

# Environmental Assessment and Review Framework

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January 2014

## Indonesia: Neighborhood Upgrading and Shelter Project – Phase 2

Prepared by the Directorate General of Human Settlements, Ministry of Public Works for the Asian Development Bank.

## CURRENCY EQUIVALENTS

(as of 15 October 2013)

Currency unit	–	rupiah (Rp)
Rp1.00	=	\$0.0000914813
\$1.00	=	Rp10,931.20

## ABBREVIATIONS

ADB	=	Asian Development Bank
AMDAL	=	Analisis Mengenai Dampak Lingkungan (Environmental Impact Assessment)
BKM	=	badan keswadayaan masyarakat (community self-help groups)
CAP	=	community action plan
CIO	=	community implementation organization
CDD	=	community-driven development
CPMU	=	central project management unit
DGHS	=	Directorate General of Human Settlements
EARF	=	environmental assessment and review framework
EIA	=	environmental impact assessment
GDP	=	gross domestic product
IEE	=	initial environmental examination
LCO	=	local coordinating office
MPW	=	Ministry of Public Works
NSD	=	new site development
NUAP	=	neighborhood upgrading action plan
NUSP	=	Neighborhood Upgrading and Shelter Project
CPMU	=	project management unit
RPKPP	=	rencana pengembangan kawasan prioritas permukiman = plan for the development of priority settlement areas
RTRW	=	Rencana Tata Ruang dan Wilayah (spatial plan)
SPPIP	=	strategi pembangunan permukiman and infrastruktur perkotaan = strategy on the development of urban settlement and infrastructure
SPPL	=	Surat pernyataan pengelolaan lingkungan (statement of readiness to manage and monitor the environment)
SPS	=	Safeguard Policy Statement
TOR	=	terms of reference
UKL	=	Usaha Pengelolaan Lingkungan (Environmental Management Efforts)
UPL	=	Usaha Pemantauan Lingkungan (Environmental Monitoring Efforts)

## **NOTES**

- (i) The fiscal year (FY) of the Government of Indonesia and its agencies ends on 31 December. FY before a calendar year denotes the year in which the fiscal year ends, e.g., FY2011 ends on 31 December 2011.
- (ii) In this report, "\$" refers to US dollars.

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## ENVIRONMENTAL ASSESSMENT AND REVIEW FRAMEWORK

### A. Introduction

1. This is the environmental assessment and review framework (EARF) for the Neighborhood Upgrading and Shelter Project - Phase 2 (NUSP Phase 2) supported by the Asian Development Bank (ADB) and executed and implemented by the Directorate General of Human Settlements, Ministry of Public Works (MPW). The proposed NUSP Phase 2 is formulated to support the Government in achieving the “Cities without Slums Program”, which was launched to address issues related to rapid urbanization. The project is also expected to contribute towards meeting the millennium development goals (MDG), particularly targets 7C and 7D.<sup>1</sup> The project will be implemented in 20 towns to develop and implement inclusive pro-poor city development plans and improve living conditions in slums, through (i) providing resources to local governments and communities for upgrading basic infrastructure in slum areas; (ii) strengthening planning and management capacities of local administrations for inclusive pro-poor urban planning; (iii) establishing sustainable mechanisms to engage communities in urban development planning processes; and (iv) launching public private partnerships to establish affordable housing areas for poor families.<sup>2</sup>

2. The project also builds on lessons from Government's foremost poverty reduction program - the National Program for Community Empowerment (PNPM Mandiri), which adopts a CDD approach and provides nationwide assistance for improving essential social services and basic infrastructure by providing block grants to poor communities.<sup>3</sup> Addressing poverty issues and basic infrastructure needs through CDD is considered more effective, sustainable and equitable compared with centralized arrangements as communities become active partners in development. The CDD approach adopted under PNPM gives communities control over planning decisions and investment resources and focuses on community empowerment to improve basic infrastructure and service delivery. Community participatory planning and design of specific investments is a key feature. The community controls resources; hence funds are transferred directly to community-managed bank accounts. The community is also managing project implementation supported by consultants and facilitators wherever required. The CDD process is designed to systematically mobilize the capacity of communities to prioritize their development needs, design activities, seek technical assistance, manage resources, and implement and sustain development actions.<sup>4</sup> Building on lessons of the overall PNPM program and the latest ADB financed CDD projects; the proposed new Project will follow a similar CDD approach.

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<sup>1</sup> MDG targets for achieving significant improvement in the lives of slum dwellers (MDG target 7D) and halving the proportion of households without sustainable access to safe drinking water and basic sanitation (MDG target 7C).

<sup>2</sup> The project will promote PPPs whereby: (i) local governments will provide land; (ii) MPW will establish the infrastructure (roads, water and electricity supply, sanitation facilities) financed by loan proceeds; (iii) private developers will pre-finance the house construction; (iv) commercial banks will provide loans to poor families to buy new houses.

