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Department of Environment and Natural Resources
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APRIL 20, 2020

**EMB MEMORANDUM CIRCULAR**
No. 2020 - 18

SUBJECT: **ADOPTION OF DENR ADMINISTRATIVE ORDER NO. 2019-16 FOR ENVIRONMENTAL COMPLIANCE CERTIFICATE (ECC) PROCESSING OF NON-ENVIRONMENTALLY CRITICAL PROJECTS (NON-ECP) UNDER THE BUILD, BUILD, BUILD PROGRAM OF THE GOVERNMENT**

In the interest of service and to harmonize the implementation of PD 1586 of the Philippine Environmental Impact Statement System for projects under Build, Build, Build Program of the Government, the procedures and requirements under DENR Administrative Order No. 2019-16 in ECC processing shall be adopted for Non-Environmentally Critical Projects requiring Environmental Impact Statement (EIS) on its ECC application. The EIS Screening Form / Checklist for Build, Build, Build Program for Non-ECP in Annex A is an integral part of this Circular.

All EMB Regional Offices are required to create an Internal Review Committee to be led by the Clearance and Permitting Division. In case that the needed expertise is not available in the respective regional offices, experts may be invited to be part of the review committee.

This Memorandum Circular shall take effect immediately upon publication in any newspaper of general circulation and upon acknowledgement of receipt of a copy hereof by the Office of the National Administrative Registrar (ONAR), UP Law Center.

Published: **THE MANILA TIMES**

Date of Publication: **Wednesday, 8 July 2020**

**ENGR. WILLIAM P. CUÑADO**
OIC, Director

U.P. LAW CENTER
OFFICE of the NATIONAL ADMINISTRATIVE REGISTER
Administrative Rules and Regulations
RECEIVED
JUL 22 2020
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**ANNEX A**

## EIS Screening Form / Checklist for Build, Build, Build – Non-ECP

Date Submitted for Screening: _____
Form of Submission: ___ Hard ___ Digital
Project Title: _____
Project Location: _____
Project Proponent: _____
Authorized Representative: _____
Address: _____
Contact No: _____ Fax No: _____ Contact Person: _____
EIS Consultant: _____
Address: _____
Contact No: _____ Fax No: _____ Contact Person: _____
Project Size:: _____

### Table 1. Checklist of Documentary Requirements

*Pages are to be filled-up prior to submission of EIS for screening*

| |
|---|
| 1. Environmental Impact Statement (EIS)<br>✓ Executive Summary<br>✓ Project Description<br>✓ Assessment of Environmental Impacts (including baseline)<br>✓ Environmental Management Plan<br>✓ Environmental Risk Assessment (ERA) & Emergency Response Policy and Guidelines<br>✓ Social Development Plan/Framework (SDP) and IEC Framework<br>✓ Environmental Compliance Monitoring<br>✓ Decommissioning / Abandonment /Rehabilitation Policy<br>✓ Institutional Plan for EMP Implementation including EGF Commitments |
| 2. Proof of Authority over the Project Site<br>Tenurial Instruments/Clearance<br>☐ FLA (in case the proposed project will cover portion of foreshore)<br>☐ PAMB Clearance (in case the proposed project is located within NIPAS)<br>☐ FLAg (in case the proposed project is located within forestland)<br>☐ Area Clearance Endorsement (in case there is a reclamation component)<br>☐ Others: _____ |
| 3. Accountability Statements of Preparers & Proponent |

### Table 2. EIS Annotated Outline

| **Sections / Subsections** | **Content** | **Page #** |
|---|---|---|
| Executive Summary | | |
| Project Fact Sheet | Summary of Project Description | |
| Process Documentation | Documentation of the process undertaken in the conduct of EIA *(EIA Team, EIA Study Schedule & Area, description of key EIA Methodologies including sampling and measurement plan, Scoping and Public Participation)* | |
| EIA Summary | • Summary of alternatives considered in terms of siting, technology selection/operation processes and design<br>• Concise integrated summary of the main impacts and residual effects after applying mitigation<br>• Risks and uncertainties relating to the findings and implications for decision making | |
| Project Description | | |

