

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

October 4, 2011

Sub: Minutes of the First 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 under Rule 11 of the Hazardous Waste (Management, Handling & Transboundary) Rules, 2008”.

1. First Meeting of the Technical Expert Committee on “Evaluation of proposal for utilization of the hazardous wastes as a supplementary resource or for energy recovery, or after processing” was held at CPCB, Delhi on 23.09.2011. List of the participants is enclosed at **Annexure I**.
2. Shri B. Vinod Babu, Senior Environmental Engineer & I/c HWMD, welcomed the members and invitees and highlighted the provisions made under Rule 11 of the Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2008 for granting approval for utilization of the hazardous waste as a supplementary resource or for energy recovery, or after processing. He explained the procedure adopted by CPCB for processing of applications received under Rule 11 of the Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2008, prior to constitution of this committee.
3. The progress made for clearance of the cases received by CPCB so far under the provision of Rule 11 of HWM Rules, 2008 was also reviewed by the committee. It was observed that 52 applicants having applied for permission to CPCB out of which 2 applicants were granted permission for utilization of the hazardous wastes.
4. The Committee discussed in detail the procedure required to be adopted for granting permission for utilization of the hazardous wastes. However, the cases pertaining to co-processing of HW in Cement kilns may not require to be placed before this committee as CPCB guidelines are already in place on the same. The committee recommended to append the following additional points to the procedures approved by Chairman, CPCB (**Annexure- II**):
 - (i) The units which did not respond to CPCB’s request for clarifications/documents/trial run may be asked finally to respond within 30 days and in case no response is received within 30 days, the case shall be deemed to be withdrawn by the applicant and the same shall be communicated to the unit and the concerned SPCB.
 - (ii) Though duration of approval has not been stipulated in the Rule, but the grant of approval may be permitted initially for one year with random checks/sampling by CPCB/SPCB twice a year. Based upon the satisfactory results regular permission with 5 years validity limit shall be permitted.
 - (iii) The format for submitting requisite information should also include information on characteristics of the product and details of the end use. Accordingly, the revised format is given at **Annexure-III**.
5. With regard to proposals for utilization of waste for energy recovery in steel furnaces/boilers, it was observed that the CPCB guidelines on Co-processing of hazardous wastes in Cement plants stipulate “the emission standards for particulate matter prescribed for cement kiln by the concerned State Pollution Control Board shall be applicable during co-processing in cement

kiln also. For other pollutants i.e. HCl, SO₂, CO, TOC, HF, NO_x, total dioxins and furans, Cd + Tl + their compounds, Hg and its compounds, Sb + As + Pb + Co + Cr + Cu + Mn + Ni + V + their compounds, the emission during co-processing should not exceed the base line emissions i.e.; during pre co-processing phase of trial run.” The committee recommended that such policy may not be applied straight away in cases of boiler/steel furnaces as unlike the cement kilns, presence of alkaline media and high residence time which adsorbs halides and acidic gaseous pollutants besides assimilation of residues of hazardous metallic constituents in the product i.e. cement, are not there in boiler.

It was recommended that emission standards for the prescribed parameters as prescribed in the “consent to operate” given by the SPCB/PCC shall be followed. However, in case of other parameters relevant to constituents present in the hazardous waste proposed to be co-processed, the notified emission standards of common hazardous waste incinerator may be applied selectively.

6. The matter related to grant of renewal/regular permission to the following units for utilization of hazardous waste was also discussed :

- i. **M/s Grishma Metal Technology Ltd., Thane, Maharashtra** - The inspection report received from Zonal Office Vadodara was discussed and it was recommended to grant permission to the said unit for utilization of spent acid containing Molybdenum compound @ 60 KL/month for manufacturing of Ammonium Molybdate with 5 years validity. Maharashtra SPCB shall be asked to monitor and ensure compliance of the provisions of the HWM Rules, 2008, Air (Prevention & Control of Pollution) Act, Water (Prevention & Control of Pollution) Act and Environment (Protection) Act, 1986. The Maharashtra SPCB shall report non-compliance, if any, to CPCB.
- ii. **M/s Shri Balaji Chemical Industries, M.P** - As per the provisional permission granted in June 2010, the unit was asked to inform the date of commencement of the production for utilizing the hazardous waste for necessary verification by CPCB. However, the same could not be verified as this office did not receive any intimation from industry about commencement of production. The industry has, however, clarified vide its letter dated 28/7/2011 that they have commenced production in the month of December 2010 and claimed that they have informed the same to CPCB in December 2010. In this regard, committee recommended that decision on grant of regular permission to the unit may be taken based on the inspection report. The Zonal Office Bhopal may be requested to inspect the unit and submit a report verifying the adequacy of existing facilities.

