



DELHI METRO RAIL CORPORATION LIMITED

Conditions of Contract on Environment

for

Civil Works of O&M for Contract Value upto Rs.1.0 Crore

Delhi Metro Rail Corporation Ltd.

Metro Bhawan

Fire Brigade Lane, Barakhamba Road,

New Delhi-110001

Environmental Requirements

1. The construction works shall be undertaken in accordance with all applicable legislation and Indian statutory requirements listed below but not limiting to:
 - i) Environment Protection Act, 1986 and Rules 1986
 - ii) Air (Prevention and control of Pollution) Act, 1981 and Rules 1981
 - iii) Water (Prevention and Control of Pollution) Act, 1974 and Rules 1974
 - iv) The Noise Pollution (Regulation & Control) Rules, 2000
 - v) Notification on Control of Noise from Diesel Generator (DG) sets, 2002
 - vi) Notification, Central Ground Water Board, Act January 1997 (New Rule)
 - vii) Manufacture, Storage & Import of Hazardous Chemicals Rules, 1989
 - viii) Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016.
 - ix) Delhi Tree Preservation Act (1994) and Rules 2010.
 - x) Batteries (Management and Handling) Rules
 - xi) Fly ash utilization notification, Sept 1999 as amended in August 2003
 - xii) Guidelines of Delhi Urban Arts Commission and Central Vista Committee
 - xiii) The Petroleum Act, 1934 and Rules 1976
 - xiv) Solid waste management rule, 2016.
 - xv) Construction and Demolition Waste Management Rule 2016.
 - xvi) E-Waste (Management) Rules, 2016
 - xvii) Plastic Waste Management Rule, 2016.
 - xviii) *Applicable NGT Guidelines*
2. The Contractor shall take all precautions to avoid any nuisance arising from his works. Nuisance will include (i) Improper environmental sanitation (housekeeping), (ii) improper stacking of materials, (iii) lack of barricades where required, (iv) emission of dust, waste water and noise etc. which is a cause of complaint.
3. The Contractor shall maintain the site reasonably clean, keep free from obstruction and properly store any construction equipment, tools, and materials. General Housekeeping shall be carried out and ensured at all times at work sites, Stores and Offices.
4. The contractor shall ensure that no trees, existing or otherwise, shall be harmed and damage to roots during the work.
5. The contractor shall not fell, remove or dispose of any tree or forest produce in any land handed over to him for the construction of works and facilities related to Delhi Metro except with the prior permission.
6. The Contractor shall erect barricades securely around all construction work sites during the entire phase of construction activity to prevent escape of fugitive material.

7. The contractor shall not store any construction material/debris/soil outside barricaded area.
8. Soil & debris of any kind that is stored in the site shall be fully covered in all respects with tarpaulin or hazen cloth so that it does not escape in the air in any form.
9. The dust emissions from the construction site should be completely controlled and all precautions taken in that behalf which includes but not limited to, regular water sprinkling.
10. Any deposition of material/muck/soil on public streets due to construction should be removed by manual sweeping, or by deploying electro – mechanical devices.
11. Construction material and debris shall be carried in the trucks or other vehicles which are fully covered and protected so as to ensure that the construction debris or the construction material does not get dispersed into the air or atmosphere, in any form whatsoever.
12. The Contractor is not allowed to discharge waste-water from the site in a manner that may block the existing drain. Intimation to employer is required before any such discharge.
13. To the extent required to meet the noise limits the Contractor shall use reasonable efforts to include noise reduction measures as advised by Employer. Failure to do so shall invite penalty. This includes stoppage of work at night.
14. The Contractor shall handle waste in a manner that ensures they are held securely without loss or leakage thus minimizing potential for pollution following all legal requirements for handling and storage. The Contractor shall maintain and clean waste storage areas regularly.
15. The contractor shall transport and dispose of all waste properly complying all legal/statuary requirements. As such, transportation and disposal of all waste shall be strictly managed by the contractor as per applicable legal provisions.
16. The C&D waste shall be disposed off in a manner in compliance with the procedure given in the Construction & Demolition waste management Rules, 2016.
17. Disposal of C&D waste along the river bed, natural drainage and wet land is strictly prohibited and non compliance will invite severe action.
18. Chemicals classified as hazardous chemicals under "Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 of Environment (Protection) Act, 1986 shall be disposed off in a manner in compliance with the procedure given in the rules under the aforesaid act.
19. Measures shall be taken to prevent mosquito breeding at site.
20. The contractor should use energy efficient pumps and motors having efficiency 70% as a minimum.
21. For production of concrete, the concrete mixer shall not be more than 5 years old. The Contractor shall demonstrate the age of the mixer.
22. If the contractor fails to implement the above clauses to the satisfaction of the client, then DMRC may get the same done by engaging another agency and

recovering the cost from the contractor. This however, does not restrict the right of DMRC to impose penalty for non compliance.

Penalty for non-compliance

The contractor shall follow the applicable laws, regulations and legal requirements in so far they are applicable as given in clause-1.

The employer may impose penalty for non-compliance in respect of each the clauses mentioned above, as follows:

Clause no.	Penalty Amount
Clause 2	Rs. 5,000/- on each violation per day up to maximum of 5% of contract value
Clause 3	Rs. 5000/- on each violation per day up to maximum of 5 % of contract value
Clause 5	Rs. 1,00,000/- on felling of each tree without permission
Clause 6	Rs. 5,000/- on each violation per day up to maximum of Rs. 50,000/-
Clause 7 to 11	Rs. 5,000/- per single violation maximum of 5% of contract value
Clause 12	Rs. 5,000/- for first violation and Rs.10,000/- for each subsequent violations.
Clause 13	Rs. 5,000/- on each violation per day up to maximum of Rs. 25,000/-
Clause 14 & 15	Rs. 5,000/- on each violation per day up to maximum of Rs. 25,000/-
Clause 16 & 17	Rs. 25,000/- for first instance and Rs.50,000/- for subsequent instances.
Clause 18	Rs. 5,000/- for first instance and Rs.10,000/- for subsequent instances.
Clause 19	Rs.5,000/- on each occasion per day up to maximum of Rs.50,00/-
Clause 20 & 21	Rs. 5,000/- for first instance and Rs.10,000/- for subsequent instances.

23. The ceiling limit of total penalty on account of environmental non compliance shall not exceed 10% of total contract value.