

Organization Unit:	Environment Department	الوحدة التنظيمية :
Work Instructions title:	Technical Guideline No. 2 Environmental Impact Assessment (EIA) Requirements for Development and Infrastructure Projects	عنوان الوثيقة :
Doc Ref.	DM-ED-GU02-EIARDIUP	رقم الوثيقة :

TECHNICAL GUIDELINE

Number 02

Environmental Impact Assessment (EIA) Requirements for Development and Infrastructure Projects

March 2019

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1.0 Introduction

This Technical Guideline shall be used in conjunction with the EPSS Technical Guideline No. 01 on Environmental Impact Assessment (March 2019). The environmental impact assessment (EIA) procedures and requirements outlined in this Guideline are applicable to any development and infrastructure project and to any project or activity as may be determined by the Environmental Planning & Studies Section (EPSS).

Issuance of this Guideline shall in effect supersede the EPSS Technical Guideline No. 02 on EIA Requirements for Land Development, Infrastructure, and Utility Projects issued on August 2018.

2.0 Reference Legislations

This Technical Guideline is issued under the same reference laws and regulation as for the above-mentioned EPSS Technical Guideline No. 01. In particular, this Guideline is issued in accordance to the provisions of Federal Law No. 24 of 1999 for the Protection and Development of the Environment, and its implementing rules and regulations.

3.0 Categorisation of Projects

This Chapter provides a list of Projects that are subject to an EIA, as required by the Federal Law No. 24 of 1999, prior to the commencement of any construction activity, any changes or modification in its process or component, or any planned expansion of an existing Project.

This Guideline identifies two types of EIA studies as follows:

- EIAR: quantitative EIA leading to the preparation of an EIA Report (EIAR); and
- EIAS: qualitative EIA leading to the preparation of an EIA Summary (EIAS).

The types of Projects and the corresponding type of EIA document required are presented in the following Section 3.1.

3.1 List of Projects Required to be Subjected to an EIA (Mandatory List)

Project Classification as per Federal Law No. 24 of 1999	Project Type	Threshold / Criteria	Required EIA Document
Non-renewable Resource Projects			
<i>Petrol projects (similar but not limited to benzene, diesel, oils or fats) and natural gas projects, which include exploration (discovery and extraction), storage, transportation (i.e. pipeline), selling and collecting (i.e. distribution)</i>	Fossil fuel, natural gas, and mineral ore exploration and development including offshore structures or pipelines	All	EIAR
	Onshore pipelines for the transport of oil, natural gas or petrochemical products	In new oilfield or pipeline corridor	EIAR
		In existing oilfield or pipeline corridor	EIAS
	Bulk storage facilities for petroleum, natural gas or petrochemical products	Tank farm or tank terminal	EIAS
Fuel filling stations	All	EIAS	
Power Generation and Desalination Projects			
<i>Power plant projects (regardless of power source) including power transmission lines, substations, installations and related equipment used</i>	Power generation plants (fossil fuel)	All	EIAR
	Renewable energy plants (i.e. hydro, geothermal, solar power plants, Waste to Energy)	All	EIAR
	Open substations	All	EIAS
	High voltage overhead power transmission lines	All	EIAS

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Project Classification as per Federal Law No. 24 of 1999	Project Type	Threshold / Criteria	Required EIA Document
<i>Water desalination projects (regardless of the technology) including pipelines, assembly, storage, distribution, disinfection, treatment, installations and related equipment used, discharges (i.e. brine)</i>	Desalination plant and potable water processing facility	All	EIAR
	Reverse osmosis (RO) plant	Using Treated Sewage Effluent (TSE) or desalinated water	EIAS
	Sea water reverse osmosis (SWRO) plant	All	EIAR
<i>Groundwater resource usage Projects including exploration, extraction, transfer, storage, injection, installation and related equipment</i>	Groundwater extraction, purification and recharge	All	EIAR
	Dams, water reservoir	All	EIAR
Land, Air and Sea Transport Projects			
<i>Fast lane projects including bridges and roadways</i>	New highways, road network, or bridges	All	EIAR
	Railway and mass transport network	All	EIAR
<i>Tunnel projects</i>	Tunnels, tunnelling and related works	All	EIAR
	Sewer, irrigation, or drainage network	All	EIAR
<i>Marina and seaport projects and waterway and dredging projects that require dredging of marine, anchors and seaport pathways</i>	Development of a new harbour(s) or terminal(s) or marina or modification of an existing harbour or marina in coastal zone (including rock works, capital dredging or excavation, quay walls, reclamation)	All	EIAR
	Development of artificial canals connected to the Creek or sea or existing waterways (including excavation or dredging, retaining walls)	All	EIAR
	Maintenance dredging (including approach channels, turning basins)	All	EIAS
	Development of promenade or new marina or modification of existing marina in Creek or waterways (including floating pontoons with mooring systems, piles supporting platforms, quay walls, revetment)	With any reclamation or encroachment into the Creek or waterways	EIAR
		Without any reclamation or encroachment into the Creek or waterways	EIAS
Modification of existing marina in the coastal zone (including replacement or repairs to existing floating pontoons and mooring system)	<ul style="list-style-type: none"> Up to 10 no. of berths or slips Without any rock works, dredging or reclamation 	EIAS	
<i>Bridge over the water</i>	Bridges above marine water (including Piers located in Creek or waterways or sea)	All	EIAR
<i>Airport and airfield construction projects regardless of size</i>	Airport and airfields	All	EIAR
Projects Related to Waste			
<i>Waste disposal projects (regardless of method used: buried, incinerated or otherwise) whether solid, semi-solid, liquid or gaseous, hazardous or non-hazardous, municipal, industrial or medical including sites, industries, equipment and related transport</i>	Landfills and waste disposal site	All	EIAR
	Waste incineration plant	All	EIAR
	Waste transfer station	All	EIAR