7. Further, the matter related to grant of fresh permission for utilization of hazardous waste subsequent to the trial runs/ inspections by CPCB to the following units was also discussed :

- i. **M/s Universal Chemical, Kota** - Inspection report received from Zonal Office Bhopal was discussed. The committee agreed with the recommendation of the Zonal office inspection report that ambient air quality monitoring of SPM, RSPM, SO₂, NO_x, CO, Total hydrocarbon, Benzene, Xylene and Toluene may not be required as specified in the trial run protocol since there is no perceivable fugitive emissions during the trial run and that the entire operation/process is in closed circuit including raw material feeding. However, it was recommended by the committee that the unit may be granted approval initially for one year for utilization of 60 MT per Annum of High Boiler Residue from Vinyl chloride monomer production for recovering Pure Toluene with a condition that the ZO-Bhopal may visit the unit for analyzing TOC from vent upon commencement of the production as well as Toluene in ambient air within the premises.

- ii. **M/s Di-electric Corporation, Bhopal** – Inspection report of trial run received from Zonal Office Bhopal was discussed. It was recommended that the unit may be asked to take following actions :

- (i) Adequate safety gadgets shall be provided to workers and the existing ventilation system be augmented to further minimize odor near resin and pigment threading area.
- (ii) The unutilized resin waste shall be sent to the common TSDF (M/s Madhya Pradesh Waste Management Project Ltd.). The unit shall, therefore, become member of common TSDF within a period of one month from date of approval granted.

Upon compliance of above and submission of relevant documents & photographs, grant of approval for utilization of resin waste @ 2 MT/annum for one year may be given.

- iii. **M/s Chemsale Organisation, Hapur, U.P** - The trial run of utilization process and verification of modifications carried out by the unit were done on 31.01.2011 and 01.06.2011 respectively. The same were discussed and it was recommended that the unit shall be asked to provide following information/confirmation:

- (i) Analysis report indicating Chromate & Dichromate of potassium/ammonium and degree of impurities in the product and where the same is used.
- (ii) The spent mother liquor shall be separately forced evaporated or precipitated. The residue shall be disposed in TSDF.

The unit may be granted approval for utilization of spent chromic acid @ 10KL/month upon installation of the forced evaporation or precipitation system for one year.

- iv. **M/s Sumak Pigments & Molybdates Pvt. Ltd., Nasik**- The inspection report received from Zonal Office Vadodara was discussed. The committee agreed with the recommendation of the Zonal office for grant of approval under Rule 11 of the HWM Rules, 2008 for utilization of 5 MT/month of spent acid containing Molybdenum compound for one year.
- v. **M/s Uflex Ltd., Malanpur, Bhind (M.P)** - With regard to co-processing of spent Ethylene Glycol in captive boiler, It was recommended by the committee that the unit shall submit the detailed characteristics of Ethylene Glycol in terms of Organic & Inorganic Chlorine within one month.

Upon receipt of the said details, the unit may be granted approval for utilization of Ethylene Glycol @ 2.5 MT/ month initially for one year with a condition that the unit shall comply with the emission standard prescribed in the "Consent to Operate" given by the SPCB and also meet emission limits of HW incinerators for Heavy metals, TOC, CO and PCDDs/PCDFs (in case organic chlorine is present in the waste).

8. The proposal from M/s SAVLA Chemicals Ltd, Gujarat for utilizing Di Methyl Ether (generated as by-product in gaseous form during manufacturing of isobutylene) as a fuel in steam boiler and thermic fluid heater was discussed. It was observed that Gujarat PCB vide letter no. GPCB/BRCH-CCA-86(2)/ID-15613/75972 dated 28/3/2011, has asked M/s SAVLA Chemicals Ltd, Gujarat to obtain permission of CPCB under Rule 11 of the HWM Rules, 2008 for utilizing Di Methyl Ether (generated as by-product in gaseous form during manufacturing of isobutylene) as a fuel in steam boiler. It was further observed that The MoEF has acknowledged use of the

Di Methyl Ether as a fuel in the steam boilers and thermic fluid heaters while issuing environmental clearance (J-11011/152/2009-IA II (I) dated 10/6/2009) for the expansion of the unit.

It was recommended that since Di Methyl Ether (DME) is in gaseous form, the same does not qualify for hazardous waste category. Thus, the requirement of CPCB's approval under Rule 11 may not be applicable to the unit as the same is applicable for utilization of only *hazardous wastes*.

