Standard Operating Procedure for Processing the Proposals for Utilization of Hazardous Waste under Rule 11 of the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008



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Central Pollution Control Board

Hazardous Waste Management Division
(Ministry of Environment, Forest & Climate Change, Government of India)
'Parivesh Bhawan', East Arjun Nagar
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Background:

The Rule 11 of the Hazardous Waste (Management, Handling and Transboundary Movement) Rules, 2008, stipulates that;

"The utilisation 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."

As per the aforesaid provisions utilization of hazardous wastes (not listed in schedule of recyclable wastes) can be utilized as a supplementary resource or for energy recovery or after processing by the unit only after taking approval from Central Pollution Control Board.

In order to enforce the aforesaid provision, CPCB has been processing the proposals of hazardous waste utilization following a procedure with approval of the Chairman, Central Board. However it has been felt to review the set procedure to bring in more transparency and to minimise the time lapse in processing the utilization proposals. A new procedure has been evolved as below:

1. Acceptance of Application for Utilization Proposal of Hazardous Waste

The following procedure shall be followed for acceptance of applications for CPCB's approval for utilization of a hazardous waste;

- a) The proponent shall submit an application to concerned SPCB/PCC in a prescribed format (given at Annexure-I), with request to forward their application to CPCB after endorsing the consent to establish granted to the proponent within a period of 15 days. The following documents shall be attached;
 - i. Scanned copies of valid Consent to Establish or Operate under the Air Act & Water Act from the concerned SPCB/PCC.
 - ii. Details regarding patented technologies if any adopted by him that may require non-disclosure for public information.
- b) Proponent shall also submit details online at CPCB website w.r.t. characteristics of hazardous waste intended to be utilized, sources, utilization process, product and enduse etc as per the format given in the website i.e. http://164.100.43.186:8080/HWMD/.
- c) Upon receipt of endorsement from SPCB, CPCB shall process the application and incomplete applications be communicated to the applicant within 10 days; in case of no response within 20 days from the applicant; the application shall be treated as withdrawn.
- d) In case if the proposal pertains to utilization of similar hazardous waste (i.e hazardous waste for which the utilization permission has already been granted earlier by CPCB) adopting similar process for similar use, which CPCB has already earlier granted approval after conducting trial utilization studies, the applicant will be accorded conditional approval under Rule 11 in accordance with the steps as stated below.

2. Cases of Already approved utilization processes

An application seeking approval of CPCB for utilizing similar hazardous waste (i.e hazardous waste for which the utilization permission has already been granted earlier by CPCB) adopting similar process for similar use, which CPCB has already earlier granted approval after conducting trial utilization studies, shall be treated by CPCB as an acceptable case of utilization. The procedure of granting approval under the said Rule 11 in such cases shall be as below:

- a) The proponent shall submit an application as indicated at Step-1.
- b) Upon receipt of endorsement from SPCB, CPCB, shall issue a letter to SPCB (with copy to proponent) granting approval under Rule-11 within two weeks with following conditions;
 - i. A checklist with SOPs shall be provided to the unit for compliance
 - ii. The unit shall not exceed the source/fugitive air emissions and effluent discharge standards as prescribed by CPCB based on earlier similar case of approval.
 - iii. The residue generated shall be utilized in process or shall be sent to common TSDF or captive disposal facility.
 - iv. The unit shall submit monthly and annual information on hazardous waste consumed, its source and products generated or resources conserved (specifying the details like type and quantity of resources conserved such as coal, fuel oil, minerals etc.) etc.
 - v. The unit shall operate with valid consent to operate/authorization from the concerned SPCB/PCC
- c) The TSDF operator shall submit quarterly report on receipt of residue disposed of by the unit.
- d) CPCB and SPCB shall verify the utilization process, checklist and SOPs, quarterly during the initial 2 years of operation followed by random checks in subsequent years.
- e) The conditions specified in the SOPs shall be part of authorization/consent issued by SPCB/PCC.
- f) Applications for enhancement of capacity to approved units shall be disposed based on the consent to operate issued by SPCB/PCC

3. Processing of New Utilization Proposals

In case the proposal is for new hazardous wastes, which was not permitted earlier, CPCB shall follow the following procedure for grant of approvals;

- a) The proponent shall submit an application as indicated at Step-1
- b) Trial run for utilization of HW shall be conducted for all new utilization proposals.
- c) Complete applications (as per the prescribed format) shall be evaluated** by CPCB and a protocol for conducting trial utilization study shall be prepared specifying the duration, quantity of hazardous waste to be procured for trial, the parameters to be analyzed for air/water/wastes streams/soil/work-zone air quality etc., permissible standards for