<sup>3</sup> PNPM Mandiri was launched in 2007. The RPJM for 2010-2014 includes PNPM Mandiri as a development tool to accelerate poverty alleviation with an indicative budget allocation of \$6,754 million over five years.

<sup>4</sup> Encouraged by the success of the PNPM scheme, three recent ADB-financed basic infrastructure improvement projects were aligned to PNPM using a project loan modality and adopting a CDD approach, including: (i) Rural Infrastructure Support to PNPM Mandiri Project (Loan 2449-INO), approved in September 2008 for about \$50.0 million equivalent; (ii) Rural Infrastructure Support to PNPM Mandiri Project II (Loan 2575-INO), approved in November 2009 for \$84.24 million; (iii) Urban Sanitation and Rural Infrastructure Support to PNPM Mandiri Project (Loan 2768-INO), approved in August 2011 for \$100 million.

3. The expected impact of the project will be improved living conditions in urban areas. The outcome will be improved infrastructure and access to service delivery in poor urban neighborhoods in 20 project cities. The project will have three outputs: (i) Institutional capacities for managing pro-poor urban development are strengthened; (ii) Infrastructure in slum neighborhoods upgraded; and (iii) New settlements for poor families established.

## **B. ADB's Environmental Requirements**

4. ADB requires the consideration of environmental issues in all aspects of its operations, and the requirements for environmental assessment are described in ADB's Safeguards Policy Statements (SPS) 2009, which includes an environmental assessment of all project loans, program loans, sector loans, sector development loans, loans involving financial intermediaries, and private sector loans. The nature of the environmental assessment required for the a project depends on the significance of its environmental impacts, which are related to the type and location of the project, the sensitivity, scale, nature and magnitude of its potential impacts, and the availability of cost-effective mitigation measures. Projects are screened for their expected environmental impacts as follows:

- (1) Category A: Projects could have significant adverse environmental impacts. Impacts may affect an area larger than the sites or facilities subject to physical works.
- (2) Category B: Projects could have some adverse environmental impacts, but of lessee degree or significance than those in category A. Impacts are site – specific and can be readily addressed through mitigation measures.
- (3) Category C: Projects are likely to have minimal or no adverse environmental impacts.
- (4) Category FI: Projects involved a credit line through a financial intermediary or an equity investment in a financial intermediary.

5. Overall, it is expected that the infrastructure upgrading activities will create positive impacts on the environment and improve the livelihoods at slum communities. The project is categorized as environmental category B. Since the project will use a CDD approach by which communities will identify project locations and specific types of infrastructure interventions only during the first year of implementation, an Environmental Assessment and Review Framework (EARF) has been prepared. The EARF provides guidance on environmental screening for each type of infrastructure upgrading and includes environmental assessment checklists to review environmental implications and ensure that there are no adverse impacts. The EARF is based on the (i) lessons from similar CDD infrastructure projects,<sup>5</sup> (ii) feedback from experienced officials from the Executing Agency, provincial and district/city administrations, community implementation organizations (BKMs), and community members; and (iii) review of the relevant documents related to urban development projects. Under output 2, in the process to prepare Neighborhood Upgrading Action Plans (NUAPs) that will formulate specific infrastructure upgrading activities for each project slum neighborhood, environmental screenings will be conducted to identify potential issues. The assessments will be conducted and guided by

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<sup>5</sup> Lessons from the following projects have been considered (i) the Neighborhood Upgrading and Shelter Sector Project (NUSSP, Loans 2072/2073-INO), (ii) two Rural Infrastructure Support to PNPM Mandiri Projects I (RIS-PNPM I; Loan 2449-INO, and RIS-PNPM II Loan 2575-INO), and (iii) the ongoing Urban Sanitation and Rural Infrastructure Support to PNPM Mandiri Project (Loan 2768-INO).

safeguard specialists and trained community advisors.<sup>6</sup> The environmental assessment checklists will be attached to the NUAPs.

6. Up to five cities will participate under output 3 to develop new sites for settlement (NSD). The local governments will provide the land for the new site development of at least 2 hectares. The legal title of the land underlying the NSD sites will be placed with and in the name of the corresponding project city, and the land will be vacant and ready for implementation. It is also required that the respective local house of representatives (local parliament, DPRD) provides their approval for the use of the land for the NSD.<sup>7</sup> An IEE will be conducted once the NSD site has been endorsed by the DPRD. The IEE report will be part of the full NSD proposals that have to be prepared by each participating cities within the first 18 months of project implementation. NSD proposals without the IEE report will not be endorsed by the DGHS and ADB.

7. This environmental assessment and review framework (EARF) is prepared to guide the environmental assessment process to screen urban infrastructure interventions, set up institutional arrangements in relation to environmental management and monitoring, and define environmental assessment requirements in accordance with the existing/applicable laws and regulations of the Government and with Asian Development Bank (ADB's) environment policy and *Environmental Assessment Guidelines*.

