

Central Pollution Control Board
HWM Division, Delhi

Sub: Minutes of the Third Meeting of the Technical Expert Committee for "Evaluation of proposal for utilization of the hazardous and other wastes under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016".

1. The Third Meeting of the Technical Expert Committee on "Evaluation of proposal for utilization of the hazardous and other wastes under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016" was held at CPCB, Delhi, on 18/01/2017. List of the participants is given at **Annexure I.**

2. Shri Bharat K Sharma, Additional Director, HWMD, welcomed the members and invitees of the Committee. The following 02 draft Standard Operating Procedures (SoPs) & Check list of Minimal Requisite facilities for utilization of hazardous waste, prepared by HWMD, CPCB, based on trial study conducted in accordance with the trial run monitoring protocol, were reviewed by TEC :

S.No	Agenda	TEC Recommendations
1.	Standard Operating Procedure (SoP) for captive utilization of Spent Resin for energy recovery in DRI Kiln of Sponge Iron Industry.	SoP & Checklist of Minimal Requisite Facilities for the said utilization with mix of 0.002: 99.998 (Spent ion exchange resin: Coal) ratio, as recommended by TEC after incorporating suggestions, is given at <u>Annexure - II.</u>
2.	Standard Operating Procedure (SoP) for utilization of Resin Waste (generated from the resin impregnation of electrical coils) for manufacturing HT/LT insulators.	SoP and Checklist of Minimal Requisite Facilities for the said utilization, as recommended by TEC after incorporating suggestions, is given at <u>Annexure - III.</u>

3. The following applicants, who were communicated to make technical presentation before the committee about their hazardous waste utilization proposals, made technical presentation about their utilization proposal before the committee;

- (i) M/s Lionel Resources Privet Limited (44454), Plot No. 14, GIDC Kuvadava, Tal & Dist.-Rajkot., Gujarat.
- (ii) M/s Ambuja Intermediates Plot NO: 1152, Village: Rajpur, Ta: Kadi, Dist-Mehsana, Gujarat
- (iii) M/s Shubham Sales Co.,
5.3 Km Milestone, Rohtak Bhiwadi Road, Rohtak, Haryana
- (iv) M/s Raj Lubricants, Januganj-756019, Balasore, Odisha

The details of the utilization proposals along with the recommendations of the committee are given at **Annexure - IV.**

4. The applicant M/s Aarti Drugs Ltd., Plot No. G-60, MIDC, Tarapur, Tal. & Dist.:- Thane, Maharastra, was also communicated to make technical presentation before the committee about their utilization proposals. However, they informed through email about their unavailability and requested to give them an opportunity in subsequent meeting. It was decided that the applicant may be invited for technical presentation in subsequent meeting so as to evaluate their utilization proposal.

5. Next meeting of TEC has been tentatively scheduled to be held on 30/01/2017

6. The meeting ended with vote of thanks to the Chair.

R. K. Singh

**CENTRAL POLLUTION CONTROL BOARD
DELHI- 110 032**

Date: January 18, 2017

Venue: 2nd Floor, Conference room, Parivesh
Bhawan, CPCB, Delhi- 110 032

Third Meeting of the Technical Expert Committee for "Evaluation of proposal for utilization of the hazardous and other wastes under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.

List of Participants

S. No	Name	Designation	Member of the Committee / Invitee
1.	Dr R. K. Singh	Retired Scientist 'F', Bureau of Indian Standard.	Chairperson
3.	Shri A.V. Shah	Environmental Engineer, Gujarat Pollution Control Board	Member
5.	Shri Deenbandhu Gauda	Additional Director, PCI-I, CPCB, Delhi	Member
6.	Sh. Bharat K Sharma	Additional Director, HWMD, CPCB, Delhi	Convener
8.	Ms. Deepti Kapil	Environmental Engineer, HWMD, CPCB, Delhi	Invitee
9.	Ms. Vineeta	SSA, HWMD, CPCB, Delhi	Invitee
10.	Dr. Sandeep Kumar Dixit	Research Associate, HWMD, CPCB, Delhi	Invitee

