

**Central Pollution Control Board**  
**HWM Division, Delhi**

**Sub: Minutes of the Seventh Meeting of the Technical Expert Committee for "Evaluation of proposal for utilization of the hazardous wastes under Rule 11 of the Hazardous Waste (Management, Handling & Transboundary) Rules, 2008".**

1. The Seventh Meeting of the Technical Expert Committee on "Evaluation of proposals for utilization of the hazardous wastes as a supplementary resource or for energy recovery, or after processing" was held at CPCB, Delhi on 06.12.2012. The officer of Gujarat SPCB attended the meeting as special invitee. List of the participants is enclosed at **Annexure I**.
2. Shri B. Vinod Babu, I/c HWMD, welcomed the members and invitees of the Committee and informed that 19 applications (new cases) have been received for approval for utilization of HW under Rule 11 of the HWM Rules 2008 and the following applicants have been asked to make technical presentation before this committee;
  - (i) M/s Pankaj Ferro Tech Pvt Ltd , Orissa
  - (ii) M/s TATA Motors Ltd , Pantnagar
  - (iii) M/s Bharat Oil Company (India) Regd, Ghaziabad
  - (iv) M/s Fertichem Industrial Corporation, Ludhiana
  - (v) M/s Konark Tar Products Pvt. Ltd, West Bengal
  - (vi) M/s Shikhar Ferro Private Limited , Rajasthan
  - (vii) M/s Grishma Metal Technology, Maharashtra
  - (viii) M/s Jay Minerals, Gujarat
  - (ix) M/s Shree Tiles, Gujarat
  - (x) M/s Patidar Products, Gujarat
  - (xi) M/s Brighto Chem, Gujarat
  - (xii) M/s Sunrise Chemicals , Gujarat
  - (xiii) M/s Alpha Products, Gujarat
  - (xiv) M/s Bond Products Pvt Ltd, Gujarat
  - (xv) M/s Dhoriyani Silicate Industries, Gujarat
  - (xvi) M/s Shiv Chemical, Gujarat
  - (xvii) M/s Unique Chemicals, Rajasthan
  - (xviii) M/s Subhra Chemicals, Orissa
  - (xix) M/s Shree Laxmi Products, Rajasthan

In addition to above units, as decided in earlier meeting, M/s Vinayak Chemicals, Rajasthan, has also been requested to make presentation before the committee.

3. The applicants listed at (i) to (xvi) and M/s Vinayak Chemicals, Rajasthan, made technical presentations before the committee. Apart from new applications, the committee also reviewed earlier proposals under process. The recommendations of the committee on new proposals and earlier cases are given at **Annexure-IIA and IIB** respectively.
4. The recommendations of the committee regarding grant of approval for utilization of hazardous waste subsequent to the trial runs/ inspections by CPCB/SPCB are given at **Annexure – III**.
5. Next meeting of the committee is proposed to be held on 11<sup>th</sup> January, 2013.
6. The Meeting ended with vote of thanks to the Chair.



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


Date: December 06, 2012

Venue: 2<sup>nd</sup> Floor, Conference  
room, Parivesh Bhawan, CPCB,  
Delhi- 110 032

**Seventh Meeting of the Technical Expert Committee for Evaluation of proposal for utilization of the hazardous wastes as a supplementary resource or for energy recovery, or after processing.**

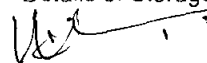
**List of Participants**

<b>S. No</b>	<b>Name</b>	<b>Designation</b>	<b>Member of the Committee / Invitee</b>
1.	Shri R.K. Garg	Former Managing Director, Indian Rare Earths Ltd.	Chairperson
2.	Shri. K.P. Nyati	-	Member
3.	Sh. B. Sandilya	Advisor, PDIL, Noida	Representing Member of the committee on behalf of PDIL
4.	Dr. G.S Dang	Former Sc. F, Indian Institute of Petroleum, Dehradun	Special Invitee
5.	Sh. V. R. Patel	Senior Environmental Engineer, Gujarat Pollution Control Board	Special Invitee
6.	Sh. B. Vinod Babu	Senior Environmental Engineer & I/c HWMD, CPCB, Delhi	Member Convener
7.	Sh. Bharat K Sharma	Senior Environmental Engineer, HWMD, CPCB, Delhi	Invitee
8.	Ms. Deepti Kapil	Assistant Environmental Engineer (HWMD), CPCB, Delhi	Invitee

