# [Published In the Gazette of India, Part-II, Section-3, Sub-section (ii)] Ministry of Environment, Forest and Climate Change

#### NOTIFICATION

New Delhi, the 29th March, 2016

G.S.R. 317(E).-Whereas the Municipal Solid Wastes (Management and Handling) Rules, 2000 published vide notification number S.O. 908(E), dated the 25<sup>th</sup> September, 2000 by the Government of India in the erstwhile Ministry of Environment and Forests, provided a regulatory frame work for management of Municipal Solid Waste generated in the urban area of the country;

And whereas, to make these rules more effective and to improve the collection, segregation, recycling, treatment and disposal of solid waste in an environmentally sound manner, the Central Government reviewed the existing rules and it was considered necessary to revise the existing rules with a emphasis on the roles and accountability of waste generators and various stakeholders, give thrust to segregation, recovery, reuse, recycle at source, address in detail the management of construction and demolition waste.

And whereas, the draft rules, namely, the Solid Waste Management Rules, 2015 with a separate chapter on construction and demolition waste were published by the Central Government in the Ministry of Environment, Forest and Climate Change vide G.S.R. 451 (E), datedthe 3<sup>rd</sup> June, 2015 inviting objections or suggestions from the public within sixty days from the date of publication of the said notification;

And Whereas, the objections or suggestions received within the stipulated period were duly considered by the Central Government;

Now, therefore, in exercise of the powers conferred by sections 6, 25 of the Environment (Protection) Act, 1986 (29 of 1986), and in supersession of the Municipal Solid Wastes (Management and Handling) Rules, 2000, except as respect things done or omitted to be done before such supersession, the Central Government hereby notifies the following rules for Management of Construction and Demolition Waste –

- 1. Short title and commencement.-(1) These rules shall be called the Construction and Demolition Waste Management Rules, 2016.
- (2) They shall come into force on the date of their publication in the Official Gazette.
- 2. Application.-The rules shall apply to every waste resulting from construction, re-modeling, repair and demolition of any civil structure of individual or organisation or authority who generates construction and demolition waste such as building materials, debris, rubble.
- 3. **Definitions** –(1) In these rules, unless the context otherwise requires,-
- (a) "ACT' means the Environment (Protection) Act, 1986 (29 of 1986);
- (b) "construction" means the process of erecting of building or built facility or other structure, or

building of infrastructure including alteration in these entities,;

- (c) "construction and demolition waste" means the waste comprising of building materials, debris and rubble resulting from construction, re-modeling, repair and demolition of any civil structure;
- (d) "de-construction" means a planned selective demolition in which salvage, re-use and recycling of the demolished structure is maximized;
- (e) "demolition" means breaking down or tearing down buildings and other structures either manually or using mechanical force (by various equipment) or by implosion using explosives.
- (f) "form" means a Form annexed to these rules;
- "local authority" means an urban local authority with different nomenclature such as municipal corporation, municipality, nagarpalika, nagarnigam, nagarpanchayat, municipal council including notified area committee and not limited to or any other local authority constituted under the relevant statutes such as gram panchayat, where the management of construction and demolition waste is entrusted to such agency;
- (h) "schedule" means a schedule annexed to these rules;
- (i) "service provider' means authorities who provide services like water, sewerage, electricity, telephone, roads, drainage etc. often generate construction and demolition waste during their activities, which includes excavation, demolition and civil work;
- (j) "waste generator" means any person or association of persons or institution, residential and commercial establishments including Indian Railways, Airport, Port and Harbour and Defence establishments who undertakes construction of or demolition of any civil structure which generate construction and demolition waste.
- (2) Words and expressions used but not defined herein shall have the same meaning defined in the ACT.

#### (4) Duties of the waste generator -

- (1) Every waste generator shall prima-facie be responsible for collection, segregation of concrete, soil and others and storage of construction and demolition waste generated, as directed or notified by the concerned local authority in consonance with these rules.
- (2) The generator shall ensure that other waste (such as solid waste) does not get mixed with this waste and is stored and disposed separately.
- (3) Waste generators who generate more than 20 tons or more in one day or 300 tons per project in a month shall segregate the waste into four streams such as concrete, soil, steel, wood and plastics, bricks and mortar and shall submit waste management plan and get appropriate approvals from the local authority before starting construction or demolition or remodeling work and keep the concerned

authorities informed regarding the relevant activities from the planning stage to the implementation stage and this should be on project to project basis.