R. K. Singh

S.No	Name of the Industry	HW as Raw Material	Product	Process	Recommendations
					<ul style="list-style-type: none"> i. VOC in work place (at vent of distillation of Methanol). ii. SO_x and Acid Mist (Stack attached to the Sulphonation unit) iii. NO_x to H₂O₃ (Stack attached to the Nitration Unit) iv. SO₂ and SO_x (Stack attached to the neutralizer) v. SO_x, NO_x and SPM (Stack attached to the Dryer) vi. Compare the quality of the product and by-products (i.e. H-Acid and G-Salt and Gypsum) manufactured by using Spent Sulphuric Acid with product and by-products (i.e. H-Acid and G-Salt and Gypsum) manufactured by using fresh Sulphuric Acid.
3	M/s Shubham Sales Co., 5.3 Km Milestone, Rohtak Bhiwadi Road, Rohtak, Haryana	Carbon slurry (category : 18.2 of schedule I of HOWM Rules, 2016)	Carbon pellets	The utilisation process involves centrifuging and drying followed by pulverising to manufacture carbon pellets	<p>The committee observed that the unit now intends to manufacture Carbon Powder instead of earlier proposed product i.e. Carbon Pellets. Further, it was also observed that the up gradation made in plant & machineries is not satisfactory and may generate fugitive emission in handling, storage and drying of carbon slurry. After detailed discussion, the applicant proposed to modify the facilities as below for utilisation of Carbon slurry:</p> <ol style="list-style-type: none"> 1. Carbon Slurry will be procured only in non leaching form i.e. moisture content <85% and shall be transported in water tight non leaching container. 2. Carbon Slurry shall be stored in silo and the same shall be directly transferred to centrifuge through mechanised system with no manual handling. 3. The cake generated from centrifuge shall be taken to electric drier (temp. <120°C) in such a way that there is no manual handling and spillage. Hot gases from the drier shall be dispersed into atmosphere through duct and stack. 4. The dried material shall be mechanically (with no manual handling) sent to another silo under vacuum condition. The dried material shall also be directly transferred to pulverizer through closed mechanised system with no manual handling and fugitive emissions. 5. The pulverizer shall be a closed system ensuring no fugitive emission and be connected to bag filter followed by a stack. 6. The pulverised material shall be collected in a separate silo and there shall be packaging section attached to the silo where product shall be packaged into bag mechanically with no manual handling and fugitive emissions. <p>The committee, therefore, recommended that upon installation of the above proposed modified facilities and submission of supporting photographs as proof of installation, trial utilization study may be carried out in presence of CPCB and SPCB officials wherein OSHA work zone standards for Cyanide and Particulate matter shall also be verified. Further, handling and utilization of the product in</p>

R. K. Singh

S.No	Name of the Industry	HW as Raw Material	Product	Process	Recommendations
					rubber article manufacturing industry shall also be studied and in case if the same is handled manually or leads to fugitive emission of carbon, utilization may not be permitted in rubber article manufacturing industry.
4	M/s Raj Lubricants, Janaganj-756019, Balasore, Odisha	Organic Residue (category : 4.4 of schedule I of HOWM Rules, 2016), Spent Clay (category : 4.5 of schedule I of HOWM Rules, 2016) and Oily sludge (category : 4.1 of schedule I of HOWM Rules, 2016)	Low grade grease	The process involves mixing of Spent Clay, Organic residue, Soap tone powder, vegetable oil followed by heating @ 120 ° C then cooling and passed through milling machine to produce Low grade grease	The committee is of view that the proposed hazardous wastes i.e. Spent Clay and Organic residue generated from used oil re-processing may contain PCB (which is a persistent organic compound) and heavy metals and thus grease made of the said hazardous waste may not be safe for human health and environment. Therefore, the committee did not recommend the utilisation proposal.

R.K. Singh