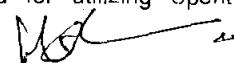


**Recommendation of the committee for New proposals for approval under Rule 11 of the Hazardous Waste (Management, Handling & Transboundary) Rules, 2008.**

S. No	Name of the Industry	HW as Raw Material & Product	Process	7 <sup>th</sup> TEC Recommendations
1.	M/s Pankaj Ferro Tech Pvt Ltd., Plot No. 17, Matkambada Industrial Area, Barbil, Orissa-758035	GCP Sludge (HW Category Sh.-I, 34.1) Generated from Ferro-manganese furnace, to be utilized for manufacturing Silico Manganese	The GCP sludge is blended with bentonite to prepare feed for sintering plant. The sintered material replaces consumption of manganese ore. Manganese ore, Quartz, High Manganese Oxide Slag, Dolomite etc in the required proportion is charged into the submerged arc furnace where MnO and SiO <sub>2</sub> react at a temperature of 1600°C with reducing agents to produce silico-manganese and iron metals.	<p>It was recommended that the unit shall,</p> <p>(i) Install necessary plant machinery including blending and sintering unit alongwith requisite pollution control system for utilization of GCP Sludge (in wet form only)</p> <p>(ii) Provide requisite storage &amp; handling facility for GCP Sludge to contain any seepage/run off from the storage area.</p> <p>(iii) Submit copy of environmental clearance obtained from concerned agency as applicable</p> <p>(iv) Submit detailed characteristics of GCP sludge</p> <p>After installation of the plant machinery, receipt of above information and relevant document/photographs, permission for conducting trial run for utilization of GCP sludge (in wet form only) from Fe-Mn furnace may be given.</p>
2.	M/s TATA Motors Ltd., Plot No. 1, Sectors-11 SIDCUL, Pantnagar-263153	ETP Sludge (HW Category Sch.-I, 34.3) to be utilized for manufacturing cement based pavement tiles/blocks/bricks	The dried ETP Sludge from sludge drying beds is crushed into powder form and mixed with aggregate materials i.e. Cement, Sand, crushed stone and water in a cement concrete mixer. This ready mix is casted in die and pressed to reduce volume by 20% with the help of hydraulic press, which is further cured and dried.	<p>The committee recommended that the unit shall,</p> <p>i. Provide details of dried sludge handling, crushing and mixing operations ensuring dust control measures.</p> <p>ii. Submit the samples of tiles/ blocks/bricks manufactured by utilizing ETP Sludge at laboratory scale for conducting TCLP analysis for heavy metals at CPCB lab / NABL accredited laboratory. The charges for the same shall be borne by the unit.</p> <p>If the results of the above analysis are found to be satisfactory and after the requisite facility has been installed and verified by CPCB/SPCB, permission for utilizing ETP sludge may be given initially for a period of one year.</p>
3.	M/s Bharat Oil Company (India) Regd., E-18, Site IV, Sahibabad Industrial Area, Ghaziabad, (UP)	Spent Solvent to recover solvent	Fractional Distillation process to recover Solvent from Spent Solvent	<p>The committee recommended that the proponent shall take the following actions and submit the information/documents for the same:</p> <ol style="list-style-type: none"> <li>1. Install suitable venting system with flame arrestor for evacuating vapours during loading in the receiver/storage tank.</li> <li>2. Details on feeding rate, quantity of residue generated and its management etc.</li> <li>3. Details of VOC emission control system installed at condenser outlet.</li> <li>4. Details on type/category as per Schedule I of the HWM Rules of each Spent Organic Solvent, their boiling point, characteristics, process and source of generation.</li> <li>5. Name of the industries where the recovered solvent is expected to be used</li> <li>6. Details of Storage &amp; process area</li> </ol>



