## **TERMS OF REFERENCE (TOR)**

### And

# GUIDELINES FOR CHARTERED ENGINEERS / CHARTERED INSTITUTES



**JULY, 2021** 

## **PUNJAB POLLUTION CONTROL BOARD**

Vatavaran Bhawan, Nabha Road, Patiala - 147 001

### **INDEX**

S.No.	PARTICULARS	PAGE NO.
1	SCOPE OF WORK	1
2	FUNCTIONS OF CHARTERED ENGINEER / INSTITUTE	2-4
3	COMMENCEMENT AND APPLICABILITY OF THE SCHEME	5
4	PROCEDURE FOR PREPARATION AND SUBMISSION OF APPLICATIONS	6-7
5	ELIGIBILITY CRITERIA And EXPERIENCE FOR AN CHARTERED ENGINEER / INSTITUTE	8-9
6	GUIDELINES FOR INSPECTION OF INDUSTRIES / PROJECTS	10-12
7	GENERAL TERMS AND CONDITIONS	13-15
8	FEE TO BE CHARGED BY THE CHARTERED ENGINEER / INSTITUTE	16
9	VALIDITY OF EMPANELMENT	17
10	JURISDICTION	18
11	COMPLAINTS AGAINST CHARTERED ENGINEER / INSTITUTE	
12	DISPUTES	20
13	TERMINOLOGY	21

# TERMS OF REFERENCE (TOR) FOR THE CHARTERED ENGINEERS / INSTITUTES

#### 1. SCOPE OF WORK:

Preparation of Application(s) / Verification / Certification of environmental data / Submission of application(s) for all category of industries, Operation or Processes; Construction / Area Development Projects and other Establishments for the purpose of obtaining 'consent to establish' (NOC), ' consent to operate', renewal of consent under the Water (Prevention and Control of Pollution) Act, 1974, Air (Prevention and Control of Pollution) Act, 1981; as well as authorizations / permissions under the Environment (Protection) Act, 1986 and the Rules made their under from the Punjab Pollution Control Board.

#### 2. FUNCTIONS OF CHARTERED ENGINEER / INSTITUTE:

The Chartered Engineer(s)/ Institute(s) will be entitled to perform one or more of the following functions:

- 2.1 Compilation and completion of documents required for applying for the 'consent to establish' (NOC)/'consent to operate' / authorization / registrations and any other permission / approvals required under the provisions of the Water (Prevention and Control of Pollution) Act, 1974, Air (Prevention and Control of Pollution) Act, 1981 and Environment (Protection) Act, 1986 and the Rules made thereunder, as prescribed by the Board in accordance with the provisions of the above mentioned Acts, from time to time.
- 2.2 To facilitate and ensure the filing of online applications by the Project Proponent for the purpose of obtaining various consents / authorizations / registrations and other approvals, wherever required under the Provisions of the Statutes mentioned in Para 2.1 above.
- 2.3 Checking of feasibility reports for the proposed pollution control systems and adequacy thereof to meet with the standards and checking the adequacy of existing / installed Pollution Control Systems of the Industries, Operation or Processes.
- Visit to the proposed / existing site of the Industry, Operation or Processes for verifying all the facts related to the application in question, including confirmation of the site meeting with the siting criteria laid down by the Government / Board.

- 2.5 Coordinate and facilitate the Project Proponent for getting the sampling / monitoring done for the industry specific parameters from the Laboratories approved for consent purposes by the Board.
- 2.6 Suggesting measures which can be adopted by the Industry / Project Proponent, Operation or Processes for achieving;
  - a) Energy efficiency
  - b) Conservation of resources
  - c) Waste minimization
  - d) Adoption and upgradation to cleaner technology

These facts shall be reported at the time of submitting the application for 'consent to establish' (NOC) / 'consent to operate' / varied consents / renewal of consent on behalf of the Industrial Unit / Project Proponent / Operation or Processes.

- 2.7 To calculate the total water balance, material balance of industrial process and optimizing its operation.
- 2.8 To study the energy consumption and fuel consumption to optimize the operation of boilers, thermo packs, furnaces etc. installed in the industry.
- 2.9 To calculate the pollution load in terms of water, air and hazardous waste / solid waste generated by the project and check the adequacy and efficacy of pollution control devices / equipments and certify that treated effluent / emissions shall meet with the standards prescribed for such type of industries, operation or processes and hazardous waste / solid waste is disposed off in an environmentally sound manner as per the provisions of law and the guidelines, if any prescribed by the Central or the State Pollution

#### Control Board.

- 2.10 Facilitating adoption of sound environmental practices by the Project Proponent, industrial unit, operation or processes and placing the environmental information in public domain.
- 2.11 To facilitate the project proponent in preparing the Environmental Audit Statement (EAS) / Environmental Audit Report (EAR) and certification of the same that EAS/EAR is in order as per Environmental Laws and or the Guidelines, if any, prescribed by the Central or the State Pollution Control Board.
- 2.12 Any other issue(s) asked or directed by the Board to be reported from time to time by any industry, operation or process.