| Sections / Subsections | Content | Page # |
|---|---|---|
| 1.1 Project Location and Area | a) Map showing sitio, barangay, municipality, province, region boundaries, vicinity, proposed buffers surrounding the area and Primary & secondary impact areas | |
| | b) Geographic coordinates (shape file data) of project area (use WGS 84 datum - GPS setting) | |
| | c) Describe the vicinity and the accessibility of the project site/area | |
| I.2. Project Rationale | • Cite and focus on the need for the project based on national and regional/local economic development in terms of contribution to sustainable development agenda or current development thrusts.<br>• Describe the justification for the Project with particular reference made to the economic and social benefits, including employment and associate economic development, which the project may provide. The status of the project should be discussed in a regional and national context. | |
| I.3. Project Alternatives | a) Cite criteria used in determining options for facility siting, development design, process/technology selection, resource utilization and discuss how the decisions on the preferred options were made.<br><u>Siting</u>: Present the process and criteria for the selection of the alignment Discuss alternative project locations including factors significant to the selection such as severity of impacts, perception of affected communities with regards to project, ancestral domain issues, land classification, etc.<br><u>Design Selection:</u> Discuss factors significant to design selection in consideration to project's adverse impacts to environment<br><u>Resources:</u> Alternative sources of power, water, raw materials and other resources needed including factors significant to the selection such as supply sustainability and climate change projections. In case the project includes reclamation activity, provide source of filling materials.<br><br>*Likewise contextualize the determination of preliminary options in terms of project site factors significant to the selection such as supply sustainability and susceptibility to:*<br>• *Liquefaction, Ground Shaking, Ground Rupture, Earthquake induced Landslides Volcanic eruptions, tsunami (PHIVOLCS )*<br>• *Rain-induced landslide and flooding (MGB)*<br>• *Storm surge, and flooding as well as extreme climatologic conditions (PAGASA)* | |
| | b) Discuss the consequences of not proceeding with the project or no project option | |
| 1.4 Project Components | a) General layout of facilities | |
| | b) Maps showing in particular, the location and boundaries of project area, location and footprint of main facilities, storage and support facilities, and proposed buffers. | |
| | b) Identification and general description of major components<br>☐ Roads and Bridges<br>1. Main Carriageway<br>2. Overpass and Underpass<br>3. Interchanges<br>4. Toll Facilities<br>5. Bridges and Box Culverts<br>☐ Airports<br>1. Runway<br>2. Taxiway<br>3. Apron | |

| Sections / Subsections | Content | Page # |
|---|---|---|
| | 4. Terminal Building<br>5. Control Tower<br>6. Hangar<br>7. Parking<br>☐ Other Infrastructure Projects:_____ | |
| | c) Identification and description of support facilities and infrastructure requirements such as energy/power generating facility (if any) or energy source, water supply/storage, storm water drainage, sewerage | |
| | e)Identification and description of pollution control devices during construction phase (ie. silt curtains, gabion) and operation phase (ie. sewage treatment plant (STP) for airport, etc.) | |
| 1.7 Project Size | Total Project Area in hectares<br>For Roads and bridges: Length in km | |
| 1.8Development Plan, Description of Project Phases and Corresponding Timeframes | Phases to be described in terms identifying specific activities (w/ special attention on those with significant environmental impacts as well as climate change adaptation options relevant to the project and project activities) and corresponding projected implementation timeframes:<br>• ***Pre-construction*** (e.g. planning, acquisition of rights to use land, Road Right of Way, Resettlement Action Plan, Tree cutting permit, zoning clearance, etc.)<br>• ***Construction*** (e.g. land/site clearing, temporary housing, transport of materials, excavation, mobilization of equipment, operation of crusher plant, concrete batching plant and bitumen mixing plant, slope cutting for road width formation, road formation clearance, construction of road, interchanges, for bridges: construction of substructure: pile driving and concreting, dredging and construction works, for airports, foundation works, dewatering, asphalt laying)<br>• ***Operation*** (projected period of start-up/commissioning/full operation of various project components) include discussion on the operation of various components (as identified above) in terms of raw materials, fuel requirements, waste management and infrastructure requirements, airport traffic management<br>• ***Decommissioning/Abandonment/Rehabilitation***<br>- projected life of the project and alternatives for the future use of the project area which should be consistent with long term zoning and land use development plan of the municipality;<br>- Abandonment Plan (general) to include management plan for the remediation of contaminated soil and water resources, land restoration, proper dismantling/abandonment of facilities/ equipment and other necessary activities<br>- Demobilization plan to include proper dismantling/abandonment of temporary facilities/ equipment and other necessary activities | |
| I.8. Manpower | Tabulate the following per project phase (pre-construction, construction, operation and maintenance):<br>• manpower requirements;<br>• expertise/skills needed;<br>• nature & estimated number of jobs available for men, women, and indigenous peoples (if in IP ancestral land);<br>• scheme for sourcing locally from host and neighboring LGUs | |
| I.9. Project Cost | Indicative Project Investment Cost (Philippine Peso) | |

