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Order No. 121 - JKPCB of 2020

Dated. 07.09.2020.

Subject:- Enforcement of Guidelines for Assessing Environmental Compensation for discharging untreated sewage due to non-installation / non-operation / inadequacies of STPs (05 KLD to 200 KLD)

Whereas, as part of enforcement strategy, **Hon'ble National Green Tribunal (NGT)** has issued directions in several cases to impose penalty on the non-complying polluting units, directing all SPCBs/PCCs to implement "**Polluter Pays Principle**" in right spirit and to recover **Environmental Compensation (EC)** from the polluting units and to execute appropriate plans for restoration of environmental damages by initiating **Environmental Restoration Fund**.

Whereas, Central Pollution Control Board, on the directions of **Hon'ble NGT** in the matter of **OA No. 593/2017(WP (CIVIL) No. 375/2012 of Hon'ble Supreme Court of India**, in a case titled **Paryavaran Suraksha Samiti & Anr. Vs. Union of India & Ors.**, has framed **guidelines / methodology for Assessing Environmental Compensation** and Action Plan to Utilize the Funds. These guidelines are for **levying Environmental Compensation** from those industrial units which are violating Environmental norms for non-installation / non-operation of **ETP/STP** in their units. The approved guidelines for recovering of compensation as prepared by **CPCB** are for higher capacity of STPs ranging from **01 MLD to 500 MLD** and above and there is no provision for levying Environmental Compensation for smaller STPs having capacity ranging from **05 KLD to 200 KLD** and above.

Whereas, **Technical Advisory Committee (TAC)** constituted by the board vide order no. **91 JKPCB of 2020 dt. 07.07.2020**. has been mandated to provide its technical recommendation with regard to cases of Environmental Compensation. The **TAC** has framed guidelines for levying environmental compensation for small scale STPs as used in many commercial establishments such as *Hotels / Hostels / Banquet Halls / Convention Centres / Circuit Houses / Dak Bunglows / Commercial Establishments/Shopping Malls / Educational Institutions*. These guidelines are for STPs having capacity ranging from **05 KLD to 200 KLD** which have been approved and issued vide series no. **JK PCB-EC-STP-1 of 2020** and are enclosed along with **Annexure-I**. These guidelines shall be applicable to the units having mandatory requirement of operation of STPs for sewage treatment, as referred above.

It is, therefore, hereby ordered to adopt the said guidelines / methodology for assessing Environmental Compensation for such polluting units / commercial establishments violating environmental norms for discharge of untreated sewage due to non-installation / non-operation / inadequacies of STPs as per norms of the **Water (Prevention and Control of Pollution) Act, 1974** and **Environment (Protection) Act, 1986**, in Jammu and Kashmir with immediate effects.

"As approved by the Competent Authority".

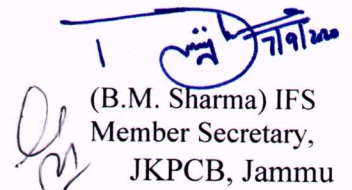
Encl:- Guidelines (JKPCB-EC-STP-1 of 2020)

No.:- JKPCB/T/C/EE TAC/20/97/06-32.

Dated:- 07-09-2020

Copy for information and necessary compliance:-

- i) Member Secretary, CPCB, New Delhi for information.
- ii) Regional Director, PCB, Jammu / Kashmir.
- iii) Head Technical Adviser Committee, JKPCB.
- iv) All DOs _____ Jammu/Kashmir
- v) PA to Chairman for information of the chairman, JKPCB, Jammu.
- vi) I/c website, J&K Pollution Control Board for uploading on website.
- vii) Office file.


(B.M. Sharma) IFS
Member Secretary,
JKPCB, Jammu



J&K PCB

**Guidelines for Assessing Environmental Compensation
(STPs- 05 KLD to 200 KLDcapacity)**

(Hon'ble NGT direction in the matter of OA No. 593/2017(WP (CIVIL) No. 375/2012 in a case title Paryavaran Suraksha Samiti & Anr. Vs. Union of India & Ors.)

**J&K POLLUTION CONTROL BOARD, JAMMU
(2020)**



FOREWORD

Environmental Compensation (EC) is a policy instrument for the protection of the environment, which works on the *Polluter Pays Principle*, with overall objective to develop a sense of responsibility towards the environment protection and to make defaulters realize their mistake by imposing compensation, which will be utilized for the protection/restoration of the environment.

The **Hon'ble National Green Tribunal** through its various judgments has empowered the Central Pollution Control Board (CPCB) to lay down the methodology to assess and recover compensation for damage to the environment and utilize such amount in terms of an action plan for protection of the environment. The **CPCB in-house Committee** has developed a methodology for assessing environmental compensation to be levied on defaulting industry, authority, individual etc. as deterrence to environment pollution.

