Subject: Approval of Terms of Reference (TOR) for Environmental Impact Assessment (EIA) in favour of Preparatory Activities of Dhaka Sanitation Improvement Project (PADSIP), Dhaka WASA.

Ref: Your application on 27/03/2018.

With reference to your letter dated 27.03.2018 for the subject mentioned above, the Department of Environment hereby gives approval of TOR for Environmental Impact Assessment (EIA) in favour of Preparatory Activities of Dhaka Sanitation Improvement Project (PADSIP), Dhaka WASA subject to fulfilling the following terms and conditions.

1. Dhaka WASA shall conduct a comprehensive Environmental Impact Assessment (EIA) study considering the overall activity of the said Project in accordance with the TOR submitted to the DOE and additional suggestions provided herein.

2. The EIA report should be prepared in accordance with following indicative outlines:

1. Executive summary

2. Environmental Baseline Data

2.1. Project Data Sheet

a. Project location and area
   The location of the project and area involved

b. Project Concept
   An outline of description of the concept and objectives of the project, the types of activities expected, and the development plans for achieving the objectives.

c. Project Components
   Components of the project concerning the types of activities proposed to be located in the area, the number and distribution of underground and overhead tanks, other infrastructure, utilities and service requirements.

d. Project Activities
   A list of the main project activities to be undertaken during: site clearing and construction, operation of activities and associated developments.

e. Project schedule
   The phase and timing for development of the surface water treatment plant, transmission line, underground and overhead tanks in Khulna, infrastructure and other facilities required.

f. Resources and utilities demand
   Resources required to develop the project, such as soil and construction material and demand for utilities (water, electricity, sewerage, waste disposal and others), as well as infrastructure (road, drains and others) to support the project.
2.2. Physical and chemical components

a Map and survey information
   Location map
   Cadastral map showing land plots (project and adjacent area)
   Topographic map for identifying catchment boundaries, general land use and terrain
   survey map showing contour information
   Aerial photograph

b Geology and soil
   Geological map showing geological units, fault zone, and other natural features
   Soil map and soil profile analysis. This may only be established from soil survey and
   geotechnical investigation (important for analysis for soil stability, cut and fill)
   Soil properties and composition

c Hydrology and drainage
   Catchment boundaries of rivers/lakes/canals which drain the project
   Hydrological characteristics of rivers in and around the project area, including flow,
   salinity and sediment load for varies return period
   Flood characteristics and historical records of flood events covering areas affected, height
   of flood and frequency
   Ground water potential and aspects of aquifer, such as recharge zones, ground water
   abstraction etc.
   Drainage system and drainage characteristics in the project area
   Coastal zone characteristics

d Water quality and use
   Water quality of the receiving water bodies likely to be affected by the project
   Beneficial uses of the water need to be established for rivers or any other water bodies
   likely to be impacted by the development. The locations of these water utilization should
   be identified in the map
   Sources of pollutants from existing and known future activities within the catchment of
   the rivers

e Air quality and noise
   Baseline data of the project site with respect to air quality and noise level
   Air pollutant and noise sources from existing and known sources

2.3. Ecological components

a Habitats
   Aquatic habitat likely to be impacted by the project
   Terrestrial habitat likely to be impacted by the project

b Species and Population
   Identification of population of flora and fauna to assess their conservation status of being
   rare, endemic and endangered
   Identification of population of flora and fauna to assess their conservation status of being
   rare, endemic and endangered
   Biodiversity of the project site

2.4. Social and Economic Factors

a Population
Population within and around the project area
Organizational structure of communities and the degree of public awareness and response to
the proposed project

b Human settlement
Size and distribution of human settlement
Community infrastructure, utilities and services available
Housing and future requirements within the impacted area
Historical/archaeological features of significance
c Economic activities
Economic activities of population in and around the project area. Activities should
include those that are dependent on resources which may be impacted by the project
Income dependence on economic activities impacted directly or indirectly by the project
Employment and economic returns to the population by the project

2.5. Infrastructure and utilities

a Availability of infrastructure to support the proposed project. Attention should focus on
different transportation requirements due to project increase in traffic to and from the
project area
b Availability of utilities and services, especially water, gas and electricity supply,
sewerage and waste disposal facilities to cater to the projected demand for such utilities
and services

3. Identification and Prediction of Potential Impacts (identification, prediction and
assessment of positive and negative impacts likely to result from the proposed
project).