| Sections / Subsections | Content | Page # |
|---|---|---|
| **2.** Assessment of Environmental Impacts<br><br>See Table 3 for the list of key environmental impacts which shall be subjected to assessment. The assessment shall done using the prescribed approach/method and in relation to the corresponding baseline characterization in the primary and secondary impact areas (*as determined using the Guidelines in Annex 2-2 of the Revised Procedural Manual (RPM) for DAO 2003-30 or succeeding issuances*). The sampling and measurement plan used shall be discussed. Likewise, the assessment should be done for the various phases of development (i.e. pre-construction, construction and operation) and should consider climate change projections and disaster risks based on existing natural hazard information. For all maps, include overlays of project area footprint, show sensitive/critical receptors and sampling points for baseline data (indicate geographical coordinates). In conclusion, the residual and cumulative impacts shall be assessed. | | |
| **3.** Environmental Management Plan<br><br>Appropriate mitigation/management measures should be specified for each of the identified key impacts (Table 3). Appropriate climate change adaptation and disaster risk reduction measures/options shall likewise be thoroughly discussed. The impact management plan should be summarized using at the minimum, the format in Annex 2-17 of RPM for DAO 2003-30 | | |
| **4.** Environmental Risk Assessment (ERA) & Emergency Response Policy and Guidelines<br><br>The level of coverage and type of document required shall first be determined based on Annex 2-7e of RPM for DAO 2003-30.<br><br>See Table 4 for details | | |
| Social Development Plan/Framework (SDP) and IEC Framework | | |
| 5.1 Social Development Program (SDP) | Community development or livelihood programs/activities, projected beneficiaries, partner institutions, timeframe of implementation as well as source and amount allotted per activity/component (See Annex 2-18 of RPM for DAO 2003-30) | |
| 5.2.Information and Education Campaign (IEC) | Target sector, key messages, scheme/strategy/methods, Information medium, timelines and frequency, cost (See Annex 2-19 of RPM for DAO 2003-30) | |
| Environmental Compliance Monitoring | | |
| 6.1.Self-Monitoring Plan | The monitoring plan shall be summarized using Annex 2-20 of RPM for DAO 2003-30 or succeeding issuances as template.<br><br>. | |
| 6.2 Environmental Guarantee and Monitoring Fund Commitments | • Discussion on the necessity of putting up an EGF. If deemed necessary, present a proposed amount of EGF indicating the basis for the estimate (per guidelines in annex 3-6 of RPM for DAO 2003-30) | |
| 7.Decommissioning / Abandonment /Rehabilitation Policy<br><br>Statement on Proponent's policies to implement the abandonment plan described in Item 1.7 and to formulate and submit procedures for Rehabilitation/ Decommissioning/Abandonment within a timeframe specified in the ECC. | | |
| 8. Institutional Plan for EMP Implementation<br><br>Present the organizational scheme of the proponent including line of command and reporting procedures as well as manpower complement and relationships with other operating departments. | | |

**Table 3. Key Environmental Impacts to be included in the Assessment and Formulation of Management and Monitoring Plan to be reflected in the EIS**

