



GOVERNMENT OF THE PUNJAB
ENVIRONMENT PROTECTION AGENCY
EP&CCD Green Building, 110, Block - H,
College Road, Gulberg -II, Lahore

Dated the 20th January, 2026

EPA/PNC/O/260120/0002

NOTIFICATION

443/PA/DG/EPA/2026

CONSTITUTION OF TECHNICAL COMMITTEE FOR ASSESSMENT OF ENVIRONMENTAL IMPACT OF MECHANIZED VERSUS HANDMADE BRICK MAKING IN ZIG-ZAG BRICK KILNS

WHEREAS, the Environmental Protection Agency (EPA) Punjab, as the provincial environmental regulatory authority, is mandated to protect, conserve, rehabilitate and improve the environment and to prevent and control pollution in the Province;

2. **AND WHEREAS**, the Environmental Protection Agency (EPA) Punjab has successfully ensured the transition of all brick kilns (approximately 8,000+) operating in Punjab from the conventional Bull Trench Kiln (BTK) technology to the comparatively cleaner and more environment-friendly Zigzag Kiln methodology, resulting in significant improvement in air quality and reduction in emissions;

3. **AND WHEREAS**, despite this technological transition, the issue of bonded and manual labour persists in the brick kiln sector, wherein entire families, including children, continue to be engaged in the manual moulding of bricks under coercive, unsafe and inhumane working conditions, often in extreme weather, thereby warranting serious policy-level, technical and regulatory interventions;

4. **AND WHEREAS**, EPA Punjab intends to undertake a comprehensive comparative study to assess and quantify the emissions associated with the production and firing of manually moulded bricks and machine-moulded bricks, with a view to determining their relative environmental impacts under comparable operating conditions;

5. **AND WHEREAS**, Section 6(1)(i) of the Punjab Environmental Protection Act, 1997 empowers the Environmental Protection Agency to establish systems and procedures for surveys, monitoring, measurement, examination, investigation and research for the prevention and control of pollution;

6. **AND WHEREAS**, Section 6(1)(j) of the Punjab Environmental Protection Act, 1997 authorizes the Environmental Protection Agency to promote research and development of science and technology contributing to environmental protection and sustainable development;

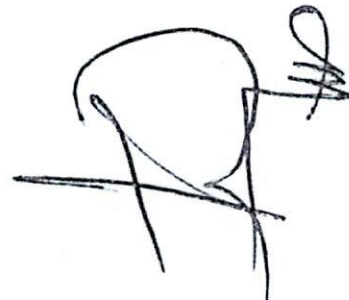
NOW, THEREFORE, in exercise of the powers conferred under Section 6(1) (i) and (j) read with Section 5(4) of the Punjab Environmental Protection Act, 1997, I, Dr. Imran Hamid Sheikh, PAS, Director **General, Environmental Protection Agency, Punjab**, do hereby constitute the following **Technical Committee** to assess the environmental impact of mechanized brick making vis-à-vis handmade brick making in Zig-Zag brick kilns:

Sr. No.	Officer	Responsibility / Role
i.	Dr. Nusrat Naz , Director (ML&I), EPA Punjab	Convener
ii.	Representative from PCSIR	Member
iii.	Representative from Chemical Engineering Department, LUMS	Member
iv.	Representative from Materials Testing Laboratory, Civil Engineering Department, UET	Member
v.	Representative of Brick Kilns Association of Pakistan	Member
vi.	Mr. Ahmad Akram , Regional Officer, EPA Lab, Lahore	Member / Secretary
vii.	Any other member to be co-opted by the members of the Committee	Member

8. **AND THEREFORE**, under the Terms of Reference (TORs), the committee shall:

- i. To conduct a **comparative analysis of specific energy consumption** in handmade and machine-made brick production, including quantification of fuel consumption per unit of brick.
- ii. To **measure and compare emissions** from Zig-Zag brick kilns used for firing (baking) an equivalent number of handmade and machine-made

- bricks using consistent methodologies.
- iii. To prepare a **comprehensive scientific report** assessing the environmental footprint of traditional (manual) and mechanized brick making, including fuel economy, emission profiles and comparative analysis based on laboratory-scale experiments and/or real-world monitoring with consistent methodologies.
 - iv. To employ **standardized testing protocols** and scientifically robust methodologies to ensure accuracy, reproducibility and comparability of results.
 - v. **Submit a final report** with findings and recommendations to the Director General, EPA Punjab within **15 days** of issuance of this notification.
9. This is issued with the approval of Director General, EPA Punjab.



(ANJUM RIAZ)
DIRECTOR
PLANNING AND COORDINATION

C.C.

A copy is forwarded for information and necessary action to the:-

- 1) Secretary
Communication & Works Department
with the request for nomination, please
- 2) **The Director General, PCSIR Laboratories Complex, Lahore
with the request for nomination, please**
- 3) Director , (Monitoring Laboratory and Implementation)
Environment Protection Agency
- 4) **The Chairman, Civil Engineering Department, UET, Lahore
with the request for nomination, please**
- 5) **Head / Program Director, Department of Chemistry & Chemical Engineering,
LUMS
with the request for nomination, please**
- 6) Assistant Director (Air) , (Air)
Environment Protection Agency
- 7) Personal Assistant , (PA To DG)
Environment Protection Agency

8) PSO To Secretary EP&CCD
Environment Protection and Climate Change Department

9) ***The PSO to Minister for Environment, Forest and P&D Board, Punjab.***