In identification and analysis of potential impacts—the ‘Analysis’ part shall include
the analysis of relevant spatial and non-spatial data. The outcome of the analysis
shall be presented with the scenarios, maps, graphics etc. for the cases of anticipated
impacts on baseline. Description of the impacts of the project on air, water, land,
hydrology, vegetation-man maid or natural, wildlife, socio-economic aspect shall be
incorporated in detail.

4. EVALUATION OF IMPACTS

The judgment of significance of impacts can be based on one or more of the following,
depending on the environmental factor being evaluated. These are:

i. comparison with laws, regulation or accepted national or international standards
ii. reference to pre-set criteria such as conservation or protected status of a site, feature or
species
iii. consistency with pre-set policy objectives
iv. consultation and acceptability with the relevant decision makers, local community or the
general public.

5. MITIGATION OF IMPACTS

Mitigation measures which may be considered including:
i. changing project layout, transport routes, disposal routes or locations, timing or engineering
design
6. Environmental Management Plan

The responsibilities and actions required of the project initiator or implementing body should be identified in the EMP. Some of those responsibilities and actions include: allocation of institutional responsibilities for planning and management of environmental requirements, allocate responsibility to execute mitigation action, implement a programme of monitoring to check the effectiveness of mitigation measures, and if necessary, taking additional measures to correct or overcome the impact in question, in-house monitoring capacity building and allocation of budget.

The EMP should recognize and include the following:

i) Management of soil erosion, land slides and siltation during site clearance and earth work
ii) Management of runoff
iii) Regulation of the types of activities allowed in the project area
iv) Management of liquid, solid and gaseous wastes generated from the project area
v) Environmental monitoring requirements
vi) Responsibilities and role of the project proponent for protection of environment

The program for monitoring should generally identify:

i. the type of monitoring required
ii. the location of monitoring
iii. the types of measures to be undertaken (e.g. dissolve oxygen, if fisheries is important in a river)

7. Management Plan/Procedures:

For each significant major impact, proposed mitigation measures will be set out for incorporation into project design or procedures, impacts, which are not capable of mitigation, will be identified as residual impacts. Both technical and financial plans shall be incorporated for proposed mitigation measures.

An outline of the Environmental Management Plan shall be developed for the project.

In Environmental Monitoring Plan, a detail technical and financial proposal shall be included for developing an in-house environmental monitoring system to be operated by the proponent's own resources (equipments and expertise).

8. Consultation with Stakeholders/Public Consultation

ensures that consultation with interested parties and the general public will take place and their views taken into account in the planning and execution of the project

Beneficial Impacts (summarize the benefits of the project to the Bangladesh nation, people and local community and the enhancement potentials)

9. Emergency Response Plan & Disaster Impact Assessment

10. Conclusion and Recommendations

3. Without approval of EIA report by the Department of Environment, Dhaka WASA shall not be able to open L/C in favor of importable machineries.

4. Without obtaining Environmental Clearance, Dhaka WASA shall not start operation of the projects.
5. Dhaka WASA shall submit the EIA along with a filled-in application for Environmental Clearance in prescribed form, the applicable fee in a treasury chalan, the applicable VAT on clearance fee in a separate treasury Chalan, the no objection certificates (NOCs) from the local authority, NOC from forest department (if it is required in case of cutting any forested plant/trees-private or public) and NOC from other relevant agencies for operational activity etc. for each project to the Dhaka Metropolitan of DOE in Dhaka with a copy to the Head office of DOE in Dhaka.

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Copy Forwarded to:
1) The Secretary, Ministry of Environment and Forests, Bangladesh Secretariat, Dhaka.
2) Director, Department of Environment, Dhaka Metropolitan Office, Dhaka.
3) Staff Officer to the Director General, Department of Environment, Head Office, Dhaka.