- applicable parameters, sampling duration, number of samples, chemical mass balance of the principal constituents of concern etc. for the proposed trial run. The same shall be approved by Member Secretary, CPCB.
- d) The aforesaid protocol shall be published on CPCB website inviting comments/feedback from general public/ SPCBs/PCCs/etc. within a period of one week. The said protocol may also be forwarded by e-mail to expert members seeking comments within a week.
- e) A formal letter in this regard attaching the aforesaid protocol shall be issued by CPCB to the unit for conducting the said trial run with copy to SPCB/PCC and CPCB (ZO or HO team) within 30 days from receipt of complete application.
- f) Aforesaid trial run can be given for a maximum period of 30 days in a stretch. Validity of such trial run shall be for period of 3 months from the day of issue of trial run permission letter.
- g) Based on aforesaid letter, the unit shall procure the required hazardous waste for trial run from the generating industry as declared by the unit.
- h) NOC for inter State transport of hazardous waste for utilization is not required from SPCB/PCC as per the provisions under Rule 20 (3) of HWM Rules, 2008.
- Separate authorization for conducting trial run and procurement of hazardous waste is not required from SPCB/PCC. In this regard, CPCB may issue necessary directions to all the concerned SPCB/PCC.
- j) The unit shall engage an EPA/NABL/ISO17025 accredited laboratory for carrying out the monitoring of trial utilization as per the protocol prepared by CPCB. The laboratory shall have accreditation (EPA/NABL/ISO17025) for the parameters specified for the trial run protocol. In case the unit is unable to engage any laboratory having the said accreditation for any parameters, international labs accredited under ISO 17025 may be engaged for analysis of such parameters.
- k) The unit shall inform CPCB about their preparedness of carrying out trial run at least 15 days in advance so as to enable CPCB official in participating in the said trial utilization and monitoring.
- The unit shall reimburse the actual expenses incurred by CPCB including the sampling and analysis costs as per EPA notified rates, where EPA rates are available for given parameter.
- m) Trial run monitoring shall be conducted at peak load.
- n) Trial run performance by laboratory shall be carried out in presence of the CPCB & SPCB officials. CPCB (ZO or Head Office team) shall collect few random samples for verification purpose during the same.
- The laboratory engaged shall submit a trial utilization report within 20 days on completion
 of trial utilization monitoring and other information as prescribed in the monitoring protocol
 and submit the report to Head Office CPCB.
- p) Inspecting team of CPCB shall submit a separate report (analysis results and information as per the protocol) to Head Office, CPCB, within 20 days from date of trial run. The report shall be very specific with clear cut observations, shortcomings and recommendations with no subjectivity.

- q) In case of un-acceptable deviation between the results of samples collected by CPCB Zonal office/ Head Office and laboratory engaged, the monitoring shall be repeated.
- r) Standard for selected parameters shall be taken from notified standards under Environment (Protection) Act, 1986, and if not available, CPCB may propose referring international practices/ standards, wherever applicable.
- s) A condition for installing CEMS for air emissions and wastewater discharge, as applicable, for units shall be imposed.
- t) Based on the trial study reports, individual case shall be examined for compliance to monitored parameters and requisite infrastructure as per trial run protocol. The matter shall accordingly be placed before Member Secretary/ Chairman, CPCB for granting approval/conditional approval or refusal as the case may be. Accordingly, CPCB, shall issue a letter to SPCB (with copy to proponent) granting approval under Rule-11.
- u) CPCB shall develop a checklist and SOPs for utilization of similar hazardous waste adopting similar process which has been assessed through inspection and trial run.
- v) The unit shall submit monthly and annual information on hazardous waste consumed, its source, products generated or resources conserved.
- w) The conditions specified in the SOPs shall be part of authorization/consent issued by SPCB/PCC.
 - ** Complete applications are evaluated by CPCB, considering environmentally soundness of the utilization proposal; pollution potential for emissions/discharges; potential for ground/soil contamination; adequacy of the proposed facility for control of pollution; quantity of residue/waste generated; potential exposure to the workers and nearby community; etc. as per the conceptual framework for evaluation of the utilization process (enclosed).

4. Validity of Approvals

- a) No validity period for the permissions issued under Rule-11 shall be specified as long as there is no change in utilization process, raw material and product use, wherever applicable. The conditions specified as part of approval shall be enforced by CPCB and the concerned SPCB/PCC.
- b) In cases where violations are observed by CPCB or the concerned SPCB/PCC, the approval under Rule-11 shall be cancelled by CPCB.
- c) It shall be the endeavour of CPCB to continuously improve upon the utilization process based on the technology improvements, implementation and experience gained on larger scale. Therefore, the conditions specified in SoPs or Check-list is subjected to change from time to time.

Annexure -I

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: | |
| 2.3 | Detailed characteristics of hazardous waste proposed for utilization: | |
| 2.4 | 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.