The approved methodology developed by **CPCB** is for higher capacity of **STPs (MLDs)** to be installed by **Urban Local Bodies** and others, but for small scale **STPs** as used in many commercial establishment such as *Hotels / Hostels / Banquet Halls / Convention Centres / Circuit Houses / DakBungalows / Commercial Establishments / Shopping Malls / Educational Institutions*, there is no such guidelines.

Now, the **Technical Advisory Committee (TAC)** of **J&K PCB** has drafted *Guidelines for Assessing Environmental Compensation* for individual **STPs** of lower capacity ranging from **05 KLD to 200 KLD** which can be used as a tool for levying **EC** in such cases.

These guidelines can be applied to all the defaulting units which are not conforming to the environmental norms and shall infuse a sense of responsibility and consciousness towards the environment protection.


**(Suresh Chugh) IFS,
Chairman, JKPCB**



Preface

Nature is a common heritage of mankind and to preserve this heritage, mankind must make constant efforts, whereas ever increasing pressure on natural resources and its exploitation with the increase in pollution load, marks the man's failure to do so. Right to live is a fundamental right under **Article 21** of Constitution of India and it includes the right of having pollution free Water and Air. If anything endangers and impairs that quality of life in derogation of law, citizen have the right to have recourse to **Article 32** of Constitution for enforcement of such rights. With recent judicial activism for environmental protection, the Indian judiciary has incorporated the **Polluter Pays Principle** as a part of the environmental law regime which is evident from number of judgements passed with the directions for imposing Environmental Compensation to the person/s guilty of causing pollution.

The Polluter Pays Principal was first introduced in 1972 by the **Organization of Economic Cooperation and Development (OECD)** Guiding Principles concerning **International Economic Aspects of Environmental Policies**, which under the polluter was held responsible for the environmental damage and pollution caused.

Subsequently, **Principle 16** of the **Rio Declaration** enshrined the **Polluter Pays Principle** stating that the polluter should bear the cost of pollution. This doctrine of Environmental Compensation under Polluter Pays Principle is basically recovery of compensation from polluter as part of enforcement strategy but not as substitute for environmental compliances.

Keeping all these in mind, The Central Pollution Control Board, GoI, has formulated mechanisms for assessing Environmental Compensation (**EC**) for violators of environmental laws as per different directions of the Hon'ble National Green Tribunal (NGT). One of such approved methodologies is to assess the **Environmental Compensation** for non-installation / non-operation of higher capacity STPs by different unit holders. On same analogy, JK PCB has come up with one such *Guidelines for Assessing Environment Compensation for small capacities of STPs (05 to 200 KLD)* which is first of its kind in the country, to evaluate the **EC** due to non-operation / non-installation/ inadequacies of such small capacity STPs, as required under provisions of **Water (Prevention and Control of Pollution) Act, 1974** and **Environment (Protection) Act, 1986**.

I appreciate the effort made by **Technical Advisory Committee (TAC)** of JKPCB comprising a) **Sh. J.N. Sharma, Environmental Engineer, Convener TAC** b) **Dr. Yash Paul, Head Labs** and c) **Sh. Anupam Kaul, Jr. Environmental Engineer** for their sincere efforts while coming-up with such guidelines which shall be a ready reckonor and a tool to evaluate and assess Environmental Compensation for discharging untreated sewage by commercial establishments / Hotels / Banquet Halls etc. These guidelines can easily be adopted and used by regulators of Environmental laws in future.

(B. M. Sharma) IFS
Member Secretary,
JKPCB, Jammu




Er. J.N.SHARMA
Environmental Engineer

PREFACE

Water is a precious resource on this planet for the mankind and our foremost duty as a citizen and as per **the Constitution of India** under **Article 51-A(g)** is to protect the environment for the mankind and progeny. J&K PCB has been constituted under **the Water (P&CP) Act, 1974** and one of the main functions of the Board **under Section 17 of the (Water (P&CP) Act, 1974** is to ensure that there should be no disposal of untreated sewage or trade effluent in the **stream / rivers** so as to maintain the potability of fresh water. For the past few years, it is observed that our water bodies are getting polluted due to discharge of untreated waste water into streams / rivers. Judicial activism in the recent past have made conscious to the human fraternity to aware of the serious consequence of pollution of the precious resources of our water bodies and sensitized us that such damage to the water resources is not only irreversible but will also have adverse impact on the health of the people.

Keeping the sensitivity and the magnitude of problem in view, one of the NGO namely **Paryavaran Suraksha Samiti** has filed a **PIL** in the **Hon'ble Supreme Court of India** and **Hon'ble NGT** particularly on the issue of establishment and functioning of **ETP /CETPs/STPs** to prevent untreated sewage / effluent being discharged in water bodies including rivers, canals and streams. The matter in PIL has been discussed in **the Hon'ble NGT in a OA No. 593 /2017 (WP (Civil) No. 375/2012 of the Hon'ble Supreme Court of India**. The Hon'ble NGT is pleased to issue directions to CPCB/ all the SPCBs/PCCs to apply the instrument of **Polluter Pays Principle** for recovering of damages to the environment in the shape of Environmental Compensation. The CPCB has come up with a mechanism to Levy Environmental Compensation for all kind of industries and large scale of Municipal Sewage Treatment Plants.