9. The committee observed that many units did not respond to CPCB's request for clarifications/ documents/trial run. Accordingly, it was decided that in all such cases the unit be finally asked, if not asked earlier, to respond within a month failing which the proposal shall be deemed to be withdrawn by the applicants.
10. The committee reviewed some of the old cases and also discussed three new cases. The details of the proposals alongwith the recommendations of the committee are given at *Annexure – IV*.
11. The Meeting ended with vote of thanks, after tentatively fixing the date of the next meeting on 10th October, 2011.

**CENTRAL POLLUTION CONTROL BOARD
DELHI- 110 032****Date:** September 23, 2011**Venue:** 2nd Floor,
Conference room,
Parivesh Bhawan,
CPCB, Delhi- 110 032**First 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**

S. No	Name	Designation	Member of the Committee / Invitee
1.	Shri R.K. Garg	Former Managing Director, Indian Rare Earths Ltd.	Chairperson
2.	Prof. A.K Nema	Associate Proffessor, IIT Delhi	Member
3.	Dr. Saroj	Director, HSMD, MoEF	Member
4.	Sh. B. Vinod Babu	Senior Environmental Engineer & I/c HWMD, CPCB, Delhi	Member Convener
5.	Sh. Bharat K Sharma	Senior Environmental Engineer, HWMD, CPCB, Delhi	Invitee
6.	Ms. Deepti Kapil	Assistant Environmental Engineer (HWMD), CPCB, Delhi	Invitee

Annexure II

Procedure for grant of approval for the utilization of hazardous wastes as a supplementary resource or for energy recovery, or after processing as per Rule 11 of the HWM Rules, 2008

Rule 11 of the Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008, stipulates that the utilization of hazardous wastes as a supplementary resource or for energy recovery, or after processing shall be carried out by the units only after obtaining approval from the Central Pollution Control Board.

The procedure for granting permission for the cases other than co-processing in cement kilns is proposed below:

1. The applicant desirous to utilize the hazardous wastes after processing or as a supplementary resource or for energy recovery, shall submit the proposal to CPCB (online as well) alongwith the following enclosures :
 - i. Information on the proposed HW utilization as per the format as given at *Annexure – II* alongwith all supporting technical details, process flow sheets, waste characteristics etc. as required.
 - ii. Copy of valid Consent to Establish/Operate under the Air Act & Water Act from the concerned SPCB/PCC.
2. The constitution of the Technical Expert Committee is as below:

1.	Shri R.K. Garg , Former Managing Director, Indian Rare Earths Ltd.	Chairperson
2.	Shri K.P. Nyati	Member
3.	Prof. A.K Nema IIT, Delhi	Member
4.	Shri. M.J Pervez, Group Head & Director (Environment Management), NPC, New Delhi	Member
5.	Director, HSMD, Ministry of Environment & Forests	Member
6.	Representative from Projects & Development India Ltd.(PDIL) , Noida	Member
7.	Representative from State Pollution Control Board	Member
8.	Sh. B. Vinod Babu , Senior Environment Engineer & I/c HWMD, CPCB, Delhi	Member Convener

3. Incomplete applications will be communicated to the applicant and in case of no response within 30days, the application shall be returned with the approval of technical expert committee.
4. Complete applications shall be placed before technical expert committee constituted by CPCB to evaluate environmentally soundness of the proposal. The proponents shall make technical presentation before the committee. For all new waste categories trial run will be conducted.
5. After approval of the recommendations of the technical expert committee by Chairman, Central Board, the individual cases shall be processed accordingly.
6. CPCB shall issue letter to the unit permitting procurement of desired quantity of hazardous wastes as raw material after obtaining permission from the concerned SPCB/PCC.

7. After receipt of permission and procurement of the hazardous wastes, the unit shall inform about their preparedness of carrying out trial run. Trial run shall be carried out by the unit in presence of the CPCB/SPCB officials and monitoring conducted by an EPA recognized NABL accredited laboratory.
8. The concerned Zonal Office shall submit the report on the trial run within 30 days.
9. After receipt of the report on trial run from the Zonal Office, the matter shall be placed before the technical expert committee. The recommendations of the committee shall be approved by the Chairman, Central Board. Based on the approval Division shall process the individual case for further action under Rule 11 of the HWM Rules, 2008.
10. The technical expert committee shall meet when atleast 05 cases have been accumulated or at every two months, whichever is earlier.
11. Rule 11 of the HWM Rules, 2008, does not stipulate validity of the approval to be accorded by the Central Board but the same may be permitted initially for one year followed by regular permission with 5 years validity limit, proposed as in case of re-processing of HW listed in Schedule- IV as per specified in Rule-8 (Sub rule- 4) of HWM Rules 2008.
12. The application for renewal of approval granted for one year shall be submitted to CPCB at least two months in advance of the expiry. The application shall be submitted along with the self-declared compliance report w.r.t. conditions stipulated by the Central Board in the approval letter. The application shall be forwarded to the respective Zonal Office of the Central Board for verification of the same. The inspection report as received from the Zonal Office along with the recommendations shall be placed before the aforesaid committee for making appropriate recommendations.