S. No	Name of the Industry	HW as Raw Material & Product	Process	7 <sup>th</sup> TEC Recommendations
				<p>On receipt of clarifications/information on the above, the trial run permission for a period of 5 days for utilization of solvents @ 5 MT having high boiling point i.e. more than 100 °C in presence of CPCB/SPCB officials may be given.</p>
4.	M/s Fertichem Industrial Corporation Village Jugiana, Kanganwal Road Distt. Ludhiana, Punjab.	Grinding iron dust containing oil (HW Category Sc-I, 5.2) generated from bearing manufacturing plant to be utilized for manufacturing Ferrous Sulphate along with waste pickling liquor (Sc.-I,12.3)	Reaction of grinding iron dust, waste pickling liquor, and sulphuric acid in a reaction vessel followed by filter pressing and crystallization.	<p>The committee observed that the unit has already been granted approval under Rule 11 of the HWM Rules for producing Ferrous Sulphate from Waste pickling liquid (generated by industries involved in pickling operation of iron sheets/rods using sulphuric acid). The unit now intends to utilize another waste (i.e. grinding iron dust generated from bearing manufacturing plant).</p> <p>It was recommended that trial run shall be conducted in presence of CPCB/ SPCB officials after procuring 7 MT of Grinding iron dust from bearing industry wherein;</p> <ol style="list-style-type: none"> <li>Material balance w.r.t Cr, Ni, Mn in the grinding iron dust containing oil, product and residue be carried out.</li> <li>The product FeSO<sub>4</sub> as produced from utilizing grinding iron dust shall be analyzed for Cr, Ni and Mn and compared with BIS/relevant specification for Ferrous Sulphate. (since the waste contains Cr, Ni and Mn and the product FeSO<sub>4</sub> is expected to be used as coagulant in water treatment)</li> </ol>
5.	M/s Konark Tar Products Pvt. Ltd. Lenin Sarani, Durgapur Distt- Burdwan (West Bengal)-713201	Coal Tar Sludge to be utilized for manufacturing Coal Tar Pitch & by-products	The coal tar sludge from gasifier plant is mixed with coal tar followed by dehydration and distillation to produce light oil, carbolic oil, Naphthalene oil, Creosote oil etc. The bottom residue forms coal tar pitch as product.	<p>It was recommended that a trial run in presence of CPCB/ SPCB officials may be permitted for a period of five days by procuring 10 MT of coal tar sludge.</p> <p>Both source and work-zone emissions shall be monitored for VOC and particulate matter during and before the trial utilization.</p>
6	M/s Shikhar Ferro Private Limited. Khasra No. 868/2, Village- Kotri, Tehsil & District- Bhilwara (Rajasthan)	Oil based sludge and Water based sludge (HW Category Sc-I, 5.2) generated from grinding mill section of Ball & Roller Bearings manufacturing units to be utilized for manufacturing of Ferrous Sulphate	Oil/water based Sludge & Sulphuric Acid are mixed in a acid proof reactor and filtered through filter press to separate insoluble/un-reacted material. The remnants at filter press are washed with water to recover acid and un-reacted/un-utilized Ferrous. The filtrate is pumped to crystallization tanks for crystallization to obtain Ferrous Sulphate. The mother liquor is recycled back to reaction tank.	<p>It was observed that the plant machinery is under installation. The committee recommended that laboratory scale utilization be conducted by the proponent wherein;</p> <ol style="list-style-type: none"> <li>Material balance w.r.t Cr, Ni, Mn in the oil and water based sludge, product and residue be carried out.</li> <li>The product FeSO<sub>4</sub> as produced from utilizing grinding iron dust shall be analyzed for Cr, Ni and Mn and compared with BIS/relevant specification for Ferrous Sulphate. (since the waste contains Cr, Ni and Mn and the product FeSO<sub>4</sub> is expected to be used as coagulant in water treatment)</li> </ol> <p>The aforesaid information shall be submitted to CPCB for discussion in the next committee meeting.</p>
7.	M/s Grishma Metal Technology Gut no. 107, Vill. Bilawali, Chinhghar Bilawali Road, Near Priyadarshni Via	Spent catalyst containing Molybdenum to be utilized for manufacturing Ammonium	The spent catalyst generated from refineries is first pulverized & leached with liquid ammonia in the reactor. The reacted liquor is passed through filter	<p>The committee observed that the unit has already been granted approval under Rule 11 of the HWM Rules for producing Ammonium Molybdate from Spent acid containing Molybdenum (generated from bulb filament units) and the same facility will be used for utilizing Spent catalyst containing</p>