In compliance to the directions of the **Hon'ble NGT**, Technical Advisory Committee of JKPCB constituted for the purpose has also formulated *Guidelines for Assessing Environmental Compensation (EC)* for small capacity of **STPs (05 KLD to 200 KLD)** under the esteemed guidance of **Shri Suresh Chugh, IFS, Chairman, JK PCB** and **Shri B. M. Sharma, IFS, Member Secretary**, and these guidelines shall ensure the application of **Environmental Compensation** against the defaulters of environmental laws.


(Er. J.N.Sharma)
(Convener, TAC)

Subject:- Environment Compensation for discharge of untreated / partially treated sewage by Hotels/Hostels/ Banquet Halls/Convention Centres/Circuit Houses/ Dak Bunglows / Commercial Establishments/ Shopping Malls / Educational Institutions in violation of environmental norms.

1.1 Background:-

The Principal Bench of Hon'ble National Green Tribunal (NGT), in the matter of OA No. **593/2017** (WP (CIVIL) No. **375/2012**, Paryavaran Suraksha Samiti & Anr. Vs. Union of India & Ors. directed Central Pollution Control Board (CPCB) through its various judgements particularly order dt. 28/08/2019 to lay down the methodology to assess and recover compensation for damage to the environment and utilize such amount in terms of an action plan for protection of the environment.

Further, the Hon'ble NGT in its order dated **06.12.2018** in the matter of court of its own motion v/s State of Karnataka (Original application No. 125/2017 and M.A. No. 1337/2018) has given following directions:-

“Since failure of preventing the pollutants being discharged in water bodies (including lakes and failure to implement solid and other waste management rules are to frequent and widespread, the CPCB must lay down specific guidelines to deal with the same, throughout India, including the scale of compensation to be recovered from different individuals / authorities, in addition to or as alternative to prosecution. The scale may have slabs, depending on extent of pollution caused, economic viability, etc. deterrent effect for repeated wrong may also be provided”.

In compliance of the directions of the **Hon'ble NGT**, the **in-house Committee** of CPCB has formulated / developed a methodology for assessing Environmental Compensation to be levied on concerned industry, authority individual etc. for the protection of environment. The methodology developed by CPCB is for Sewage Treatment Plant (STP) having capacity of **01 MLD to 501 MLD** above and not for the **small STPs** having capacity **05 KLD to 200 KLD**. In Jammu and Kashmir, it has been observed that most of the commercial establishments as stated above have STPs with capacity ranging from **05 KLD to 200 KLD**. So it was felt to develop a mechanism for levying Environmental Compensation Charges to the violators *who have not installed STP or those who have installed STP but not operating or those who have installed inadequate capacity of STPs*, there by, violating the environmental norms and degrading the environment with impunity.

1.2 Constitution of the Technical Advisory Committee (TAC):

The Board has constituted a **Technical Advisory Committee (TAC) on Environmental Compensation (EC)** and other such technical issues vide order no. **91-JKPCB of 2020** dated **07.07.2020** with the following members:

- 1) Sh. M.M.Shah Legal Advisor (Head Committee)
- 2) Er. J.N.Sharma Environmental Engineer (Convener)
- 3) Dr. Yash Pal Sc-B (Member)
- 4) Er. Anupam Kaul D.O. Ramban (Member)

1.3 Ideology of EC Formula:-

The committee has suggested that environmental compensation in the small scale of STPs (05 KLD to 200 KLD) should be same as per the **ideology of Environmental compensation formula worked out by CPCB for STPs having higher capacity**. The two components taken into consideration by CPCB in house committee while making the formula for STP of higher capacities (MLDs) as explained earlier shall be taken into consideration in the case of small scale STPs as well which is as under:-

1. Cost saved/benefits achieved by the concerned individual / authority by not having proper waste / sewage management system.
2. Cost to the environment (environmental externality) due to untreated/partially treated waste/sewage because of insufficient capacity of waste / sewage management / treatment facility.

These two components are vital to calculate the EC i.e.

- a) First is **Cost component** and other is **Environmental externality**. The cost component which may be considered in case of STP (5-200 KLD) is tentatively worked out as per prevailing market rates which is enclosed as **Annexure-I** & which shall be considered for calculating the **EC Penalty** in such cases.
- b) Secondly, the **Environment externality** is also worked in line with CPCB ideology in such cases of **STP** of small capacities.