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Project Classification as per Federal Law No. 24 of 1999	Project Type	Threshold / Criteria	Required EIA Document
<i>Waste treatment projects (regardless of method used: recycled, reused or otherwise) whether solid, semi-solid, liquid or gaseous, hazardous or non-hazardous, municipal, industrial or medical including sites, industries, equipment and related transport</i>	Hazardous waste treatment facility	All	EIAR
	Waste sorting & recovery	All	EIAR
	Waste composting plant	All	EIAR
Projects Related to Housing and Industry			
<i>New horizontal housing or new population city projects</i>	Residential, commercial or mixed-use community development	Without permanent discharge to Creek or sea	EIAS
		- Adjacent or within 100-m from a beach - With permanent discharge to Creek or sea	EIAR
<i>Construction of industrial zone projects</i>	Industrial estates, park, city or complex	Without water intake or permanent outfall to Creek or sea	EIAS
		- Adjacent or within 100-m from a mean sea level shoreline - With water intake or permanent outfall to Creek or sea	EIAR
<i>New vertical housing projects</i>	Building(s) (regardless of height)	With a marina component	EIAR
Special Projects			
<i>Projects located near, next to, or within protected areas, or ecologically sensitive areas, or environmentally sensitive areas</i>	Any Project	All	EIAR
<i>Projects for the establishment of any kind of activity, installation and work on the islands and coastline of the UAE</i>	Effluent-discharging outfalls (thermal discharge, brine, hypersaline water, treated sewage effluent, storm water or groundwater, etc.)	Storm water or groundwater with discharge rates greater than 2.0-m ³ /sec	EIAR
		For all other effluents threshold is NOT applied	
	Coastal stabilisation (including revetment, groynes, breakwaters, seawalls, artificial reefs, beach reclamation, dredging, etc.)	Storm water or groundwater with discharge rates less than 2.0-m ³ /sec	EIAS
		All	EIAR
Maintenance of existing beaches (cleaning, re-profiling, trimming, beach nourishment)	All works extending below the intertidal zone	EIAS	

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Project Classification as per Federal Law No. 24 of 1999	Project Type	Threshold / Criteria	Required EIA Document
<i>Coastal and offshore reclamation projects</i>	Development of an artificial island(s) or peninsulas (<i>land reclamation, beaches, rock works, and quay walls</i>)	All	EIAR
	Sub-marine pipelines	All	EIAR
	Sub-marine cables	All	EIAS
	Offshore capital dredging and/or disposal (<i>sand dredging from borrow areas, disposal of dredged material</i>)	All	EIAR
	Temporary or permanent causeway(s) (<i>including rock works, reclamation</i>)	All	EIAR
	Temporary or permanent causeway(s) supported on piles	All	EIAS
<i>Projects that are expected to affect the heritage, historical, recreational, scientific, cultural and service nature of the surrounded areas of the project</i>	Golf course	New and without water discharges to the sea or Creek	EIAS
		New and with water discharges to the sea or Creek	EIAR
<i>Hospitals and health facilities, including medical incinerators and laboratories</i>	Hospitals, veterinary, specialised medical clinics, health facilities with incinerator and/or laboratories	All	EIAR

Note: With reference to the Online EC Application (<https://environment.dm.gov.ae>), this Table has to be referred to enable the EC Applicant to identify the correct Project Type and the required EIA document for the Project.

