Environmental Safeguards Framework

January 30, 2007

Istanbul
Environmental Safeguards Framework

SAFEGUARD REVIEW PROCEDURES

1. This Environmental Safeguards Framework defines the safeguards procedures that the Istanbul Metropolitan Municipality (IMM) will apply to sub-projects to be financed under IMIP regarding issues related to:

   (a) Environmental Impact Assessment (EIA)
   (b) Cultural Properties
   (c) Natural Habitats
   (d) International Waterways
   (e) Involuntary Resettlement

A. ENVIRONMENTAL IMPACT ASSESSMENT

   Overview

1. All sub-projects to be financed under the project will be subject to an environmental review process by IMM utilizing the procedures described in this section (including selected joint reviews and clearances by the World Bank). These procedures incorporate Turkish regulatory requirements for Environmental Review (Regulations on Environmental Impact Assessment, Official Gazette, dated 16 December 2003, Number 25318 from the Ministry of Environment and Forests (MoEF), hereafter the “Regulation”)\(^1\) and World Bank Environmental Assessment safeguard policy (OP/BP/GP 4.01).

2. The environmental assessment process is carried out to evaluate potential positive or negative impacts of any proposed sub-project; to evaluate measures that must be taken to prevent or minimize potential negative impacts damaging to the human and natural environment (for example by site selection or mitigating measures at a given site); and for supervision/inspection of sub-project implementation.

3. The Turkish environmental impact assessment regulation classifies projects by environmental risk in a similar manner to World Bank EA policy (OP 4.01). However, there may be some cases where the resultant environmental risk assignment may differ. Therefore, in some cases it will be necessary for IMM to request additional information or request additional measures to be taken by the sub-project sponsors as a condition of receiving World Bank funds.

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\(^1\) This regulation is soon to be revised. When the revised regulation is legally adopted, the procedures presented herein may be subject to revision contingent upon any changes prescribed in the new regulation which may require modification of the procedures described here.
Procedures

4. The seven key elements involved in the EIA process are identified below and subsequently described in full detail:

- Screening
- EA Documentation
- Public Consultation
- Review and Approval
- Disclosure
- Conditionality
- Supervision and Reporting

4.1 Screening

4.1.1 In accordance with Turkish environmental assessment procedures, MoEF is responsible for initial sub-project screening. The IMM will review the documentation and screening decision to identify those cases where World Bank safeguards require additional due diligence.

4.1.2 If a sub-project is listed under Annex I of the Regulation, a full EIA report is required and all subsequent EA procedures are managed by the main office of MoEF in Ankara. Sub-projects screened as “Annex I” are comparable to a World Bank EA classification of “Category A”. While the World Bank requires Category A EIA reports to be prepared by an independent consultant not affiliated with the sub-project, this is not required under the Regulation. However, the Regulation does include an independent review of the EIA by a MoEF-appointed commission which provides comparable peer review.

4.1.3 If a sub-project is listed under Annex II of the Regulation, IMM must submit a “Project Introduction File” (PIF) to the MoEF. The Istanbul office of the MoEF evaluates the PIF to determine whether or not an EIA is required. If the local office determines an EIA is required, all responsibility for subsequent EA procedures revert back to MoEF headquarters in Ankara. MoEF in Ankara may then at their discretion delegate EA procedural responsibilities back to the Istanbul office or retain it for itself. It is important to note that the PIF itself often constitutes a brief though professionally-prepared environmental assessment of the sub-project’s environmental implications as well as key mitigation and monitoring requirements.

For sub-projects that require an EIA Report, the IMM will be required to provide to the World Bank: (i) a copy of the official MoEF “Environmental Impact Assessment Positive Decision” (i.e. official approval that the IMM can proceed with the EA process), (ii) an English language version of the
For sub-projects that do not require an EIA Report, IMM will submit the PIF and formal MoEF Certificate of “No Need for EIA [Report]” to the World Bank who will review the issues identified in the PIF and determine if IMM has prepared an adequate environmental management plan (EMP) for mitigating and monitoring potential environmental impacts. Such sub-projects are generally comparable to a World Bank EA classification of “Category B”.

4.1.4 It is possible that, IMM determines that a sub-project for which the MoEF provided a decision of “No Need for EIA” may still pose a reputational risk either to themselves or possibly the World Bank, and that greater due diligence is needed over and above requirements of the Regulation. IMM will consult with World Bank Safeguard specialists to ascertain if more rigorous analysis, equivalent to Category A under World Bank EA policy, is appropriate. This situation is anticipated to be exceptional.

4.1.5 For sub-projects not listed under Annex I or Annex II, the Regulation does not require any EA documentation. This is normally equivalent to a World Bank EA classification of “Category C”. In a small number of cases, the IMM may be required by the World Bank to prepare an EMP. The EMP may be patterned or substituted by a PIF if such documentation is of sufficient technical quality to satisfy World Bank requirements.

