



KERALA STATE POLLUTION CONTROL BOARD
കേരളസംസ്ഥാന മലിനീകരണ നിയന്ത്രണ ബോർഡ്

Pattom P.O., Thiruvananthapuram – 695 004
പട്ടം പി.ഒ., തിരുവനന്തപുരം - 695 004

PCB/HO/RULES/SWM - IDUKKI /2018

Date: 07/10/2020

From

The Chairman

To

The Chairman
Central Pollution Control Board

Sub: Environmental compensation estimation for cities of Class II and below - reg.

- Ref: 1. Order of the Hon'ble NGT in OA No. 585/2018 dated 25/01/2019 & 08/04/2019.
2. Joint committee report submitted dated 03/02/2020
3. This office letter of even no dated 07/05/2020 and 11/08/2020.
4. Minutes of the meeting (VC) of the Joint Committee constituted by the Hon'ble NGT as per the order dated 25.01.2019 in OA 395/2013 held on 07.08.2020.
5. Direction in the VC of CPCB with SPCB's held on 25.09.2020

Sir,

Kind attention is invited to letters under ref (3) wherein it was requested to provide capital cost component for the cities other than Class I cities for the calculation of environment compensation of the local bodies in Idukki District.

Based on the orders of the Hon'ble NGT in O.A. 585/18, OA 514/2018 and OA 6/2020, the Board is to assess environmental compensation for the cities coming under Class II, III, IV and V. Environmental compensation is estimated based on the sum of capital cost, operational cost and environment externalities. For Class I cities, minimum capital cost recommended is already prescribed by the Committee as 100 lakh and operation cost as 1 lakh/day. But the minimum capital cost and operational cost are not prescribed for Class II and below. Hence it is not possible to estimate the Environmental Compensation for the cities of Class II and below.

Meanwhile Joint Committee constituted as per NGT Order in OA 585/2018 enclosed, a methodology for assessing percentage of achievement in solid waste management ie. by considering factors such as formation of Haritha Karma Sena, door to door collection etc. A total

score 100 is given for different activities and score chart is enclosed as Annexure I. The percentage of achievement is calculated based on the data sheet on solid waste management report submitted by local body. A copy of sample calculation is given in Annexure II. Criteria fixed for assessment of environmental compensation is enclosed as Annexure III. This methodology is brought to your kind consideration for approval

As per the minutes under ref (4) it is learnt that CPCB has constituted a division to look into the matter of the modification of guidelines on the assessment of environmental compensation. The matter was discussed in the video conference held on 25.09.2020 (agenda item 2(a)) and it was directed to send letter to CPCB detailing all issues. Hence action may kindly be taken to issue guidelines to estimate the capital/operational cost component for the cities other than Class II and below.

Yours faithfully


CHAIRMAN

Encl: as above.

Copy to:

1. The Chief Environmental Engineer
Regional Office, Ernakulam
2. The Environmental Engineer
District Office – 1
Ernamulam
3. The Environmental Engineer
District Office, Idukki
4. The Environmental Engineer
District Office, Thrissur
5. Concerned file.

ANNEXURE - 1

SOLID WASTE MANAGEMENT SCORES		
Sl no	Priorities	Marks
1	Harithakarmasena	19(Max)
	Formation	10
	Training, Id card&Uniform issued	4
	activities (D/D collection)	5
2	Dry waste (Plastic waste/E waste)	33(Max)
	collection (shop,house&road)	8
	segregation&storing	6
	MCF/RRF	8
	Plastic squad formed, activities, fine imposed	3
	notice issued (ban on carry bag)	1
	alternatives provided(cloth bag)	1
	Other activities (sign board, awareness programme, appointing staffs etc)	3
	E waste collection/Domestic Hazardous waste	3
3	Wet waste	38(Max)
	collection (shop&house)	8
	Anaerobic digestors at source	10
	vermi compost or ring compost or biogas plant or pipe	
	compost provided with houses	10
	Thumboormuzhi/Common Facility	10
4	Vehicles	10(Max)
5	Grand Total	100



M.A. BALU
Chief Environment Engineer

ADIMALY			
1	Harithakarmasena		
	formation	10	10
	trained, id&uniform issued	4	4
	activities (d/d collection)	4	5
		18	19
2	Dry waste (Plastic waste/F waste)		
	collection (shop,house&road)	8	8
	segregation&storing	6	6
	MCF/RRF	8	8
	Plastic squad formed, activities, fine imposed	1	3
	notice issued (ban of carry bag)	1	1
	alternatives provided(cloth bag)	0	1
	Other activities (sign board, awareness programme, appointing staffs etc)	2	3
	E waste collection/Domestic Hazardous waste	1	3
		27	33
3	Wet waste		
	collection (shop&house)	0	8
	at source	8	10
	vermi compost or ring compost or biogas plant or pipe compost provided to houses	5	10
	Thumbboormuzhi/Common Facility	2	10
		15	38
4	Vehicles	7	10
	Total	67	100



Or/

M.A. BAIJU
Chief Environment Engineer

Criteria Fixed For The Assessment of Environmental Compensation

For 1 Lakh Population, as per the guidelines cost of treatment for 50 T/Day is :

Capital cost (One time) = 12 Cr

O&M cost (Per annum) = 3.5 Cr

FOR 1 TPD

Capital cost = 1200/50

= 24 Lakhs

Capital cost factor = 10% of capital cost [total loan amount required to set up a centralized solid waste management facility]

Population (in Lakhs)	1-5	0.5-1	0.4-0.5	0.3-0.4	0.2-0.3	0.1-0.2	0.01-0.1
Qty/per/d	0.4	0.4	0.3	0.3	0.3	0.2	0.1
Waste Qty(MT)	40-196	20-39.6	12-14.7	9-11.9	6-8.7	2-3.8	0.9-1

= 24*0.1

= 2.4

O&M Cost = 7 Lakhs /Year

= 7/365 = 0.02 Lakhs/day

O&M cost factor = 100% of O&M cost

= 0.02

CALCULATION

Total Waste Generation (A) (TPD) = Population x Waste Generation (TPD) per person

Waste Disposal (TPD) (B) = % achievement in solid waste management x A



Cr

Env. Engineer

Waste Gap = A-B

Calculated EC (Capital cost) in Lakhs = Capital cost factor x Waste Gap
= 2.4 x Waste Gap

Final EC(Capital cost component) = min. or max. value of EC (Capital cost component)

Calculated EC (O&M cost) in Lakhs.Rs. per day = O&M cost factor x Waste Gap
= 0.02 x Waste Gap

Final EC (O&M cost component) = 0.02 x Waste Gap

*Min and Max values are not considered here

Calculated Environmental Externality (Lakhs Rs. Per Day) = (5 x Waste Gap)/100000

*As per the guidelines Municipal Solid Waste Management Capacity Gap (TPD) up to 500 TPD,
Environmental Externality (Rs. per ton per day) = 5

Minimum and Maximum value of Environmental Externality recommended by the Committee
(Rs.per day) = Min. 0.05 and Max. 0.10

Final Environmental Externality (Rs. per day) = Min. 0.05 or Max. 0.10

EC to be collected = Final EC (Capital cost) + [Final EC (O&M cost component) in
Lakhs Rs.per day + Final Environmental Externality (Rs. per day)] x no.of
days of violation

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M. A. B. B. B.
Chief Environment Engineer