3.2 Exempted Miscellaneous Types of Project (Exclusion List)

All Projects not categorised in Section 3.1 are exempted to secure EC. These include, but not limited to, the following:

Project Classification	Project Type	Description/Remarks
Land, Air and Sea Transport Projects	Improvement of existing road (<i>widening, removal or addition of lanes, interchange, pedestrian crossing, etc.</i>)	-
	Access road to a development	-
	Helipad	-
Power-Related Projects	Enclosed substation	-
	Loop-In-Loop-Out (LILO) OHL	-
Projects Related to Waste	Grey water treatment facility	-
	Sewage Treatment Plant (STP)	-
Projects Related to Housing and Industry	Low-rise buildings including labour accommodation	-
Special Projects	Private zoos and similar facilities	-
	Leisure, public parks, entertainment complex and theme parks	-
	Mall and shopping centres	-
	District Cooling Plants (DCPs)	If there is reverse osmosis (RO) plant / facility, refer to Section 3.1 for the required EIA study covering only the RO components.

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Project Classification	Project Type	Description/Remarks
Coastal/Marine Projects	Modification of existing marina in the coastal zone (<i>replacement or repairs to existing floating pontoons and mooring systems</i>)	Without any rock works, dredging / reclamation
	Maintenance of existing beaches (<i>cleaning, re-profiling, trimming, beach nourishment</i>)	On dry areas and within the intertidal zone
	Development of promenade, new marina or modifications of existing marina in Creek or waterways (<i>floating pontoons with mooring systems, piles supporting platforms</i>)	Without edge protection structures (e.g. revetment, quay walls) No dredging or temporary reclamation
	Emergency coastal stabilisation (<i>using revetments, geo-containers, etc.</i>)	-
	Floating leisure and entertainment structures (<i>water parks and restaurants</i>)	-

Most of the Projects in Dubai are included in either the Mandatory (Section 3.1) or Exclusion (Section 3.2) Project Categorisation Lists. In case a Project does not belong to any category or the Applicant is unsure, the Project shall be subjected to a screening process based on a case-by-case approach. For this purpose, the Applicant shall complete a Screening Checklist (refer to Annex IV) and submit the hard copy of the said Screening Checklist to EPSS along with the supporting documentation deemed necessary by the Applicant.

The purpose of the Screening Checklist is to provide information on the Project and the reasonably foreseeable impacts on the environment for the DM-ED to reach a decision if an EIA study is deemed required for the Project. The decision, which will be communicated to the Applicant through the same Screening Checklist, may be one of the following:

- EIAR or EIAS is required;
- EIA study is not required; or
- Additional information is required to come up with a decision on the type of EIA study.

The Screening Checklist with DM-ED's decision will be returned to the Applicant within ten (10) working days from the date of receipt of the checklist.

4.0 Siting Considerations

4.1 Any Project that is likely to be affected by activities that create or are potential to create significant adverse impacts (e.g. EMF, odour) must be sited on appropriate location according to the applicable land use zoning regulations and with adequate buffer or separation distance. The sensitivity of the receptors at the Project from either existing or planned activity, should be taken into consideration when providing suitable buffer or separation distance. The types, sensitivity, and description of sensitive receptors are provided in Table 1.

Table 1 – Description and Features of Sensitive Receptors Area

Sensitivity and (Type of Area)	Description and Features of the Receptors Area
High (Type 1 Area)	<ul style="list-style-type: none"> • Protected areas for conservation of national or international importance • Water supply reserves • Hospitals and school premises • High density residential block (according to land use classification), town center

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Moderate (Type 2 Area)	<ul style="list-style-type: none"> • Vital utilities such as electricity and energy sources, natural wealth reserves, and state-protected economic zones • Light density residential blocks (according to land use classification), public parks • Natural body of water • Place of cultural heritage
Light (Type 3 Area)	<ul style="list-style-type: none"> • Commercial buildings, offices, and other public areas • Food products manufacturing premises • Agricultural crops farmland
Marginal (Type 4 Area)	<ul style="list-style-type: none"> • Industrial • Animal farmland but without dairy or meat food products processing

- 4.2 The provision of adequate buffer or separation distance will not only minimise the impact on sensitive receptors within a proposed Project, but most importantly, pre-empts any future conflicts that may arise due to harmful effects of electromagnetic field (EMF), noise, malodour, and other emissions and/or harmful discharges to the environment. Any Project that will be located near facilities that generate odour or EMF emissions is recommended to provide a buffer or separation distance in accordance with the local and international best practices. The assessment on the provision of buffer zone or separation distance should be integrated with the air impact assessment in the EIA study.
- 4.3 Location of any project or activity near or inside a protected, conservation, heritage or any specific areas of concern shall be evaluated based on the submission of the EIA document.
- 4.4 The necessary Environmental Site Assessment (ESA) shall be conducted for any contaminated site or suspected of being contaminated with chemical or dangerous substance, abandoned site of industrial or manufacturing activity, abandoned waste disposal site, or any site that requires clean-up, remediation or restoration. The ESA (including the necessary rehabilitation or remediation measures, if required) shall be performed prior to the EIA baseline study.