4.1.6 As result of sub-project screening the following six alternatives emerge:

<table>
<thead>
<tr>
<th>Alternative Number</th>
<th>Turkish EA Requirement/Documentation</th>
<th>World Bank EA Classification/Documentation</th>
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<tbody>
<tr>
<td>I</td>
<td>Annex I</td>
<td>Category A/EIA</td>
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<tr>
<td>II</td>
<td>Annex II-Positive EIA Decision</td>
<td>Category A/EIA</td>
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<td>III</td>
<td>Annex II-Negative EIA Decision</td>
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<td>IV</td>
<td>Annex II-Negative EIA Decision</td>
<td>Category B/EMP</td>
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<td>V</td>
<td>No Annex</td>
<td>Category B/EMP</td>
</tr>
<tr>
<td>VI</td>
<td>No Annex</td>
<td>Category C</td>
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</tbody>
</table>

EA procedures for each of these six cases can be somewhat different and are described in the subsequent sections.

Closure of Waste Disposal Sites

Solid waste disposal sites at the scale that applies to the IMIP are not listed in Annex I of the Turkish Regulation as an activity that requires the preparation of an EIA. It is enlisted in Annex II but without specification whether the inclusion applies to merely (new) waste disposal site operations or rehabilitation works as well. Closure of waste disposal dumps projects to
be financed under the IMIP will be classified as Category ‘B’ under the World Bank EA policy and will therefore follow environmental safeguard procedures that are in line with the Turkish Regulation for Annex II projects. Although not envisaged, in cases where for instance hazardous waste disposal would be encountered or waste disposal sites would require substantial extension in size, a classification as Category ‘A’ could be possible.

4.2 EA Documentation

4.2.1 Under all Alternatives, unless otherwise specified, EA documentation is the responsibility of IMM. All EA documentation must include one or more maps at an appropriate scale showing project location, major natural features such as water bodies (rivers, lakes, etc.) areas of cultural significance, parks and/or natural protected areas, population centers etc. The map(s) should note, to the extent possible, any other development activities underway or planned in the near future.

Alternative I: Annex I/Category A

4.2.2 The EA Report will be prepared in accordance with the EA outline or Format to be provided by the MoEF and in accordance with World Bank policy (as detailed in OP 4.01 Annex B-Content of an Environmental Assessment Report for a Category A Project). The Turkish Regulation does not include a specific EA format for all projects. There is a general format presented in Annex III of the Regulation. However, this is only to be used as a framework by the MoEF. Each project is analyzed in terms of its individual characteristics and based upon this evaluation and input from the public consultation (discussed below) a unique format is provided to the sub-project sponsor for the specific project in question.

4.2.3 In those cases where the Turkish EA documentation requirement differs from the World Bank, the sponsor will prepare the Turkish EA document in accordance with the MoEF Format, and a separate Addendum with any supplemental information that may be required by the World Bank EA policy. The EA Executive Summary and World Bank Addendum are prepared in both English and Turkish languages.

Alternative II: Annex II Positive EIA Decision/Category A

4.2.4 IMM first prepares a PIF in accordance with the format presented in Annex IV of the Regulation and then will be subjected to the same documentation requirement as discussed under Alternative I.
**Alternative III: Annex II negative EIA Decision/Category A**

4.2.5 IMM will submit to the World Bank a copy of the “No EIA Required” certificate. Since the Turkish government has no further EA documentation requirement, the sponsor will prepare an EA document in accordance with World Bank EA policy (as detailed in OP 4.01 Annex B-Content of an Environmental Assessment Report for a Category A Project). This alternative is not anticipated to occur very often.

**Alternative IV: Annex II negative EIA Decision/Category B**

4.2.6 IMM may choose to submit to the World Bank a copy of the PIF and self monitoring form if it is well prepared and contains sufficient technical detail regarding the mitigation measures and monitoring plan that will be followed during project implementation or IMM may choose to submit a separate EMP in typical World Bank format (See Appendix B). Before preparing any document, IMM should discuss the matter with the World Bank to agree upon the type of document most suitable.

**Alternative V: No Annex/Category B**

4.2.7 IMM should discuss with the World Bank Safeguard specialists as to what documentation would be most suitable. It is anticipated the EMP format, as presented in Appendix B, would be suitable for most situations.

**Alternative VI: No Annex/Category C**

4.2.8 No action is required.

*Closure of Waste Disposal Sites*

Closure of waste disposal sites will as a rule fall under WB EA Category B, and Category A in special cases (see description in the Screening section), and an EMP for each closure/rehabilitation site would be a minimum requirement for EA documentation. Appendices A and B to this EMF provide further details for the preparation of the EMP.

4.3 **Public Consultation**

**ALTERNATIVE I: ANNEX I/CATEGORY A**

4.3.1 According to Turkish Regulation, one consultation is performed before any EA documentation is prepared. The MoEF is responsible for conducting the public consultation. In fact, MoEF utilizes the outcome of the public consultation to define the format for the EA document. World Bank EA policy requires *two* public consultations: the first, essentially the same as
the Turkish Regulation, to discuss the draft Terms of Reference for the EIA report, and the second to discuss the draft EIA report itself. Therefore, for the Istanbul Municipal Infrastructure Project, the sponsor will be responsible for conducting the second public consultation to discuss the draft EA report.