- (4) Every waste generator shall keep the construction and demolition waste within the premise or get the waste deposited at collection centre so made by the local body or handover it to the authorised processing facilities of construction and demolition waste; and ensure that there is no littering or deposition of construction and demolition waste so as to prevent obstruction to the traffic or the public or drains.
- (5) Every waste generator shall pay relevant charges for collection, transportation, processing and disposal as notified by the concerned authorities; Waste generators who generate more than 20 tons or more in one day or 300 tons per project in a month shall have to pay for the processing and disposal of construction and demolition waste generated by them, apart from the payment for storage, collection and transportation. The rate shall be fixed by the concerned local authority or any other authority designated by the State Government.

### (5) Duties of service provider and their contractors -

- (1) The service providers shall prepare within six months from the date of notification of these rules, a comprehensive waste management plan covering segregation, storage, collection, reuse, recycling, transportation and disposal of construction and demolition waste generated within their jurisdiction.
- (2) The service providers shall remove all construction and demolition waste and clean the area every day, if possible, or depending upon the duration of the work, the quantity and type of waste generated, appropriate storage and collection, a reasonable timeframe shall be worked out in consultation with the concerned local authority.
- (3) In case of the service providers have no logistics support to carry out the work specified in subrules (1) and (2), they shall tie up with the authorised agencies for removal of construction and demolition waste and pay the relevant charges as notified by the local authority.

## (6) Duties of local authority-The local authority shall,-

- (1) issue detailed directions with regard to proper management of construction and demolition waste within its jurisdiction in accordance with the provisions of these rules and the local authority shall seek detailed plan or undertaking as applicable, from generator of construction and demolition waste;
- (2) chalk out stages, methodology and equipment, material involved in the overall activity and final clean up after completion of the construction and demolition;
- (3c) seek assistance from concerned authorities for safe disposal of construction and demolition waste contaminated with industrial hazardous or toxic material or nuclear waste if any;
- (4) shall make arrangements and place appropriate containers for collection of waste and shall remove at regular intervals or when they are filled, either through own resources or by appointing private operators;

- (5) shall get the collected waste transported to appropriate sites for processing and disposal either through own resources or by appointing private operators;
- (6) shall give appropriate incentives to generator for salvaging, processing and or recycling preferably in-situ;
- (7) shall examine and sanction the waste management plan of the generators within a period of one month or from the date of approval of building plan, whichever is earlier from the date of its submission;
- (8) shall keep track of the generation of construction and demolition waste within its jurisdiction and establish a data base and update once in a year;
- (9) shall device appropriate measures in consultation with expert institutions for management of construction and demolition waste generated including processing facility and for using the recycled products in the best possible manner;
- (10) shall create a sustained system of information, education and communication for construction and demolition waste through collaboration with expert institutions and civil societies and also disseminate through their own website;
- (11) shall make provision for giving incentives for use of material made out of construction and demolition waste in the construction activity including in non-structural concrete, paving blocks, lower layers of road pavements, colony and rural roads.
- (7) Criteria for storage, processing or recycling facilities for construction and demolition waste and application of construction and demolition waste and its products-
- (1) The site for storage and processing or recycling facilities for construction and demolition waste shall be selected as per the criteria given in **Schedule I**;
- (2) The operator of the facility as specified in sub-rules (1) shall apply in Form I for authorization from State Pollution Control Board or Pollution Control Committee.
- (3) The operator of the facility shall submit the annual report to the State Pollution Control Board in Form II.
- (3) Application of materials made from construction and demolition waste in operation of sanitary landfill shall be as per the criteria given in **Schedule II**.