Format* for obtaining approval from the Central Pollution Control Board under the Rule 11 of the Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008

1	General Information	
1.1	Name & Address of the Unit:	
1.2	Contact Person and phone number:	
1.3	Products to be manufactured and quantity (MT/Day):	
2	Details of hazardous waste to be utilized	
2.1	Name & address of hazardous waste generating industry:	
2.2	Name/Type of the hazardous wastes including category (as per the Schedule I) intended for utilization:	
2.4	Detailed characteristics of hazardous waste proposed for utilization:	
2.5	Details of process from which such hazardous waste is generated:	
3	Details of utilization of hazardous wastes	
3.1	Proposed quantity (in MTA) of hazardous waste to be utilized	
3.2	Process details for utilization of hazardous waste and its Flow Diagram:	
3.3	Please attach copy of air consent, water consent and authorization:	
3.4	Base line data including characteristics pertaining to air emissions, waste water generation and other solid wastes including hazardous waste expected to be generated in the proposed utilization process:	
3.5	Material Balance with and without utilizing hazardous wastes, in case the waste is proposed for utilization/co-processing in an already existing process:	
3.6	Details of hazardous waste storage facility and process area facility:	
3.7	Quantity of fuel and/or raw material that are expected to be conserve (in % of raw material replaced) from the proposed utilization:	
3.8	Data including characteristics pertaining to air emissions, waste water generation and other solid wastes including hazardous waste expected to be generated during utilization of hazardous wastes.	
3.9	Details of findings of laboratory/ pilot scale study, international practice etc.	
3.10	Name of the product (to be manufactured from utilization of hazardous waste), if any, its characteristics and where the same will be used and in which process:	

* To be filled and submitted **in triplicate** by the unit, who desires to utilize hazardous wastes as a supplementary resource or for energy recovery, or after processing.

Recommendation of the Technical Expert Committee on the decisions taken by in-house committee in the meetings prior to the constitution of Technical Expert Committee

S. No	Name of the Industry	HW as Raw Material	Product	Brief Process	Status of Consent	Committee Recommendation
1	M/s Choski Heraeus Pvt. Ltd., A-195-196,"F" Road, M.I.A, Madri, Udaipur -313003	Spent catalyst (carbon/alumina based) containing silver/platinum ETP Sludge containing platinum	Silver Platinum Catalyst	Spent catalyst/ETP sludge based spent catalyst is fired in furnace the residue/ashes rich in metals is further leached in closed reactor to generate metal compounds adopting suitable hydro-metallurgical process.	Consent to operate under Air and Water Act is valid upto 28.02.2014.	<p>It was recommended that the proponents shall submit the following information/ documents :</p> <ol style="list-style-type: none"> 1. Details of safety gadgets & pollution control devices installed. 2. Storage & process area details. 3. Details on handling of spent catalyst and scrubber bleed water. 4. Characteristics of spent catalyst, spent carbon and ETP sludge. 5. Process details of utilization of hazardous waste i.e rate of feeding, method of feeding etc. 6. Details of residue generation and its disposal during the process of utilization of spent catalyst containing alumina. 7. Details of the facility provided to control fumes generated during the process. <p>Upon receipt of above and if found satisfactory, permission for conducting trial run in presence of CPCB/SPCB officials may be given for utilizing 1MT of silver and platinum based spent catalyst to each of the units.</p>
2	M/s Ravindra Heraeus Pvt. Ltd., A-196, (A),"F" Road, M.I.A, Madri Udaipur -313003				Consent to operate under Air and Water Act is valid upto 31.08.2012.	
3.	M/s Barkha Enterprises G-63 Kuber Industrial Area, Ranpur, Distt- Kota (Rajasthan)	Spent catalyst containing Mercury (impregnated in activated carbon) & Mercury Sludge	Mercury	Spent catalyst containing mercury is indirectly heated in coal fired furnace. The hot gases containing mercury vapours are condensed to recover elemental mercury followed by alkali scrubbing and venting.	Consent to operate under Air and Water Act is valid upto 28.02.2014.	<p>It was recommended that the proponent shall submit the following information/documents :</p> <ol style="list-style-type: none"> 1. In which form (elemental/compound) the mercury is present in waste and if in compound form, how the mercury is separated by heating; 2. Characteristics of Mercury Sludge of Hindustan Zinc Ltd. 3. System available/proposed to measure mercury in exhaust. 4. Facilities proposed for treatment of