4.3.2 For either public consultation, IMM should ensure that, as a minimum, the following information about the public consultation is documented:

- Manner in which notification of the consultation was announced:
- Media(s) used
- Date(s), description or copy of the announcement
- Date(s) consultation(s) was (were) held
- Location(s) consultation(s) was (were) held
- Who was invited [Name, Organization or Occupation, Telephone/Fax/e-mail number/address (home and/or office)]
- Who attended [Name, Organization or Occupation, Telephone/Fax/e-mail number/address (home and/or office)]. A relevant attendance list is to be provided by the Istanbul Provincial Administrator’s office of the MoEF
- Meeting Program/Schedule
- What is to be presented and by whom
- Summary Meeting Minutes (Comments, Questions and Response by Presenters)
- List of decisions reached, and any actions agreed upon with schedules and deadlines and responsibilities.

**ALTERNATIVE II: ANNEX II POSITIVE EIA DECISION/CATEGORY A**

4.3.3 The same public consultation requirements as presented under Alternative I are applicable under Alternative II.

**Alternative III: Annex II negative EIA Decision/Category A**

4.3.4 Since the Turkish government has no further EA responsibility, the two public consultations will be the responsibility of IMM. Documentation requirements will be the same as indicated under Alternative I.

**ALTERNATIVE IV: ANNEX II NEGATIVE EIA DECISION/CATEGORY B**

4.3.5 Turkish government has no responsibility. However, World Bank EA policy requires at least *one* public consultation which will be conducted by IMM. The PIF document can be used as a basis for the public consultation. If it is decided that an EMP is to be prepared, than the public consultation can be conducted *before* the EMP is prepared to establish environmental issues of
concern by affected groups, or alternatively the public consultation can be conducted after a draft EMP is prepared to act as a basis of discussion. In either case, if significant environmental issues are raised at the public consultation, they should be integrated into the EMP.

**ALTERNATIVE V: NO ANNEX/CATEGORY B**

4.3.6 As with Alternative IV, Turkish government has no further EA responsibility. The IMM together with the World Bank decide the appropriate EA documentation (EMP or similar). As was the case with Alternative IV, the public consultation can be conducted before the EA document is prepared to establish the environmental issues of concern by affected groups, or alternatively the public consultation can be conducted after the draft EA document is prepared to act as a basis of discussion. In either case, if significant environmental issues are raised at the public consultation, they should be integrated into the EMP.

**ALTERNATIVE VI: NO ANNEX/CATEGORY C**

4.3.7 No public consultation is required.

4.4 **Review and Approval**

**Alternative I: Annex II/Category A**

**ALTERNATIVE II: ANNEX II POSITIVE EIA DECISION/CATEGORY A**

4.4.1 These two Alternatives require a preparation of a Turkish EIA. Under the Turkish Regulation, the MoEF is responsible for approving the EIA. IMM should have first obtained this approval (MoEF Positive Decision). As previously mentioned, IMM will provide the World Bank an English language copy of the Turkish EIA Executive Summary, the EIA report, and any World Bank Addendum. The World Bank will provide an independent review and approval. **IMM is not permitted to provide a sub-project loan from the World Bank project until it receives an official approval letter from the World Bank.**

**Alternative III: Annex II negative EIA Decision/Category A**

4.4.2 Since the Turkish government has no EA documentation requirement, IMM will prepare an EA document in accordance with World Bank EA policy (as detailed in OP 4.01 Annex B-Content of an Environmental Assessment Report for a Category A Project). IMM will provide the World Bank with an English language copy of the Turkish EIA Executive Summary and the full EIA. The World Bank will review and approve the document. **IMM is**
not permitted to provide a sub-project loan from the World Bank project until it receives an official approval letter from the World Bank.

ALTERNATIVE IV: ANNEX II NEGATIVE EIA DECISION/CATEGORY B

ALTERNATIVE V: NO ANNEX/CATEGORY B

4.4.3 IMM send the EA documentation (PIF or EMP) to the World Bank who will verify that all environmental issues have been properly identified, and mitigation measures and associated monitoring are well defined and reasonable, with responsibilities for performing these functions clearly identified.

ALTERNATIVE VI: NO ANNEX/CATEGORY C

4.4.5 No approval of EA documentation is required.

4.5 Disclosure

Sub-projects Requiring and EIA Report (Alternatives I, II, and III)

4.5.1 Alternatives I and II have prepared an EIA in accordance with the Regulation. A requirement of the Regulation is for MoEF to place the EIA on their website. In addition, IMM will be required to disclose a hard copy of the EIA at the Istanbul office of the MoEF, and send a letter to the World Bank indicating the date of the disclosure. The World Bank will deposit the English language EIA Executive Summary, English language EIA document and Addendum at the World Bank Infoshop. IMM is not permitted to provide a sub-project loan using World Bank funds until the Turkish language EIA is disclosed in Turkey and the English language Executive Summary, EIA document and Addendum are disclosed at the World Bank Infoshop.

