Minutes of 1st Committee Meeting (2023-24), for By-Products and Hazardous waste categorization

Date : 18/10/2023

Venue : MPCB, 4th Floor, Conference Hall, Sion Circle, Sion (E), Mumbai.

Committee Members present for the meeting:

1.	Dr Avinash Dhakane, Member Secretary	Chairman
2.	Dr. V. M. Motghare, Joint Director (APC)	Member
3.	Dr. J. B. Sangewar, Joint Director (WPC)	Member
4.	Shri. Shankar Waghmare, RO (BMW)	Member
5.	Dr. B. R. Naidu, Ex Zonal Officer, CPCB	Member
6.	Dr. M. P. Patil, Chief Scientist & Head, CHWMD NEERI, Nagpur	Member
7.	Shri. N. N. Gurav, Assistant Secretary (Tech), MPCB	Member convener

Assistant Secretary (Tech.), MPCB, Member convener of the Committee, welcomed all the members of the Committee and requested Member Secretary, MPCB, Chairman of the committee to permit proceedings of the meeting to start.

Assistant Secretary (Tech.), MPCB, Member Convener of the Committee introduced the members of committee formed vide dtd 06/05/2022 & briefed about the, guidelines issued by CPCB in December 2021 for Identification of Materials Generated from Industrial Processes as Wastes or By-products [Hazardous and Other Wastes (Management and Transboundry Movement) Rules, 2016].

Definitions of Waste and by-products as per MoEF notification dated 04th April, 2016 which is a supersession of the Hazardous Wastes (Management, Handling and Transboundry Movement) Rules, 2008.

“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. This excludes residuals recycled or reused at the place of generation.
“By-products” 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.

Based on the applications made by the industries, the members thereafter deliberated on the agenda items placed before the committee and following decisions were taken.

Agenda Item No. 01

Project Name: **M/s. Eternis Fine Chemicals Ltd.,**
948/2, Sinnar Taluka Industrial Cooperative Estate,
Tal. Sinnar, Dist. Nashik

(i) **Application unique No.:** MPCB-BY_PRODUCT-0000000048.

(ii) **Environmental Clearance details:** Obtained EC dtd. 28.11.2019 for project type- Flavour and fragrance ingredients mfg. Schedule 5(f), Category B1 in the name of M/s. Aims Impex Pvt Ltd.

(iii) **Consent details:** Obtained consent to 1st operate (part) for expansion and amalgamation with existing C to O vide Format1.0/CAC/UAN No. 0000095268/CO-2011000839 dated 12.11.2020 valid upto 30.09.2025.

<table>
<tr><th colspan="4">Proposed inclusion of By-product</th><th>Industry submission and deliberation</th><th>Committee decision</th></tr>
<tr><td colspan="4"><table>
<tr><th>Sr. No.</th><th>Name</th><th>Qty</th><th>Purity</th></tr>
<tr><td>1</td><td>Recovered Acetic Acid</td><td>1102.9 MT/A</td><td>Min purity 92% to 98%</td></tr>
<tr><td>2</td><td>Magnesium Sulphate /chloride as salt or aqueous solution (equivalent to anhydrous salt)</td><td>2016 MT/A</td><td>Aq. MgSO4 Try hydrate – 98%, Aq. MgSO4 50% solution- 45%</td></tr>
<tr><td>3</td><td>Methyl formate pure</td><td>225 MT/A</td><td>Min purity 84%</td></tr>
</table></td><td>Industry submission:
Industry is engaged in mfg of Synthetic organic chemicals like Aromatic chemicals namely Coumarin- 83.33 MT/M, Salicylaldehyde- 150 MT/M. Industry has claimed 4 nos. of Hazardous Wastes listed in existing consent as By-Products and applied for consideration of the same as By-Products:
Industry has made detailed presentation and submitted following details;
a. Source of by-products</td><td>Recovered Acetic Acid:
After due deliberations, it was decided that Recovered Acetic Acid cannot be considered as By-Product, as it is a spent acid as per the Schedule-I of Hazardous & Other Wastes (M & TM) Rules, 2016, however it can be utilized as a raw material at their sister concern unit, only after obtaining the Authorization under Rule 9 of Hazardous & Other Wastes (M & TM) Rules, 2016 by user industry, till that time it should be considered as hazardous waste as per consent and shall be disposed at CHWTSDF or sale to the Authorized recycler having</td></tr>
</table>

	or as Methanol solution				
4	Salicyaldehyde CDC-Residue (Distillation residues)	450 MT/A	Min purity 45%		

b. Material Balance along with mfg. process of products in which the claimed by-Products are being generated, along with chemical reactions.
c. Declaration regarding Purity of By- products
d. End use of the By products
e. Prefeasibility study, Environmental & Health Impact and Risk Assessment Studies, Safety Data Sheets.