### C. Overview of Type of Infrastructure Interventions to be Assessed

Table 1: Summary of Infrastructure Interventions

Output 1: Institutional capacities for managing pro-poor urban development strengthened	There are no infrastructure interventions under output 1	
Output 2: Infrastructure in slum neighborhood upgraded	Roads, Bridges and Pathways	<ul style="list-style-type: none"> <li>• Rehabilitation or upgrade of neighborhood roads (1.5km and 3m width in average, earth to gravel or gravel to asphalt and bridges).</li> <li>• New construction of footpath or pathways for pedestrians and motorcycles.</li> <li>• Rehabilitation or construction of drains along the existing roads.</li> </ul>
	Water Supply and Sanitation	<ul style="list-style-type: none"> <li>• Rehabilitation or upgrade of existing water supply systems.</li> <li>• Construction of new wells (mainly shallow wells).</li> <li>• Construction of toilets with septic tanks.</li> </ul>
	River Normalization/Flood Control	<ul style="list-style-type: none"> <li>• Rehabilitation or upgrade of existing flood canals, embankment and or its retaining walls.</li> <li>• Construction of new flood canals/drainages.</li> </ul>

<sup>6</sup> National and regional consultant teams will include environmental safeguard experts, who will guide communities and LCO to carry out the environmental screening and supervise the process. The environmental screening process is described in Attachment 10.

<sup>7</sup> The land will be granted or sold in a subsidized price to beneficiaries. Under the government's regulation, the transfer of ownership of any local government-owned asset will require approval from the local parliament. As of the fact-finding mission, local parliament approvals have not been obtained, as they would require assurance that the project will be implemented (i.e. in for of the signed loan agreement). Considering the formal approval from the local parliament is not in place yet, to reduce risk of location change, the IEE will be prepared during project implementation only.

	Solid Waste	<ul style="list-style-type: none"> <li>Provision of garbage bins, collection carts, construction of transfer stations/temporary disposal sites.</li> </ul>
	Other	<ul style="list-style-type: none"> <li>Installment of street lights</li> </ul>
Output 3: New settlements for poor families established	Development of new housing and settlements	<ul style="list-style-type: none"> <li>Development of 5 new housing sites with about 2 hectares for each site.</li> </ul>

#### D. Country's Environmental Assessment and Review Procedures

8. Indonesia has its own environmental impact management system for development projects, *Analisa Mengenai Dampak Lingkungan* (AMDAL), which describes coverage of facilities and activities under the Government's environmental impact assessment system and the procedural steps and compliance requirements. The relevant environmental assessment law and regulations include:

- Law No. 32 Year 2009 on the Environmental Protection and Management;
- Minister of Environment Regulation No.5/2012 on types of activities/projects requiring environmental impact assessment (EIA);
- Minister of Public Works Regulation No. 10/PRT/M/2008 on types of public infrastructure/facilities activities/projects requiring environmental management efforts (*Upaya Pengelolaan Lingkungan Hidup*) and environmental monitoring efforts (*Upaya Pemantauan Lingkungan Hidup*);
- Minister of Environment Regulation No.16/2012 on the guidance for the preparation of environment documents;
- Government Regulation No. 27/2012 on Environmental Permits.

9. The Environmental Protection and Management Law categorizes activities/projects into three types: (i) projects requiring an EIA report (*Analisis Mengenai Dampak Lingkungan*, AMDAL); (ii) projects requiring Environmental Management Effort (*Upaya Pengelolaan Lingkungan*, UKL) and Environmental Monitoring Effort (*Upaya Pemantauan Lingkungan*, UPL); and (iii) projects that do not require ANDAL or UKL/UPL. The Law retains the requirements that any parties whose activities are likely to have a significant impact on the environment, should prepare and submit an environmental impact assessment (EIA) to the relevant authority for approval or recommendation. Article 23 of the Law sets out the criteria for any activity that requires an *Analisis Mengenai Dampak Lingkungan*, AMDAL/(the equivalent of ADB's EIA). If an activity does not qualify for the criteria set out in article 23, the initiating party will be required to prepare an environmental management efforts (*Upaya Pengelolaan Lingkungan*, UKL) and Environmental Monitoring Effort (*Upaya Pemantauan Lingkungan*, UPL) – similar to the ADB's IEE. If its activity/project does not require either the AMDAL or the UKL/UPL, the initiating party should prepare and submit a statement of readiness to manage and monitor the environment (*Surat Pernyataan Kesanggupan Pengelolaan dan Pemantauan Lingkungan*, SPPL).

10. Regulation No. 5/2012 provides detailed lists on types of investment activities (sector specific thresholds) which require a preparation of EIA. Investment activities below the thresholds will be assessed by responsible district governments in charge of environment to determine an appropriate environmental category. Attachment 1 shows the environmental screening process. The regulation No.5/2012 also provides an extensive list of screening and sector-specific criteria for investment projects requiring EIA. The Environmental Permit Regulation No.27/2012 requires that application for environmental permit shall be accompanied

by environmental assessment documents (AMDAL and UKL/UPL), business legal documents, and business profile document. Under this regulation, project owners need to apply an environmental permit to the appropriate government authority before project implementation. The main gap between the AMDAL system and ADB's environmental assessment requirements is in two areas: (i) the format of AMDAL (EIA) does not include analysis of alternatives; and (ii) public consultation is not included in the formats for AMDAL and UKL/UPL. Implementation capacity of AMDAL system at the local level varies. The World Bank has been providing support to *AMDAL Revitalization* through policy-oriented research focusing on adapting existing environmental regulatory regimes to the changed circumstances of decentralization.