S. No	Name of the Industry	HW as Raw Material & Product	Process	7 <sup>th</sup> TEC Recommendations
	Kudus Tal-Wada, Dist. Thane- 421312	Molybdate	press and evaporated , centrifuged & dried	Molybdenum. However, pulverizer & filter press are under installation.  It was recommended that after commissioning of Pulverizer with adequate pollution control system & filter press and submission of relevant photographs, permission for conducting trial run for a period of seven days @ 10 tons in presence of CPCB/SPCB officials may be given.
8	M/s Jay Minerals , P.No 1, S.No 5, Dhichada, bedi Port Road, City Dhichada, Distt Jamnager (Gujarat)	Used anode butt (HW category Sc.-II, Class-B) be utilized for manufacturing Electrode Carbon Paste/ Carbon coke	The bath material on outer surface in the used anode butt is mechanically chipped off followed by crushing and sizing. This material is proportionately blended with Coal tar pitch & petroleum coke to manufacture Electrode Carbon Paste/ Carbon coke	The proponent informed that cleaned anode butt after crushing and sizing will also be utilized in cement kiln for manufacturing white cement.  It was recommended that Gujarat SPCB shall send a verification report to CPCB about installed plant machinery including shot blasting equipment & pollution control equipment.  Upon receipt of the same, permission for conducting trial run by procuring 250 MT of used anode butt for trail run over a period of two weeks in presence of CPCB/SPCB officials may be given without referring the same again to the committee  Meanwhile, the proponent shall submit the following information/documents:  a) Details on fugitive emission control system for controlling emissions during chipping, crushing and mixing operations b) Name of the industries to whom Electrode Carbon Paste/Carbon coke will be sold c) Quantity of residue generated, its storage details and mode of disposal. d) Copy of TSDF membership e) Material balance for utilization of used anode butt.  In case of utilization in cement kilns, the proponent shall obtain amended consent from Gujarat SPCB
9	M/s Unique Chemicals, Rajasthan B-172 & 173, MIA, Madri Udaipur (Rajasthan)	Hydro Fluoro Silicic acid (HW Sch.-II, Class-E) to be utilized for manufacturing Sodium Silico Fluoride	Hydro fluo silicic acid and sodium chloride solution mixed in the reactor and passed through centrifuge unit followed by drying to produce the final product.	The committee decided to invite proponent in next meeting to explain process details alongwith details of unit processes adopted and the pollution control systems w.r.t air, water & solid waste and safety system etc. to enable the committee to evaluate the same.  Further, the applicant shall also provide the following information/documents:  a) Name of the industries to whom the Sodium Silico Fluoride will be sold. b) Details of storage and process area (i.e. flooring & shed details and their size) supported with photographs. c) Characteristics of Hydro fluoro silicic acid proposed for utilization. d) Concentration of TDS and Fluoride in wastewater including feasibility of zero discharge. e) Details of mode of disposal of the sludge generated. f) Material balance for utilization of Hydro fluoro silicic acid.
10.	M/s Shree Laxmi Products	Hydro Fluo Silicic acid	Hydro fluo silicic acid and sodium chloride solution	The committee decided to invite proponent in next meeting to explain process details alongwith