| | | | ✓ For *completeness, page numbers should be provided upon submission of the EIS* | | | | |
|---|---|---|---|---|---|---|---|
| **List of Key Impacts** | **Baseline Data Parameter Requirements** | **Required Assessment Methodology/Approach** | Baseline Conditions | Impact Analysis | Mgmt. Plan | Monitoring Plan | **Remarks** |
| | | | Page | Page | Page | Page | |
| **I.** Land | | | | | | | |
| **1.1.** Land Use and Classification | | | | | | | |
| 1.1.1 Impact in terms of compatibility with existing land use | Description & Map showing the project area in relation to existing land use. | Assessment of the compatibility of the proposed project vis-a-vis actual land use and the approved comprehensive land use plan/zoning classification, ECA Classification and/or the coastal resource management plan of the LGU if any. | | | | | |
| 1.1.2 Impact on compatibility with classification as an Environmentally Critical Area (ECA) | Identify ECA where the project is located or near the project area.<br><br>Identify areas vulnerable/susceptible to natural hazards where the project is located or near the project area (include map/s). | | | | | | |
| 1.1.3 Impact in existing land tenure issue/s | Determine if the project area is under CARP or with CADC / CADT / CALC/ CALT, with IFMA/CBFMA, within COC, within MPSA or other tenurial instruments and identify corresponding existing tenure issues including presence of informal settlers. | Identify and assess impact in terms of land tenure issues in relation to project implementation | | | | | |
| 1.1.4 Impairment of visual aesthetics | Visually significant landforms/ landscape/structures | Identify and assess impact of the project on these visually significant landforms/landscape/ structures | | | | | |
| 1.2 Geology/Geomorphology | | | | | | | |
| 1.2.1 Change in surface landform/geomorphology / topography/ terrain/slope | Slope and Elevation/Topographic Map; | Identify and assess project impact in terms of the changes in surface landform/topography/terrain/slope including existing hazard as maybe aggravated by climate change as projected by PAGASA | | | | | |
| 1.2.2 Change in sub-surface geology/underground conditions | Regional/General Geological Map<br><br>Natural Hazard Map (sub surface) | Identify and assess project impact in terms of the changes in sub-surface geology and inducement of | | | | | |

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| | | | Page | Page | Page | Page | |
| 1.2.3 Inducement of subsidence, liquefaction, landslides, mud / debris flow, etc. | Geological Map as needed.; hazard maps (NAMRIA, NDRRMC, MGB, PHIVOLCS, PAGASA) | subsidence, liquefaction, landslides, mud/debris flow to the environment including the possibility of aggravating existing natural hazards<br><br>Discuss and assess the impacts of geologic hazards and planned earthworks on the project facilities (e.g., landslides, mudflows, subsidence, ground shaking from earthquake, liquefaction, flooding, etc.). Note in the discussion how climate change can aggravate the hazards and impacts. The geologic hazards map must consider the hazards/exposure/vulnerability/ risk maps of Section 1.1.2. | | | | | |
| 1.3 Pedology | | | | | | | |
| 1.3.1 Soil erosion / Loss of topsoil/overburden | • Summary of Soil Investigation Report on soil type and quality<br>• Soil map showing soil types, sampling stations, topography, streams, built-up areas, and planned project features<br>• Sediment sources | Describe capability of the land to accommodate the proposed development with minimal or without soil erosion/loss of topsoil/overburden<br><br>Describe the physical properties and erodibility potential of the soil, ongoing erosion processes and assess the erosional impacts of the project. | | | | | |
| 1.4 Terrestrial Ecology | | | | | | | |
| 1.4.1 Vegetation removal and loss of habitat | • Map showing land cover; sampling sites; location of observed important, endangered, and keystone species; ecologically sensitive sites; planned land development works<br>• Flora and fauna species inventory or survey report to cover species listing, abundance, richness, dominance, diversity, | To establish baseline,<br>- Use quadrat sampling for flora to cover all land cover types<br>- Use transect walk , mist nets, traps, for fauna | | | | | |