Deliberations:

Industry presented that the claimed By-Product Recovered Acetic Acid generates from the process of production of Coumarin which is useful in manufacturing of Aromatic chemicals.

The claimed By-Product Magnesium Sulphate Tri hydrate generates from the production of Salicyladehyde which is useful for Micronutrient fertilizer.

The claimed By-Product Methyl Formate generated from the production of Salicyladehyde which is useful in mfg. of Aromatic materials.

And the claimed By-Product Salicyladehyde CDC – Residue generates from production of

Authorization under Rule 9 of Hazardous & Other Wastes (M & TM) Rules, 2016.

Magnesium Sulphate /chloride as salt or aqueous solution:

It was decided that Magnesium Sulphate /chloride or aqueous solution is the salt generated from ATFD (Pollution control system) and may contain toxic impurity and cannot be considered as By-product. It should be considered as hazardous waste as per consent and shall be disposed at CHWTSDF or sale to the Authorized recycler having Authorization under Rule 9 of Hazardous & Other Wastes (M & TM) Rules, 2016.

Methyl Formate pure or as Methanol solution:

It was decided that Methyl Formate pure or Methanol solution is a spent solvent as per the Schedule-I of Hazardous & Other Wastes (M & TM) Rules, 2016, and already listed as HW in Schedule-I, hence cannot be considered as By-product. It should be considered as hazardous waste as per consent and shall be disposed at CHWTSDF or sale to the Authorized recycler having Authorization under

	Salicyladehyde which is useful in mfg. of Aromatic materials. Further industry has clarified that, presently the claimed By-Product Recovered Acetic Acid generated from production of Coumarin can be utilised in mfg. process at their similar type of plant located at MIDC Kurkumbh, Dist. Pune.	Rule 9 of Hazardous & Other Wastes (M & TM) Rules, 2016. **Salicyaldehyde CDC-Residue (Distillation residues):** It was decided that Salicyaldehyde CDC-Residue is a distillation residue, and already listed as HW in Schedule-I, hence cannot be considered as By-product. It should be considered as hazardous waste as per consent and shall be disposed at CHWTSDF or sale to the Authorized recycler having Authorization under Rule 9 of Hazardous & Other Wastes (M & TM) Rules, 2016.

Agenda Item No. 02

Project Name: **M/s. Keltech Energies Limited.,**
116, 149/1, 146, 147, 148/1, 149/2, 151/1, 151/2, 152/1,
Village- Garamsur, Tal. Katol, Dist. Nagpur.

(i) Application unique No.: MPCB-BY_PRODUCT- 0000000053.
(ii) Environmental Clearance details: Industry has obtained Environmental Clearance under 5(F) category of 'Synthetic Organic Chemicals" from MoEF & CC vide No. F. No. IA-J -11011 /360 /2018-IA II (I), Date. 14.07.2020.
(iii) Consent details: Amendment in 1st Consent to Operate (Expansion) in amalgamation with renewal of Consent to Operate under Red/LSI category, vide No. Format1.0/AS(T)/UAN No. MPCB-CONSENT-0000159780/CR/2306002321, Date: 30/06/2023 valid upto 31.03.2028.

