Environmental Checklist: 17. Ports and Harbors (1)

Category	Environmental Item	Main Check Items	Confirmation of Environmental Considerations
1 Permits and Explanation	(1) EIA and Environmental Permits	Have EIA reports been officially completed? Have EIA reports been approved by authorities of the host country's government? Have EIA reports been unconditionally approved? If conditions are imposed on the approval of EIA reports, are the conditions satisfied? In addition to the above approvals, have other required environmental permits been obtained from the appropriate regulatory authorities of the host country's government?	
		Are contents of the project and the potential impacts adequately explained to the public based on appropriate procedures, including information disclosure? Is understanding obtained from the public? Are proper responses made to comments from the public and regulatory authorities?	
2 Mitigation Measures	(1) Air Quality	Do air pollutants, such as sulfur oxides (SOx), nitrogen oxides (NOx), and soot and dust emitted from various sources, such as ships, vehicles, and the ancillary facilities comply with the country's emission standards and ambient air quality standards?	
	(2) Water Quality	Do general effluents from the related facilities comply with the country's effluent standards and ambient water quality standards? Do effluents from ships and ancillary facilities (e.g., dock) comply with the country's effluent standards and ambient water quality standards? Are adequate measures taken to prevent spills and discharges of materials, such as oils and hazardous materials to the surrounding water areas? Is there a possibility that oceanographic changes, such as alteration of ocean currents, and reduction in seawater exchange rates (deterioration of seawater circulation) due to modification of water areas, such as shoreline modifications, reduction in water areas, and creation of new water areas will cause changes in water temperature and water quality? In the case of the projects including land reclamation, are adequate measures taken to prevent contamination of surface water, seawater, and groundwater by leachates from the reclamation areas?	
	(3) Wastes	Are wastes from ships and the related facilities properly treated and disposed of in accordance with the country's standards? Is offshore dumping of dredged materials and soils properly performed in accordance with the country's standards to prevent impacts on the surrounding waters? Are adequate measures taken to prevent discharge or dumping of hazardous materials to the surrounding water areas?	

Environmental Checklist: 17. Ports and Harbors (2)

Category	Environmental Item	Main Check Items	Confirmation of Environmental Considerations
2 Mitigation Measures	(4) Noise and Vibration	Do noise and vibrations comply with the country's standards?	
	(5) Odor	Are there any odor sources? Are adequate odor control measures taken?	
	(0) 50011110111	Are adequate measures taken to prevent contamination of sediments by discharges or dumping of materials, such as hazardous materials from ships and the related facilities?	
3 Natural Environment	(1) Protected Areas	Is the project site located in protected areas designated by the country's laws or international treaties and conventions? Is there a possibility that the project will affect the protected areas?	
	(2) Ecosystem	Does the project site encompass primeval forests, tropical rain forests, ecologically valuable habitats (e.g., coral reefs, mangroves, or tidal flats)? Does the project site encompass the protected habitats of endangered species designated by the country's laws or international treaties and conventions? If significant ecological impacts are anticipated, are adequate protection measures taken to reduce the impacts on the ecosystem? Is there a possibility that the project will adversely affect aquatic organisms? If significant impacts are anticipated, are adequate protection measures taken to reduce the impacts on aquatic organisms? Is there a possibility that the project will adversely affect vegetation and wildlife of coastal zones? If significant impacts are anticipated, are adequate measures taken to reduce the impacts on vegetation and wildlife?	
	(3) Hydrology	Is there a possibility that installation of port and harbor facilities will cause oceanographic changes? Is there a possibility that installation of the facilities will adversely affect oceanographic conditions, such as induced currents, waves, and tidal currents?	
	(4) Topography and Geology	Is there a possibility that installation of port and harbor facilities will cause a large-scale alteration of topographic and geologic features in the surrounding areas or elimination of natural beaches?	