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| | evenness, ecological status, and uses; | - show survey locations in a map<br><br>Relate discussions to estimated GHG emissions and possible carbon sequestration program/s | | | | | |
| 1.4.2 Threat to existence and/or loss of local species | Summary of endemicity / conservation status | | | | | | |
| 1.4.3Threat to abundance, frequency and distribution of species | • Summary of abundance, frequency and distribution<br>• Economic importance and uses of significant flora and fauna | | | | | | |
| 1.4.4 Hindrance to wildlife access | Survey map in relation to the project site | | | | | | |
| 2. THE WATER | | | | | | | |
| 2.1 Hydrology/Hydrogeology | | | | | | | |
| 2.1.1 Change in drainage morphology / inducement of flooding/ Reduction in stream volumetric flow | Drainage map (also showing local drainage system/infrastructures); Historical flooding/drought occurrences, stream flow measurements/estimates; Delineation of watershed /sub-watersheds/ floodplain; and identification of aquifers if any | Identify and assess project impact on the change in drainage morphology/local drainage system and resulting effects of flooding pattern in the project area and surrounding. Include climate projections effects on flooding.<br><br>Relate discussions to item 3.1.1 | | | | | |
| 2.1.2 Change in stream, lake water depth | Regional hydrogeological map | Identify and assess project impact in terms of change in stream, lake water depth | | | | | |
| 2.1.3 Depletion of water resources / competition in water use | Current / projected water use (groundwater/surface water) in the area and adjacent areas<br><br>Inventory of water supply source including springs and wells( indicate depth of water table) and show location in a map of appropriate scale | Identify and assess project impact on the existing water resources and the resulting competition in the water use using analysis/estimation of water availability. Include discussions taking into consideration the PAGASA medium to long term projections | | | | | |
| 2.2 Oceanography *(applicable to projects with jetty/port and/or subsea structures that will change the bathymetry in the area)* | | | | | | | |

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| | | | ✓ For *completeness, page numbers should be provided upon submission of the EIS* | | | | |
| **List of Key Impacts** | **Baseline Data Parameter Requirements** | **Required Assessment Methodology/Approach** | Baseline Conditions | Impact Analysis | Mgmt. Plan | Monitoring Plan | **Remarks** |
| | | | Page | Page | Page | Page | |
| 2.2.1 Change/disruption in water circulation pattern, littoral current, and coastal erosion and deposition | • Bathymetric survey and map<br>• Measurement of water currents<br>• Analysis of available proximate tides data<br>• Hydrodynamic modeling<br>• Particle dispersion modeling and map<br>• Storm surge hazard, exposure, vulnerability, risk maps | Identify and assess project impact on the degree of change/disruption of circulation pattern and the potential for coastal erosion<br><br>Build a hydrodynamic model based on the measured bathymetry and currents and tidal analysis and then validate the model. A public domain software like the United States Environmental Protection Agency Environmental Fluid Dynamics Code (EFDC) may be used. Through the validated hydrodynamic model, assess the impacts of the project on water circulation, littoral current, and coastal erosion and deposition. Use the modeling results of Sec. 1.3.1 and 2.1.1. Discuss how the impacts may be affected by climate change especially sea level rise. | | | | | |
| 2.2.2 Change in bathymetry | Bathymetric map; | USLE / similar modeling when applicable<br><br>Use the hydrodynamic model to assess the impacts of the bathymetric changes. Discuss how the impacts may be affected by climate change. Compare projected new bathymetry as a result of the project with the existing | | | | | |
| 2.3 Water Quality | | | | | | | |
| 2.3.1 degradation of groundwater quality | Physico-Chemical characterization of water:<br><br>☐ pH<br>☐ BOD5 | Identify and assess project impact in terms of degradation of groundwater, coastal surface water and coastal/marine water | | | | | |

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|---|---|---|---|---|---|---|---|
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| 2.3.2 degradation of surface water quality | ✓ BOD5<br>✓ Oil and grease<br>✓ TSS<br>✓ fecal / total coliform<br>☑ sampling site map | quality. Use DENR standard methods and procedures for sampling and analysis.<br><br>Assess impact on siltation of surface and coastal/marine waters. | | | | | |
| 2.3.3 degradation of coastal/marine water quality | | | | | | | |
| 2.4 Freshwater Ecology | | | | | | | |
| 2.4.1 Threat to existence and/or loss species of important local and habitat | • Summary of endemicity / conservation status<br>• Abundance of ecologically and economically important species (fishes, benthos, planktons);<br>• Presence of pollution indicator species;<br>• sampling site map | Identify and assess project impact in terms of threats to existence/and or loss of species, abundance frequency and distribution species and include discussions on overall impact to freshwater ecology.<br><br>Relate discussions to air and water quality | | | | | |
| 2.4.2 Threat to abundance, frequency and distribution of species | | | | | | | |
| 2.5 Marine Ecology *(applicable if project involves activities, discharges or with structure in marine waters)* | | | | | | | |
| 2.5.1 Threat to existence and/or loss of important local species and habitat | • Abundance/densities/distribution of ecologically and economically important species (mangroves, fishes, benthos, planktons, coral reefs, algae, seaweeds, sea grasses);<br>• sampling site map | Quadrat, transect, line intercept, spot dive, manta tow, marine resource characterization (e.g. municipal and commercial fisheries data) for baseline gathering.<br><br>Identify and assess project impact in terms of threats to existence, loss of important local species and include discussions on overall impact to marine ecology.<br><br>Show in a map, sampling sites for monitoring purposes. | | | | | |
| 2.5.2 Threat to abundance, frequency and distribution | | | | | | | |
| 3.0 THE AIR | | | | | | | |
| 3.1 Meteorology/Climatology | | | | | | | |
| 3.1.1 Change in the local micro-climate e.g. local temperature | Monthly average rainfall and temperature of the area; Climatological normals/extremes; Wind | Identify and assess project impact in terms of change in the local micro- climate change. | | | | | |