5.0 Procedure for the Preparation of EIA document

- 5.1 The EIA Report / EIA Summary shall be prepared by an Environmental Consultant registered with Dubai Municipality Environment Department (DM-ED) and following the outlines presented as Annex I and Annex II, respectively, of this Guideline.

6.0 Documentary Requirements and Submissions

- 6.1 The following information and documents shall be completed and submitted by the Applicant through the online service webpage (<https://environment.dm.gov.ae>, Service Request Name: Request for Environmental Clearance for Development and Infrastructure Projects):
- Basic details of the Project and the Project Owner;
 - Copy of the approved Affection Plan/s issued by the concerned planning authority;
 - Copy of the latest Master Plan/Design;
 - Letter appointment from the Project Owner to the Applicant to secure the EC on their behalf;
 - Details of the Applicant (e.g. appointed Environmental Consultants' CVs, portfolio of Project experience, etc., as attachment to the EIA document, contact information of the Applicant, copy of valid Dubai Economy License if Applicant is not an Environmental Consultant);
 - Copy of a valid Dubai license (i.e. commercial, etc.) of Project Owner, as attachment to the EIA document;
 - EIA Document (i.e. EIAR or EIAS either in word document or readable PDF with working table of contents links);
 - Properly referenced Comments Resolution Sheet (CRS), if applicable; and
 - Other supporting documents deemed necessary by the Applicant.

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6.2 The EPSS may require the Project Owner and the appointed Environmental Consultant for technical meetings to discuss pertinent issues and/or require additional data. Alternatively, the Project Owner and Environmental Consultant may be directed to submit the required additional data within a specified period of time not exceeding one month, through the Online EC Application System.

ANNEX I

CONTENTS/OUTLINE OF AN ENVIRONMENTAL IMPACT ASSESSMENT REPORT

The **EIA Report**, in addition to the main body, shall include: (i) Cover/Title Page; (ii) Page containing the document review details (QA/QC Page), (iii) Table of Contents; (iv) List of Abbreviations; (v) List of Figures; (vi) List of Engineering Plans / Maps; (vii) Bibliography & References; and (viii) List of Annexes. The EIA Report shall also include an Executive Summary.

The **Executive Summary** should have all the vital data and key findings of the EIA study presented in a condensed form. The executive summary must include brief description of the proposed project, concise details of the environmental baseline characterization, summary of environmental aspects highlighting the most critical which are the potential sources of significant impacts, description of significant impacts, and the corresponding mitigation measures. Concise presentation of data should include maps, tables, and figures.

The **Body of EIA Report** shall be structured to contain of the following as minimum.

I - Introduction

This Chapter should contain the following:

1. The **Basic Project Information** which include the project title, project location, project owner, address, telephone and fax numbers, email, Dubai Economy License Number, and the name and designation of the contact person responsible for the project.
2. The **Project Rationale** stating the need for the project based on the national and local economic development and in terms of the contribution to the Dubai Strategic Vision.
3. The **Project Alternatives** presenting the methodology and criteria used in determining alternative concepts considered for the location, development design, process/technology selection, or resource utilization. An overview of the preferred concept must be presented. At least two alternatives must be considered (**with and without the project**).

II - Description of the Project's EIA process

This Chapter should include the following:

1. The EIA Team

Name of the Environmental Consultant including the complete contact details, Dubai Economy License Number, and the name of the designated contact person responsible for the Project. Name list of the EIA team members and the EIA Team Leader with their respective field of expertise, and the corresponding module or area of study assigned to each, in the preparation of report.

2. EIA Methodology

Description of the EIA approach and methods used to identify / predict, and assess impacts and the list of data sources.

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III - Reference Laws, Regulations, and Standards

This Chapter contains the list of relevant Federal Laws, Local Orders and their Implementing Rules and Regulations, Environmental Standards, and applicable International Treaties and Conventions. The key provisions of each referred laws and regulations shall also be cited with elaboration as to their relevance to the project.

IV - Description of the Project

This Chapter should include the following:

1. Description of the Project including the Master Plan (where applicable), scale, coverage, components, and any associated utilities required by the project
2. Location (use maps and photographs) showing project limits and adjacent land uses at least within 5 km radius from the project boundaries;
3. (Where applicable) For projects involving process, production, or processing of materials: detailed process description, process flowchart, plant layout, production capacity, utilities, list of equipment/machinery, and details pertaining to waste streams (air, water, hazardous waste, etc);
4. Project status, duration and schedule of phases (pre-construction, construction, operation), provide the construction timeline and the expected completion of the project; and
5. Total project cost.