<table>
<tr><th>Proposed inclusion of By-product</th><th>Industry submission and deliberation</th><th>Committee decision</th></tr>
<tr>
<td>
<table>
<tr><th>Sr. No.</th><th>Name</th><th>Qty</th><th>Purity</th></tr>
<tr><td>1</td><td>Dilute Nitric Acid (75%)</td><td>300 MT/M</td><td>Produced as part of PETN Manufacturing Process having purity 75%</td></tr>
</table>
</td>
<td>Industry submission:
The Unit has the existing facilities to manufacture: Slurry and Emulsion explosives, Pentaerythritol Tetra Nitrate (PETN), Detonating Fuse, Cast Booster and Perlite.
The principal uses of PETN are in the explosive core of industrial detonating fuses, in the base charge of commercial blasting caps, in industrial boosters, in linear shaped charges, in commercial and military detonators and in medicinal application. PETN is the most chemically stable and least reactive of the explosive nitrate esters. The claimed By- Product is generated during the manufacture of PETN.</td>
<td>Dilute Nitric Acid (75%):
After due deliberations, it was decided that the claimed by-product Dilute Nitric Acid (75%) is a spent acid as per the Schedule-I of Hazardous & Other Wastes (M & TM) Rules, 2016 and cannot be considered as by-Product, however it can be utilized as a raw material at their sister concern unit, only after obtaining the Authorization under Rule 9 of Hazardous & Other Wastes (M & TM) Rules, 2016 by user industry, till that time it should be considered as hazardous waste as per consent and shall be disposed at CHWTSDF or sale to</td>
</tr>
</table>

	PETN is manufactured by Nitrating Penta Erythritol (PE) with a measured quantity of concentrated Nitric acid at cold temperature (160 C to 250 C). The crude PETN obtained is stabilized by Solvent Dissolution Method. The measured quantity of Nitric Acid (Min. 98%) is cooled to 160 C in a vessel after being transferred through a pump. The measured quantity of PE is slowly added with the help of PLC Control to Nitric Acid in the reaction vessel at controlled temperature. **Deliberations:** Industry claims that, the claimed By-product is not intended to manufacture and not listed/ mentioned in EC. Analysis report of Dilute Nitric Acid shows the organic matter content Nil. Industry has submitted the commercial value of their By-product and submitted the invoice of sale. Further industry has clarified that, presently the claimed By-product Dilute Nitric Acid (75%) is used in the manufacturing of MMAN at their sister concern unit Situated at VN, Udupi district, Karnataka. Industry has presented its utilization process, the consent copy of sister concern unit etc.	the Authorized recycler having Authorization under Rule 9 of Hazardous & Other Wastes (M & TM) Rules, 2016.

Agenda Item No. 03

Project Name: **M/s. Hikal Ltd.,**
Plot No. T-21, M.I.D.C.
Taloja Panvel, Dist Raigad.

(iv) Application unique No.: MPCB-BY_PRODUCT-0000000057.
(v) Environmental Clearance details: Industry has obtained Environmental Clearance from MoEF & CC vide No. F. No. J-11011/63/2007-IA II(I), Date. 28.08.2007.
(vi) Consent details: Consent to Operate under Red/LSI category, vide No. Format1.0 /CAC /UAN No. 0000142930/ CR/ 2303002506 dated 29.03.2023 valid upto 31.07.2024.

<table>
<tr><th>Proposed inclusion of By-product</th><th>Industry submission and deliberation</th><th>Committee decision</th></tr>
<tr>
<td>
<table>
<tr><th>Sr. No.</th><th>Name</th><th>Qty</th><th>Purity</th></tr>
<tr><td>1</td><td>Potassium Bromide</td><td>307.8 MT/A</td><td>28.6%</td></tr>
<tr><td>2</td><td>Sodium Hydro Sulphide (NaSH),</td><td>224.3 MT/A</td><td>18.0%</td></tr>
</table>
</td>
<td>Industry submission:
Industry is engaged in mfg of Pesticides 2280 MT/A. Industry has claimed 6 nos. of Hazardous Wastes listed in existing consent as By-Products and applied for consideration of the same as By-Products:
Industry has made detailed presentation on detailed manufacturing process along with Chemical reaction & Material Balances of each product mentioning generation of said</td>
<td>After due deliberations, it was noted that the claimed by-product Potassium Bromide & Aluminum Chloride are generated during mfg. of Isofetamide (IKF).
Potassium Bromide:
Committee noted that CPCB has categorized Potassium Bromide generated from pesticide industry as Hazardous Waste at S. No. C-2, C-4 of Schedule- II & 29.1 of Schedule-I of Hazardous & Other Wastes (M & TM) Rules, 2016 and prepared SoP for utilization of the same. Therefore, Potassium Bromide cannot be considered as by-Product & it should be considered as hazardous waste as per consent and shall be disposed at CHWTSDF</td>
</tr>
</table>