S. No	Name of the Industry	HW as Raw Material & Product	Process	7 <sup>th</sup> TEC Recommendations
	E-71, MIA, Madri Udaipur (Rajasthan)	(HW Sch.-II, Class-E) to be utilized for manufacturing Sodium Silico Fluoride	mixed in the reactor and passed through centrifuge unit followed by drying to produce the final product.	<p>details of unit processes adopted and the pollution control systems w.r.t air, water &amp; solid waste and safety system etc. to enable the committee to evaluate the same.</p> <p>Further, the applicant shall also provide the following information/documents:</p> <ol style="list-style-type: none"> <li>Name of the industries to whom the Sodium Silico Fluoride will be sold.</li> <li>Details of storage and process area (i.e. flooring &amp; shed details and their size) supported with photographs.</li> <li>Characteristics of Hydro fluoro silicic acid proposed for utilization.</li> <li>Concentration of TDS and Fluoride in wastewater including feasibility of zero discharge.</li> <li>Details of mode of disposal of the sludge generated.</li> <li>Material balance for utilization of Hydro fluoro silicic acid.</li> </ol>
11.	M/s Subhra Chemicals. Plot No. 10, Old Industrial Estate Jagatpur, Cuttack, Odisha	Spent Pot Lining (SPL) (HW Category Sc-I, 11.2) to be utilized for manufacturing Fuel grade Carbon	SPL is crushed into small pieces followed by spraying of lime water. The wet material is subjected to indirect heating at 600-700°C in a furnace. The material is then pulverized followed by treatment with lime in hot water (100°C) in a rotary drum reaction vessel. The treated material is filtered and washed and again subjected to 600-700°C in the furnace. After the heat treatment, the material is mixed with 3% lime and 3% molasses followed by briquetting and drying so as to obtain Fuel grade carbon.	The committee decided to invite proponent in next meeting to explain process details alongwith details of unit processes adopted and the pollution control systems w.r.t air, water & solid waste and safety system etc. to enable the committee to evaluate the same.
12.	M/s Shree Tiles Plot no. 44/P, 8-A National Highway, Trajpar-363642, Taluka- Morbi, Distt- Rajkot (Gujarat)	Tarry Residue to be utilized as a supplementary fuel in furnace to manufacture sodium silicate	Tarry residue generated from coal gasifier units is received and used directly as fuel in sodium silicate after pre-heating so as to reduce viscosity and make it suitable for oil burners.	<p>The committee observed that the information sought vide CPCB letter dated 15.10.2012 is incomplete with regard to the characteristics of the hazardous waste (i.e. Tarry residue) proposed for utilization viz. Calorific value, L<sub>o</sub>I, Flash point, Moisture content, Ash content, Volatile matter content, PAH, Fixed carbon content, Sulphur, Nitrogen, Chlorine, fluorine, and metal content lead, zinc, tin, cadmium, arsenic, mercury, chromium, cobalt, nickel, thallium, copper, vanadium, antimony, manganese, selenium, iron</p> <p>It was proposed that upon submission of above mentioned information/document, some members of the committee alongwith Gujarat SPCB and CPCB will visit any of the three units (suggested by Gujarat SPCB) to assess emissions w.r.t combustion efficiency, particulate matter emission, CO and VOC emission while utilizing tarry residue as fuel in the furnace. The VOC and CO shall also be monitored in ambient during the same period.</p>
13.	M/s Patidar Products Behind Bandhunagar, N.H.8/A Near Samsun Ceramics Makansar-363642, Tal:-Morbi, Distt:- Rajkot (Gujarat)		Thus tarry residue is used directly as fuel in furnace to produce Sodium silicate.	
14	M/s Brighto Chem S. no. - 128, 8-a National Highway, Village=Jambudiya, Taluka:-Morbi,Dist:- Rajkot (Gujarat)			
15.	M/s Sunrise Chemicals 8-A, National Highway,			

S. No	Name of the Industry	HW as Raw Material & Product	Process
	Lakaddhar Road, Wakaner, Dist:- Rajkot (Gujarat)		
16.	M/s Alpha Products S. no. – 301/ P, Lilapur, Near Canal, Morbi-363642, Taluka:- Morbi, Distt- Rajkot (Gujarat)		
17.	M/s Bond Products Pvt Ltd S.no. – 74/p2,plot no.- 1,2, Bhadiyad Road,Bhadiya MORBI-363642, Distt- Rajkot (Gujarat)		
18.	M/s Dhoriyani Silicate Industries, S. No. 767/2&3,Lakhdirpur Road,Morbi-363642 Taluka:-Morbi,Dist:- Rajkot (Gujarat)		
19.	M/s Shiv Chemical S. no. – 820/1/2-P, Village-Ghuntu,Morbi- 363642, Taluka:- Morbi, Distt- Rajkot (Gujarat)		

7<sup>th</sup> TEC Recommendations

The cost of monitoring of the above shall be borne by the units.



**Recommendation of the Technical Expert Committee on Old Cases for approval under the Rule 11 of the Hazardous Waste (Management, Handling & Transboundary) Rules, 2008**