V - Description of the Environment

This Chapter should include the following:

1. A clear delineation of the **EIA Study Area** within which impacts are considered. The study area should include all environmental resources that might be affected by the project.
2. Baseline conditions covering the environmental components that will be affected by the project. These may include all or any of the following (primary data):
 - **Water** (hydrology, hydrogeology, oceanography)
 - **Air** (meteorology, air quality, noise, vibration, EMF)
 - **Land** (land use classification, geomorphology, topography, soil quality)
 - **Biodiversity** (identification of flora and fauna)
 - Socio-cultural and economic, archaeological, and historical values,
3. The methodology of the study, description of the sampling stations, key findings on the baseline profiling, and analysis of the primary and secondary data.
4. Maps (easy to read and accurately scaled) showing the vital resources within and adjacent to the project area/study area, topographical and land features of the project/study area, location of the sampling stations, among others)

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VI - Assessment of Environmental Impacts

This Chapter should include the following:

1. Discussion, including a tabulation, of all identified environmental aspects and impacts expected from the project;
2. Assessment and criteria for determining the significance of environmental impacts;
3. Discussion on the significance of each impact with highlights on the most critically affected environmental components or sensitive receptor areas;
4. Tabulation of the assessed significant environmental aspects and impacts; and
5. Results and conclusions of any modelling undertaken to forecast the nature and extent of the identified environmental impacts.

VII - Mitigating Measures and Enhancement Plan

This Chapter should include the following:

1. Presentation of the proposed enhancements, mitigations, or actions for each identified significant environmental impacts associated with each project phase;
2. Assessment of the likely effectiveness of the enhancement and mitigation measures in terms of reducing or preventing impacts; and
3. Discussion of residual, unavoidable and cumulative impacts after incorporating the enhancement or mitigation measures.

VIII- Environmental Management and Monitoring Program (EMMP)

This Chapter should include the following:

1. Detailed description of environmental management practices and mitigation measures for each identified significant environmental impacts associated with each project phase, including the timetable of implementation;
2. Detailed description of the monitoring program which include, among others: the monitoring objectives to determine the effectiveness of the proposed enhancement and / or mitigation measures, environmental parameters to be monitored, sampling plan and frequency, methodology and equipment for measurement, data management & analysis, reporting schedules, and equipment calibration; and
3. Organizational structure, including the roles and responsibilities of the Environmental Management Team or office, administrative arrangements, and resources requirements for the implementation of the EMMP.

IX – Conclusions and Recommendations

The presentation of the conclusions and recommendations of the EIA study shall include a summary, presented as matrix or table, of all the significant environmental aspects and impacts including the proposed mitigation and enhancement measures, identified residual impacts, and proposed monitoring activity for each project phase.

X - Annexes

The list of Annexes shall include all or any of the following mandatory information (unless specified otherwise):

1. Copy of a valid Dubai Economy License of the Project Owner;
2. Additional engineering drawings, as deemed necessary;
3. Construction schedule (Gantt Chart);

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4. Results of the laboratory analysis conducted by a DAC accredited testing laboratory (if applicable and required);
5. Records of inter-agency communications (if applicable and required); and
6. Numerical modelling studies (where applicable).

ANNEX II

CONTENTS/OUTLINE OF AN

ENVIRONMENTAL IMPACT ASSESSMENT SUMMARY (EIAS)

The **EIA Summary**, in addition to the main body, shall include: (i) Cover/Title Page; (ii) Page containing the document review details (QA/QC Page), (iii) Table of Contents; (iv) List of Abbreviations; (v) List of Figures; (vi) List of Engineering Plans / Maps; (vii) Bibliography & References; and (viii) List of Annexes.

I. Basic Project Information

The Basic Project Information includes the project title, project location, details of the project owner and the Environmental Consultant, which include mailing address, telephone and fax numbers, email, Dubai Economy License Number, and the name and designation of the contact person responsible for the project.

II. Description of the Project

1. Description of the Project including the Master Plan (where applicable), scale, coverage, components, and any associated utilities required by the project.
2. Location and site plan showing all buildings, drains, discharge points to air, water, or land and storage areas for dangerous goods. The map must clearly show the adjacent land uses within 2 km. radius.
3. (Where applicable) For projects involving process, production, or processing of materials: detailed process description, process flowchart, plant layout, production capacity, and list of equipment/machinery.
4. Description of emissions and waste streams (where applicable) pertaining to:
 - 4.1 Emissions to air, noise, and electromagnetic field (EMF)
 - a. Description of air pollution sources;
 - b. Rate and type of air pollutant emissions (e.g. PM₁₀, TSP, SO₂, NO_x);
 - c. The type of fuel and rate of use in all fuel-burning installations;
 - d. The height and diameter of chimneys/stacks;
 - e. Discharge velocity of flue gases from chimney/stacks;
 - f. Details of the operation and maintenance of proposed air pollution control devices;
 - g. Description of noise sources, noise levels, and control devices;
 - h. Description of EMF sources and emission levels.
 - 4.2 Wastewater Discharges
 - a. Type and estimated volume of wastewater generation (sewage or process);
 - b. Description of wastewater treatment (if any) and / or disposal;
 - c. Operation and maintenance of wastewater treatment facility (if any on-site).
 - 4.3 Hazardous Wastes

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- a. Types and quantities of hazardous wastes
- b. Description of containment, treatment and disposal of hazardous wastes

4.4 Dangerous Goods

- a. List of dangerous goods with their respective CAS Number, quantities, and rate of use
- b. Location and description of storage, bulk storage tanks, bund walls, (where applicable).