## (8) Duties of State Pollution Control Board or Pollution Control Committee-

(1) State Pollution Control Board or Pollution Control Committee shall monitor the implementation of these rules by the concerned local bodies and the competent authorities and the annual report shall be sent to the Central Pollution Control Board and the State Government or Union Territory or any other State level nodal agency identified by the State Government or Union Territory administration for generating State level comprehensive data. Such reports shall also contain the comments and suggestions of the State Pollution Control Board or Pollution Control Committee with respect to any comments or changes required;

- (2) State Pollution Control Board or Pollution Control Committee shall grant authorization to construction and demolition waste processing facility in Form-III as specified under these rules after examining the application received in Form I;
- (3) State Pollution Control Board or Pollution Control Committee shall prepare annual report in Form IV with special emphasis on the implementation status of compliance of these rules and forward report to Central Pollution Control Board before the 31<sup>st</sup>July for each financial year.

## (9) Duties of State Government or Union Territory Administration-

- (1) The Secretary in-charge of development in the State Government or Union territory administration shall prepare their policy document with respect to management of construction and demolition of waste in accordance with the provisions of these rules within one year from date of final notification of these rules.
- (2) The concerned department in the State Government dealing with land shall be responsible for providing suitable sites for setting up of the storage, processing and recycling facilities for construction and demolition waste.
- (3) The Town and Country planning Department shall incorporate the site in the approved land use plan so that there is no disturbance to the processing facility on a long term basis.
- (4) Procurement of materials made from construction and demolition waste shall be made mandatory to a certain percentage (say 10-20%) in municipal and Government contracts subject to strict quality control.
- (10) Duties of the Central Pollution Control Board (1) The Central Pollution Control Board shall,-
- (a) prepare operational guidelines related to environmental management of construction and demolition waste management;
- (b) analyze and collate the data received from the State Pollution Control Boards or Pollution Control Committee to review these rules from time to time;
- (c) coordinate with all the State Pollution Control Board and Pollution Control Committees for any matter related to development of environmental standards;
- (d) forward annual compliance report to Central Government before the 30<sup>th</sup>August for each financial year based on reports given by State Pollution Control Boards of Pollution Control Committees.
- (11) Duties of Bureau of Indian Standards and Indian Roads Congress -The Bureau of Indian Standards and Indian Roads Congress shall be responsible for preparation of code of practices and standards for use of recycled materials and products of construction and demolition waste in respect of construction activities and the role of Indian Road Congress shall be specific to the standards and practices pertaining to construction of roads.

#### (12) Duties of the Central Government -

- The Ministry of Urban Development, and the Ministry of Rural Development, Ministry of Panchayat Raj, shall be responsible for facilitating local bodies in compliance of these rules;
- The Ministry of Environment, Forest and Climate Change shall be responsible for reviewing implementation of these rules as and when required.
- 13. Timeframe for implementation of the provisions of these rules -The timeline for implementation of these rules shall be as specified in Schedule III:
- Accident reporting by the construction and demolition waste processing facilities-In case of 14. any accident during construction and demolition waste processing or treatment or disposal facility, the officer in charge of the facility in the local authority or the operator of the facility shall report of the accident in Form-V to the local authority. Local body shall review and issue instruction if any, to the incharge of the facility.

#### Schedule I

# Criteria for Site Selection for Storage and Processing or Recycling Facilities for construction and demolition Waste

[See Rule 7(1)]

- The concerned department in the State Government dealing with land shall be responsible for (1)providing suitable sites for setting up of the storage, processing and recycling facilities for construction and demolition and hand over the sites to the concerned local authority for development, operation and maintenance, which shall ultimately be given to the operators by Competent Authority and wherever above Authority is not available, shall lie with the concerned local authority.
- The Local authority shall co-ordinate (in consultation with Department of Urban Development of (2) the State or the Union territory) with the concerned organizations for giving necessary approvals and clearances to the operators.
- Construction and demolition waste shall be utilized in sanitary landfill for municipal solid waste (3)of the city or region as mentioned at Schedule I of thse rule. Residues from construction and demolition waste processing or recycling industries shall be land filled in the sanitary landfill for solid waste.
- The processing or recycling shall be large enough to last for 20-25 years (project based on-site (4)recycling facilities).
- The processing or recycling site shall be away from habitation clusters, forest areas, water (5) bodies, monuments, National Parks, Wetlands and places of important cultural, historical or religious interest.
- A buffer zone of no development shall be maintained around solid waste processing and disposal (6) facility, exceeding five Tonnes per day of installed capacity. This will be maintained within the

total area of the solid waste processing and disposal facility. The buffer zone shall be prescribed on case to case basis by the local authority in consultation with concerned State Pollution Control Board.