11. In accordance with the AMDAL system, none of the individual infrastructure interventions implemented so far under the previous NUSSP, RISP (Rural Infrastructure Support Project), RIS-PNPM (Rural Infrastructure Support to PNPM Mandiri Project) have required UKL/UPL (equivalent to ADB's IEE) because (i) urban infrastructure interventions are small scale; and (ii) screening criteria exclude any infrastructure interventions located within or next to the environmentally sensitive areas. Since the proposed project will apply the community-driven development approach (CDD) involving small scale infrastructure, the project interventions are not likely to require a preparation of UKL/UPL. However, in accordance with Law No. 32/2009, SPPLs will be required.

12. Environmental safeguard measures were taken into considerations in the guidelines of previous similar CDD projects such as the RIS PNPM, NUSSP to comply with respective safeguard policies. The environmental screening checklists adopted under previous projects such as RIS-PNPM will be adopted under the NUSP.

#### **E. Anticipated Environmental Impacts and Possible Mitigation Measures**

13. Overall, it is expected that the infrastructure upgrading activities will create positive impacts on the environment and improve the livelihoods at slum communities. The environmental impacts associated with the upgrading activities are temporary and related to the implementation of the actual civil works.

14. **Possible Environmental Problems due to Project Locations and Design.** No project sites are expected to locate in or adjacent to areas that are sensitive in topographical or environmental terms and all are urban.

15. **Possible Environmental Problems Associated with Construction Stage.** Construction activities, no matter how small and localized, can create disturbance and danger to adjacent residents and can include interruptions to existing services and access. Silt run off is frequently a problem within the local construction area that will need to be carefully managed. Based on the CDD approach, potential problems will be discussed with the community members during the planning process of the upgrading activities. The CIOs/BKMs assisted by the community advisors will prepare a construction schedule that will include regular monitoring of potential problems to mitigate the impacts and keep annoyance, disturbance and danger to the community to a minimum..

16. **Possible Environmental Problems Resulting from Facility Operations.** Adverse operational impacts may include potential environmental impacts due to the operation of the built facilities, e.g. the operation of water supply facilities (deep wells) may cause ground water depletion; the operation of temporary solid waste disposal may cause air pollution (odor). Some of the project's anticipated environmental impacts are given in attachment 2. More



comprehensive and sub-project specific assessments need to be conducted and the environmental management plans developed once the specific subprojects are identified.

## **F. Specific Procedures to be used for Neighborhood Upgrading Proposals**

### **1. Responsibilities and Authorities**

17. The project will use the implementation mechanisms that are in place for similar CDD projects supported by ADB and executed and implemented by the Ministry of Public Works (MPW) through Directorate General of Human Settlements (DGHS). The EA will establish a central project management unit (CPMU) at the national level. The CPMU will be responsible for the management, coordination, and monitoring of project activities. Each city will establish local coordination offices (LCO) that will facilitate project activities at the city level. Each participating neighborhood will establish a community implementation organization (CIO) or work through an established *Badan Keswadayaan Masyarakat* (BKM= community self-help group), which will have a legal status. Each BKM/CIO will assign staff to manage the project activities including environmental aspects. Community advisors will be assigned to assist the communities and BKM/CIOs neighborhoods. District government units for public works, environment and health also have responsibilities to ensure that infrastructure investments proposed by BKMs/CIOs.

18. Supported by consultant teams, CIOs/BKMs will facilitate infrastructure assessments at the slum neighborhoods that will be carried out by the community members themselves to identify problems and needs, evaluate the community implementation capacity, establish efficient planning and decision-making processes, prioritize infrastructure needs and prepare specific neighborhood upgrading action plans (NUAPs), which will document the results of the needs assessments and specify the type and mix of interventions, including technical designs, cost estimates and initial O&M plans. Facilities/infrastructure allowed for financing under the project include water supply and sanitation facilities; river normalization/flood control system, neighborhood roads, pathways, and drainage; and electricity and street-lighting facilities. In particular, teams of community advisors will assist CIOs/BKMs in the conduct of the assessments and preparation of NUAPs. One community advisor will assist 2 to 3 BKMs/CIOs.

19. During the infrastructure assessments and the prioritization of infrastructure needs environmental screenings and assessments of the potential infrastructure upgrading activities will be conducted and documented in the NUAP. The project will engage a team of safeguard specialists, who will train community advisors and LCOs and will supervise and guide the process of environmental screening and assessments at the slum neighborhoods.