4.5.2 Under Alternative III, MoEF has no responsibility for the EA document. IMM will be required to disclose a hard copy of the EIA near the sub-project site, and send a letter to the World Bank indicating the date and location of the disclosure. The World Bank will deposit the English language EIA at the World Bank Infoshop. MMI is not permitted to provide a sub-project loan using World Bank funds until the Turkish language EIA is disclosed in Turkey and the English language Executive Summary and Addendum are disclosed at the World Bank Infoshop.

Alternative IV: Annex II Negative EIA Decision/Category B

4.5.3 Under Turkish regulation the PIF is sent to the local government by MoEF who discloses a hard copy of the PIF near the sub-project site. If an EMP is prepared, IMM will disclose this document at the same location.
ALTERNATIVE V: NO ANNEX/CATEGORY B

4.5.4. IMM WILL DISCLOSE THE EMP NEAR THE SUBPROJECT SITE.

ALTERNATIVE VI: NO ANNEX/CATEGORY C

4.5.5 No disclosure requirements.

4.6 Conditionality

4.6.1 For all sub-projects requiring some form of EA documentation (EIA Report, PIF, EMP, etc.), namely Alternatives I, II, III, IV, and V, IMM will insure that the sub-project loan agreements include a commitment to obey the requirements set forth by the Turkish environmental regulations, as well as the measures specified by IMM and/or the World Bank. IMM is expected to exercise due diligence to ensure the sub-project is implemented with the expected attention to good environmental management.

4.7 Supervision and Reporting

4.7.1 As part of normal supervision activities, IMM will ensure compliance with all environmental obligations specified in the loan agreement. IMM will coordinate with MoEF (Istanbul and/or Ankara offices, as appropriate) to ensure compliance.

4.7.2 IMM supervision reports will include a section on environmental management. In this Section, IMM will verify whether or not environmental requirements as specified in the loan agreements have been followed. If this is not the case, reasons for noncompliance should be elaborated, and recommendations for further action to ensure future compliance. For situations of noncompliance, IMM is required to implement corrective measures in a timely manner.

B. CULTURAL PROPERTY

1. Turkish laws and practices are consistent with the World Bank safeguard policy on cultural property (OPN 11.03). Applicable Turkish legislation is embodied in Law 2863 (dated 21.07.1983) on the Protection of Cultural and Natural Resources (amended with Law Amending the laws on the Protection of Cultural and Natural Resources and some other laws No: 5224 dated 27.07.2004 ), the Regulation on Researches, Drillings, and Excavations in Relation to the Cultural and Natural Assets, published in the Official Gazette No. 18485 on 10.08.1994, and The Protection of Cultural and Natural Resources Law (Number 2863, dated July 23, 1983). There are no separate regulations for Istanbul Municipality.
2. Istanbul Municipality is responsible for application of these laws and regulations. There are two possibilities: (i) a subproject located in a “designated” area, and (ii) chance find.

2.1 **Sub-project in a Designated Area**

2.1.1 Istanbul has six regional councils, each regional council has seven representatives; five from the Ministry of Culture, two from academia and one from the metropolitan municipality, one from the district municipality, and there are also other members depending on the related subjects representing those agencies., and each council has identified certain “designated” areas within its’ jurisdiction that are culturally significant. If a sub-project is proposed for one of these designated areas, an approval from the regional council with jurisdiction over that area is all that is needed. The Ministry of Culture will bring in special workers to perform the necessary activities in the designated area and charge Istanbul Municipality accordingly. Regional councils are established for different types of cultural properties, thus there are councils for “city walls”, “coastal areas”, etc.

2.1.2 The firm has to consult the municipality to know whether the site is in a designated area or not since the plans would already be approved, and there are maps in the municipality regarding the designated areas. If there is a cultural or a natural asset in that designated area, the municipality directs the project developer to the related regional Board for approval. In order to get the approval from the Board for construction, the sponsor has to provide detailed projects (like restoration projects, etc). Since IMM is the project owner, permitting and construction oversight of the rehabilitation/closure of wild dump projects, IMM should submit a plan to World Bank clearly identifying the safeguard measures to overcome the possible conflict of interest issues and related QA/QC procedures.

2.2 **Sub-project not within a Designated Area**

2.2.1 If the project is not in a designated area, the firm applies to the Municipal Construction Department for the approval of construction no approval from any regional council is necessary. If by chance, an historical article is found during construction, the Ministry of Culture and Tourism is informed.

2.2.2 If construction is conducted outside a designated area and something is uncovered accidentally, then Turkish “chance find” procedures are in effect: work is stopped, the Ministry of Culture (Department of Museums and Archaeology) is notified who in turn sends an expert to provide direction on how to proceed with the activity.
2.2.3 The EMP will include appropriate obligations in both mitigation and monitoring plans for construction either in a “designated area” or to address chance find events.