3	Liquor Ammonia,	1009.5 MT/A	19.28%	byproducts and submitted following details; a. Source of by-products b. Material Balance along with mfg. process of products in which the claimed by-Products are being generated, along with chemical reactions. c. Declaration regarding Purity of By- products d. End use of the By products e. Prefeasibility study, Environmental & Health Impact and Risk Assessment Studies, Safety Data Sheets. **Deliberations:** 1. During the presentation the industry submitted that all the claimed by-products mentioned in the application for consideration as by-products are listed in valid consent which are currently in hazardous waste. In earlier consent dated 10.11.2021, all the claimed by-products were in the by-product list which are now shifted to hazardous waste while granting the amendment in consent to operate under change in product mix.	or sale to the Authorized recycler having Authorization under Rule 9 of Hazardous & Other Wastes (M & TM) Rules, 2016. Committee also opined that the SoP shall be validated from CPCB for specific process. **Aluminum Chloride:** Committee noted that claimed by-product Aluminum Chloride is generated mfg. of Isofetamide (IKF). Industry has submitted the analysis reports of purity carried out by MoEF & CC accredited lab. After due deliberation it was decided to defer this claimed By-Product for next meeting, meanwhile industry shall carry out & submit detailed analysis report from IIT/NEERI/NCL showing concentration level of organic impurities. **Sodium Hydro Sulphide (NaSH):** Committee noted that the claimed by-product Sodium Hydro Sulphide (NaSH) is generated during mfg. of Fenamidone. Committee noted that CPCB has already categorized Sodium Hydro Sulphide generated during caustic scrubbing of H2S gas in pesticide industry as Hazardous Waste under category 35.1 of Schedule-I of Hazardous & Other Wastes (M & TM) Rules, 2016 and prepared SoP for utilization of the same. Therefore, Sodium Hydro Sulphide (NaSH) cannot be considered as by-Product & it should
4	HCl (Approx. 30%),	1245.7 MT/A	29.65%		
5	Aluminum Chloride	381.9 MT/A	8.5%		
6	H2SO4	1014.4	91.87%		

	2. Industry has presented the source of these by-products i.e., from which product manufacturing the by-product is generated. Flow diagram showing the point of generation of by-product, the analysis report about the concentration of by-products & details of end users for the claimed by-products.	be considered as hazardous waste as per consent and shall be disposed at CHWTSDF or sale to the Authorized recycler having Authorization under Rule 9 of Hazardous & Other Wastes (M & TM) Rules, 2016. **HCl, H2SO4 and Liquor Ammonia** Committee further noted that the claimed by-products HCl, H2SO4 and Liquor Ammonia are generated during mfg. of Thiabendazole. Industry has submitted the analysis reports of purity carried out by MoEF & CC accredited lab. After due deliberations, it was decided that the claimed by-product HCl, H2SO4 and Liquor Ammonia are spent acids as per the under category 29.6 of the Schedule-I of Hazardous & Other Wastes (M & TM) Rules, 2016 and cannot be considered as by-Product & it should be considered as hazardous waste as per consent and shall be disposed at CHWTSDF or sale to the Authorized recycler having Authorization under Rule 9 of Hazardous & Other Wastes (M & TM) Rules, 2016.

Agenda Item No. 04

Project Name: **M/s. Privi Speciality Chemicals Limited.,**
A-07, MIDC Mahad, Dist. Raigad.

(i) Application unique No.: MPCB-BY_PRODUCT-0000000058 .
(ii) Environmental Clearance details: Industry has obtained Environmental Clearance vide No. SEAC-2013/CR-242/TC-2 dated 08/10/2015.
(iii) Consent details: Consent to Operate under Red/LSI category, vide No. Format1.0/CC/UAN No.0000151650/CO/2304000648 dated 11/04/2023 valid up to 31/08/2025.

