



CP-99/143/2021-UPC-II-HO-CPCB-HO

May 26, 2022

To,

The Chairman  
All SPCBs/ PCCs

**Sub: Directions under Section 5 of Environment (Protection) Act, 1986 for implementation of the Solid Waste Management Rules, 2016-regarding Fire Incidents at MSW Dumpsites.**

**WHEREAS**, the Ministry of Environment, Forest & Climate Change has notified Solid Waste Management Rules on April 08, 2016 which inter-alia state procedures for Solid Waste Management;

**WHEREAS**, in accordance with Rule 11(d) of the Rules, it is the duty of the State/UT Urban Development Department to ensure implementation of provisions of these Rules by all local authorities;

**WHEREAS**, in accordance with Rule 15(a) of the Solid Waste Management (SWM) Rules, 2016, the local authorities and Panchayats should prepare a solid waste management plan as per state policy and strategy on solid waste management within six months from the date of notification;

**WHEREAS**, in accordance with provision of Rule 15(zd) of the SWM Rules, 2016, the local authorities and Panchayats shall ensure that the operator of a facility provides personal protection equipment including uniform, fluorescent jacket, hand gloves, raincoats, appropriate foot wear and masks to all workers handling solid waste and the same are used by the workforce;

**WHEREAS**, in accordance with provision of Rule 16 (1a) of SWM Rules, 2016, the State Pollution Control Board or Pollution Control Committee shall enforce these rules in their State through local bodies and review implementation of these rules at least twice a year in close coordination with concerned Directorate of Municipal Administration or Secretary-in-charge of State Urban Development Department;

**WHEREAS**, MSW is being disposed of unscientifically in most cases which is one of the major causes for public nuisance due to frequent fire incidents, foul odour, generation of leachate and other adverse environmental impacts;

**WHEREAS**, waste disposed at dumpsites is prone to catching fire in view of inadequate waste management practices adopted at these sites;

**WHEREAS**, several fire incidents have been reported recently at Ghazipur & Bhalsawa dumpsites in Delhi, Manesar in Haryana and Ludhiana in Punjab;



**WHEREAS**, fire incidents at dumpsites may lead to severe adverse impact on environment and related health hazards. People living in and around the dumpsites are likely to be affected due to the frequent outbreaks of fire

**WHEREAS**, Hon'ble NGT in OA No. 286 of 2022, in reference to News item published in The Indian Express dated 20<sup>th</sup> April, 2022, titled "7 Charred to death in fire near Ludhiana dumpsite" issued the following Directions:

*"CPCB to collect information about garbage dumpsites from all States/ UTs in respect of at least Metro cities and issue statutory directions / guidelines for preventing such fires and handling them effectively if they take place, specifying serious consequences of delay in dealing with the issue, in violation of binding rules."*

**WHEREAS**, as per the information provided by SPCBs/PCCs there are 3,184 dumpsites in the country, of which XXX are located in your State/UT;

**WHEREAS**, CPCB had issued Directions dated October 20, 2018 regarding fire at Bhalsawa site to North Delhi Municipal Corporation in which specific measures to be taken for prevention of fire at the dumpsites had been identified which amongst others included using Construction & Demolition waste material to immediately check fire, stopping dumping of fresh waste, installation of CCTV cameras, setting up of decentralized facilities for biodegradable waste;

**WHEREAS**, as per Guidelines for Disposal of Legacy Waste (Old Municipal Solid Waste) issued by CPCB, it is important to carry out comprehensive risk assessment and develop onsite emergency plan which should be kept handy prior to commencement of dumpsite bio-remediation & bio-mining;

**WHEREAS**, CPCB had issued following Directions dated January 27, 2021 to SPCBs/PCCs regarding biomining of legacy waste

- i. SPCBs/PCCs to provide complete list of legacy waste dumpsite in their States /UTs as per format enclosed
- ii. SPCBs/PCCs to ensure that necessary action for biomining and bio-remediation of these dumpsites is done by the concerned Local authorities in compliance with provisions of SWM Rules 2016
- iii. SPCBs/PCCs shall ensure that concerned Local authorities engaged in the biomining process of legacy waste follow procedures as per CPCB Guidelines for disposal of legacy waste with specific compliance to the following points:
  - a. Analysis of various screened fractions i.e. RDF, fine earth / bio earth etc. prior to its disposal / utilization
  - b. Preparation of action plan for utilization / disposal of screened fractions
  - c. Adequate provisions for leachate treatment
  - d. Maintenance of records / documents for disposal / utilization of the RDFs or fine earth and other material



- iv. SPCBS shall ensure that the local bodies prepare time targeted Action Plan for biomining / bio-remediation of these dumpsites in compliance with points listed above. The timeline as specified in SWM Rules and Hon'ble NGT Directions on the matter are to be adhered to for remediation of these sites
- v. SPCBs/PCCs to ensure that no fresh waste is disposed at these dumpsites and local authorities make proper arrangement for management of fresh solid waste
- vi. SPCBs/PCSS to ensure that at least one legacy waste dumpsite is remediated in their jurisdiction which can be considered as model for compliance for other legacy waste dumpsites in Non-Attainment Cities

**WHEREAS** Hon'ble NGT in its Order dated April 22, 2022 in O.A No. 288/ 2022 regarding News item published in the Times of India dated April 22, titled "Delhi: Another long-drawn effort to douse fire at Ghazipur landfill" has stated that dumpsite may be considered as isolated and vulnerable site which require On-site and Off-site Fire and other disaster management plans; **AND**

**WHEREAS**, CPCB made the following observations based on inspected various dumpsites, where bioremediation of legacy waste is being carried out:

- i. Fresh solid waste continued to be dumped at these dumpsites.
- ii. Fire incidents have been reported at locations where fresh waste is being dumped
- iii. Inaccessible slopes of garbage were observed
- iv. No standard operating plan in place for prevention and management of dumpsite fires
- v. Cause of fire incident reported is excess release of Methane (CH<sub>4</sub>) gas due to anaerobic decomposition of the bio-degradable organic waste, high temperature and dry atmospheric conditions.
- vi. Partial fencing with barbed wire provided at the boundary observed.
- vii. Police patrolling the site not observed.
- viii. No fire tender observed at site.
- ix. Anti-Smog Gun have been installed which were not found in use; **AND**

**NOW THEREFORE**, in view of above and in exercise of powers vested under section 5 of Environment (protection) Act, 1986 to the Chairman, Central Pollution Control Board (CPCB) the following directions are issued for compliance;

- i. Provide updated information w.r.t Directions dated 27.1.21 regarding biomining issued to SPCBs/PCCs. It is to be ensured that updated information w.r.t at least all Metro cities is provided in accordance with NGT Directions
- ii. Direct State UDDs to conduct comprehensive risk assessment studies and accordingly prepare detailed On-site Emergency Plan for each dumpsite located in their jurisdiction addressing the following issues:
  - a. The onsite emergency plan to cover potential risks / emergencies due to fire, obnoxious / flammable emissions, odour, vector borne diseases,



rodents, bird nuisance, seasonal affects i.e. summer / winter / monsoon (rainy season) and all other potential risks at the dumpsites.

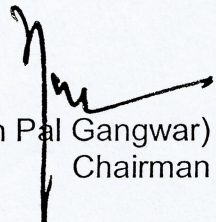
- b. The onsite emergency plans to address the worst possible case scenarios preferably using appropriate risk assessment softwares covering any or all of the potential emergency issues / scenarios cited above.
  - c. The on-site emergency management plan to cover likely affected geographical area including population, flora & fauna in and around the dumpsites
  - d. The on-site emergency plan to contain detailed remedial measures both hardware and software based for mitigating various emergency situations, which should finally be available with respective control rooms and on-site emergency notice boards.
- iii. To direct District Collector or District Emergency Authority designated by the State Government for integrating such (dumpsites) On-site Emergency Plans with the existing Off-site District Disaster Management Plans in their respective Districts, prepared by the Local Authorities in compliance with Rule 14 of The Manufacture, Storage and Import of Hazardous Chemical Rules, 1989
- iv. The State / UT Authorities to prepare the on-site & off-site (or update off-site) emergency management plans preferably through an expert agency on the subject.
- v. The following interim measures to be implemented on priority till the time On-site/Off-site Emergency Plans are prepared and implemented.
- a. **Disposal of Waste:** Fresh waste not to be disposed at the dumpsite where bio-remediation is being undertaken. Organic waste from slaughter house, fish market etc., industrial waste not to be disposed at the dumpsite. It is to be further ensured that industrial waste / E-waste / lithium battery is not dumped at the site. Waste that is being unloaded at the site should be examined visually for potential fire sources fire sources when located, should be neutralized with cover material immediately. Emergency tipping area to be provided to set aside from the immediate working area where incoming loads of material known to be on fire or suspected of being so can be deposited, inspected and dealt with. Adequate compacting of waste to be done to minimize formation of air or methane pockets which can lead to subsurface fire at site
  - b. **Monitoring at dumpsites:** Methane Gas Detectors (on downwind side) to be installed at site so that area with high methane concentration can be identified and preventive actions be undertaken. Further temperature at windrows to be monitored with non-contact infrared thermometer (as used for monitoring human body temperature under COVID circumstances) and records be maintained for any major deviations. The temperature is to be in the range of 35°C to 59°C. Treated leachate / water to be sprayed on the waste when rise in temperature is observed



at the bioremediation site. Suitable mechanism to be in place. Installation of CCTV cameras at the site and provision of fencing & frequent patrolling to be done for checking unauthorized entry at dumpsite

- c. **Arrangements for Fire Extinguishing:** Arrangements for adequate storage of sand / chemical fire extinguishing medias such as foam or powder at site to be made to douse fire in case a fire incident is reported. Usage of water for dousing fire to be avoided. Isolation and allowing rapid natural burnout or smothering with soil to be done for dousing dumpsite fires. Dedicated fire tenders (preferably chemical extinguishing media) and adequate fire safety measures are to be deputed, specifically during summer season when dumpsites fire is more likely to take place. All mobile equipment or vehicles should be fitted with fire extinguisher and spark arrester
- d. **Health & Safety of Workers:** Fire protection measures and safety equipment to be provided to all workers at the site and checked before entry to the dumpsite. Workers to be trained for detection of fire and necessary action to be taken in case of fire. Periodic training of workers be conducted in Safe handling of Waste, PPE's, Health & Safety issues etc
- e. **Mock Drills & safety audits:** Periodic mock drills to be conducted to prevent fire accidents at dumpsites. Quarterly, Fire Safety and Hazardous Emissions Audits to be conducted.

SPCBs/PCCs are hereby directed to submit action taken report within 15 days for Action Point listed at (v) above. Action taken report for Points (i-iv) to be provided within thirty days of receipt of these Directions

  
(Naresh Pal Gangwar)  
Chairman

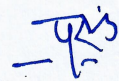
Copy to:

1. **Additional Secretary (CP Division)**  
**Ministry of Environment, Forests & Climate Change,**  
Indira Paryavaran Bhawan, Jor Bagh Road,  
New Delhi - 110003

: for information please

2. **DH-IT Division, CPCB**

: for uploading on website please

  
(Prashant Gargava)  
Member Secretary

o/c