C. NATURAL HABITATS

IMM is responsible for parks in Istanbul and the MoEF is responsible for the coastal areas. There are fourteen regions in Turkey that are designated as protected areas. None of these fourteen areas are within Istanbul. According to the MoEF there are no sensitive areas or critical habitats within the Istanbul Metropolitan area.

D. INTERNATIONAL WATERWAYS

The Government of Turkey has no special regulations regarding projects on or affecting international waterways. Therefore, only World Bank safeguard policy OP 7.50 applies. None of the sub-projects is either known or suspected to be on an international waterway or utilizes international waters for withdrawal or discharge.

E. INVOLUNTARY RESETTLEMENT

Procedures for expropriation and resettlement are included in the Resettlement Policy Framework.
APPENDIX A: Closure of Existing Solid Waste Disposal Sites

2. Uncontrolled disposal of municipal waste (garbage) at locations “out of sight of the public” had been a common disposal practice in both urban and rural settings. In as much as providing a needed public service, such disposal practices are no longer acceptable due to public health risks and induced ground/surface water contamination. There are 28 waste disposal sites (or ‘dumps’) in the European side of Istanbul within the jurisdiction of IMM that have been operated by the local municipalities. Proper closure and rehabilitation of these uncontrolled disposal sites is a high priority issue for IMM.

3. The dump areas range from very small to medium sized (some hectares). The majority of the closed dumps were closed in 2004; but others more recently or some 8 years of more ago. A large number of the closed dumps have been covered but often just the upper surface area (and not the slopes) and, as far as can be judged, mostly in a rough manner just using locally available materials. Terrain conditions and soil conditions vary widely. Disposal sites are found in flat, hilly and mountainous areas with superficial, multi-layer and mountain slope dumping. A large number of sites are adjacent to creeks or lakes. With the often high permeability of soil layers in the area and the fact that some of these lakes are used for drinking water production this issue requires careful consideration. There is one site (Silivri Belediyesi) constructed on a thick clay layer that is equipped with a simple leachate collection system. There is no environmental data available on the quality / contamination of the underground, adjacent surface waters and local groundwater systems.

4. **Project Options and Expected Impacts.** Closure of dump sites is expected to reduce human health risks, mitigate adverse environmental impacts of past waste disposal and allow the lands to be reused. Applicable options are:

   (a) Upgrading (including environmental control measures, continuation of operations and possibly environmental remediation measures);
   (b) Closure (closure and site rehabilitation, possibly including environmental remediation measures);
   (c) Removal (including site rehabilitation, possibly with environmental remediation measures); or
   (d) Do nothing.

5. **Decision Making Process.** In the above options site rehabilitation includes measures to adequately (i) prevent (further) contamination of the environment; (ii) manage leachate and land fill gas generation; (iii) cover, stabilize and reshape the dump area; and (iv) prepare the site for post-closure monitoring/management and the future land-use purpose as determined. Remediation measures may be required in case past-time waste disposal practices have caused contamination of soil groundwater or surface waters that pose a risk to the environment or public health. The remediation measures should be established in a risk assessment and as a minimum reduce the environmental and public health risks to acceptable levels. *For this purpose each waste disposal site requires*
adequate site investigations to establish ambient contamination levels in soil, groundwater and surface waters (sediments).

6. Turkey, as most countries, does not have design, construction and clean-up standards for waste disposal site closure, rehabilitation and remediation. Selection of the available environmental control, containment and clean-up methodologies will rely on cost-benefit evaluation based on environmental risk assessment and administrative decision making process (EIA Regulation) and applicable WB Safeguard Policies. Turkish “Soil Pollution Control Regulation” as revised on 31.05.2005, is an applicable relevant regulation on clean up/rehabilitation of the dump sites together with the” Water Pollution Prevention Regulation” of 31.12.2004 and related water quality legislation. Appropriate due diligence will be followed for public participation in decision making process as per the Turkish EIA Regulation. Feasibility studies and design specifications will refer to internationally recognized good practices for waste disposal site closure and rehabilitation.
APPENDIX B: Format for Environmental Management Plan

Project Description

7. Present a brief description of the subproject. Include the nature of the investment, the location, and any characteristics of the area that are of particular interest, e.g. near a protected area, area of cultural, historical, religious interest etc. Also, very briefly describe the general land use characteristics (farming, small industry etc.), and the location(s) of the nearest population centers.