5. Project Status

State the status of the project whether it is on the pre-construction, construction or operational phase. Where applicable, provide the construction timeline and the expected completion of the project.

6. Project Capital Cost

III. Description of the Environment

A description focused on the aspects of the environment likely to be affected by the project, which may include all or any of the following (secondary data):

- Water (hydrology, hydrogeology, water quality)
- Air (air quality, noise, vibration, EMF)
- Land (land use classification, geomorphology, topography, soil quality)
- Biodiversity (identification of flora and fauna)
- Socio-cultural and economic, archaeological, and historical values

IV. Impact Assessment and Mitigating Measures

A description of the identification and assessment of the potential environmental impacts associated with each project phase and the proposed measures to mitigate the identified impacts.

V. Environmental Management and Monitoring Plan

Description of environmental management measures for each identified significant environmental impacts associated with each project phase, timetable of implementation, monitoring plan with parameters, frequency, and the responsible party/ies who will implement the plan.

VI. Annexes

The list of Annexes shall include all or any of the following mandatory information (unless specified otherwise):

1. Copy of a valid Dubai Economy License of the Project Owner and the Applicant, if Applicant is not an Environmental Consultant;
2. Additional engineering drawings, as deemed necessary;
3. Construction schedule (Gantt Chart).

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Work Instructions title:	Technical Guideline No. 2 Environmental Impact Assessment (EIA) Requirements for Development and Infrastructure Projects	عنوان الوثيقة :
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ANNEX III

General Environmental Compliance Conditions

1. Prior approval shall be secured from the Environmental Planning and Studies Section (EPSS) for any modification / change in the Project or inclusion of new Projects components, or establishment of any additional facilities, such as temporary concrete batching plants, not covered by the Environmental Impact Assessment (EIA). The request of amendment of EC from the EPSS should be made by the Project Owner at least thirty (30) days prior to the change.
2. The Environmental Clearance (EC) shall be renewed at least thirty (30) days prior to its expiry date. The renewal of the EC is subject to the compliance of the Project Owner and/or its appointed contractors and operator to the compliance conditions stipulated herein/or additional Project-specific requirements indicated in the issued EC, and payment of outstanding fees and penalties as a result of violations in the future, if any.
3. The EC does not exempt the Project Owner and/or its appointed contractors and operator from securing other government approvals or preclude other agencies/departments from enforcing their rules and regulations.
4. All applicable DM permit requirements shall be obtained and complied with. These include, but not limited to, permits from the DM Waste Management Department for the disposal of all wastes (e.g. solid, liquid, including sludge and hazardous waste), and permit from the EPSS for Storage of Dangerous Goods, if any.
5. All air and noise emissions to the environment shall comply with the applicable Environmental Laws and Regulations in the Emirate of Dubai.
6. Discharge of any wastewater / effluent generated from the Project implementation shall, at all times, comply with the applicable discharge limits/standards enforced by the concerned DM Departments.
7. All chemicals that shall be used for the buildings' maintenance, cooling system, firefighting equipment, among others, shall have zero ozone depletion potential (ODP) or low global warming potential (GWP).
8. All the required sampling and analyses shall be conducted by the Dubai Central Laboratory (DCL) and/or any laboratory accredited by the Dubai Accreditation Centre (DAC).
9. A copy of the EC shall be kept at the Project site at all times. The Project Owner and/or its appointed contractors and operator shall allow access, and provide assistance to the authorised representatives of DM-ED in carrying out inspections, incident investigations, taking of pictures, and in obtaining relevant information such as onsite sources of emissions and effluent discharges at anytime, except if it is unsafe to do so.
10. The construction and/ or operation activities shall not cause any environmental pollution or any complaints from the public and its adjacent communities. In case of environmental pollution and/or complaints, the Project Owner and/or its appointed contractors and operator shall implement appropriate corrective actions, settle environmental disputes, and bear all responsibilities on any environmental damages and cost for any remediation thereof.
11. Any environment-related incidents and complaints shall be reported immediately to the Environmental Control Section (ECS) within twenty-four (24) hours. The incident report shall describe the likely cause, the time of occurrence, and the conditions under which an incident occurred, the extent of impact, and the remedial actions undertaken. In such events, a registered Environmental Consultant shall be appointed to determine and supervise the necessary corrective actions to be undertaken, and conduct the necessary monitoring activities to ensure compliance to the prescribed standards.
12. A **semi-annual** Environmental Performance Report (EPR), including environmental protection measures implementation and monitoring, and a brief description with photo documentation of the construction progress (as applicable) shall be submitted to the ECS within seven (7) days after each reporting period.

