TAMILNADU POLLUTION CONTROL BOARD





Memo: T2/TNPCB/HWM/NGT/Monitoring/2020 dated: 01.09.2020

Sub: TNPC Board - HWM Section - Monitoring of Industries/Facilities for the effective implementation of HOWM Rules, 2016 - Development of 'Monitoring Protocol' for enhanced level and frequency of enforcement & environmental monitoring - Communicated for Implementation - Regarding.

Ref: 1. Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016 as amended.

2. Hon'ble NGT(PB), New Delhi orders dated 12.04.2019, 26.08.2019 and 07.07.2020 in OA No. 804/2017 regarding hazardous waste management.

Kind attention is invited to the references cited. The Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016 (HOWM Rules, 2016) has been notified by the Ministry of Environment, Forest and Climate Change, Government of India, New Delhi for the safe and environmentally sound management of hazardous and other wastes.

The State Pollution Control Boards (SPCBs)/Pollution Control Committees (PCCs) have been entrusted with duty to ensure compliance of the various provisions stipulated under the HOWM Rules, 2016 through monitoring and taking of actions against defaulters as per Rule 21 of the HOWM Rules, 2016.

The Hon'ble NGT(PB), New Delhi considered the issue of non-compliance of HOWM Rules, 2016 in OA No. 804/2017 and issued various directions in orders dated 12.04.2019, 26.08.2019 and 07.07.2020 for strict compliance of action points by various stakeholders including SPCBs/PCCs.

The directions issued related to effective monitoring on compliance of HOWM Rules, 2016 are highlighted below:-

- ".....All occupiers who have authorizations shall submit the Annual report in time and in case of non-compliance, action needs to be taken by SPCBs/PCCs..."
- "......The pre-processing and recycling/utilization facilities need to be treated as critical environmental infrastructure facilities for sound environmental management of hazardous waste so as to ensure enhanced level and frequency of enforcement and environmental monitoring....."
- ".....SPCBs/PCCs shall ensure that all solvent recovery units have mandatory Authorisation in compliance with the SOP and checklist issued by CPCB for solvent recovery units within one month....."
- ".....The verification of the up-dation of display board should be an integral part of any inspection carried out by CPCB/SPCBs/PCCs without exception. In case of noncompliance the concerned officer should be subjected to departmental actions..."

No. 76, MOUNT SALAI, GUINDY, CHENNAI - 600 032.

"......SPCBs/PCCs need to take steps to ensure closing of the manifests received and reconcile the HW handling data...."

Hence, there is a need for regular monitoring for the effective implementation of the HOWM Rules, 2016. CPCB has prescribed inspection format (attached as ANNEXURE-2) to ensure comprehensive inspections as per the provisions of the Rules. Also, CPCB has issued document on "Enforcement Framework for Effective Implementation of Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016" during July, 2019.

On scrutiny of the details of "District Office HW Annual Inventory 2019-20" received, it is noted that there are cases of violations (procedural violations of HOWM Rules, 2016) such as (i) industrial operations without valid Authorization under HOWM Rules, 2016, (ii) non-submission of Annual Returns (FORM-4) in time and (iii) not following manifest system (FORM-10) for receipt, transport of hazardous waste etc.. But, the same has not been reported by way of inspections in IR Format for necessary action.

Further, inspection report (offline) for action under HOWM Rules, 2016 are furnished only when complaints received against defaulting industries regarding improper management or illegal disposal of hazardous waste causing environmental pollution. There is no periodical inspection, monitoring of industries/facilities covered under HOWM Rules, 2016 on the various provisions of the Rules and reporting on the compliance status/violations.

In order to have enhanced frequency of enforcement & environmental monitoring, a monitoring system is developed for "Inspection, Verification and Reporting" for the effective implementation of the HOWM Rules, 2016 and the same is attached as ANNEXURE-1.

Hence, all DEEs of TNPCB are informed to follow the "Monitoring Protocols" for the effective implementation of the HOWM Rules, 2016. They are instructed to carryout periodical inspection of industries/facilities covered under the HOWM Rules, 2016 under their jurisdictions as per the protocols and report on the verification and violations (if any) in the prescribed IR format for necessary action.

