Government of the People's Republic of Bangladesh Department of Environment www.doe.gov.bd Head Office, Paribesh Bhaban

E-16 Agargaon, Dhaka-1207

Memo No: DOE/Clearance/5725/2017 / 556

Date: 05/11/2017

Subject: Environmental Clearance for Mass Rapid Transit Development Project (Line 5 from Vatara to Hemayetpur).

: Your application dated 10/10/2017.

Please refer to your letter of 10/10/2017 on the captioned subject, I have the pleasure to award the Environmental Clearance as well as approval of Environmental Impact Assessment (EIA) report for Mass Rapid Transit Development Project (Line 5 from Vatara to Hemayetpur).

A copy of the said Environmental Clearance Certificate is attached herewith for your kind information and necessary action at your end.

(Syed Nazmul Ahsan)

Director (Environmental Clearance) Phone # 8181673

Executive Director

Dhaka Transport Coordination Authority (DTCA) Road Transport and Highways Division Ministry of Road Transport and Bridges 13-14th Floor, Nagar Bhaban, Fulbaria, Dhaka-1000.

Copy Forwarded to:

- PS to the Secretary, Ministry of Environment and Forests, Bangladesh Secretariat, Dhaka.
- 2) Director, Department of Environment, Dhaka Regional/Dhaka Metropolitan Office, Dhaka.
- Deputy Director, Department of Environment, Dhaka District Office, Dhaka. 3)
- Assistant Director, Office of the Director General, Department of Environment, Head Office, Dhaka.

Government of the People's Republic of Bangladesh

Department of Environment www.doe.gov.bd

Head Office, Paribesh Bhaban E-16 Agargaon, Dhaka-1207

Environmental Clearance Certificate

Section 12 (1), of the Bangladesh Environment Conservation Act, 1995 (Amended 2010)

Clearance Certificate Number: 556

File number: DOE/Clearance/5725/2017

Clearance Certificate Issue Date: 05, November 2017

Renewal date not later than: Oq November 2018

A. Clearance Certificate Type

Environmental Clearance Certificate

B. Clearance Certificate Holder

Executive Director

Dhaka Transport Coordination Authority (DTCA)

Road Transport and Highways Division

Ministry of Road Transport and Bridges

13-14th Floor, Nagar Bhaban, Fulbaria, Dhaka-1000.

C. Premises to which this Clearance Certificate Applies

Mass Rapid Transit (MRT) line-5 will be 22 km long east west corridor from Hemayetpur to Vatara via Dar-us-Salaam road, Mirpur road, Banani cantonment and Madani Avenue. Underground section is planned in the central area of Dhaka for 13.5 km long and viaduct structure is planned at suburban area for 6.5 km.

D. Activities for which this Clearance Certificate Authorizes and Regulates

The following activities will be implemented under Mass Rapid Transit Development Project (Line-5):

Pre-construction Phase

- · Selection of final route alignment.
- Planning and Utility Diversion specially in the open cut area and viaduct section if there any utility line
- Land acquisition for the depot area as well as road side area where underground station will be constructed by open cut method
- Preparation of construction site

Construction Phase

- 22 km MRT line construction (13.5 km underground line, 6.5 km viaduct line).
- · Depot construction.

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- Tunneling (range from 16 m to 37m underground) after Aminbazar station to Natun Bazar Station.
- Elevated line construction from Hemayetpur to Aminbazar Station and after the Natun Bazar to Vatara Station.
- 14 Station Construction (9 underground stations construction by open cut method and 5 elevated viaduct station construction.)
- Manufacturing of girder for elevated section and RC segment for underground tunnel in the construction yard.

Operation Phase

- Test run of the MRT line 5.
- · Commercial operation.
- · Maintenance of the station.
- · Washing and repairing of the train in the depot.
- Automatic ticketing system maintenance.
- Maintenance the continuous power supply system.
- Implement the environmental management plan.

E. Terms and Conditions for Environmental Clearance Certificate

- 1. Limit Condition for Discharges to Air and Water: The Environmental Clearance Certificate must comply with schedule 2 and 10, rule 12 of the Environment Conservation Rules, 1997.
- 2. Noise Limit: The Environmental Clearance Certificate must comply with the Noise Pollution (Control) Rules, 2006.

In case of non-coverage of ECR 1997, the Asian Development Bank & World Bank Environment, Health and Safety Guideline shall be adhered to.

