
**Standard Operating Procedure for Processing the Proposals for Utilization of
Hazardous Waste under Rule 9 of the Hazardous and Other Wastes
(Management and Transboundary Movement) Rules, 2016**



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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 Shahdara, Delhi – 110032**

Standard Operating Procedure for Processing the Proposals for Utilization of Hazardous Waste under Rule 9 of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016

Background:

The Rule 9 of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, stipulates that;

- 1) *The utilization of hazardous and other wastes as a resource or after pre-processing either for co-processing or for any other use, including within the premises of the generator (if it is not part of process), shall be carried out only after obtaining authorization from the State Pollution Control Board in respect of waste on the basis of standard operating procedures of guidelines provided by the Central Pollution Control Board.*
- 2) *Where standard operating procedures or guidelines are not available for specific utilization, the approval has to be sought from Central Pollution Control Board which shall be granting approval on the basis of trial runs and thereafter, standard operating procedures or guidelines shall be prepared by Central Pollution Control Board.*

Provided, if trial run has been conducted for particular waste with respect to particular utilization and compliance to the environmental standards has been demonstrated, authorization may be granted by the State Pollution Control Board with respect to the same waste and utilization, without need of separate trial run by Central Pollution Control Board and such cases of successful trial run, Central Pollution Control shall intimate all the State Pollution Control Board regarding the same.

- 3) *No trial runs shall be required for co-processing of waste in cement plants for which guidelines by the Central Pollution Control Board are already available; however, the actual users shall ensure compliance to the standards notified under the Environment (Protection) Act, 1986 (29 of 1986), for cement plant with respect to co-processing of waste, Provided that till the time the standards are notified, the procedure as applicable to other kind of utilization of hazardous and other waste, as enumerated above shall be followed”*

As per the aforesaid provisions of utilization of hazardous and other wastes as a resource or after-pre-processing either for co-processing or for any other use, including within the premises of the generator (if it is not part of process), shall be carried out only after taking approval from Central Pollution Control Board (CPCB) and/or obtaining authorization from the State Pollution Control Board in respect of waste on the basis of standard operating procedures or guidelines provided by the CPCB, as the case may be.

In view of above, below is revised procedure for processing applications received at CPCB for grant of approval and development of standard operating procedures or guidelines for various proposed utilization of hazardous and other wastes:

1. Acceptance of Application for Utilization Proposal of Hazardous Waste:

The following procedure shall be followed for acceptance of application 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.

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- ii. Details regarding patented technologies if any adopted by him that may require non-disclosure for public information.
- b) Proponent must submit details online at CPCB website w.r.t. characteristics of hazardous waste intended to be utilized, sources, utilization process, product and end-use etc as per the format given in the website i.e. <http://164.100.43.186:8080/HWMD/>.
- c) Upon receipt of the online application and endorsement of the same by SPCB, CPCB shall process the application and incomplete applications be communicated to the applicant within 15 days; in case of no response within 20 days from the applicant; the application shall be treated as withdrawn.
- e) 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, for CPCB has already prepared standard operating procedures or guidelines and circulated to all SPCBs/PCCs, the application shall be forwarded to the concerned SPCB/PCC for grant of authorization on the basis of the said standard operating procedures or guidelines.

2. Processing of New Utilization Proposals:

In case the proposal is for new hazardous wastes utilization, for which CPCB has not prepared standard operating procedures or guidelines, CPCB shall follow the following procedure for grant of approvals;

- a) Trial run for utilization of HW shall be conducted for all new utilization proposals.
- b) 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.
- c) 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 (RD or HO team) within 45 days from receipt of complete application.
- d) Regional Directorate, CPCB shall conduct trial run jointly with SPCB within 30 days from date of receipt of preparedness by proponent.
- e) It shall be responsibility of the industry to take all safeguards while handling, transportation, storage, utilization etc. of the hazardous waste so as to avoid accidents, environmental damages etc. In the event of such accidents/damages, the industry shall have sole responsibility and liability of the same.

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- 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. However, the sender of hazardous wastes to be utilized shall intimate both the SPCBs before handing over the waste to the transporter in accordance with provisions laid down under the Rule 18(4) of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.
- i) 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.
- j) The unit shall inform CPCB and the concerned SPCB/PCC about their preparedness of carrying out trial run at least 15 days in advance so as to enable CPCB and the SPCB/PCC official in participating in the said trial utilization and monitoring.
- k) Trial run monitoring shall be conducted at peak load.
- l) Trial run performance by laboratory shall be carried out in presence of the CPCB & SPCB/PCC officials. CPCB (RD or Head Office team) shall collect few random samples for verification purpose during the same.
- m) 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.
- n) 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 submission of analysis results by labs hired by proponent. The report shall be very specific with clear cut observations, shortcomings and recommendations with no subjectivity.
- o) In case of major deviation between the results of samples collected by CPCB and laboratory engaged and non-compliance, the monitoring shall be repeated. Only one time repeat trial run may be permitted. However, the said repeat trial run shall be permitted only after taking corrective measures by the unit.
- p) 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.