Specific Conditions for Projects with Odour Emitting Sources

The following compliance conditions shall be applicable for, but not limited to, Projects with sources of odourous gases such as Municipal Solid Waste Recovery or Recycling Facility, Landfill or Composting Facility, etc., in addition to the General Environmental Compliance Conditions (except for condition nos. 7 & 12):

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13. Adequate controls and mitigation measures shall be implemented for all air emission associated with the Project activities. All emissions to the air environment shall comply with the limits provided in the Cabinet Decree No. (12) of 2006. The ambient concentration of the below odourous gases shall not exceed the following limits at plot boundary and nearby sensitive receptor(s).

Ambient Air (Odour)		
Parameter	Standard Limit	Source of Standard Limit
H ₂ S *	7 µg/m ³ (30-min averaging)	WHO
NH ₃ *	30 µg/m ³ (30-min averaging)	NIH, US
Dimethyl disulphide	56 µg/m ³ (10-min averaging)	Ontario's Ambient Air Quality Criteria
Dimethyl sulphide	30 µg/m ³ (10-min averaging)	
Methyl mercaptan	13 µg/m ³ (10-min averaging)	

*Continuous measurement for 24 hrs at plot boundary and nearby sensitive receptor(s)

14. Whenever a foul odour complaint arises, the Project Owner/Operator shall conduct an air quality monitoring of the parameters listed in condition no. 13 at the odour control unit exhaust, plot boundary, and at nearby sensitive receptors, for at least 1-hour to 24-hours (continuous) extendable to seven (7) days. The monitoring instrument should have an averaging time of at least 10 minutes, including record of wind direction and valid calibration certificate.
15. A **quarterly** Environmental Performance Report (EPR) including environmental protection measures implementation and monitoring and a brief description with photo documentation of the construction progress (as applicable). The EPR should include quarterly air quality monitoring report for the parameters listed in condition no. 13 with the meteorological data and monitoring location map. The quarterly EPR shall be submitted to the ECS within seven (7) days after each reporting period.

Specific Conditions for Fuel Filling Stations

In addition to the General Environmental Compliance Conditions (except for condition no. 7), the following conditions shall be applicable:

16. The fuel storage tanks and fuel dispensing equipment shall be provided with adequate vapour recovery systems (VRS Stages 1 & 2) as per the submitted specifications and shall be operated and maintained in accordance with manufacturer's recommendations.
17. All chemicals that will be used for the buildings' maintenance and firefighting equipment, including the refrigerant for the VRS shall have zero ozone depletion potential (ODP) or low global warming potential (GWP).
18. All measures to prevent and/or control the spillage / leaks of petroleum products and chemicals from all relevant activities during the operation shall be implemented based on the Environmental Management Plan (EMP) framework in the approved EIAs.

Specific Conditions for Coastal Projects

In addition to the General Environmental Compliance Conditions (except for condition no. 12), the following conditions shall be applicable:

19. A construction No Objection Certificates (NOC) shall be obtained from the Coastal Environment Section (CES) prior to commencement of any marine construction works. In addition to the NOC, a Construction Environmental Control Plan (CECP) shall be approved by CES.
20. Any liquid fuel, oil and chemical shall be stored within impermeable secondary containment (bund area). For a single-walled fuel tank, the secondary containment shall be at least 110% of the tank. For multiple drums and containers, the secondary containment must be 110% of the largest drum or 25% of the combined full capacity of all drums and containers. Spill kits must be located close to the designated storage area, and must be appropriate for the quantity and type of chemicals, oil and fuel stored on site.
21. Lightweight non-hazardous construction waste (paper, plastic, polystyrene) shall only be stored in bins and containers with lids, and they shall be emptied regularly to prevent overfilling and spilling. Similarly, they will be transported in closed waste trucks.

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22. Hazardous waste shall temporarily be stored on site within a bunded area with impermeable surface, no connection to the drainage network or a surface water body. In the event of a spill, contaminated sand/soil shall be excavated immediately, and temporarily stored on site at the designated hazardous waste area. All hazardous waste shall be collected and disposed of at a licensed landfill for hazardous waste, by a licensed DM-approved waste contractor. Chain of custody records of collection and disposal of the contaminated soil as hazardous waste shall be retained on site.
23. A **quarterly** Environmental Performance Report (EPR) including but not limited to, environmental protection measures implementation and monitoring, monthly laboratory analysis results, monitoring locations, and a brief description with photo documentation of the construction progress shall be submitted to the ECS within seven (7) days after each reporting period.