S. No	Name of the Industry	HW utilized & Product manufactured	Process	Background & 7 <sup>th</sup> TEC Recommendations
1.	M/s Vinayak Chemicals G 1-21 & 22, IA, Sukher, Udaipur (Rajasthan)	Hydro Fluoro Silicic acid to be utilized for manufacturing Ammonium Bi Fluoride	Hydro fluoro silicic acid and ammonia gas are mixed in the reactor and maintained at temperature between 16-40 <sup>o</sup> C. The material is filtered in a filter press from where the mother liquor is distilled through vacuum distillation process. This is then centrifuged followed by drying and grinding.	<p>The committee recommended that a trial run in presence of CPCB/SPCB officials may be permitted for a period of ten days @ 20 KI of Hydro Fluoro Silicic acid, wherein the utilization process shall be verified w.r.t quality of wastewater generated, recirculated including the feasibility of zero discharge &amp; emissions shall be monitored for ammonia during the trial utilization monitoring in presence of CPCB/SPCB officials</p>
2.	M/s Universal Chemical, F-191, Road No. 5, Indraprastha Area Kota- 324005 (Rajasthan)	Spent Solvent / Process residues/Organic residues/Distillation residues to recover solvent	Distillation process by Column Condenser to convert Spent Solvent / Process residues/Organic residues/Distillation residues to pure solvent	<p>The committee discussed the reply submitted by the unit vide its letter dated 29.09.2012 and observed that though the chilled water supply is now available for the condenser but the concentration of solvent vapor at the condenser vent is not submitted by the unit.</p> <p>Further, the unit has also applied for renewal of permission granted for utilization of High Boiler residue which was valid till November 2, 2012</p> <p>Accordingly, it was recommended to grant permission for trial utilization of Spent solvent (i.e. one with boiling point less than 100<sup>o</sup>C and one with more than 100<sup>o</sup>C), for a period of 10 days @ 7 tons, wherein VOC concentration at the condenser vent shall be monitored in presence of CPCB/SPCB officials.</p> <p>Further, in respect of renewal of permission granted for producing Toluene from High Boiler residue (generated from vinyl chloride monomer production), it was recommended to verify the compliance of the conditions stipulated by CPCB in its letter dated 03/11/2012 during the aforesaid trial run.</p>





**Recommendation of the Technical Expert Committee on Grant of approval after trial run under the provision of Rule 11 of the Hazardous Waste (Management, Handling & Transboundary) Rules, 2008**

S. No	Name of the Industry	HW as Raw Material & Product	Background	7 <sup>th</sup> TEC meeting recommendation
1.	M/s Sterilite Industries (I) Ltd SPICOT Industrial Complex, Madurai Bypass Road, T.V Puram, P.O Thoothukudi- Tamil Naidu- 628002	Utilization of Tail Gas Cake by mixing it with phosphogypsum as a saleable product	As per the recommendation (6 <sup>th</sup> TEC meeting on 05.09. 2012) of Competent authority w.r.t not mixing of gypsum produced from Tail Gas Scrubber (TGS) with phosphogypsum. The matter was discussed by the committee.	The committee recommends grant of approval for utilization of Tail Gas Scrubber cake @ 10 MT/day by not mixing with phosphogypsum for utilization in soil conditioning, cement plants, gyp-board manufacturing, etc. without any formal Visit/trial runs by CPCB, as per CPCB draft guidelines for a initial period of one year
2.	M/s Metacast International "Shree Kunj", Bhalupali Chowk Bohidar Nuapali, P.O. – Sankarma Distt- Sambalpur, Orissa-768006	Waste Anode Butt to be utilized for manufacturing electrode carbon paste for usage in ferro-alloy furnaces.	<p>As per 5<sup>th</sup> TEC meeting held on 13.06.2012, the unit was granted three months temporary permission during which the unit shall monitor fluoride in the exhaust gases/work zone with and without utilization (i.e. carbon electrode paste made with 25% and 50% utilization of Waste Anode butt) in ferro-alloys furnace in presence of CPCB/SPCB officials.</p> <p>Also, ZO Kolkata as asked to collect the representative samples of the following and analyze for Cyanide &amp; Fluoride in respect of both TCLP concentration (mg/l) and, if possible, also analyze total concentration in mg/kg during the permitted period of operation:</p> <p>a) Raw Waste Anode Butt crushed homogenously in the crusher installed in the plant.</p> <p>b) Treated anode butt (after removal of bath layer) in Shot Blasting Chamber and crushed homogenously.</p> <p>c) Chipped off material from Shot blaster (which is intended for disposal in TSDF).</p> <p>d) Final Product i.e. Electrode Carbon Paste.</p> <p>The results of the same submitted by the unit &amp; ZO Kolkata was discussed by the committee.</p>	<p>It was recommended to grant approval under Rule 11 of the HWM Rules, 2008 for utilization of Waste anode butt @ 28 tons/day to manufacture Electrode Carbon Paste initially for a period of one year with the following conditions:</p> <p>(i) Minimum 25 mm of outer layer of waste anode butt shall be removed during shot blasting.</p> <p>(ii) Only Carbon Electrode Paste shall be produced from the cleaned waste anode butts for utilization in Ferro alloy furnaces and the records of the same shall be maintained by the unit w.r.t name of Ferro alloy industries utilizing such Carbon Electrode Paste and respective quantity.</p> <p>(iii) The percentage mix of cleaned Waste anode butt in the product shall not exceed 50%.</p>