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- q) A condition for installing CEMS for air emissions and wastewater discharge, as per the prevailing policy of CPCB or as appropriate, for units shall be imposed.
- r) 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-9.
- s) 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 within 45 days from date of receipt of the trial run report (As it requires literature survey and consultation with experts too).
- t) The unit shall submit monthly and annual information on hazardous waste consumed, its source, products generated or resources conserved to the concerned SPCB/PCC.
- u) The conditions specified in the SOPs shall be part of authorization/consent issued by SPCB/PCC.

*** Complete applications are evaluated by CPCB considering environmental 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. If utilization proposal found satisfactory, trial run monitoring protocol shall be recommended along with emission/discharge/work zone standards. Further, upon satisfactory verification during trial run, CPCB shall grant approval and prepare standard operating procedure or guidelines thereof.*

3. Validity of Approvals:

- a. No validity period for the approvals issued under the Rule-9 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 the concerned SPCB/PCC.
- b. In cases where violations are observed by CPCB or the concerned SPCB/PCC, the approval under Rule-9 shall be cancelled by CPCB or SPCB/PCC, as the case may be.

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 and Check-list is subjected to change from time to time.

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Annexure-I

Revised Format for obtaining approval from the Central Pollution Control Board under the Rule 9 of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016*

1	GENERAL INFORMATION	
1.1	Name & Address of the Unit:	
1.2	Contact Person and phone number with Email Id:	
1.3	Products to be manufactured and quantity (MT/Day):	
1.4	Please attach copy of air consent, water consent and authorization:	
2	DETAILS OF HAZARDOUS WASTE TO BE UTILIZED	
2.1	Name, category & address of hazardous or other waste generating industry:	
2.2	Name/Type of the hazardous wastes or other waste including category (as per the Schedule I or II or III) intended for utilization:	
2.3	Detailed characteristics of hazardous waste or other waste proposed for utilization (<i>including individual concentration of all raw materials/products and by-products/possible organic compounds utilized during hazardous waste generation process</i>):	
2.4	Complete Process details from which such hazardous or other waste is generated (<i>including chemical reactions and complete list of raw materials/chemicals utilized/by products of generation process</i>):	
3	DETAILS OF UTILIZATION OF HAZARDOUS AND OTHER WASTES IN PRODUCT MANUFACTURING	
3.1	Proposed quantity (in MTA) of hazardous or other waste to be utilized:	
3.2	Process details of hazardous waste utilization (<i>including working principle of each of the plant & machinery and flow diagram of the utilization process along with complete mass balance and write-up about the process</i>):	
3.3	Chemical reactions involved at various stages of the utilization process along with material balance:	
3.4	Detailed characteristics of product manufactured by using above hazardous waste (<i>including individual concentration of all raw materials/products and by-products/possible organic compounds utilized during hazardous waste generation process; TCLP/STLC//Total Concentration analysis, as applicable</i>):	
3.5	Base line data including characteristics pertaining to air emissions, waste water generation and other solid wastes including hazardous or other waste expected to be generated in the proposed utilization process:	
3.6	Material Balance with and without utilizing hazardous or other wastes, in case the waste is proposed for utilization/co-processing in an already existing process:	
3.7	Details of hazardous or other waste storage facility and process area facility:	

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3.8	Quantity of fuel and/or raw material that are expected to be conserved (in % of raw material replaced) from the proposed utilization:	
3.9	Details of findings of laboratory/ pilot scale study, international practice etc.:	
3.10	End use process details of the product (s) manufactured by using the above waste and its environmental impacts thereof:	
3.11	Specifications of product derived with and without utilization of the aforesaid hazardous waste (<i>Please also provide BIS or other specifications of the product, as applicable</i>):	
4	ADDITIONAL DETAILS OF UTILIZATION OF HAZARDOUS AND OTHER WASTES IN ETP/CETP	
4.1	Name of chemical being currently used as neutralizing/coagulating agent/others	
4.2	Consumption of quantity of chemical being currently used as neutralizer/coagulant/others in terms of per MLD	
4.3	Proposed dosing of hazardous waste in terms of per MLD	
4.4	Current intake of CETP/ETP (monthly average)	
4.5	Details of ETP/CETP along with various intermediates treatment units and expected impact by the said utilization on the treated waste water	
5	ADDITIONAL DETAILS OF UTILIZATION OF HAZARDOUS AND OTHER WASTES IN ENERGY RECOVERY	
5.1	Name of the material that is being currently used as fuel for energy source and its calorific value	
5.2	Consumption of quantity of fuel that is being currently used as fuel in terms of MTA	
5.3	Details of the hazardous waste proposed to be utilized with their calorific value, proximate analysis, ultimate analysis and expected impact by the said utilization as emissions	
5.4	Name and details of the furnace/boiler/kiln that is used in the utilization process with working principle and its operational conditions	

***To be filled and submitted to the concerned SPCB/PCC by the unit, who desires to utilize hazardous or other wastes as a resource or after pre-processing either for co-processing or for any other use, including within the premises of the generator (if it is not part of process)*