Environmental Checklist: 17. Ports and Harbors (3)

Category	Environmental Item	Main Check Items	Confirmation of Environmental Considerations
4 Social Environment	(1) Resettlement	Is involuntary resettlement caused by project implementation? If involuntary resettlement is caused, are efforts made to minimize the impacts caused by the resettlement? Is adequate explanation on relocation and compensation given to affected persons prior to resettlement? Is the resettlement plan, including proper compensation, restoration of livelihoods and living standards developed based on socioeconomic studies on resettlement? Does the resettlement plan pay particular attention to vulnerable groups or persons, including women, children, the elderly, people below the poverty line, ethnic minorities, and indigenous peoples? Are agreements with the affected persons obtained prior to resettlement? Is the organizational framework established to properly implement resettlement? Are the capacity and budget secured to implement the plan? Is a plan developed to monitor the impacts of resettlement?	
	(2) Living and Livelihood	Is there a possibility that the project will adversely affect the living conditions of inhabitants? Are adequate measures considered to reduce the impacts, if necessary? Is there a possibility that changes in water uses (including fisheries and recreational uses) in the surrounding areas due to project will adversely affect the livelihoods of inhabitants? Is there a possibility that port and harbor facilities will adversely affect the existing water traffic and road traffic in the surrounding areas? Is there a possibility that diseases, including communicable diseases, such as HIV will be introduced due to immigration of workers associated with the project? Are considerations given to public health, if necessary?	
	(3) Heritage	Is there a possibility that the project will damage the local archeological, historical, cultural, and religious heritage sites? Are adequate measures considered to protect these sites in accordance with the country's laws?	
	(4) Landscape	Is there a possibility that the project will adversely affect the local landscape? Are necessary measures taken?	
	(5) Ethnic Minorities and Indigenous Peoples	Does the project comply with the country's laws for rights of ethnic minorities and indigenous peoples? Are considerations given to reduce the impacts on culture and lifestyle of ethnic minorities and indigenous peoples?	

Environmental Checklist: 17. Ports and Harbors (4)

Category	Environmental Item	Main Check Items	Confirmation of Environmental Considerations
5 Others	(1) Impacts during Construction	Are adequate measures considered to reduce impacts during construction (e.g., noise, vibrations, turbid water, dust, exhaust gases, and wastes)? If construction activities adversely affect the natural environment (ecosystem), are adequate measures considered to reduce impacts? If construction activities adversely affect the social environment, are adequate measures considered to reduce impacts? If necessary, is health and safety education (e.g., traffic safety, public health) provided for project personnel, including workers?	
	(2) Monitoring	Does the proponent develop and implement monitoring program for the environmental items that are considered to have potential impacts? Are the items, methods and frequencies included in the monitoring program judged to be appropriate? Does the proponent establish an adequate monitoring framework (organization, personnel, equipment, and adequate budget to sustain the monitoring framework)? Are any regulatory requirements pertaining to the monitoring report system identified, such as the format and frequency of reports from the proponent to the regulatory authorities?	
6 Note	Note on Using Environmental Checklist	Where necessary, impacts on groundwater hydrology (groundwater level drawdown and salinization) that may be caused by alteration of topography, such as land reclamation and canal excavation should be considered, and impacts, such as land subsidence that may be caused by groundwater uses should be considered. If significant impacts are anticipated, adequate mitigation measures should be taken. If necessary, the impacts to transboundary or global issues should be confirmed (e.g., the project includes factors that may cause problems, such as transboundary waste treatment, acid rain, destruction of the ozone layer, and global warming).	

¹⁾ Regarding the term "Country's Standards" mentioned in the above table, in the event that environmental standards in the country where the project is located diverge significantly from international standards, appropriate environmental considerations are made, if necessary.

In cases where local environmental regulations are yet to be established in some areas, considerations should be made based on comparisons with appropriate standards of other countries (including Japan' experience).

²⁾ Environmental checklist provides general environmental items to be checked. It may be necessary to add or delete an item taking into account the characteristics of the project and the particular circumstances of the country and locality in which it is located.