20. To achieve a wider development impact at the city level and address infrastructure issues beyond the boundaries of the individual slums neighborhoods, the LCOs with the help of consultants will establish a consultation mechanism among project CIOs/BKMs and the city administration to formulate a consolidated infrastructure upgrading investment plan based on the individual NUAPs. In the process of preparing the overall infrastructure upgrading investment plan, CIOs/BKMs and the city administration will jointly evaluate NUAPs from each slum neighborhood, agree on collaboration to link upgrading activities between neighborhoods, concur on fund allocations per neighborhood within the overall investment amount earmarked for the respective project city, and revise individual NUAPs if necessary. The consolidated city investment plan will be approved by all project CIOs/BKMs and the city administration and include the revised NUAPs with agreed investments amounts for each project slum neighborhood. All consolidated city investment plans will be reviewed and approved by the EA and ADB. The project will ensure that the consultation process is conducted in a transparent

and fair manner. During this consultation process CIOs/BKMs and city administrations will also assess whether individual NUAPs are aligned with the RTRW and SPPIP and agree on adjustments if necessary. Safeguard specialists will assess the consolidated city investment plans to ensure that environmental assessments are reflected.

21. Under output 3, the project is expected to establish models of partnerships between central government, local administrations, developers, and financial institutions to provide housing for poor people. The project will take a catalytic role to develop examples for replication and promote public-private alliances whereby: (i) local governments will provide land from their own resources and issue land titles for potential new house owners, which are required as collaterals to receive loans from commercial banks; (ii) MPW will establish the basic infrastructure (roads, water and electrify supply, sanitation facilities) financed by loan proceeds; (iii) private developers will pre-finance the house construction, and coordinate connections to the main networks of service providers (water and electricity); (iv) local commercial banks will provide loans to poor families to buy (or construct) new houses; (v) BKM/CIOs, in close cooperation with the local administration, will organize socialization campaigns to explain the scheme among poor families, develop transparent criteria to select poor beneficiary families to be eligible to apply under the new site development scheme, and facilitate the selection process. For the new site development, IEEs will be prepared at each site after the respective project city will have formally confirmed its readiness to participate in the NSD component and designated the land. The IEE report will be part of the NSD proposal to be approved by the EA and ADB.

**Table 2: Main Environmental Responsibilities**

Institutions		Responsibilities
National	Ministry of Public Works (EA, CPMU)	<ul style="list-style-type: none"> <li>• Overall coordination, supervision, monitoring.</li> <li>• Preparation and submission of consolidated quarterly progress reports and evaluation reports.</li> <li>• Prepare guidelines for the environmental due diligence and monitoring of environmental management plan.</li> </ul>
District/city	Public Works (LCOs)	<ul style="list-style-type: none"> <li>• Provide overall coordination, supervision, monitoring and approval of village proposals including environmental checklists.</li> <li>• Prepare quarter progress reports including environmental.</li> <li>• Provide technical support to community advisors and BKMs/CIOs.</li> <li>• Carry out environmental due diligence.</li> <li>• Monitor the implementation of the environmental management plan.</li> </ul>
	Environmental	<ul style="list-style-type: none"> <li>• Provide guidance on environmental checklists.</li> <li>• Coordinate with community advisors to conduct site visits, if necessary, to validate the screening/assessment results,</li> <li>• Review the engineering design and environmental checklists and provide permit for construction of a deep well.</li> <li>• Conduct random checking during construction and after completion to inspect environmental procedures and impacts.</li> </ul>
	Health	<ul style="list-style-type: none"> <li>• Test collected water quality samples to determine if collected water sources meet the drinking water standards.</li> </ul>
Urban neighborhood	Community Implementation Organization (BKM/CIO)	<ul style="list-style-type: none"> <li>• Responsible for establishing project implementation units</li> <li>• Responsible for conducting environmental checklists assisted by community advisors, and safeguard specialist</li> <li>• Formulate O&amp;M mechanisms.</li> <li>• Responsible for monitoring construction activities and conducting inspection for completed interventions.</li> <li>• Disclose on the neighborhood board neighborhood proposals and contracts including environmental checklists.</li> <li>• Responsible for taking any negative feedback related site, construction</li> </ul>

		and operation from other neighborhood members and organizing meetings to solve problems with assistance by facilitators. <ul style="list-style-type: none"> <li>• Responsible for reporting environmental monitoring to LCOs</li> </ul>
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EA = executing agency, LCO=local coordinating office, O&M = operation and maintenance, CPMU = central project management unit.