<table>
<tr><th>Proposed inclusion of By-product</th><th>Industry submission and deliberation</th><th>Committee decision</th></tr>
<tr>
<td>
<table>
<tr><th>Sr. No.</th><th>Name</th><th>Qty</th><th>Purity</th></tr>
<tr><td>1</td><td>Aqueous Fluoroboric Acid

OR</td><td>82.7 MT/A</td><td>22.32%</td></tr>
<tr><td>2</td><td>Potassium/ Sodium/ Calcium Tetrafluoroborate</td><td>313 MT/A</td><td>--</td></tr>
</table>
</td>
<td>Industry submission:
Industry is engaged in mfg of Aromatic chemicals. Industry has claimed 01 no. of Hazardous Wastes listed in existing consent as By-Products & 1 no. of additional By-Product to be mfg. by processing Aqueous Fluoroboric Acid in-house to form Potassium/ Sodium/ Calcium Tetrafluoroborate for consideration of the same as By-Products:
Industry has made detailed presentation on manufacturing process along with Chemical reaction & Material Balances of each product mentioning generation of said byproducts and submitted following details;
a. Source of by-products</td>
<td>Aqueous Fluoroboric Acid
OR
Potassium/ Sodium/ Calcium Tetrafluoroborate:
Committee noted that the claimed By Product Aqueous Fluoroboric Acid is produced as part of Amber fleur & Amber gamma mfg process. Committee also noted that the industry has proposed to produce Potassium/ Sodium/ Calcium Tetrafluoroborate by treating Aqueous Fluoroboric Acid in-house.
However, during the course of presentation industry has withdrawn the claimed by Product Potassium/ Sodium/ Calcium Tetrafluoroborate as the same is yet not mentioned in the valid consent of the industry.</td>
</tr>
</table>

	b. Material Balance along with mfg. process of products in which the claimed by-Product are being generated, along with chemical reactions. c. Declaration regarding Purity of By-product d. End use of the By product e. Prefeasibility study, Environmental & Health Impact and Risk Assessment Studies, Safety Data Sheets. **Deliberations:** Industry claims that, the claimed By-product is not intended to be produced but gets produced in the production process of intended product – hence it is a by-product as per definition in HOWM Rules 2016.	After due deliberation committee noted that the claimed By Product Aqueous Fluoroboric Acid is used in metallurgical industries directly. The committee decided to defer the case for next meeting to reexamine the case to verify on whether the claimed By Product Aqueous Fluoroboric Acid is listed under Schedule-I/II/III/IV of Hazardous Wastes Rules 2016.

Agenda Item No. 05

Project Name: **M/s. Grasim Industries Limited, Shahad. (Unit- Century Rayon).,**
P.B No-22, Murbad Road, Shahad, Ulhasnagar, Thane 421103.

(i) Application unique No.: MPCB-BY_PRODUCT-0000000059 .
(ii) Environmental Clearance details: Industry has obtained Environmental Clearance vide No. F. No. J-11011/415/2014-IA II(I), dated 31/10/2016.
(iii) Consent details: Consent to Operate under Red/LSI category, vide No. Format1.0/CAC/UAN No. MPCB-CONSENT_AMMENDMENT-0000010874/2307000070 dated 11.07.2023 which is valid up to 30.09.2026.

<table>
<tr><th>Proposed inclusion of By-product</th><th>Industry submission and deliberation</th><th>Committee decision</th></tr>
<tr>
<td>
<table>
<tr><th>Sr. No.</th><th>Name</th><th>Qty</th><th>Purity</th></tr>
<tr><td>1</td><td>Sodium Sulphide (Na2S)</td><td>1870 MT/A</td><td>23%</td></tr>
</table>
</td>
<td>Industry submission:

Industry is engaged in manufacturing of viscose staple fibre (VSF), chemicals and insulators, viscose filament yarn etc. Industry has claimed 01 no. of Hazardous Wastes listed in existing consent as By-Products:

Industry has made detailed presentation on manufacturing process along with Chemical reaction & Material Balances of each product mentioning generation of said byproducts and submitted following details;
a. Source of by-products</td>
<td>Sodium Sulphide (Na2S):
It was noted that the claimed By-Product is generated during mfg. of Carbon –di-sulphide. H_2S is generated due to the reaction of sulphur and volatile matter present in charcoal during the production of CS_2 in the furnace. Spintek 12 oil is used in absorbing CS_2 while H_2S remains unabsorbed. The H_2S is then absorbed in NaOH solution to produce Na_2S. Unadsorbed gas from Oil Adsorption Tower enters H_2S Absorption Towers (packed with rasching rings and saddle type packing material) where it comes in counter current contact with circulating NaOH. H_2S reacts with NaOH to produce Na_2S. Na_2S (20-</td>
</tr>
</table>

	b. Material Balance along with mfg. process of products in which the claimed by-Product is being generated, along with chemical reactions. c. Declaration regarding Purity of By-product d. End use of the By product e. Prefeasibility study, Environmental & Health Impact and Risk Assessment Studies, Safety Data Sheets. **Deliberations:** Industry claims that the claimed by-product is as pure as fresh product and generated from unit operation of manufacturing process and not from pollution control equipment. Industry further presented that the claimed by-product does not contain any contamination/impurity there will not be any generation of other waste due to use of the claimed by-product. Hence, no negative impact on the quality where this by-product will be used directly. Industry has uploaded names of some direct end users for said by-product.	25%) is formed which is the claimed by-product. Committee also noted that the industry has applied for process validation of the said By-Product to CPCB as per Hazardous & Other Wastes (M & TM) Rules, 2016. After due deliberations, the committee decided to defer the case as industry has already approached CPCB which is apex body for process validation of SoP as per Hazardous Waste Rules 2016 for the said By-Product. It was also decided to communicate to CPCB regarding receipt of application for categorization of By-Product. A decision may be taken after receipt of CPCB reply.

Agenda Item No. 06

Project Name: **M/s. Lona Industries Ltd.,**
At Ladivali,Post Gulsunde,Tal Panvel, Dist Raigad.

(i) Application unique No.: MPCB-BY_PRODUCT-0000000062 .
(ii) Environmental Clearance details: Industry has obtained Environmental Clearance for expansion vide No. F.No. IA-J-11011/84/2018-IA-II(I), Date. 03.12.2021.
(iii) Consent details: a) Consent to Operate under Red/LSI category, vide No. Format1.0/CC/UAN No.0000167553/CR/2308001545, dated 23/08/2023 which is valid up to 30/04/2027. b) Consent to Establish for Expansion vide No. Format1.0/CC/UAN No.0000133479/CE/2211001976, dated 24/11/2022.

<table>
<tr><th colspan="4">Proposed inclusion of By-product</th><th>Industry submission and deliberation</th><th>Committee decision</th></tr>
<tr><td colspan="4"><table>
<tr><th>Sr. No.</th><th>Name</th><th>Qty</th><th>Purity</th></tr>
<tr><td>1</td><td>Ammonium chloride/Ammonium Sulphate (as per C to E expansion)</td><td>2520 MT/A</td><td></td></tr>
<tr><td>2</td><td>Dicalcium phosphate (as per C to E expansion)</td><td>2160 MT/A</td><td></td></tr>
<tr><td>3</td><td>Copper sulfate/carbonate as copper (as per existing & C to E expansion consent)</td><td>108 MT/A</td><td></td></tr>
</table></td><td>Industry submission:
Industry is engaged in manufacturing organic pigments, mainly Phthalocyanines and Quinacridones.

Industry has claimed to identify Ammonium Sulfate, Ammonium Chloride, Dicalcium Phosphate and Copper Sulfate as Products & Hydrochloric Acid solution, Aluminum Chloride solutions, Sulfuric Acid and Sodium Hypochlorite solution as By-products.