- (7) Processing or recycling site shall be fenced or hedged and provided with proper gate to monitor incoming vehicles or other modes of transportation.
- (8) The approach and or internal roads shall be concreted or paved so as to avoid generation of dust particles due to vehicular movement and shall be so designed to ensure free movement of vehicles and other machinery.
- (9) Provisions of weigh bridge to measure quantity of waste brought at landfill site, fire protection equipment and other facilities as may be required shall be provided.
- (10) Utilities such as drinking water and sanitary facilities (preferably washing/bathing facilities for workers) and lighting arrangements for easy landfill operations during night hours shall be provided and Safety provisions including health inspections of workers at landfill sites shall be carried out made.
- (11) In order to prevent pollution from processing or recycling operations, the following provisions shall be made, namely:
  - (a) Provision of storm water drains to prevent stagnation of surface water;
  - (b) Provision of paved or concreted surface in selected areas in the processing or recycling facility for minimizing dust and damage to the site.
  - (c) Prevention of noise pollution from processing and recycling plant:
  - (d) provision for treatment of effluent if any, to meet the discharge norms as per Environment (Protection) Rules, 1986.
- (12) Work Zone air quality at the Processing or Recycling site and ambient air quality at the vicinity shall be monitored.
- (13) The measurement of ambient noise shall be done at the interface of the facility with the surrounding area, i.e., at plant boundary.
- (14) The following projects shall be exempted from the norms of pollution from dust and noise as mentioned above:

For construction work, where at least 80 percent construction and demolition waste is recycled or reused in-situ and sufficient buffer area is available to protect the surrounding habitation from any adverse impact.

(15) A vegetative boundary shall be made around Processing or Recycling plant or site to strengthen the buffer zone.

Schedule II

Application of materials made from construction and demolition waste and its products.

[See Rule 7(3)]

Sl. No.	Parameters	Compliance Criteria
	Drainage layer in leachate collection system at bottom of Sanitary Landfill Gas Collection Layer above the waste at top of Sanitary Landfill and Drainage Layer in top Cover System above Gas Collection Layer of Sanitary Landfill For capping of sanitary landfill or dumpsite, drainage layer at the top	Only crushed and graded hard material (stone, concrete etc.) shall be used having coarse sand size graded material (2mm - 4.75mm standard sieve size).  Since the coarse sand particles will be angular in shape (and not rounded as for riverbed sand), protection layers of non-woven geo-textiles may be provided, wherever required, to prevent puncturing of adjacent layers or components.
2	Daily cover	Fines from construction and demolition processed waste having size up to 2 mm shall be used for daily cover over the fresh waste.  Use of construction and demolition fines as landfill cover shall be mandatory where such material is available. Fresh soil (sweet earth) shall not be used for such places and borrow-pits shall not be allowed. Exception — soil excavated during construction of the same landfill.  During hot windy days in summer months, some fugitive dust problems may arise. These can be minimised by mixing with local soil whereve available for limited period.
3	Civil construction in a sanitary landfill	Non-structural applications, such as kerb stones drain covers, paving blocks in pedestrian areas.

# Schedule III Timeframe for Planning and Implementation [See Rule 13]

Sl. No.	Compliance Criteria	Cities with population of 01 million and above	Cities with population of 0.5-01 million	Cities with population of less than 0.5 million	
	Formulation of policy by State Government	12 months	12 months	12 months	
	Identification of sites for collection and processing facility	18 months	18 months	18 months	
- 2	Commissioning and implementation of the facility	18 months	24 months	36 months	
4	Monitoring by SPCBs	3 times a year – once in 4 months	2 times a year – once in 6 months	-	

<sup>\*</sup>The time Schedule is effective from the date of notification of these rules.