## 2. Environmental Criteria for Neighborhood Upgrading Proposal Selection

### 2.1. Neighborhood Upgrading Civil Works

22. The project will adopt the screening list mechanism. The list consists of the following environmentally sensitive areas, harmful procurement and destructive activities:

- (i) Avoid following sensitive areas:
  - national park, forest park, wildlife reserve, protected flora area, conservation forest, and watershed protection forest.
  - national cultural preserve, traditional/religious buildings.
  - marine reserves, coastline and dune systems, and mangrove and wetland areas.
- (ii) Prohibit the following procurement:
  - procurement of any products containing asbestos.
  - procurement of pesticides or herbicides.
- (iii) Prohibit the following activities:
  - mining or excavation of live coral.
  - construction of a road leading to protected forests.
  - production, processing, handling, storage or sale of tobacco or products containing tobacco.
  - water resources developments on rivers which flow into or out of other countries
  - alterations to river courses.
  - land reclamation larger than 50 ha.
  - new irrigation larger than 50 ha.
  - construction of water retaining or storage structures of capacity greater than 10,000 cubic meters.

23. In addition to the above list, the following additional requirements for water supply and sanitation interventions need to be met:

- (i) Potable water supply from proposed sites must be free from any contamination and certified safe by the district health officer through the conduct of water sample analysis; and
- (ii) Leaching fields from latrines has to be located at least ten meters from any water supply system.

### 2.2. New Site Development (NSD)

24. Five NSD locations are expected to be built. Each location is expected to be at least 2 hectares. In accordance with the Law 32/2009 and the related local regulations,<sup>8</sup> an IEE will be required as the settlement size will be more than 2 hectares. The IEE will be prepared together with the NSD proposal of each location and will be prepared in the first 18 months of project implementation (expected in 2015). The procedure of the IEE preparation is discussed in para.

<sup>8</sup> Governor/mayor regulations, where the proposed NSD are located.

30. The template and procedure for the preparation of UKL/UPL will follow the local regulations of 5 the participating cities.

### **3. Procedures for Environmental Assessment of Neighborhood Upgrading Proposals**

25. **Environmental Safeguard Awareness.** Raising awareness on environmental safeguards will be included in overall project socialization meetings at the beginning of the project at each project city. The overall environmental screening and assessment process and monitoring responsibilities will be explained to CIO/BKM members by safeguard specialists. The safeguard specialists will train LCO officers, CIO/BKM members and community advisors on how to conduct environmental screening and assessments and establish checklists. BKM/CIO members will inform and community members on safeguard requirements. In addition, targeted training on environmental screening and assessment checklists will be conducted at neighborhood meetings. The LCOs assisted by the safeguard specialists will supervise the training and ensure that CIOs/BKMs are aware of the environmental screening process.

26. **Environmental Screening and Preparation of Assessment Checklists.** During the process to formulate the NUAP, the community will assess infrastructure needs and upgrading interventions through a series of meetings, discussions and poverty/infrastructure mapping assisted by the community advisors. An environmental screening for each type of infrastructure upgrading will be carried out based on the environmental assessment checklist (Attachment 3). In close collaboration with the trained CIOs and community advisors, the safeguard specialists will carry out environmental screening for selected infrastructure in selected neighborhoods. The remaining environmental screening will be carried out by trained CIO members and community advisors, and supervised by the safeguard specialists. The environmental screening process is described in Attachment 1. The CIOs and community advisors will also seek technical inputs (if required) from the safeguard specialists and LCOs to ensure that appropriate mitigation measures to address potential problems are included in the NUAPs. The environmental assessment checklists will be attached to the NUAPs. If the environmental assessment checklists suggest that EIA or IEE are not required, the SPPL will be prepared by the BKM/CIO. The SPPL should be included in the NUAP. A template of SPPL is in Attachment 4.

27. **Review of the Assessment Checklists.** Each of the environmental screening checklists attached to the NUAPs will be presented at the *consultation process to formulate the consolidated city investment plans*. LCO members with the support of safeguard specialists will review the environmental assessment results. Once the consolidated investment plans including the individual NUAPs and checklists are endorsed, documents will be submitted to the EA for review and approval.

28. **Preparation and review of UKL/UPL (IEE).** If the environmental screening at the slum neighborhood concludes that a UKL/UPL (IEE) is required for any particular proposed infrastructure interventions, LCO will immediately report to the project management unit (CPMU). Safeguard specialists, with the help of the relevant LCOs, will prepare the UKL/UPL (IEE). The UKL/UPLs (IEE) reports will be approved by the city administration and submitted to EA and ADB for review and endorsement. The procedure for the preparation of UKL/UPL (IEE) will follow the local regulations of the participating cities/districts. For the new site development under output 3, IEEs will be prepared at each site after the respective project city has formally confirmed its readiness to participate in the NSD component and designated the land. The IEE report will be part of the NSD proposal to be approved by the EA and ADB.

29. **Environmental Monitoring and Reporting.** BKM/CIOs are responsible for monitoring construction activities while city administrations are responsible for the overall supervision. Attachment 2 shows the responsibility of BKM/CIO for environmental monitoring the construction activities, inspecting the completed infrastructure and maintaining the improved infrastructure. A monitoring and supervision unit will be established within each CIO/BKM. Community advisors will assist BKM/CIOs to develop detailed day-to-day monitoring and supervision schedules. All complaints received by the BKM/CIOs will be documented in the log books in accordance with the Implementation Guidance: Management of Complaints and Problems that was developed under the national program. Community advisors will assist BLM/CIOs in solving problems through community forums or reporting to the district or provincial governments if formal legal process is required. Environmental monitoring results during construction will be incorporated in the quarterly project level monitoring and evaluation (M&E) progress reports to be prepared by each LCO, consolidated by the CPMU and submitted to ADB.