						<p>bleed water from scrubber</p> <p>5. Facilities proposed for control of release of mercury vapour during handling, Storage & transportation of waste.</p> <p>Upon receipt of above information, the matter shall be placed in the next technical expert meeting.</p>
4.	M/s Krishna Organics F-99&100, M.G. Road Ind. Area, Ghaziabad	Spent acetone solvents from automobile and paint industries.	Acetone	Spent solvent is distilled and vapours are passed through condenser & Sub-chiller units to recover solvent. Residue is generated during the process is stored for disposal at TSDF.	Consent to operate under Water Act is valid upto 31.12.2013	<p>It was recommended that the proponent shall comply to following;</p> <ol style="list-style-type: none"> 1. Carry out safety audit from a reputed agency and the report of the same shall be submitted to CPCB; 2. Install suitable venting system with flame arrestor for evacuating vapours from spent acetone at the time of loading in the receiver tank. 3. Details of safety gadgets & pollution control devices installed. 4. Details on rate of feeding, quantity of residue generated etc. <p>Upon compliance of above and submission of relevant documents & photographs, permission for conducting trial run in presence of CPCB/SPCB officials may be given.</p>
5	M/s Chaudhary Briquette Fuel Industries.NS-8, 2nd Phase, Industrial Area, Adityapur, Jamshedpur	Spent Pot Lining	Fuel pellets	<p>Crushing and sizing of Spent Pot Lining in ball mills followed by addition of calcium based solution and thermal treatment in Rotary Kiln. The kiln outlet i.e. Calcium Fluoride and residual carbon shall be sold as fuel pellets which will also serve as flux material to steel melting furnaces.</p> <p>The flue gases containing Fluoride are scrubbed in lime solution.</p>	Consent to operate under Air and Water Act is valid upto 31.03.2011 for manufacturing of cement, however the unit does not have necessary clearance for establishing the proposed process.	<p>It was recommended that the proponent shall obtain Consent to establish the additional facility under Air/Water Act from Jharkhand SPCB for co-processing of spent pot lining to manufacture fuel pellets. A copy of the said consents shall be submitted to CPCB along with following information/ documents:</p> <ol style="list-style-type: none"> 1. Process details of utilization of hazardous waste i.e rate of feeding, method of feeding etc. to the kiln. 2. Fluoride mass balance across the kiln 3. Process control to establish that there is no residual fluoride other than CaF₂ in the processed material i.e fuel pellets. 4. Details of flue-gas treatment. 5. Shall explain how complete destruction of CN in the kiln.

						Upon receipt of the above, the matter shall be placed in the next Technical Expert committee meeting.
6	M/s Metacast International "Shree Kunj ", Bhalupali Chowk Bohidar Nuapali , P.O. – Sankarma Distt- Sambalpur, Orissa-768006	Waste Anode Butt from the electrolytic cell of aluminum smelter	Electrode Carbon Paste	The bath material as outer surface in the waste anode butt is mechanically chipped off followed by crushing and sizing. This material is proportionately mixed with calcined petroleum coke and melted coal tar pitch to manufacture electrode carbon paste for usage in ferro-alloy furnaces.	Consent to Operate under Water/Air Act valid upto 31.3.2012	It was recommended that the proponent shall submit the following: 1. Copy of the agreement obtained from M/s Orissa Waste Management Project for accepting the process residue waste with fluoride and cyanide. 2. Details on fugitive emission control during chipping, crushing and mixing operations. 3. The concentration of cyanide and fluoride in chipped off material. 4. Details of the treatment facility, if any, proposed before giving the chipped material to TSDF. Upon receipt of above, permission for conducting trial run in presence of CPCB/SPCB officials may be given.
7	M/s GKB Rx Lens Pvt Ltd. Plot A-15, Infocity, Sector 34, Gurgaon	Polycarbonate waste	Boiler/Furnace	Process details is not provided by the proponent	Consent to Operate under Water and Air Act valid upto 31.3.2014	The committee could not discuss technical aspects as the information sought by CPCB from the applicant vide letter dated 28.07.2011 and 02.09.2011 has not been received. It was recommended that that matter shall accordingly be processed upon receipt of the above.
8.	M/s IOL Chemicals and Pharmaceuticals Ltd. 85, Industrial Area 'A', Ludhiana	Distillation Residue ETP Sludge	As a fuel in FBC high pressure boiler	Distillation Residue and ETP Sludge is mixed together with the coal and incinerated in the high pressure boiler.	Water & Air Consent (valid upto 22.10.2012)	The committee recommended to conduct trial run for utilization of wastes by mixing it with fuel (husk) @ 0.5 % by weight in FBC boiler, wherein emissions shall be monitored for PM, Heavy metals, TOC & HCl before & during utilization in presence of CPCB/ SPCB officials.