Industry has made detailed presentation on manufacturing process along with Chemical reaction & Material Balances of each product mentioning generation of said byproducts and submitted following details;</td><td>Ammonium Chloride/ Ammonium Sulfate, Dicalcium Phosphate and Copper Sulfate:
Committee noted that the industry has installed dedicated plant for mfg. of Ammonium Chloride/ Ammonium Sulfate, Dicalcium Phosphate and Copper Sulfate.
After due deliberation it was decided to consider Ammonium Chloride/ Ammonium Sulfate, Dicalcium Phosphate and Copper Sulfate as Products. In the Environmental Clearance accorded to the industry, Ammonium Sulfate, Ammonium Chloride, Dicalcium Phosphate and Copper Sulfate are listed as By Products & for DCP</td></tr>
</table>

4	Hydrochloric acid (30%)	2160 MT/A	
5	Dil. Sulfuric acid	14400 MT/A	
6	Sodium Hypochlorite solution	2160 MT/A	
7	$AlCl_3$ (PAC) Solution (7-10% as Al_2O_3) (as per existing consent) as	36000 MT/A	

a. Source of by-products
b. Material Balance along with mfg. process of products in which the claimed by-Product is being generated, along with chemical reactions.
c. End use of the By product
d. Prefeasibility study, Environmental & Health Impact and Risk Assessment Studies, Safety Data Sheets.

Deliberations:

Industry claims that the claimed by-product Ammonium Sulphate/Ammonium Chloride, Copper Sulfate, and Dicalcium Phosphate are inorganic products & intentionally produced by the industry. Industry has stated that they have provided dedicated plant infrastructure for the process of the Ammonium Sulphate/ Ammonium Chloride, Copper Sulfate are already installed in the premises & therefore requested to consider above as Products.

Industry further states that the remaining claimed By-products are **not produced intentionally** in the pigment production. They are not listed in schedules (III), (IV), (VI) and (I) of HOWM rules 2016. Analytical results for all By-product show that their purity is greater than 96 %. The by-products have proven end uses and demand.

industry shall obtain approval from FSSAI for end use in human & animal food.

Hydrochloric acid (30%), Dil. Sulfuric acid solution

After due deliberations, it was decided that the claimed by-product Hydrochloric acid (30%), Dil. Sulfuric acid are spent acids as per the Schedule-I of Hazardous & Other Wastes (M & TM) Rules, 2016 and cannot be considered as by-Product, it should be considered as hazardous waste as per consent and shall be disposed at CHWTSDF or sale to the Authorized recycler having Authorization under Rule 9 of Hazardous & Other Wastes (M & TM) Rules, 2016.

Sodium Hypochlorite solution:

Committee noted that Sodium Hypochlorite solution is not listed in Schedule-I/II/III/IV of Hazardous Wastes Rules 2016 also the as the said claimed by-products is mentioned in Environmental Clearance as By-product, it was decided to consider Sodium Hypochlorite solution as by-products and amend both the

	The sales history of these By-products to actual end users proves that they are useful and can be used as raw materials without adversely affecting the health and environment.	consent (existing C to O & proposed expansion C to E) accordingly. **AlCl3 (PAC) Solution:** After due deliberations, it was decided that the claimed by-product AlCl3 (PAC) Solution is generated after recovery of copper from mother liquor which is listed in schedule as 28.1 Process residue & as per Hazardous & Other Wastes (M & TM) Rules, 2016 and cannot be considered as by-Product, it should be considered as hazardous waste as per consent and shall be disposed at CHWTSDF or sale to the Authorized recycler having Authorization under Rule 9 of Hazardous & Other Wastes (M & TM) Rules, 2016.

Agenda Item No. 07

Project Name: **M/s. Lasons India Private Limited.,**
C-18 , MIDC,TALOJA,DIST. RAIGAD.

(i) Application unique No.: MPCB-CONSENT-0000169922 .
(ii) Environmental Clearance details: Industry has obtained Environmental Clearance vide No. EC-2009/972/CR.135/09/TC1, Date. 14.12.2009.
(iii) Consent details: Consent to Operate under Red/LSI category, vide No. Format 1.0/AS(T)/UAN No.0000059414/CR-2101001211 dated 04.02.2021 valid up to 31.10.2023.