The receipt of the memo shall be acknowledged.

Encl. as stated

For Chairman

To

All DEEs of TNPCB

Copt to

All JCEE(M) of TNPCB

ANNEXURE - 1

MONITORING PROTOCOLS for INSPECTION - VERIFICATION - REPORTING

UNDER HOWM RULES, 2016

. No	Activities	Monitoring Protocols
1	Industries/Facilities cover under HOWM Rules, 2016	 a) Industries generating HW. b) Industries adopting pre-processing of HW to convert as resource/fuel (Alternate Fuel Mix) for co-processing in cement kiln.
		c) Industries adopting recycling of HW as listed under Schedule-IV of HOWM Rules, 2016.
		d) Cement industries authorised & practising co-processing of hazardous and other wastes in cement kiln.
		e) Industries adopting captive utilisation of HW & OW as per Schedule III, Part-A, Part-B and Part-D of HOWM Rules, 2016.
		 f) Industries adopting non-captive utilisation of HW based on guidelines/SOPs issued by CPCB.
		g) Industries/CETPs having captive HW_SLFs. h) Common HWTSDFs.
	transport of the best of	h) Common HWTSDFs.i) HW collectors.
		j) Traders (import of HW & OW for actual users).
2	Inspection & Reporting	Industries/Facilities cover under HOWM Rules 2016 shall be inspected periodically with regard to generation and management of hazardous waste and furnish inspection report within 7 days from the date of inspection in the enclosed IR Format.
3	Frequency of Inspection & Sampling	• 'Once in 6 months' in case of industries/facilities cover under Sl.Nos (b) (c), (d), (f), (g) and (h) at Sl.No (1) above irrespective of size.
		• 'Once in a year' in case of industrie /facilities cover under Sl.Nos (a), (e), (i) (j) at Sl.No (1) above irrespective of size.
4	Verification & Recording	a) Verification of display board installed a factory entrance with updated information on HW.
		b) Method of storage of HW in the storage facility within the premises, mentioning accumulated stock on the day of inspection.
		c) Verification of FORM-3, FORM-4 and FORM-10 with respect to Authorisation granted under HOWM Rules, 2016 and Consent granted under W/A Acts.

		d)	Verification with respect to guidelines and SOPs issued by CPCB for HW preprocessing, recycling, utilising and coprocessing facilities and captive/common HW SLFs.
		e)	Verification of Annual Returns with respect to receipt of HW& OW (domestic/interstate/imported), utilisation, products produced, category & quantity of waste generated and disposed etc.
		f)	Status of compliance on conditions of Authorisation granted under HOWM Rules, 2016.
		g)	Sampling of hazardous waste (solid/leachate), ground water within and outside the premises etc shall be undertaken during inspection in case of improper storage causing environmental pollution.
		h)	Verification of operation of pollution control measures.
3 -		i)	Reporting on violations with respect to various rule provisions of HOWM Rules, 2016.
5	CPCB Guidelines & Documents to be followed	A.	Guidelines for Environmentally Sound Recycling of Hazardous Wastes as per Schedule – IV of HWM Rules. (Jan, 2010).
		В.	Guidelines for Pre-Processing and Co-Processing of Hazardous and Other Wastes in Cement Plant as per Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016. (July, 2017).
		C.	Standard Operating Procedures (SOPs) issued for utilisation of Hazardous Wastes as per Rule (9) of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 from time to time.
		D.	Document on Enforcement Framework for Effective Implementation of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016. (July, 2019).
		E.	Document on Determination of Environmental Compensation to be recovered for violation of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016. (May, 2019)
		F.	Guidelines on Implementing Liabilities for Environmental Damages due to handling and disposal of hazardous waste and penalty.