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| | rose diagrams; Frequency of Tropical cyclones | Also discuss effects of climate change using PAGASA medium to long term projections | | | | | |
| 3.1.2 Contribution in terms of greenhouse gas emissions (or GHG mitigation potential) | Data on Greenhouse gasses (i.e. carbon dioxide, nitrous oxide); | Estimate projected greenhouse gases (GHG) using IPCC guidelines;<br><br>Include carbon sink program for offsetting.<br><br>Note: Per existing DENR - FMB regulations, replacement of trees shall follow the following ratio: 1:50 (50 trees for 1planted tree cut), and 1:100 (100 trees for 1 naturally growing tree cut) | | | | | |
| 3.2 Air Quality (& Noise) | | | | | | | |
| 3.2.1 Degradation of air quality | Characterization of ambient air quality:<br>✓ TSP<br>✓ PM10<br><br>☑ sampling site map | Use DENR standard methods and procedures for sampling and analysis.<br><br>Show in a map, sampling sites for monitoring purposes based on the above assessment. | | | | | |
| 3.2.2 Increase in ambient noise level | Characterization of ambient noise level<br><br>sampling site map | Use DENR standard methods and procedures for sampling and measurement. | | | | | |
| 4.0 THE PEOPLE | | | | | | | |
| 4.1 Displacement of settler/s<br><br>Displacement / disturbance of properties<br><br>Change/conflict in land ownership<br><br>Change/conflict Right of way<br><br>Impact on Public Access | Demographic data of impact area:<br>- Number of households and household size<br>- Land area,<br>- Population,<br>- Population density /growth<br>- gender and age profile,<br>- literacy rate, profile of educational attainment<br>- settlements map<br><br>Focus Group Discussion covering various population | Identify and assess project impacts on demography of affected communities. Use assessment in the formulation of SDP/IEC<br><br>Assess availability of alternative public access and housing options for displaced settlers<br>For project with displacement/ disturbance of properties/settlers, change/conflict in land ownership and | | | | | |

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| | | | ✓ For *completeness, page numbers should be provided upon submission of the EIS* | | | | |
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| | | | Page | Page | Page | Page | |
| | sectors (women, men, youth, elderly and others as applicable) shall be undertaken in the impact area/s to gather perception data<br><br>Census of population / property that will be displaced / disturbed<br><br>Housing ownership profile / availability of housing/ number of informal settlers | change/conflict right of way, formulate resettlement framework plan or RAP | | | | | |
| 4.2 In-migration<br><br>proliferation of informal settlers | | Identify and assess project impact due to in-migration patterns including proliferation of informal settlers | | | | | |
| 4.3 Cultural/Lifestyle change | Demographic data on Indigenous People (if any) and existing Culture/Lifestyle that may be significantly affected | Identity and assess project impact in terms of Culture/Lifestyle that may be affected and/or introduced | | | | | |
| 4.4 Impacts on physical cultural resources | Inventory and description of physical cultural resources and landscapes that have archaeologic, paleontologic, historical, religious, aesthetic, or cultural significance: Movable or immovable objects, below ground or under water, sites, structures, groups of structures, and natural features<br><br>Classify cultural interest value/ importance into local, provincial, national, or international level<br><br>*Sources of information: UNESCO, National Museum (NM), National Historical Commission of the Philippines (NHCP), National Commission for Culture and Arts (NCCA) and the Local Government Units (LGUs) in the project area and other UN or National Publications* | Identify all potential project impacts in an integrated manner considering the type, significance, and value/importance of the physical cultural resource/s<br><br>Identify risks in terms of capacity and commitment in managing the impacts<br><br>*(protocols in handling chance finds shall be implemented)* | | | | | |
| 4.5 Threat to delivery of basic services /resource competition | Availability of public services in terms of:<br>• Water supply<br>• Power supply<br>• Communications /transportation<br>• Conflict<br>• education facilities | Identify and assess project impact in terms of threats to delivery of basic services including potential for resource competition in the area including effects of in-migration | | | | | |