3. Operating conditions:

- 3.1 Activities must be carried out in a competent manner. This includes:
 - (a) the processing, handling, movement and storage of materials and substances used to carry out the activity; and
 - (b) the treatment, storage, processing, reprocessing, transport and disposal of waste generated by the activity.
- 3.2 All plant and equipment installed at the premises or used in connection with the Environmental Clearance activity:
 - (a) must be maintained in a proper and efficient condition; and
 - (b) must be operated in a proper and efficient manner.
- 3.3 Construction works shall be restricted to day time hours so as to avoid/mitigate the disturbance of local lives as well as implementation schedules of the works shall be notified in advance to nearby residents.
- 3.4 Storage area for chemicals and other construction materials shall be carefully selected to avoid disturbance of the natural drainage. To avoid soil contamination at labour camp and work site chemical, cement and petroleum derivatives shall be handled cautiously.
- 3.5 Sufficient number of culverts, bridges and other drainage facilities shall be installed properly to ensure sufficient cross drainage capacity.
- 3.6 This shall be ensured that soil is obtained from nearby areas, which are free of invasive plants. Re-vegetation and replanting shall be undertaken if rehabilitation works involve extensive vegetation clearance.

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- 3.7 Vegetation Clearance shall be minimizing at the construction phase as to minimize soil erosion. Soils for embankments shall be properly tested and compacted to ensure stability.
- 3.8 Proper construction practices shall be followed that minimize loss of habitats and fish breeding, feeding & nursery sites.
- 3.9 Proper and adequate sanitation facilities shall be ensured in labor camps throughout the proposed project period.
- 3.10 In order to control noise pollution, vehicles & equipment shall be maintained regularly; working during sensitive hours and locating machinery close to sensitive receptor shall be avoided.
- 3.11 No solid waste can be burnt in the project area. An environment friendly solid waste management should be in place during whole the period of the project in the field.
- 3.12 Proper and adequate on-site precautionary measures and safety measures shall be ensured so that no habitat of any flora and fauna would be demolished or destructed.
- 3.13 Any heritage sight, ecological critical area, and other environmentally and / or religious sensitive places shall be avoided during project construction phase.
- 3.14 Resettlement plan should be properly implemented and people should be adequately compensated, where necessary.
- 3.15 Appropriate permission would be required to obtain from the forest department in favor of cutting/felling of any plant/tree/sapling forested by any individual or government before doing such type of activity.
- 3.16 Construction material should be properly disposed off after the construction work is over.
- 3.17 All the required mitigation measures suggested in the Environmental Management Plan (EMP) included in the EIA report along with the emergency response plan are to be strictly implemented and kept operative/functioning on a continuous basis.

4. Monitoring and Recording conditions:

- 4.1.1 The results of any monitoring required to be conducted by this Clearance Certificate must be recorded.
- 4.1.2 The following records must be kept in respect of any samples required to be collected for the purposes of this Clearance Certificate:
 - (a) the date(s) on which the sample was taken;
 - (b) the time(s) at which the sample was collected;
 - (c) the point at which the sample was taken; and
 - (d) the name of the person who collected the sample.

4.2. Requirement to monitor concentration of pollutants discharged

For each monitoring, the Clearance Certificate holder must monitor (by sampling and obtaining results by analysis) the following parameter: air quality, water quality and Noise.

- 5. Reporting Conditions: Environmental Monitoring Reports shall be made available simultaneously to Head quarters and Dhaka Regional/ Dhaka Metropolitan office of the Department of Environment on a quarterly basis during the whole period of the project.
- 6 Notification of environmental harm: The Clearance Certificate holder or its employees must notify the Department of Environment of incidents causing or threatening material harm to the environment as soon as practicable after the person becomes aware of the incident.

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F. Recording of pollution complaints

The certificate holder must keep a legible record of all complaints made to the certificate holder or any employee or agent of the certificate holder in relation to pollution arising from any activity to which this Environmental certificate applies. The record must include details of the following:

- (a) the date and time of the complaint;
- (b) the method by which the complaint was made;
- (c) any personal details of the complainant which were provided by the complainant or, if no such details were provided, a note to that effect;
- (d) the nature of the complaint;
- (e) the action taken by the certificate holder in relation to the complaint, including any follow-up contact with the complainant; and
- (f) if no action was taken by the certificate holder, the reasons why no action was taken.

The record of a complaint must be kept for at least 4 years after the complaint was made. The record must be produced to any authorized officer of the DOE who asks to see them.

G. Validity of the Clearance Certificate: This Environmental Clearance is valid for one year from the date of issuance and Project Director shall apply for renewal to Head Office of DOE at Dhaka with a copy to Dhaka Regional/ Dhaka Metropolitan office of DOE at least 30 days ahead of expiry.

Violation of any of the above conditions shall render this clearance void.

This Environmental Clearance Certificate has been issued with the approval of the appropriate authority.

(Syed Nazmul Ahsan)

Director (Environmental Clearance)

15:11-2017