & submit the report before the committee.