| | | | ✓ For *completeness, page numbers should be provided upon submission of the EIS* | | | | |
|---|---|---|---|---|---|---|---|
| **List of Key Impacts** | **Baseline Data Parameter Requirements** | **Required Assessment Methodology/Approach** | Baseline Conditions | Impact Analysis | Mgmt. Plan | Monitoring Plan | **Remarks** |
| | | | Page | Page | Page | Page | |
| | • recreational facilities / sports facilities | | | | | | |
| 4.6 Threat to public health and safety | Availability of public services in terms of: health resources (Government and Private)<br><br>Statistical data / information related to public services:<br>• Morbidity and mortality rates (infants and adults - 5-year trend)<br>• Common diseases in the area including endemic diseases;<br><br>Environmental Health and Sanitation Profile | Identify and assess specific threats to public health and safety due to project impacts. Relate discussions to land, air and water (Item 1 to 3)<br><br>Analysis of the impact of project implementation on existing disease profile including weather sensitive diseases and impact aggravation as a result of climate change as projected by PAGASA | | | | | |
| 4.7 Generation of Local Benefits from the project<br><br>Enhancement of employment and livelihood opportunities<br><br>Increased business opportunities and associated economic activities<br><br>Increased revenue of LGUs | Socioeconomic data:<br>• Main sources of Income<br>• Employment rate/ profile<br>• Poverty incidence<br>• sources of livelihood<br>• commercial establishments and activities<br>• banking and financial institutions | Identify and assess local benefits of the project in terms of enhancement of employment and livelihood opportunities, increased business opportunities and associated economic activities and increased revenue of LGU | | | | | |
| 4.8 Traffic congestion | Road network/ systems Existing Transportation/traffic situation | Identify and assess project impact on the traffic situation in the area including congestion based on existing capacity of road system | | | | | |

**Table 4. Environmental Risk Assessment to be included in EIS**

| | | ✓ For *completeness during procedural screening; page numbers should be provided upon submission of the EIS* | | | |
|---|---|---|---|---|---|
| Level of Coverage & Type of Risks | **CONTENTS OF ERA AS PART OF EIS For the identified safety risks in column 1** | ERA | ERP | Monitoring Plan | REMARKS |
| | | Page | Page | Page | |

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| Level of Coverage:<br>Refer to Annex 2-7e of the RPM for DAO 2003-30<br>☐ Level 2 (QRA Required)<br>☐ Level1 (Emergency Plan based on hazard analysis)<br>☐ Risk Screening Level<br><br>Note: for airport only | For EIS, check type of report to be submitted prior to Operation:<br>☐ Quantitative Risk Assessment(QRA)<br>☐ HAZOP | | | | |
| Safety Risks Type:<br>☐ Fire<br>☐ Explosion<br>☐ Release of toxic substances (eg fuel oil/lubricants and other substances) | ☑ Description of conditions, events and circumstances which could be significant in bringing about identified safety risks<br>☑ Description & assessment of the possible accident scenarios posing risk to the environment<br>☑ Description of the hazards, both immediate (acute effects) and delayed (chronic effects) for man and the environment posed by the release of toxic substance, as applicable<br>☑ The safety policy and emergency preparedness guidelines consistent with the regulatory requirements. Emergency Preparedness should also consider natural hazards to the infrastructures and facilities. | | | | |
| ☐ Physical Risks<br>(Failure of Structure w/c could endanger life, property and/or the environment) | ☑ Description of conditions, events and "trigger" which could be significant in bringing about identified physical risks<br>☑ Description & assessment of the possible accident scenarios posing risk to the environment<br>☑ Description of the hazards both immediate (acute effects) and delayed (chronic effects) for man and the environment posed by the failure of structure, as applicable | | | | |