S. No	Name of the Industry	HW as Raw Material & Product	Background	7 <sup>th</sup> TEC meeting recommendation
3.	M/s Goodwill Inorganics Ltd., E-159-A, Opp. Police Chowki, Mewar Industrial Area, Madri, Udaipur (Rajasthan) - 313003	Hydro Fluoro Silicic acid to be utilized for manufacturing Sodium Silico Fluoride	As per the recommendation of the 5 <sup>th</sup> TEC meeting on 13.06.2012, the unit was asked to install alkali scrubber & bag filter.  In response, the unit replied vide its letter dated 29.11.2012 which was discussed by the committee.	The committee discussed the reply submitted by the unit vide its letter dated 29.11.2012 and observed that the alkali scrubber & bag filter have yet not been installed by the unit.  It was recommended that the proponent shall be called to explain the details of the process in the next meeting.
4.	M/s Ravindra Heraeus Pvt. Ltd., A-196, (A), "F" Road, M.I.A, Madri Udaipur - 313003	Spent catalyst (carbon/alumina based) containing silver/platinum ETP Sludge containing platinum to be utilized for manufacturing precious metals	As per the recommendation of the 5 <sup>th</sup> TEC meeting on 13.06.2012, the unit was asked to submit the analysis report w.r.t source emission, ambient air, waste water quality, characteristics of residue generated alongwith the details of quantity of effluent generated etc. in compliance to the trial run monitoring protocol issued vide letter dated 21.12.2011.  In response, the unit submitted the analysis reports vide its letter dated 17.09.2012 which was discussed by the committee.	It was recommended to grant approval under Rule 11 of the HWM Rules, 2008 for utilization of Spent catalyst and molecular sieves (HW Category Sh.-I, 1.7), Spent catalyst (HW Category Sh.-I, 4.2, 17.2, 18.1, 35.2), Spent carbon/Spent catalyst (HW Category Sh. I, 18.2 and 28.2) and Chemical sludge (HW Category Sh.-I, 34.3) @ 260 MTA containing precious metals i.e. platinum, Iridium, Osmium, Palladium, Rhodium, Ruthium, Rhenium, Gold & Silver for manufacturing of respective precious metals initially for a period of one year.  For import of above mentioned hazardous wastes, the unit shall obtain permission from the concerned SPCB and/or MoEF, as applicable under the HWM Rules.
5.	M/s Choski Heraeus Pvt. Ltd., A-195-196, "F" Road, M.I.A, Madri, Udaipur -313003			It was recommended to grant approval under Rule 11 of the HWM Rules, 2008 for utilization of Spent catalyst and molecular sieves (HW Category Sh.-I, 1.7), Spent catalyst (HW Category Sh.-I, 4.2, 17.2, 18.1, 35.2), Spent carbon/Spent catalyst (HW Category Sh. I, 18.2 and 28.2) and Chemical sludge (HW Category Sh.-I, 34.3) @ 260 MTA containing precious metals i.e. platinum, Iridium, Osmium, Palladium, Rhodium, Ruthium, Rhenium, Gold & Silver for manufacturing of respective precious metals initially for a period of one year.  For import of above mentioned hazardous wastes, the unit shall obtain permission from the concerned SPCB and/or MoEF, as applicable under the HWM Rules.
6.	M/s Sandvik Asia Pvt. Ltd. Plot No. D 27/1, Lote Parshuram, Tal. Khed, Distt- Ratnagiri	Tungsten bearing material (insert tips) to be utilized for manufacturing Tungsten Powder	The inspection report received from Zonal Office Vadodara was discussed by the committee.	The committee recommended grant of approval under Rule 11 of the HWM Rules, 2008 for utilization of Tungsten bearing material (insert tips) @ 640 MTA initially for a period of one year with the following conditions : a) The unit shall send the treated effluent to CETP in accordance with the condition stipulated in the CCA. b) The contaminated gloves, masks, dusters, etc. shall be disposed in CHWTSDH. c) For import of hazardous wastes i.e. Tungsten bearing material (insert tips), the unit shall obtain permission from the concerned SPCB and/or MoEF, as applicable under the HWM Rules.