#### 3. COMMENCEMENT AND APPLICABILITY OF THE SCHEME:

- 3.1 The Terms of Reference (TOR) and Guidelines for Chartered Engineers

  / Institutes will come into force with effect from 01.07.2021.
- 3.2 This scheme shall be applicable to;
  - a) All Large, Medium and Small Scale industries under Red, Orange and Green category situated in the State of Punjab.
  - b) Operation and Processes.
  - c) All Construction / Area Development Projects established / being established in the State of Punjab.
  - d) All common facilities i.e. CETP's / TSDF's / CBWTSDF's in the State of Punjab.
- The Punjab Pollution Control Board may carry out amendments in the scheme in accordance with the requirements and on the basis of experiences of working.

# 4. PROCEDURE FOR PREPARATION AND SUBMISSION OF APPLICATIONS:

- 4.1 The Chartered Engineer / Institute shall obtain and submit an authority letter from the concerned Industry / Project Proponent / Operation or Process to represent on behalf of industry to the Punjab Pollution Control Board.
- The Chartered Engineer / Institute will compile and complete the application in all respects as per the requirements of Law / Guidelines and thereafter submit the same to the concerned Regional Office of the Board through online portal. The Chartered Engineer / Institute must ensure that all the documents are duly signed and authenticated by the project proponent as well as by Chartered Engineer / Institute representative before loading on the portal of the Board. However, Chartered Engineer / Institute representative is not in any manner authorized to sign the application, which shall be signed by the Industry / Project Proponent only.
- 4.3 The application shall be accompanied with a checklist-cum-assessment report incorporating all the details as per the relevant performa. The report shall be duly signed by the Project Proponent as well as the Chartered Engineer / Authorized person of Chartered Institute with official seal.
- 4.4 The Chartered Engineer / Institute while processing the application on behalf of the Industry / Project Proponent / Operation or Process shall certify that the project fulfills all the applicable Laws / Acts / Rules / Guidelines / Directions issued by the Government / Central

or the State Pollution Control Board from time to time.

# 5. ELIGIBILITY CRITERIA And EXPERIENCE FOR AN CHARTERED ENGINEER / INSTITUTE :

The Chartered Engineer / Institute must have manpower, experience and qualifications as stated herein below to qualify under the policy :

#### **5.1 FOR CHARTERED INSTITUTE:**

The Chartered Institute team must comprise of atleast 4 members having individual qualifications as mentioned below:

#### **QUALIFICATION:**

- 5.1.1 A degree in Environmental or Civil Engineering with specialization in Environmental Engineering as an elective subject awarded by an University or Institute recognized for the purpose in India or abroad.
- 5.1.2 A degree in Chemical Engineering / Technology awarded by an University or Institute recognized for the purpose in India or abroad.
- 5.1.3 A degree in Chemistry or Environmental Science awarded by an University or Institute recognized for the purpose in India or abroad.
- Masters / Doctorate in Micro Biology / Bio-chemistry / Chemistry / Bio-technology awarded by an University or Institute recognized for the purpose in India or abroad.
- 5.1.5 The Qualification(s) mentioned above must has/have been obtained by the Candidate through Regular mode of education.

#### **EXPERIENCE:**

5.1.6 The Candidate shall have an experience of atleast 5 years in the field of Environmental Pollution Control / Research and Development / Teaching of Environment related subjects.

#### **5.2 FOR CHARTERED ENGINEER:**

### **QUALIFICATION:**

- 5.2.1 A degree in Environmental or Civil Engineering with specialization in Environmental Engineering as an elective subject awarded by an University or Institute recognized for the purpose in India or abroad.
- 5.2.2 A degree in Chemical Engineering / Technology awarded by an University or Institute recognized for the purpose in India or abroad.

#### **EXPERIENCE:**

5.2.3 At least five years practical experience in the field of Environmental Pollution Control.

### **5.3** Cooling Off Period

The cooling off period for Government employees who have superannuated from the public sector services including Boards/ Corporations/ Societies is 2 years from the date of retirement.