FORMAT FOR INSPECTION OF INDUSTRIES WITH REGARD TO GENERATION AND MANAGMENT OF HAZARDOUS WASTES

S.No	Particulars	Status / details	
1.	Name of Industry		
2.	complete postal address of the industry		
3.	Website		
4.	Tel and Fax Number	Telephone No.1: Telephone No.2: Fax:	
5.	longitude and latitude		
6.	E-mail		
7.	Date of Visit	D D M M Y Y Y Y	
8.	Contact Person Name, Designation and Contact No	Name Designation Contact No.	
9.	Name and Designation of	Sr. No Name of Person	Designation

S.No	Particulars	Status / details	-102
	the Officials visiting the Unit	1 2 3 4	
10	Process description in brief for each Product. Also attach Process Flow Diagram indicating raw materials and sources of hazardous waste generation along with mass balance.		
11	Year of commissioning		
12	Production (in MT or KL / day) of each product	Sr. Product MT/day or Operational status Annum Operational status	Or in Charles
	Status of consent under the Water Act, 1974	Date of issue	
		Validity D D M M Y Y Y Y	
t	Status of consent under he Air Act, 1981	Date of issue	

S.No	Particulars	Status	/ details									
		Validit	tv									
		DD		YYY								
15	Status of Authorization under the Hazardous Waste (Management, Handling & Transboundary Movement) Rules, 2008 (HWM Rules, 2008) / Hazardous & Other Wastes	Validi	ity									
	(Management & Transboundary Movement) Rules, 2016 (HOWM Rules 2016) and details of Hazardous Waste (HW) authorized (please also attach copy of	S.No 1. 2. 3.	Name of HV	V Categor	y Quantity	Mode of Disposal/Red	Treat		& /etc.			
1	authorization) 6 Name and Categories of HW generated and their respective	The details	etails of various Various Production	m during th Name of HW (with	e inspection HW generation	HW generation	Actual	ole 1:	antity	of	Actual Quan generated	
	quantity (Please specify all types of HW generated from the unit along with category as per Schedule I or II of the	(1)	Plant/ Process at the facility	category) generated in Tonne and their quantity per tonne of inputs*	(in Tonne) per tonne of the consented product (4)	as per the consented capacity of the product (Tonne per day or month or annum)	During currer finance year (conspections)	ial as on of	Durir previ finan year	ious icial	During current financial year (as on date of inspection)	During previous financia year

	Particulars	Status	/ details						
	HOWM Rules	1 1.							
- 1	2016)	2.							
		3.							
			ETP (KLD)						
		5	Utilities						
7		6	Other					2 200	
		*Pleas	se give nam	e and quant	ity of each o	f the inputs	for each re	ows of the above, the inputs v	ve table.
		includ Note:	e HW being Column (3)	procured an	d used in de	riving produced as per m	cts ass baland	ce and verified or (4), as appli	during th
17	Captive Recycling/ Utilization/ Incineration/ Secured Landfilling facility details			cify details o			complianc	ce details as pe	r the Rule
				AND DESCRIPTION OF THE PARTY OF					
18	Details of HW storage, Quantity of HW Stored and period of storage		(iii) Capaci (iv) In case	Jnlined : covered and by : Size L x	safe from rai W x H and o e hazardous	quantity in To	onne it can	store ent on compliand	ce of CPC
18	storage, Quantity of HW Stored and period of		(i) Lined // (ii) Open/C (iii) Capaci (iv) In case guidelin	Unlined: covered and by: Size L x of incinerabl nes (refer che	safe from rai W x H and o e hazardous	quantity in To	onne it can	store ent on compliand	ce of CPC
18	storage, Quantity of HW Stored and period of		(i) Lined /((ii) Open/C (iii) Capacit (iv) In case	Unlined: covered and by: Size L x of incinerabl nes (refer che	safe from rai W x H and o e hazardous ecklist):	quantity in To	onne it can ge, comme	store int on compliand	ce of CPC
18	storage, Quantity of HW Stored and period of		(i) Lined // (ii) Open/C (iii) Capaci (iv) In case guidelin	Unlined: covered and by: Size L x of incinerabl nes (refer che	safe from rai W x H and o e hazardous ecklist): Table2: Def Previous Stock (in Tonne) stored in Storage shed (at the beginning of previous financial year)	quantity in To waste storaç	Stored Balance (in Tonne) (Column 13 + Column-Column14)	Latest date of transfer of HW to authorised Recycler/ Co-processor/TSDF/etc. (16)	ce of CPC
18	storage, Quantity of HW Stored and period of	2. D	(i) Lined // (ii) Open/C (iii) Capacir (iv) In case guidelin retails of HV Name & Category of HW (as per column (3) of Table 1)	Unlined: covered and cy: Size L x of incinerable es (refer che V Stored: Actual HW generated in Tonne (sum of column (8) and (9) of Table 1)	safe from rai W x H and de hazardous ecklist): Table2: Def Previous Stock (in Tonne) stored in Storage shed (at the beginning of previous financial	Actual quantity (in Tonne) found stored on the day of inspection	Stored Balance (in Tonne) (Column 13 + Column-	Latest date of transfer of HW to authorised Recycler/ Co-processor/ TSDF/etc.	ce of CPC