S. No	Name of the Industry	HW as Raw Material & Product	Background	7 <sup>th</sup> TEC meeting recommendation
7.	M/s Malana Silver Nitrate Recycling Unit Village Rampur Gujjaran, Thsil Moonak , Distt- Sangrur (Punjab)	Spent fixer (hypo) solution of photograph/X-ray films to utilized to recover Silver	The inspection report received from Zonal Lucknow was discussed by the committee.	<p>The committee observed that following information has not been included in the ZO report:</p> <ul style="list-style-type: none"> <li>(i) Characteristics of Spent fixer (hypo) solution utilized during the process;</li> <li>(ii) The analysis report of the samples of raw fixer and filtrate showing approximately 99.6% silver metal recovery</li> <li>(iii) Analysis report of ambient air monitoring prior to utilization of hazardous waste</li> </ul> <p>Upon receipt of above said reports/documents the matter shall be discussed in the next meeting.</p> <p>Further, as per the observations made in the ZO report, following up gradation will also be required to be carried out by the unit:</p> <ul style="list-style-type: none"> <li>• The mechanical filtration process (filter press or centrifuge etc.) shall be installed;</li> <li>• The solar evaporation area shall be covered so as to protect the same during rainy season.</li> </ul>
8.	M/s Weston Electro Carbon & Graphite Products Unit II, Plot No.32-63, Rajgamar Road Industrial area, Korba Chhattisgarh-495677	Used anode be utilized for manufacturing Carbon Electrode Paste, Tamping paste & Carbon block and Carbon coke for usage in Ferro alloy furnaces.	The inspection report received from Zonal Bhopal was discussed by the committee.	<p>It was recommended to grant approval under Rule 11 of the HWM Rules, 2008 for utilization of Waste anode butt @ 28 tons/day to manufacture Electrode Carbon Paste initially for a period of one year with the following conditions</p> <ul style="list-style-type: none"> <li>(i) Minimum 25 mm of outer layer of waste anode butt shall be removed during shot blasting.</li> <li>(iv) The percentage mix of cleaned Waste anode butt in the product shall not exceed 50%.</li> <li>(ii) The unit shall monitor fluoride in the exit gases and work zone in ferro-alloys furnace in presence of CPCB/SPCB officials with and without utilization of all the three products manufactured from cleaned anode butt i.e. Carbon Electrode Paste, Tamping paste &amp; Carbon block and Carbon coke. The report of the same shall be submitted to CPCB within three months of the date of start of production.</li> <li>(iii) Only Carbon Electrode Paste, Tamping paste &amp; Carbon block and Carbon coke shall be produced from the cleaned waste anode butts for utilization in Ferro alloy furnaces and the records of the same shall be maintained by the unit w.r.t name of ferro alloy industries utilizing such products and respective quantity.</li> <li>(iv) The unit shall not use the residue generated from shot blasting machine and bag filter and the same shall be stored within premise/disposed as authorized by the Chhattisgarh Environment Conservation Board.</li> </ul>

S. No	Name of the Industry	HW as Raw Material & Product	Background	7 <sup>th</sup> TEC meeting recommendation
9.	M/s Parara Udyog F- 195-196, Masoori-Gulawathi Road Industrial Area, Panchsheel Nagar, Uttar Pradesh	Reconditioning of discarded/used drums & container	<p>As per the recommendation of 6<sup>th</sup> TEC meeting on 05.09.2012, the unit was asked to submit the information/ documents w.r.t details of the industries from where discarded/used drums &amp; container shall be collected for re-conditioning. Process details for reconditioning of discarded/used drums &amp; container, Type of discarded/used drums/containers (w.r.t size, shape and material), their quantities and chemical material for which the drums were used, quantity of effluent/residue generated and mode of disposal, details of users/industries to whom the re-conditioned drums/container will be sold, details of storage and process area (i.e. flooring and shed details).</p> <p>In response, the unit replied vide its letter dated 06.12.2012 which was discussed by the committee.</p>	<p>The committee discussed the reply submitted by the unit vide its letter dated 06.12.2012 in reference to CPCB's letter dated 30.10.2012 and observed that the information is incomplete w.r.t type of discarded/used drums/ containers (w.r.t size, shape and material), their quantities and chemical material for which the drums were used.</p> <p>Accordingly, it was recommended that the unit shall submit the above information and upon receipt of the same, officials of CPCB/SPCB shall jointly visit the plant to verify the utilization process suggesting any additional measures if required.</p>