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<tr><th>Proposed inclusion of By-product</th><th>Industry submission and deliberation</th><th>Committee decision</th></tr>
<tr>
<td>
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<tr><th>Sr. No.</th><th>Name</th><th>Qty</th><th>Purity</th></tr>
<tr><td>1</td><td>Ammonium Sulphate</td><td>392 MT/M</td><td>-</td></tr>
<tr><td>2</td><td>60% Nitric acid</td><td>535 MT/M</td><td>-</td></tr>
<tr><td>3</td><td>Back Pressure steam Turbine</td><td>1 MW</td><td>-</td></tr>
<tr><td>4</td><td>Nitrate/Nitrite of Alkaline and Alkaline earth metals</td><td>1000 MT/M</td><td>-</td></tr>
</table>
</td>
<td>Industry submission:
Industry reported that the application submitted was for consent to establish for the manufacturing of new Inorganic products in the existing facility and not under shifting of By-product which are currently under the hazardous waste.
Industry also stated that they are not shifting any existing hazardous waste i.e., ammonium sulphate, Dilute Nitric Acid and sodium Nitrate Solution /Sodium Sulphate Solution in by-product list and they will remain under hazardous waste only.</td>
<td>Committee noted that the industry had applied for consent to Establish for mfg. of new inorganic products. The said application was discussed before 10th Consent Committee meeting of 2023-24 of the Board held on 03/07/2023 & the said Committee has referred the case to Technical Committee for By-Product & Hazardous Waste categorization as some of the proposed products manufactured are By Products of the existing unit.

After due deliberations it was noted that this case is a fresh application for mfg. of inorganic products & industry has proposed to install dedicated plant & machinery for</td>
</tr>
</table>

	However, they are proposing to manufacture pure inorganic products viz. Ammonium Sulphate, Nitric Acid and Nitrate/Nitrite of Alkaline earth metals separately in the same premises. Industry has claimed that the proposed inorganic products will not being generated form manufacturing of intended products but are the main products having separate manufacturing process and also confirms that virgin raw material will be used for the manufacturing of said products.	mfg. of the proposed products. Hence the application does not come under the purview of Technical committee for By-Product & Hazardous Waste categorization. It was also noted that the industry shall manufacture the proposed products using virgin raw materials i.e., without use of used/spent Raw material & separate records for existing HW materials and new proposed materials shall be maintained for all purposes without intermixing among them.

Agenda Item No. 08

Project Name: **M/s. SANDVIK ASIA PVT LTD,**
PLOT NO. D-27/1 MIDC LOTE PARSHURAM,
TAL. KHED DIST. RATNAGIRI.

(i) Application unique No.: MPCB-BY_PRODUCT-0000000050 .
(ii) Environmental Clearance details: Not Applicable (Scrap Metal Recycling Unit).
(iii) Consent details: Consent to Operate under Red/LSI category, vide No. Format1.0/BO/CC/RO-HQCC-1906000899, dated 19/06/2019, which is valid up to 30.04.2024.

<table>
<tr><th>Proposed inclusion of By-product</th><th>Industry submission and deliberation</th><th>Committee decision</th></tr>
<tr>
<td>
<table>
<tr><th>Sr. No.</th><th>Name</th><th>Qty</th><th>Purity</th></tr>
<tr><td>1</td><td>Processed Zinc cake</td><td>490 MT/A</td><td>97.95%</td></tr>
</table>
</td>
<td>Industry submission:

Industry is engaged in Recycling of Tungsten Carbide scrap to manufacture Tungsten Powder.
In the process of recovery of Tungsten Powder the Zinc ingots of purity 99.99% are used as catalyst & after distillation along with Tungsten Powder By Product Process zinc cake is generated.
Industry has not submitted
a. Prefeasibility study, Environmental & Health Impact and Risk Assessment Studies, Safety Data Sheets.</td>
<td>Processed Zinc cake

Committee noted that the claimed by product Processed Zinc cake is generated as process waste/residue.

As per Schedule-I of Hazardous & Other Wastes (M & TM) Rules, 2016, S, No. 6 Secondary production and / or industrial use of zinc, 6.1 Sludge and filter press cake arising out of production of Zinc Sulphate and other Zinc Compounds are categorized as Hazardous Waste,

Therefore, the claimed By Product Zinc cake cannot be considered as by-Product, it should be considered as hazardous waste as per consent and shall be disposed at CHWTSDF or sale</td>
</tr>
</table>

	Deliberations: Industry claims that the claimed by-product is used in galvanizing industry for zinc galvanizing.	to the Authorized recycler having Authorization under Rule 9 of Hazardous & Other Wastes (M & TM) Rules, 2016.

The meeting ended with vote of thanks to Chair.