#### FORM – I See [Rule 7 (2)] Application for obtaining authorisation

To,	
The Member Secretary	
Name of the local authority or Na	me of the agency :
appointed by the municipal authority	
Correspondence address	
Telephone No.	
Fax No.	
Nodal Officer and designation (Officer authorized	
by the competent authority or agency responsible for operation of processing or recycling or disposal facility)	
Authorisation applied for (Please tick mark)	Setting up of processing or recycling
Authorisation applied for (1 lease tiek mark)	facility of construction and demolition waste
Detailed proposal of construction and demolition waste processing or recycling facility to include the following	
Location of site approved and allotted by the Competent Authority.	
Average quantity (in tons per day) and composition of construction and demolition waste to be handled	

at the specific site. Details of construction and demolition waste processing or recycling technology to be used. Quantity of construction and demolition waste to be processed per day. Site clearance from Prescribed Authority. Salient points of agreement between competent authority or local authority and operating agency (attach relevant document). Plan for utilization of recycled product. Expected amount of process rejects and plan for its disposal (e.g., sanitary landfill for solid waste). Measures to be taken for prevention and control of environmental pollution. Investment on project and expected returns. Measures to be taken for safety of workers working

in the processing or recycling plant.

Any preventive plan for accident during the collection, transportation and treatment including processing and recycling should be informed to the Competent Authority (Local Authority) or Prescribed Authority

Date:

Signature of Nodal Officer

#### Form-II

# See [Rule (7) (3)] Format for Issue of Authorisation to the Operator

			File No.:
То,			Date :
Ref : Your application nu	ımber	Dt	
the proposal hereby	State Pollution Control Boa authorizesto set	having their	administrative office at
	on the		
1. The validity of thi renewal of authorisation is	s authorisation is till to be sought.	After ex	piry of the validity period,

2. The State Pollution Control Board or Pollution Control Committee may, at any time, for justifiable reason, revoke any of the conditions applicable under the authorisation and shall communicate the same in writing.
3. Any violation of the provision of the construction and demolition Waste Management Rules, 2016 shall attract the penal provision of the Environment (Protection) Act, 1986 (29 of 1986).
Date: (Member Secretary) Place: State Pollution Control Board/ Pollution Control Committee
Form –III
See [Rule 8(2)]
Format of Annual Report to be submitted by Local Authority to the State Pollution Control Board  (i) Name of the City or Town.  (ii) Population.  (iii) Name and address of local authority or competent authority  Telephone No:  Fax:  Email ID:  Website:  (iv) Name of In-charge or Nodal Officer dealing with construction and demolition wastes management with designation
1. Quantity and composition of construction and demolition waste including any deconstruction waste
(a) Total quantity of construction and demolition waste generated during the whole year in metric ton
Any figures for lean period and peak period generation per day  Average generation of construction and demolition waste (TPD)  Total quantity of construction and demolition waste collected per day  Any Processing / Recycling Facility set up in the city  Status of the facility
(b) Total quantity of construction and demolition waste processed / recycled (in metric ton)  Non-structural concrete aggregate:
Manufactured sand
Ready-mix concrete (RMC)
Paving blocks
GSB :