# 6. GUIDELINES FOR INSPECTION OF INDUSTRIES / PROJECTS:

- The Chartered Engineer / Institute shall verify the contents of the application submitted by the Industries / Project Proponent / Operation or Process. In case of any variation, the Chartered Engineer / Institute will get the same corrected from the Industry / Project Proponent before submitting the application to the Board.
- The Chartered Engineer / Institute shall carryout photography of the site conditions and pollution control equipments / outlets / mode of disposal / energy meter / flow meter etc of the Project / Industry / Operation or Process and will submit the visit report alongwith the consent application.
- The validity of the visit report will be 15 days from the date of visit till the submission of the same to the Board. After the Lapse of 15 days, the Chartered Engineer / Institute will have to re-visit the site of the project, industry, operation or process and prepare a fresh visit report / agenda note.
- 6.4(a) The Chartered Engineer is not allowed to authorize any other person to visit the site of the Project, Industry, Operation or Process on his / her behalf unless and until such person(s) are authorized by the Punjab Pollution Control Board.
- 6.4(b) The Chartered Institute shall not sublet any work regarding visit to the site of Industry, Project, Operation or Process etc on its behalf unless and until such person(s) / Chartered Institutes are authorized by the Punjab Pollution Control Board.

- The Chartered Engineer / Institute must be totally self sufficient and there shall be no dependence on other agency / agencies for site visit of industries , operation or processes, collection of data etc. and finally preparation of reports and there shall be no subcontracting.
- 6.6 The Chartered Engineer / Institute must clearly report to the Punjab Pollution Control Board about any inconsistency and malpractice being committed / practiced by the industry, operation or process e.g. dilution of effluents, bye pass / stagnation of untreated effluent or any other activity / activities which is/are likely to create problems of environmental pollution and which is/are contrary to the directions issued through consent orders and other letters under the provisions of various Acts by Punjab Pollution Control Board.
- 6.7 The Chartered Engineer shall not be on the payrolls of the industry by whom he/she is appointed as Chartered Engineer.
- 6.8 Visit and Inspection of the industries, operations and processes by Chartered Engineer / Institute will be as under:-

S.N.	Category of Industry	Visit by whom
1.	17 category / grossly polluting	Chartered Institute
2.	Large Scale (Red Category)	Chartered Institute / Chartered Engineer
3.	All other category / categories of industries	Chartered Institute / Chartered Engineer
4.	CETPs/ TSDFs/ CBWTSDFs	Chartered Institute
5.	Construction / Area Development Projects	Chartered Institute / Chartered Engineer

- All 17 categories and grossly polluting industries and common facilities i.e. CETPs/ TSDFs/ CBWTSDFs shall be visited by at least 2 of the team members of the Institute consisting of one from engineering and one from scientific side.
- In case of change in the man power (any member of the team); the same shall be communicated to the Punjab Pollution Control Board in advance and the Chartered Engineer / Institute shall also obtain the permission of the Board for such replacement.
- 6.11 High levels of integrity, sincerity and ethics shall be maintained and followed by the Chartered Engineer / Institute.
- Any violation of the above aspects shall Lead to derecognition of the certificate of the Chartered Engineer /Institute with other appropriate action.

#### 7. GENERAL TERMS AND CONDITIONS:

- 7.1 The Chartered Engineer / Institute shall have complete knowledge of all the Environmental Laws / Acts / Rules / Notifications / Circulars / Guidelines / Documents regarding Environmental Laws issued by the State Pollution Control Board, State Government, Central Pollution Control Board and Ministry of Environment, Forests and Climate Change, New Delhi and other related departments.
- The Chartered Engineer / Institute has to certify with seal that all the documents and applications, which have been submitted to the Board, are true copies of the originals and no forged / false information is being supplied to the Board.
- 7.3 The Chartered Engineer / Institute shall inform the Board, if false / wrong / incorrect / misleading information has been given to them by the industry, operation or process or otherwise action will be initiated against the Chartered Engineer / Institute as deemed fit including cancellation of the recognition certificate. The Chartered Engineer / Institute shall be liable for errors of commission and / or omission as per provisions of the Water (Prevention and Control of Pollution) Act, 1974, Air (Prevention and Control of Pollution) Act, 1981 and Environment (Protection) Act, 1986 and Rules made thereunder as amended from time to time or any other law as applicable.
- 7.4 The Chartered Engineer / Institute will not issue any receipt / certificate / any other document to the industry on behalf of the

Board / Government or any other authority or agency of the Government.

- 7.5 The Chartered Engineer / Institute shall have proper office and transport facilities. The Board will not provide any such facility / facilities
- 7.6 The Chartered Engineer / Institute shall not sublet or delegate the functions entrusted to him / her by Punjab Pollution Control Board to any other person, in any manner whatsoever.
- 7.7 The responsibility for furnishing of false information / documents or concealment of any fact lies jointly and severally with the industry, operation or process and the concerned Chartered Engineer / Institute.
- All the recognized Chartered Engineers / Institutes shall submit the Bank Guarantee amounting to Rs.2,00,000/- only (Rupees two lacs only), as an assurance to comply with terms of reference prescribed for Chartered Engineer / Institute and for ensuring proper working on their part. Bank Guarantee is to be furnished in the format as prescribed by the Board and as amended from time to time.
- 7.9 The Chartered Engineer / Institute shall maintain all the record for inspection and for providing the same under the provisions of RTI Act, 2005.
- 7.10 The Chartered Engineer / Institute shall be liable to submit the report and their certification to the Board on the format as prescribed by the Board from time to time.