1. MITIGATION PLAN

<table>
<thead>
<tr>
<th>Phase</th>
<th>Issue</th>
<th>Mitigating Measure</th>
<th>Cost of Mitigation (If Substantial)</th>
<th>Responsibility*</th>
<th>Start Date</th>
<th>End Date</th>
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<tbody>
<tr>
<td>Construction (Rehabilitation /</td>
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</tbody>
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* Items indicated to be the responsibility of the contractor shall be specified in the bid documents
## 2. MONITORING PLAN

<table>
<thead>
<tr>
<th>Phase</th>
<th>What parameter is to be monitored?</th>
<th>Where is the parameter to be monitored?</th>
<th>How is the parameter to be monitored?</th>
<th>When is the parameter to be monitored?</th>
<th>Monitoring Cost</th>
<th>Responsibility</th>
<th>Start Date</th>
<th>End Date</th>
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<tr>
<td>Construction (Rehabilitation/remediation)</td>
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</table>

## 3. INSTITUTIONAL STRENGTHENING

1. **Equipment Purchases** (Tabular Presentation Preferred)

List:
- Type of equipment
- Number of Units
- Unit cost
- Total Cost
- Local or International Purchase

2. **Training/Study Tours**

List:
- Type of Training (Mitigation, Monitoring, Environmental Management, Other)
- Number of Students
  - Current and Future Organizational Unit in Which They Work or Current and Future Title/Job Description
- Duration of Training
- Start Date/End Date (for each student)
- Venue of Training (Domestic or Abroad)
- Institute or Organization to Provide Training
- Cost (Local and Foreign)
3. Consultant Services

- Type of Service
- Terms of Reference
- Justification
- Cost

4. Special Studies

- Justification
- Terms of Reference
- Cost

4. SCHEDULE

Present (preferably in Chart Form) start dates and finish dates for:

- Mitigation Activities
- Monitoring Activities
- Training Activities

5. INSTITUTIONAL ARRANGEMENTS

A narrative discussion supported by organizational charts detailing:

- Institutional responsibilities and procedures for mitigation and monitoring and how they are linked for environmental management
- Environmental information flow (reporting—from who and to who and how often)
- Decision making chain of command for environmental management (to take action, to authorize expenditures, to shut down, etc.)

In short, how is all the monitoring data going to be used to maintain sound environmental performance—who collects the data, who analyzes it, who prepares reports, who are the reports sent to and how often, and who does that person send it to, or what does he/she do with the information—who has the authority to spend, shutdown, change operations etc.

6. CONSULTATION WITH LOCAL NGOs AND PROJECT-AFFECTED GROUPS

Provide documentation of the following:

- Manner in which notification of the consultation was announced: media(s) used, date(s), description or copy of the announcement
- Date(s) consultation(s) was (were) held
• Location(s) where consultation(s) was (were) held
• Who was invited
  Name, Organization or Occupation, Telephone/Fax/e-mail number/address (home and/or office)
• Who attended
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<th>Cost</th>
<th>Institutional Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONSTRUCTION</td>
<td>Environmental disturbances caused during retrofitting (maybe demolition) of the structures</td>
<td><strong>Air Quality</strong>&lt;br&gt;&lt;br&gt;<strong>Dust emissions; during retrofitting or demolition activities would be minor and temporary.</strong>&lt;br&gt;&lt;br&gt;<strong>Vehicle exhaust emissions; carbon monoxide (CO), nitrogen oxides (NOₓ), sulphur oxides (SOₓ) and fugitive hydrocarbons.</strong>&lt;br&gt;&lt;br&gt;Dust prevention measures and good house keeping practices such as water spraying to prevent dust and use of curtains and screening of the construction area.&lt;br&gt;&lt;br&gt;Use of masks, work gloves and clothes by workers.&lt;br&gt;&lt;br&gt;All vehicles delivering dusty construction materials to the site or removing debris will be enclosed and covered to prevent release of dust.&lt;br&gt;&lt;br&gt;Selection and use of vehicles/engines with appropriate emission control technologies and equipment.&lt;br&gt;&lt;br&gt;Maintaining of all vehicles and equipment engines and exhaust systems in order not to breach Regulation limits set for that vehicle/equipment type and mode of operation. (See Section 3.3.3)</td>
<td>Criteria/ specifications to be incorporated into bidding and contract documents. It is not considered as a separate cost item.</td>
<td>Engineer is responsible to monitor and supervise the activity. Contractor is responsible to execute the mitigation measure. Provincial Directorate of MoEF, Police Department and Istanbul Metropolitan Municipality is responsible to supervise the activity</td>
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<td>Phase</td>
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<td>Mitigating Measure</td>
<td>Cost</td>
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<tr>
<td>CONSTRUCTION</td>
<td>Noise</td>
<td>To ensure the use of noise control techniques on noisy equipment such as use of machines equipped with appropriate mufflers also located appropriately</td>
<td>To ensure that noise emissions from the site do not result in accidence of Turkish threshold values. Operating times limited to normal working hours to be determined with due sensitivity to the citizens private life (such as, working on weekends near schools, hospitals, mosques, churches praying times)</td>
<td>Engineer is responsible to monitor and supervise the activity. Contractor is responsible to execute the mitigation measure. Provincial Directorate of MoEF is responsible to supervise the activity. Istanbul Metropolitan Municipality is responsible to supervise the activity.</td>
</tr>
<tr>
<td></td>
<td>Environmental disturbances caused during retrofitting (maybe demolition) of the structures</td>
<td>Transportation</td>
<td>Use of trucks with covered dumpers</td>
<td>Optimal use of alternative roads to prevent disturbance to the visitors and residents.</td>
</tr>
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<td>Phase</td>
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<tr>
<td>Waste Management</td>
<td>Retrofitting and demolition activities are one of the largest sources of waste.</td>
<td><strong>Demolition Debris Handling</strong>&lt;br&gt;• Prepare a plan for handling of Demolition Debris in accordance with the Regulation. (See Section 3.3.5)&lt;br&gt;• Get approval of the Istanbul Metropolitan Municipality.&lt;br&gt;• Provide storage, transportation and disposal activities in accordance with the Plan.</td>
<td>Criteria/ specifications to be incorporated into bidding and contract documents. It is not considered as a separate cost item.</td>
<td>Engineer is responsible to monitor and supervise the activity. Contractor is responsible to implement the mitigation measure. Provincial Directorate of MoEF is responsible to monitor and supervise the activity. Istanbul Metropolitan Municipality is responsible to assist the Contractor, approve the Plan and supervise the implementation.</td>
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<td><strong>Hazardous Waste Handling</strong>&lt;br&gt;• Determine potential hazardous waste to be handled during retrofitting in accordance with the Regulation and in consultation with the owner/management of the Public Building.&lt;br&gt;• Prepare a plan for handling these wastes in accordance with the Regulation and in consultation with Istanbul Metropolitan Municipality. (Section 3.3.6)&lt;br&gt;• Provide handling, storage, transportation and disposal/destruction activities in accordance with the Plan.</td>
<td>Criteria/ specifications to be incorporated into bidding and contract documents. It is not considered as a separate cost item.</td>
<td>Engineer is responsible to monitor and supervise the activity. Contractor is responsible to implement the mitigation measure. Istanbul Metropolitan Municipality is responsible to assist the Contractor, approve the Plan and supervise the Implementation.</td>
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<tr>
<td>CONSTRUCTION</td>
<td><strong>Handling Asbestos Containing Material</strong></td>
<td>Consult the owner/manager of the building for possible existing material containing asbestos (It is envisaged that design drawings and specification will provide input for this issue.)&lt;br&gt;Prepare a Plan for handling the asbestos containing material in accordance with the Regulation. (See Section 3.3.7)&lt;br&gt;Obtain the approval of MoEF for this Plan.&lt;br&gt;Execute mitigation measures during retrofitting activities in accordance with this Plan.</td>
<td>Criteria / specifications to be incorporated into bidding and contract documents. It is not considered as a separate cost item.</td>
<td>Engineer is responsible to monitor and supervise the activity. Contractor is responsible to implement the Mitigation Measure. MoEF is responsible to approve the handling plan and supervise its implementation. Istanbul Metropolitan Municipality is responsible to monitor and supervise the Activity.</td>
</tr>
<tr>
<td>CONSTRUCTION</td>
<td><strong>Radiation Safety</strong>&lt;br&gt;- Relevant for Retrofitting of Hospitals</td>
<td>Hospital Management in accordance with the “Accident and Emergency Plan” of the hospital will prepare a Radiation Safety Plan.&lt;br&gt;Hospital will get approval of TAEK for this plan to be implemented during retrofitting activities.&lt;br&gt;Execute mitigation activities in accordance with this plan. (See Section 3.3.8)</td>
<td>Criteria / specifications to be incorporated into bidding and contract documents. It is not considered as a separate cost item</td>
<td>Hospital Management is responsible to prepare and execute the Mitigation Plan. TAEK is responsible to direct, approve and supervise the execution of the plan. Engineer is responsible to monitor and supervise the activity.</td>
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<td></td>
<td><strong>Urban Renewal Projects with housing units more than 200.</strong></td>
<td>Client (Project Implementation Unit) needs to have an EIA report to be prepared. Ministry of Environment to approve the report. Contractor to implement the measures. (See Section 3.3.1)</td>
<td>App. 50,000 U.S $/EIA Report.</td>
<td>Relevant Implementation Unit to prepare (or have it prepared) an EIA report. MoEF is responsible to approve the report. Designer/contractor is responsible to implement the measures. Istanbul Metropolitan Municipality to supervise the implementation.</td>
</tr>
</tbody>
</table>
| **CONSTRUCTION** | **Waste Water (Point/Non Point) Handling** | To prevent any water pollution due to construction activities contractor will provide facilities for discharge of wastewater and/or spill erosion during construction:  
• Either to city sewerage system (if available) directly, or  
• Through septic tanks to be constructed in sufficient capacity, and periodically evacuated. Additional necessary precaution shall be taken to prevent the pollution of nearby water courses by the wastewater resulting from construction activities. | Specifications to be incorporated into bidding and contract document. It is not considered as a separate cost item. | Engineer is responsible to monitor and supervise the activity. Contractor is responsible to implement the mitigation measure. ISKI (Istanbul Metropolitan Municipality Water and Sewerage Authority) to assist and supervise the activity. |
<table>
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<tr>
<th>Phase</th>
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<th>Mitigating Measure</th>
<th>Cost</th>
<th>Institutional Responsibility</th>
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</thead>
<tbody>
<tr>
<td>☑ Cultural Heritage</td>
<td>Consider relevant legal steps as mentioned in Section 4.0</td>
<td>No additional cost item.</td>
<td>As defined in the laws. PIU to coordinate and define the status. Relevant institutions to select the buildings accordingly</td>
<td></td>
</tr>
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</table>
## MONITORING PLAN