Specific Conditions for Projects Near or Inside the Protected or Conservation Areas

In addition to the General Environmental Compliance Conditions (except for condition no. 12), the following conditions shall be applicable:

24. A No Objection Certificates (NOC) shall be obtained from the Natural Resources Conservation Section (NRCS) prior to commencement of any activities inside the Protected or Conservation Area.
25. A Translocation Plan for the species that will be impacted by the Project shall be submitted to the NRCS within thirty (30) days from the date of issuance of the EC.
26. Implement necessary measures to protect any fauna or flora with conservation status categorised higher than "Least Concern" encountered during the Project implementation as per requirements of NRCS Technical Guideline on the Translocation, Handling, and Restoration of Wildlife in the Emirate of Dubai.
27. Any ecological-related incident shall be reported to the NRCS within twenty-four (24) hours. The incident report shall describe the likely cause, the time of occurrence, and the conditions under which an incident occurred, the extent of impact, and the remedial actions undertaken. In such events, a registered Environmental Consultant shall be appointed to determine and supervise the necessary corrective actions to be undertaken, and conduct the necessary monitoring activities to ensure compliance to the prescribed standards.
28. A **quarterly** Environmental Performance Report (EPR), including but not limited to, environmental protection measures implementation and monitoring, monthly laboratory analysis results, monitoring locations, and a brief description with photo documentation of the construction progress shall be submitted to the ECS within seven (7) days after each reporting period.

Specific Conditions for Projects with Permanent Lagoon, Lake, or Man-made Surface Water Features:

In addition to the General Environmental Compliance Conditions, the following conditions shall be applicable:

29. Necessary approval shall be secured from Public Health and Safety Department for the Permanent Lagoon, Lake, or Man-made Surface Water Features.
30. The ambient odour levels shall not exceed the applicable allowable limits as per the laws, regulations, and legislations in the Emirate of Dubai.
31. Appropriate measures shall be implemented to prevent and control the following, which can cause generation of unpleasant odour:
- algal growth on the water surface;
 - growth of plants and weeds which can affect the view or appearance of the lagoon or lake.

Project specific conditions/submission requirements, if any, shall be specified in the Environmental Clearance. The Dubai Municipality – Environment Department (DM-ED) reserves the right to amend the existing conditions of the EC or impose additional conditions whenever deemed necessary to ensure protection of the Environment.

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ANNEX IV
Project Screening Checklist

Project Information	
Project Name	
Location	
Project Owner	
Name of Environmental Consultant (if any)	
Name of Marine Consultant (if any)	
Brief Project Description and Surrounding Land Uses	
Screening Criteria	
Yes / No / [-] if not known	
1. Is the Project location:	
a. within or next to an inland waterbody?	
b. within or next to the Creek?	
c. on the coast?	
d. offshore?	
2. If the Project is within, next to or near an inland water body, is the waterbody connected to the sea or to the Creek?	
3. Is the Project location near any designated protected area or conservation area as per the Planning Department or Federal or Local Laws?	
4. Is the Project within, next to or near any of the following areas which can be affected by the Project:	
a. areas already receiving discharges of similar nature?	
b. an area used by protected, important or sensitive species of plants (e.g. Ghaf tree) or animals (e.g. Arabian Tahr, turtles)?	
c. an area with important natural resources (aquifers, shallow water table, fish reefs) or features (wadi)?	
d. an area with archaeological or cultural heritage assets?	
e. areas subjected to subsidence, flooding, or erosion?	
f. area(s) with development plans (if so, identify by name and describe nature of development)?	
g. areas of high landscape / seascape value and tourism importance?	
5. Is the Project location an undeveloped area and will there be loss of vegetation (e.g. trees, plants) or displacement of animals?	
6. Is the Project location previously developed and will there be any demolition of existing facilities?	
7. Is the Project located in or near densely populated or built-up area?	
8. Is the Project location near any area occupied by sensitive land uses such as hospitals, schools, recreation, tourism, or community facilities?	
9. Is the Project located near or adjacent to another Emirate?	
10. Will construction or operation of the Project involve physical changes in the area (such as topography, land use, change in waterbodies, etc.)?	
11. Will the construction or operation of the Project involve the use of natural resources such as groundwater or marine water?	
12. Will the construction or operation of the Project cause significant noise and vibration or generation of air emissions which may lead to complaints from the public?	
13. Will the Project release light, heat energy, chemicals, TSE or groundwater?	
Project Owner Authorised Representative	
Name	
Designation	
Signature	
Date	
Screening Decision (For EPSS Use Only)	
<input type="checkbox"/> EIA Report	<input type="checkbox"/> EIA Summary
<input type="checkbox"/> Not Required	<input type="checkbox"/> Additional Information Required

For further information, please visit Dubai Municipality website www.dm.gov.ae
or contact the Environmental Planning & Studies Section (EPSS) at
Tel. Nos. 04-6066120, 04-6066257, 04-6066281, and, 04-6066814 or Fax No. 04-7033565

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