30. The CPMU with the assistance from the safeguard specialist will prepare guidelines on the use of the screening checklist and prepare the necessary environmental documentations. The safeguard specialists will ensure that the environmental due diligence process and environmental documentations are in line with the guidelines. The LCOs and safeguards specialist are also responsible to monitor the implementation of the environmental management plans as specified in the SPPL or IEE. The due diligence reports, environment documents and results of the monitoring will be submitted to the CPMU. With the assistance of the safeguard specialists, the CPMU will reviews the submissions. The CPMU will summarize reports on environmental management from LCOs and include them in the quarterly progress reports to be submitted to ADB.

#### **G. Public Consultation, Information Disclosure and Grievance Redress Mechanism**

31. Public consultation is an integral part of the identification, selection and implementation of neighborhood infrastructure interventions. The environmental assessment checklists will be discussed at neighborhood meetings. In the process to formulate the consolidated city investment plan, environmental assessment reports/checklists of each NUAP will be reviewed again jointly among all BKM/CIOs and the concerned LCO. Any environmental concern raised at the meetings will be documented in the meeting minutes. All consolidated city investment plans and NUAPs with the attached environmental assessment reports/checklists will be publicly disclosed at the project city and project slum neighborhoods. Any community complaints will be handled in accordance with the complaint handling guidelines that will be prepared by the DGHS.

32. In general, environmental documents such as IEE including EMP are subject to public disclosure, therefore these documents will be made available to public including affected people and interested stakeholders. The following documents will also be submitted to ADB for disclosure on ADB's website;

- (i) Final IEE, upon receipt
- (ii) A new or updated IEE if required and corrective action plan if any during project implementation
- (iii) Environmental monitoring report

33. The project will establish a grievance redress mechanism, which basically consists to three levels, i.e. at the neighborhood, city/district, and national levels. This leveling system is expected to quickly address any complaints during project implementation. People will have the

right to file complaints and/or queries related to disturbance/environmental impacts due to the project activities. At the neighborhood level, complaints from any affected people can be filed with BKM/CIO members for immediate resolution whenever possible. If the problem cannot be resolved, BKM/CIO members will assist the affected people to submit their complaints to the project's grievance and redress focal point at the LCO and/or to the national level (CPMU).

34. Once a complaint is received, the CIO/BKM will prepare a folder, which includes files describing name(s) and contact details of the complainant(s). The CIO/BKM should also issue a written acknowledgement confirming the receipt of the complaint. The acknowledgement is to be sent to the complainant within 5 days after receipt of the complaint. The CIO/BKM will register and categorize the complaint. CIO/BKM will call a meeting to analyze and discuss the complaint. Community advisors' help may be required during to formulate the remedial actions to the complaint. Within 7 days after the receipt of the complaint, the CIO/BKM will invite the complainant to a meeting to discuss and formulate resolutions on the issue. Minutes of meeting should be prepared and signed by the CIO/BKM and complainant. A list of attendance of all participants with their signature should be attached to the minutes. The minutes must be maintained by the CIO/BKM for future reference.

35. The community advisors will summarize the complaint/grievance received by BKMs/CIOs including the contact details of the complainant, date the complaint was received, nature of the grievance, agreed corrective actions, and the final outcome. Results will be reported to the to the project's management teams (LCO and RMCs), which will further report to the CPMU. The project will dedicate staff at district/city (LOC) and national levels (CPMU) to receive and follow-up on complaints from affected people.

36. If grievance cannot be addressed at the CIO level, the matters will be brought to the city/district level. LCO will facilitate a meeting with the complainant and CIO to discuss the complaint and formulate solutions. Similar to the system at the CIO level, record of meetings and list attendance are to be prepared and maintained. The RMC safeguard (environmental) specialist will assist the LCO and the recording, maintaining the records, and reporting to the CPMU.

37. If grievance cannot be resolved at the LCO level, the matters will be brought to the national level (CPMU). The DGHS with the assistance of the NMC will prepare a guidelines and complaint handling mechanism, which will be completed within the first 4 months after the NMC mobilization. The mechanism will be disseminated to all project stakeholders within the 8 of the NMC mobilization.