<table>
<thead>
<tr>
<th>Phase</th>
<th>What parameter is to be monitored?</th>
<th>Where is the parameter to be monitored?</th>
<th>How is the parameter to be monitored type of monitoring equipment?</th>
<th>When is the parameter to be monitored frequency of measurement or continuous?</th>
<th>Why is the parameter to be monitored (optional)?</th>
<th>Cost</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONSTRUCTION</td>
<td>Air Quality</td>
<td>At the Construction Site</td>
<td>Portable Measurement Devices</td>
<td>At the Project Start</td>
<td>To ensure compliance with the Air Pollution Control Regulation in order to mitigate any potential negative environmental effects.</td>
<td></td>
<td>Contractor is responsible to execute the Mitigation Measure.</td>
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<td></td>
<td>Vehicle Exhaust Emissions</td>
<td>At the Construction Site</td>
<td>Visual</td>
<td>After all servicing vehicles</td>
<td>To prevent any possible disturbance and adverse health effects on the residents.</td>
<td></td>
<td>Istanbul Municipality is responsible to supervise</td>
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<td></td>
<td>Dust</td>
<td>(In the case that during retrofitting hospitals still operate partially and dormitories are utilized at schools) At the operating parts of building.</td>
<td>Visual</td>
<td>Weekly Continuously</td>
<td></td>
<td></td>
<td>Supenervision Engineer is responsible to supervise.</td>
</tr>
</tbody>
</table>

Criteria / specifications to be incorporated into bidding and contract documents. It is not considered as a separate cost item.
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<th><strong>Where is the parameter to be monitored?</strong></th>
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<th><strong>When is the parameter to be monitored frequency of measurement or continuous?</strong></th>
<th><strong>Why is the parameter to be monitored (optional)?</strong></th>
<th><strong>Cost</strong></th>
<th><strong>Responsibility</strong></th>
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</thead>
<tbody>
<tr>
<td>Noise</td>
<td>Near the Construction Site (In the case that during retrofitting hospitals still operate partially and dormitories are utilized at schools.) At operating parts of the building.</td>
<td>Portable Noise Meters</td>
<td>On Daily, Hourly Basis</td>
<td>Continuously</td>
<td>To ensure compliance with the Noise Control Regulation in order to mitigate any potential negative environmental effects. To prevent any possible disturbance and adverse health effects on the residents.</td>
<td>Criteria / specifications to be incorporated into bidding and contract documents. It is not considered as a separate cost item.</td>
<td>Contractor is responsible to execute the Mitigation Measure. Istanbul Metropolitan Municipality is responsible to supervise the Activity</td>
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<tr>
<td><strong>CONSTRUCTION</strong></td>
<td><strong>Handling Asbestos Containing Material</strong></td>
<td>At the Construction and Disposal Site</td>
<td>In accordance with the plan to be prepared. (See Section 3.3.7)</td>
<td>In accordance with the plan to be prepared.</td>
<td>To ensure compliance with the Directive for Handling of Asbestos Products in order to mitigate any potential negative environmental effects</td>
<td>Criteria / specifications to be incorporated into bidding and contract documents. It is not considered as a separate cost item.</td>
<td>Engineer is responsible to monitor and supervise the activity.</td>
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<td>At the Construction and Disposal Site</td>
<td>In accordance with the plan to be prepared. (See Section 3.3.8)</td>
<td>In accordance with the plan to be prepared.</td>
<td>To ensure compliance with the Directive for Radiation Safety in order to mitigate any potential negative environmental effects.</td>
<td>Criteria / specifications to be incorporated into bidding and contract documents. It is not considered as a separate cost item.</td>
<td>Hospital Management is responsible to prepare and execute the Mitigation Plan.</td>
<td>TAEK is responsible to direct, approve and supervise the execution of the plan.</td>
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<tr>
<td>CONSTRUCTION</td>
<td>Waste Water Handling</td>
<td>Near and at the Construction Site</td>
<td>Utilization of Designated Routes.</td>
<td>On Daily Basis.</td>
<td>To mitigate potential negative effects.</td>
<td>Criteria / specifications to be incorporated into bidding and contract documents. It is not considered as a separate cost item.</td>
<td>Contractor is responsible to implement the Measure</td>
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<td>Observation</td>
<td>Continues</td>
<td>To mitigate potential negative effects.</td>
<td>Criteria / specifications to be incorporated into bidding and contract documents. It is not considered as a separate cost item.</td>
<td>Engineer is responsible to monitor and supervise the activity.</td>
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<td></td>
<td>ISKI (Istanbul Metropolitan Municipality Water and Sewerage Authority) to assist and supervise the activity.</td>
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</table>

29