9.	M/s Maharashtra Esters & Ketones Pvt. Ltd. 12/A Parmakuti 2nd Floor, 164/A, Mumbai	-	-	-	-	The committee observed that the unit has not responded to CPCB's letter dated 30.06.2011 asking unit to respond in 30 days. Accordingly, it was recommended that the matter may be closed and the unit may be informed that since they did not respond to the said letter within 30 days, the proposal has been deemed to be withdrawn / closed by the unit.
10.	M/s Bansal Paper Board Mills , Abohar Road, Village Mahabahdar, Distt & Teh. Muktsar Punjab	ETP Sludge	Manufacturing of Card Board	Sludge and the other waste material is put in pulper & mixed with water to form pulp. This pulp is further put in rehat and further brought in mould machine where card board is moulded. After drying in sunlight it is calendered in the machine and further used for various purposes.	<ul style="list-style-type: none"> • Consent to Operate under Air Act is valid up to 17.8.2013 • Authorization under HWM Rules valid till 31.1.2015 	The committee agreed to the earlier trial run permission granted to the unit vide letter dated 02.06.2011 and recommended that ZO shall expedite submission of trial run report as per the time target stipulated in the procedure for grant of approval (Annexure II).
11.	M/s Fertichem Plant Shakti Agro (P) Ltd. Village Raiyan, Near Kohara, Distt. Ludhiana, Punjab.	Waste Pickling liquid	Ferrous Sulphate	Addition of Iron powder and sulphuric acid followed by filter pressing and crystallization.	<ol style="list-style-type: none"> 1. Consent to Operate under Air Act and Water Act valid up to 31.12.2011. 2. Authorization for collection, reception, transportation, treatment, storage of hazardous waste valid upto 01.05.2009. 	The committee agreed to the earlier trial run permission granted to the unit vide letter dated 02.06.2011 and recommended that ZO shall expedite submission of trial run report as per the time target stipulated in the procedure for grant of approval (Annexure II).
12.	M/s Vikas Flourochem Pvt. Ltd., Plot No.B-27/C&D, Sec – C Industrial Area Sanwer Road Indore (M.P).	Hydro Fluo Silicic acid waste	Sodium Silica Fluoride	Neutralization of Hydro fluo silicic acid with brine solution and addition of soda ash as catalyst. After Neutralization at regulated temperature and pressure precipitates are washed with water followed by centrifuging, sun drying and crushing to desired mesh.	<ol style="list-style-type: none"> 1. Air Consent (valid upto 30.3.2011) 2. Authorisation under HWM Rules (Valid till 30.5.2010) 	The committee observed that reminder letter was issued by CPCB vide letter dated 19.04.11 to the proponent to submit information and the reply submitted is incomplete w.r.t. management of waste water expected to generate during utilization process including details of fume hood and scrubber. Accordingly, it was recommended by the committee to seek the desired information again.
13.	M/s Chemtreat Industries, Alwar, Rajasthan	Spent Solvent (Spent Acetone, Spent Ethyle	Pure solvent	Distillation process by Column Condensor of used to convert used solvent to pure liquid	1.Air Consent &.Water Consent (Valid till	The committee observed that the unit has not responded to CPCB's letter dated 04.05.2011 asking unit to respond in 30