(	c) Total quantity of Construction processing (last option) or filli				waste	dispos	ed by	land	filling	without
-	No of landfill sites used :									
F	Area used :									
1	Whether weigh-bridge: Ye	s		No						
fa	icility used for quantity estimation	1?								
(d)	Whether construction and demo	lition v	waste u	sed in	sanitar	y landf	ill (for	solid	waste)	as per
	;	1	Yes		No					
2. Storag	e facilities									
(a) Area	orlocation or plot or societies cove	ered fo	or colle	ction c	of Cons	truction	n and E	Demol	ition w	aste
(4) / 1.04	on our or provide or socional socionali sociona									
(b) No. of	flarge Projects (including roadway	ys proj	ject) co	vered						
Pract Comp	ner Area or location or plot or soci iced (if yes, whether done by petent Authority or Local Authori				e Agen	су				
or Non-G (d) Storag	overnmental Organization) :									_
(u) Storag	ge Bills	•	Speci (Shap	fication	ns ize)	Exis Num	ting ber	Pr fo	roposed r future	
	Containers or receptacle (Capac ii) Others, please specify	ity) :								-
(e) Wheth	ner all storage bins/collection spot	s are								
attended t	for daily lifting	į	:	Yes		No				
Wast	ner lifting of Construction & Demore from Storage bins is manual or use tick mark) please specify mode	necha		mal	Mech	anical	Othe	erc.		
82.7	oment used	,			ipment		Out	J1.03,		
3. Transj	aartation								_	
J. 11203	portation				ally Re				ımber	
	Truck :	•							<del></del>	
	Truck-Hydraulic :									
	Tractor-Trailer :									
	Dumper-placers									
	Tricycle									

Others, if any, please specify:

	Refuse-collector Others (Please specify)	2) 
m	anagement practices	made to improve Construction and Demolition waste
5. Ha	ave any efforts been made to in yes, what is (are) the technolog	volve PPP for processing of Construction & Demolition waste: gies being used, such as:
	Processing / recycling Technology	Steps taken (Quantity to be processed)
	Dry Process Wet Process Others, if any,	;
6.	Please specify  What provisions are availab	le to check unauthorized operations of:
	Encroachment on river b	oank or wet bodies:
	Unauthorized filling of l	ow line areas :
	Mixing with solid waste	:
	Encroachment in Parks,	Footpaths etc. :
7. Но	ow many slums are provided w	ith construction and demolition waste receptacles facilities:
for ta	e municipal magistrates appoin	pliance with these rules: Yes No
l II ye	s, now many cases registered &	settled during last three years (give year wise details)]
Dated Comn	: nissioner	Signature of Municipal
		Form –IV
		See [Rule (8)(3)]
F	4.64	

Format of Annual Report to be submitted by the State Pollution Control Board / Committees to the Central Pollution Control Board

To,

The Chairman, Central Pollution Control Board, PariveshBhawan, East Arjun Nagar, Delhi-110032

1.	Name of the State/Union territory	:
2.	Name & address of the State Pollution Control Board/Pollution Control Committee	:
3.	Number of municipal authorities responsible for management of municipal solid wastes in the State/Union territory under these rules	1
4.	A Summary Statement on progress made by municipal authorities in respect of implementation of <b>Schedule III</b> ]	: Please attach as Annexure-I
5.	A Summary Statement on progress made by municipal authorities in respect of implementation of <b>Schedule IV</b> : F	Please attach as Annexure-II
Date:		Chairman or the Member Secretar State Pollution Control Board/
Place:		Pollution Control Committee
Place:	Form See   Ri <u>Accident r</u>	n –V Jule 14]
	See   Re	n –V Jule 14]
1.	See   Re <u>Accident r</u>	n –V Jule 14]
1. 2.	See   Re Accident r	n –V ule14] reporting
1. 2. 3.	See   Re Accident r  Date and time of accident  Sequence of events leading to accident	n –V  ule 14] reporting  : : : te involved in accident :
1. 2. 3.	See   Re Accident r  Date and time of accident  Sequence of events leading to accident  The type of construction and demolition waste  Assessment of the effects of the accidents	n –V  ule 14] reporting  : : : te involved in accident :
1. 2. 3. 4.	See   Re Accident r  Date and time of accident  Sequence of events leading to accident  The type of construction and demolition waste  Assessment of the effects of the accidents  a. on traffic, drainage system and the en	n –V  ule 14] reporting  : : : te involved in accident :

8. Regular monthly health checkup of workers at

- a. Processing / recycling site shall be made
- 9. Any accident during the collection,
  - a. transportation and treatment including
  - b. processing and recycling should be informed
  - c. to the Competent Authority (Local Authority) or
  - d. Prescribed Authority

Date	:
Place	

Authorized Signatory Designation

[18-6/2014-HSMD] Bishwanath Sinha, Joint Secretary