S.No	Particulars	ticulars Status / details							
		3							
					Total Land				
			nents on whether HW Fetc. timely in complian			ler/ Co-proces			
19	Categories and quantity of HW sent to authorized actual user/Common TSDF	1. Detail sent:	s of the authorized act		ion TSDF, as applicat				
		Sr. No.	Name & address of the authorized common TSDF/Actual User*	Name of SPCB/PCC who granted authorization to the authorized TSDF/Actual	authorisation granted to the authorized TSDF/Actual User* (Specify among Transportation/	authorization			
		(17)	(18)	User* and authorization no. with its validity (19)	Recycling/ Utilization/ Pre-processing/ Co- processing/ Incineration/Secured landfilling) (20)	User* (21)			
		1							
		2							
		3 *^otus	Lugar includes assurt	ar who are	and processes LBA/ 5				
		2. Detai	al user includes occupions, pre-processing, utilingly and list of HW sent to the authorial year (as per daily lable 3B able data in Table 3B and list occupies.	sation including c norized actual use annual record and	o-processing. r and TSDF, as applica l manifest document F	able, since prev			
20	Compliance	Please m	ake observations on the						
	w.r.t. labeling,		uate packaging of HW						
	manifest		ling of HW containers in		1 -2-0-1				
	system,	3. Com	oliance of all Manifest	Documents and	sending/receiving of	the same to			
	records, annual returns,	4 Trans	erned when HW are bei sportation of HW only by	ng sent (reter Ru	le 19 01 the HOVVIVI Ru	iles, 2016)			
	etc.		from the concerned SP			other State/LIT			
		6. Intima	ation to both the SPCB e HW is sent for recycli	s/PCCS before h	anding over the waste	e to the transpo			
		trans	intimation to SPCBs/ portation sportation of HW and co						

No	Particulars	Status / details
		9. Daily records maintenance in Form 3 10. Timely submission of annual returns in Form 4 to the SPCB/PCC
	Safety facilities provided at storage facility	Sr. No Safety Facility 1 2 3 5 6 7
- 1		
22	Environmental Monitoring	Please comment on results of ground water sampling; soil sampling; stack emis monitoring conducted by SPCB/PCC or EPA notified lab in presence of SPCB/PCC office.
		Please comment on results of ground water sampling; soil sampling; stack emis monitoring conducted by SPCB/PCC or EPA notified lab in presence of SPCB/PCC office.

P	12	C	A	

Date: official)

Signature

(Name and designation of inspecting

Table 3B: Details of HW sent to authorized actual user and TSDF listed in Table 3A since previous financial year till date of inspection

	waste store within the premis es (as per column 15 of the Table 2)	(35)		
recycled/U tilized in captive facility and	sent to other authorized facility (Sum of column 24 to 33)	(34)		A de la companya de l
es and to Sent to	- 3 - 2 - 4	(33)		
g in Tonn Secured	ng ng	(32)		
Processing/ Incineration/ Secured Landfilling in Tonnes and to whom Recyc Utilizat Pre- Co- Incinerati Secured Sent to	Б	(31)		
n/ Secure	Proces sing	(30)		
neration/ Se	ssing	(29)		
sent for essing/inci	Loi	(28)		
Process whom	Bull	(27)		
e facility Recycl	Otilized	(26)		
in captive	Pandfill ed	(25)		
Disposed in captive facility (in Tonne)	D	(24)		
	e 2) Ser A S	(23)		
s S		(22)	1.	7