		Acetate, Spent IPA & Spent Toluene)		solvent	31.12.2009)	days. Accordingly, it was recommended that the matter may be closed and the unit may be informed that since they did not respond to the said letter within 30 days, the proposal has been deemed to be withdrawn / closed by the unit.
14.	M/s Satyam Pharma Chem Pvt. Ltd., Navi Mumbai	Spent acid containing Sulphuric Acid and Molybdic Acid	Manganese Sulphate, Sodium Molybdate and Lithium Molybdate	Spent acid after heating is filtered to obtain cake of Molybdic acid and liquid phase containing sulphuric acid. The Molybdic acid cake is reacted with Caustic Soda & Lithium hydroxide and crystallised as Sodium Molybdate and Lithium Molybdate. Sulphuric Acid is reacted with Manganese to obtain Manganese	Consent under Water/Air Act is valid upto 31.12.2012	The committee observed that the unit has not responded to CPCB's trial run permission letter dated 07.06.2010 asking to inform about the preparedness of trial to CPCB/SPCB. The unit did not respond to the same. Accordingly, it was recommended that the unit may be given a final opportunity to respond within a month failing which the proposal shall be deemed to be withdrawn by the applicants.
15.	Fair Chemicals & Minerals, Kota	Hydro Fluoro Silicic acid	Sodium Silico Fluoride	Reaction with NaCl followed by centrifuging	Consent under Air and Water Act valid upto 31/10/2013 Authorization validity upto 31/12/2010.	The committee observed that the unit has not responded to CPCB's trial run permission letter dated 28.09.2010 asking to inform about the preparedness of trial to CPCB/SPCB. The unit did not respond to the same. Accordingly, it was recommended that the unit may be given a final opportunity to respond within a month failing which the proposal shall be deemed to be withdrawn by the applicants
16.	M/s Indus Smelters Ltd. 454-B, sector – C, Urla Industrial Area, (C.G) 493 221.	Waste oil and spent pot lining	Producer gas to be used in Billet reheating furnace	Spent Pot lining mixed with coal subjected to gasification to generate producer gas.	Consents have validity till 31/1/2011 for producing re-rolled product.	A reminder letter was issued vide dated 28.04.11 to the proponent to submit the requisite information to CPCB within 30 days. No response has been received from the proponent so far. Accordingly, it was recommended that the matter may be closed and the unit maybe informed accordingly.
17	M/s Alchemy Corp. 28, Old Circuit House Area, Bungalow no: 1, Road No. 3, Jamshedpur	Spent Pot Lining and Spent Anode Butt	Fuel pellets	For Spent Pot Lining: Crushing and sizing of Spent Pot Lining followed by addition of calcium based solution and	-	A reminder letter was issued vide dated 28.04.11 to the proponent to submit the requisite information to CPCB within 30 days. No response has been received from the proponent so far.

				<p>thermal treatment in Rotary Kiln at > 5000C. The Calcium Fluoride shall be used as flux in steel melting foundry whereas processed Spent Pot Lining to be used as fuel pellets.</p> <p>For Spent Anode Butt:</p> <p>Peeling off about 10 mm outer surface of Spent Anode But leading to removal of fluoride bearing bath material. The rest of the anode butt then shall be used as fuel pellets.</p>		<p>Accordingly, it was recommended that the matter may be closed and the unit maybe informed accordingly.</p>
18.	M/s ITC Ltd., Distt. Hooghly (West Bengal)	ETP Sludge	Fuel in Boiler	<p>ETP Sludge generated from primary treatment of paper machine effluent is mix with the coal fines in the ratio of 50:50 to make small briquettes. After drying it would be fed into coal bunker along with the coal, it will be burnt in the boiler furnace at around 1200° C</p>	<ul style="list-style-type: none"> • Consent under Air Act and Water Act valid up to 31.3.2012 • Authorization for collection, reception, transportation, treatment, storage of hazardous waste valid up to 30.11.2010 	<p>A reminder letter was issued vide dated 28.04.11 to the proponent to submit the requisite information to CPCB within 30 days. No response has been received from the proponent so far. Accordingly, it was recommended that the matter may be closed and the unit maybe informed accordingly.</p>
19.	M/s Neelam Bricks Gautam Buddha Nagar, U.P.	Incinerator ash and ETP sludge	Brick manufacturing	<p>Incinerator ash & ETP Sludge are mixed in grinding mixer further fly ash is added to mixture followed by lime, gypsum, silica, stone dust and cement and curing is done by sprinkling water under sun.</p>	<p>Authorization under HWM Rules is valid for 11.6.2011</p>	<p>It was observed by the committee that though the unit possesses authorization, however, despite letters from CPCB to submit a copy of the consent and characteristics of incinerator ash and ETP sludge, the unit has not submitted the same.</p> <p>Accordingly, it was recommended that the unit may be given a final opportunity to submit the same within a month failing which the proposal shall be deemed to be withdrawn by the applicants</p>
20.	M/s Inwac Metals and Chemicals Pvt. Ltd., Nandesari, Vadodara	Spent acid containing Molybdenum Compound	Ammonium Molybdate	<p>Reaction with NH₄OH followed by centrifuging and drying</p>	<p>Consents under Air and Water Act and Authorization valid upto</p>	<p>Trial run permission was granted to the unit vide letter dated 27.12.2010 and subsequently Zonal Office Lucknow was requested vide letter dated 23.3.2011 to visit the facility and submit the report. The same is still awaited.</p>