The formula for levying Environment cost shall remain same with actual Capital Cost Factor (CCF) worked out on the basis of capital cost for such **STPs** and it is based on the methodology worked at **CPCB** in similar cases with higher capacity which is as under:-

1.4 Methodology & General formula:

EC = Capital Cost Factor x [Marginal Average Capital Cost for Treatment Facility x (Total Generation – Installed Capacity) + Marginal Average Capital Cost for Conveyance Facility x Total Generation – Operational Capacity]] + O&M Cost Factor x Marginal Average O&M Cost x (Total Generation – Operational Capacity) x No. of days for which facility was not available + Environmental externality x No. of days for which facility was not available.

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Alternatively,

$$EC \text{ (Lacs Rs.)} = [17.5\{\text{Total Sewage Generation} - \text{Installed Treatment Capacity}\} + 55.5 \{\text{Total Sewage Generation} - \text{Operational Capacity}\}] + 0.2 (\text{Sewage Generation} - \text{Operational Capacity}) \times N + \text{Marginal Cost of Environmental Externality} \times \text{Total Sewage Generation} - \text{Operational Capacity}) \times N$$

Where;

N – Number of days from the date of compliance of direction of CPCB/SPCB/PCC till the required capacity systems are **provided** by the concerned authority.

(Quantity of sewage is in MLD)

Table 1.5:- Environmental Externality for untreated / partially treated sewage discharge for small STPs (05 KLD to 200 KLD)

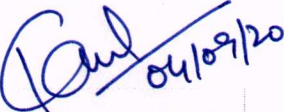
Sewage Generation (KLD)	Marginal Cost of Environmental Externality (In Rs.)		Minimum and Maximum value of Environmental Externality recommended by the TAC (05KLD-200 KLD) thousands Rs./day
	Only Mech.	Total cost including Civil works.	
5	0.375	0.4875	Min Value= 0.05 Max Value= 0.10
10	0.4125	0.5625	
15	0.45	0.6375	
20	0.4875	0.7125	
25	0.5625	0.8062	
30	0.6375	0.9	
35	0.675	0.9562	
40	0.75	1.05	
50	0.9	1.2375	
51 – 125	1.875	2.325	
125 -150	2.25	2.7375	
151 - 200	3.75	4.3875	

- i. The marginal cost of environmental externality has been worked from the value as suggested by CPCB in its formula i.e. (Rs. 75/day for 01 MLD to 200 MLD) which is scaled down to the individual STP capacity taking value. i.e. Rs. 75/day/MLD).

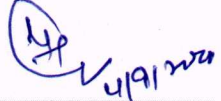
- ii. Minimum & Maximum value of Environmental externality is also worked out as per CPCB based recommendations for the same (0.05 – 0.10 lacs Rs./ day) from **01 MLD to 200 MLD** taking average value of 01 MLD to 200 MLD i.e. **0.05 lacs. Rs. per day/100 MLD**.

1.6 Cases considered for levying Environmental Compensation (EC):

- a) All such establishments falling under the ambit of **Water (Prevention and Control of Pollution) Act, 1974 and Environment (Protection) Act, 1986**, who have not installed STP or not operating STP or inadequate STP or partially treated Sewage.
- b) Discharges in violation of consent conditions, mainly prescribed standards / consent limits.
- c) Intentional avoidance of data submission or data manipulation by tampering the Log Book of ETP / Effluent Monitoring systems.
- d) Accidental discharges lasting for short durations resulting into damage to the environment.
- e) Intentional discharges to the environment -- land, water and air resulting into acute injury or damage to the environment.
- f) Injection of treated/partially treated/ untreated effluents to ground water.
- g) Discharge of untreated / partially treated sewage by Hotels/Hostels/ Banquet Halls/Convention Centres/Circuit Houses/Dak Bunglows/ Commercial Establishments/ Shopping Malls/ Educational Institutions in violation of environmental norms.


04/09/20

Er. Anupam Kaul
Member TAC


4/9/2020

Dr. Yash Pal Sc-B
Member TAC.


4/9/2020

Er. J.N.Sharma Environmental Engineer
(Convener TAC)



Table-1 :- Tentative cost components for STPs from 05 to 200 KLD.

STP Capacity (KLD)	Cost In Lacs (Mild Steel)	Civil work (In Lacs)	Total Cost
5	5.00	1.50	6.50
10	5.50	2.00	7.50
15	6.00	2.50	8.50
20	6.50	3.00	9.50
25	7.50	3.25	10.75
30	8.50	3.50	12.00
35	9.00	3.75	12.75
40	10.00	4.00	14.00
50	12.00	4.50	16.50
51 – 125	25.00	6.00	31.00
125 -150	30.00	6.50	36.50
151 - 200	50.00	8.50	58.50

Note:- The cost will vary depending upon the site conditions/technology/economic conditions/factors.