- 7.11 The Chartered Engineer / Institute shall be bound to perform such duties / functions as assigned by the Board from time to time.
- 7.12 In case of any wrong reporting, harassment to industry / project proponent or doing of any other activity not covered and authorized under TOR by the Chartered Engineer / Institute, the Board shall be at liberty to encash the Bank guarantee, revoke / cancel the recognition certificate / authorization accorded to the Chartered Engineer / Institute and to initiate legal action as per law.
- 7.13 No Chartered Engineer / Institute shall work as a consultant to the industry / group of affiliated industries where one or more directors / proprietor / partners are common; for which he is appointed / selected as Chartered Engineer / Institute. The consultancy work includes:
  - (a) analysis of effluent (waste water, air emission and solid / Hazardous Waste)
  - (b) design / operation/ upgradation of Environment Management System
  - (c) Carrying out EIA studies etc.
  - (d) Installation of Pollution Control Equipments.

# 8. FEE TO BE CHARGED BY THE CHARTERED ENGINEER / CHARTERED INSTITUTE:

The Chartered Engineer / Institute is allowed to charge Professional fee for the inspection / processing of an application from various industries as follows :

lo.	Scale of the industry	Rate	
		Facilitation charges (as per policy guidelines)	Preparation of Environmental Audit Report
	LARGE SCALE		
i)	17 category and grossly Polluting Industries.	Rs.30,000/-	Rs.15,000/-
ii)	Red Category	Rs.25,000/-	Rs. 10,000/-
iii)	Orange Category	Rs.20,000/-	
iv)	Green Category.	Rs.15,000/-	
	MEDIUM SCALE		
i)	Red category	Rs.20,000/-	Rs.7,500/-
ii)	Orange category	Rs.15,000/-	
iii)	Green category	Rs.10,000/-	
	SMALL SCALE		
i)	Red Category	Rs.7500/-	Rs.5000/-
ii)	Orange Category	Rs.5,000/-	Rs.2,500/-
iii)	Green Category	Rs.3,000/-	
	i) ii) iii) iii) iii) iii)	i) 17 category and grossly Polluting Industries.  ii) Red Category iii) Orange Category iv) Green Category.  MEDIUM SCALE  i) Red category iii) Orange category SMALL SCALE  i) Red Category iii) Orange Category	Incomposition   Incompositio

#### 9. VALIDITY OF EMPANELMENT:

- 9.1 In the first instance, the recognition certificate granted to the Chartered Engineer / Institute shall be valid for a period of two years from the date of issuance which may be further extended from time to time after assessing the performance of the Chartered Engineer / Institute.
- 9.2 The Chartered Engineer / Institute shall not perform the function under this instrument unless and until the Chartered Engineer / Institute has valid recognition certificate of the Board.
- 9.3 The recognition certificate issued by the Punjab Pollution Control Board to any Chartered Engineer / Institute can be suspended / revoked / cancelled during the validity period by the Competent Authority of the Board without assigning any reason and no challenge in this regard shall be maintainable.

#### 10. JURISDICTION:

The Chartered Engineer / Institute shall be allowed to work in the area of jurisdiction for which Chartered Engineer / Institute has been authorized by the Board. The number of Chartered Engineer(s) / Institute(s) to be authorized for an area will be decided by the Board and shall be reviewed from time to time.

# 11. COMPLAINTS AGAINST CHARTERED ENGINEER / CHARTERED INSTITUTE:

Complaint(s) against the action(s) or conduct of a recognized Chartered Engineer / Institute shall be reviewed and investigated by Punjab Pollution Control Board using documented procedures. A valid substantiated complaint may result in cancellation of certification / recognization alongwith other appropriate action.

### 12. DISPUTES:

12.1 Any dispute arising between the Chartered Engineer / Institute and the owner of the industrial unit shall be decided by such officer of the Board who has been authorized by the Board in this regard, on the receipt of the application from either party.

#### **13**. **TERMINOLOGY**:

NOC No Objection Certificate

CETP Common Effluent Treatment Plant

TSDF Treatment Storage and Disposal Facility

for Hazardous Waste

CBWTSDF Common Bio-medical Waste Treatment

Storage and Disposal Facility

EAS Environmental Audit Statement

EAR Environmental Audit Report

EIA Environment Impact Assessment

RTI Right to Information