					10/11/2012.	The Committee recommended that the ZO may be requested to expedite the same.
21.	M/s Deccan Chromates, A.P	Trivalent & Hexavalent chromium	Chromium chloride and iron chloride	-	-	<p>It was observed by the committee that information as per the format has not been provided by the unit in response to CPCB letter.</p> <p>Accordingly, it was recommended that the unit may be given a final opportunity to respond within a month failing which the proposal shall be deemed to be withdrawn by the applicant.</p>
22.	M/s Attero Recycling Pvt. Ltd, U.P	ETP sludge from Electronic waste processing industry	Pure Metal (copper, nickel etc.)	Smelting with copper followed by electro refining	Consent under Air/Water Act is valid upto 31.3.2011	<p>It was recommended that the unit may be asked if it is operational. Further, the characteristic of ETP sludge proposed to be obtained from each category of the industry be provided to CPCB.</p> <p>Upon receipt of the above and unit is operational, permission for conducting trial run (by procuring 3.5 metric tons of ETP sludge) in presence of CPCB/SPCB officials may be given.</p>

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

S. No	Name of the Industry	HW as Raw Material	Product	Process	Status of Consent/Auth.	Committee Recommendation
1	M/s Royal Black Powder Plot No. 07, Beside Zavery Polymers, GIDC Estate, At & post. Palej-392220, Taluka & District : Bharauch, Gujarat	Carbon Soot & Spent Carbon	Black powder	The raw material is first dried in hot air dryer and further mixed with burn tyre ash, coal dust, boiler ash and spent carbon and passed through vibrating screen and magnetic separator and grinded in a pulverizer. This will be further pass to cyclone and the product is finally packed in bags.	The unit has consent to establish under Air/Water Act valid upto 07.04.2017	It was recommended that the proponents shall submit the following information/ documents : <ol style="list-style-type: none"> 1. Details of the industries generating the proposed hazardous waste for utilization 2. Characteristics of each of the hazardous waste proposed for utilization including TCLP test result for Cyanide and heavy metals 3. Expected composition of the product (i.e black powder) and how the same will be utilized by the end user. TCLP test result for Cyanide and heavy metals of the product. 4. Details of residue generation and its disposal during the process of utilization 5. Details of safety gadgets & pollution control devices installed. 6. Process area and storage details of hazardous wastes. 7. Details on handling of hazardous waste proposed for utilization. <p>Upon receipt of above, the proponent shall be called for making the technical presentation before the technical expert committee.</p>
2.	M/s Hema Chemicals Industries 4/13, Industrial Estate, Gorwa, Baroda-390016 Gujarat	Spent Chromic acid	Basic Chromium Sulphate	Spent acid is treated with Caustic soda and filter through a filter press. Clear liquid of sodium chromate is used directly for basic chromium sulfate. Basic chromate sulfate plant consists of reactor and spray dried to convert the product in fine powder form. Solid mass which is pure iron	Consent to operate under Air/Water Act is valid upto 16.07.2014	It was recommended that the proponents shall submit the following: <ol style="list-style-type: none"> 1. Quantity of the solution containing sodium sulfate/any other salt and their proposed method of disposal. 2. Details of safety gadgets & pollution control devices installed. 3. Storage & process area details. 4. Characteristics of the product manufactured alongwith the details of end use.

				oxide roasted at 500° C to form iron oxide pigment for further use in ceramic industries and automobile paint.		<p>The comments of Gujarat SPCB may simultaneously be sought if the unit shall be considered for granting permission for utilization of the said waste since a premise known as M/s Hema Chemical Industries site has been identified as contaminated sites in Vadodara.</p> <p>Upon receipt of above, the matter shall be discussed in the next committee meeting.</p>
3.	M/s TATA Chemicals Limited West Bengal	<ul style="list-style-type: none"> • ETP Sludge • Sulphur Sludge 	<ul style="list-style-type: none"> • To Cement manufacturer • As filler in Single Super Phosphate plant 	<p>The ETP Sludge is mixed with gypsum and stored for some time and finally sold to cement manufacturers</p> <p>The sulfur sludge generated from the sulphuric acid plant is removed during the cleaning of filters and the ground sulphur sludge is sent to SSP plant to be used as filler.</p>	Consent to operate under Air/Water Act is valid upto 31.12.2012	<p>It was recommended that the proponents shall submit the following information/ documents :</p> <ol style="list-style-type: none"> 1. Characteristics of ETP Sludge & Sulphur muck. 2. Leaching test report of ETP Sludge & Sulphur sludge. 3. Details along with capacity of handling and storage facility for ETP sludge, sulphur muck, gypsum and mixed gypsum. <p>Upon receipt of above, permission for conducting trial run in presence of CPCB/SPCB officials may be given.</p>