#### **H. Confirmation that Environmental Assessment and Review Procedures conforms to ADB's Environmental Policy**

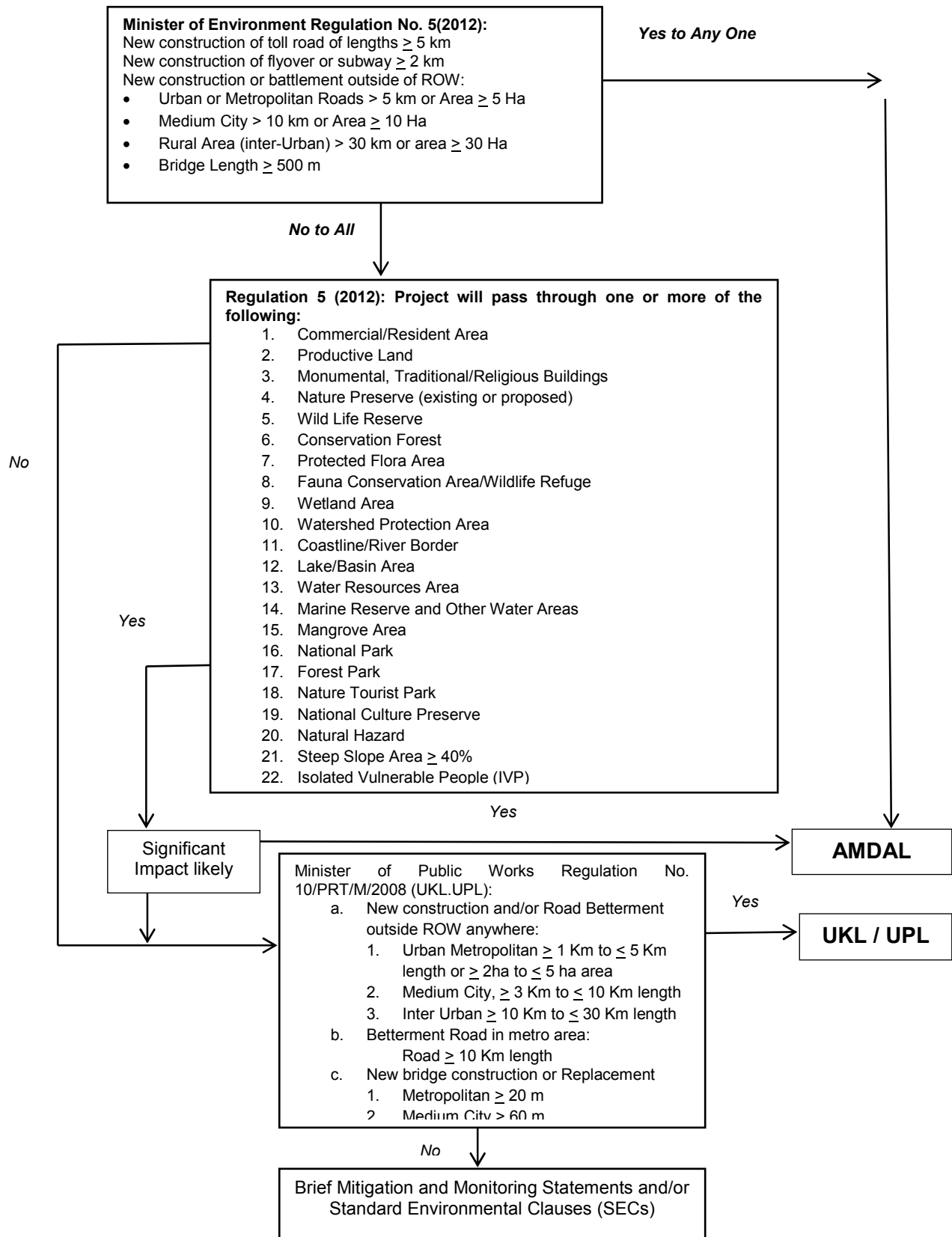
38. The procedures developed under the project ensures to screen and assess potential impacts associated with urban infrastructure interventions, set up institutional arrangements in relation to environmental management and monitoring, and define environmental assessment requirements. The developed procedures with the proposed consultants' inputs are adequate to comply with the applicable laws and regulations of the Government and with ADB's environment policy and *Environmental Assessment Guidelines*.

## **I. Staffing Requirements and Budget**

39. Overall environmental mitigation measures including drinking water sources sampling will be included in the project design costs. The consulting services will be provided at the national and city/district level. At the national level, a team of consultants will assist the CPMU. A safeguards specialist will be recruited to assist the CPMU in preparing environmental management guidelines, dissemination of the guidelines, reviewing environmental monitoring reports, incorporating environmental monitoring in the quarterly progress reports and environmental survey results in the M&E framework.

40. There will be three regional teams with the following coverage: (i) West, (ii) Central, and (iii) East regions. Safeguards specialists will also be recruited at each of the three regional teams and will be responsible for assisting city/district environment specialists to review the environmental screening carried out by CIOs, train community advisors, monitor the environmental management by CIOs, prepare reports on environmental monitoring and prepare IEE for the NSD proposal. Attachment 5 provides the indicative terms of reference of the consultants.

### Indonesia's Environmental Screening Process





### Anticipated Impacts, Mitigation Measures and Monitoring

Anticipated Impacts	Proposed Mitigation Measure	Responsible Entity	Monitorable Output	Funding Source
<b>Location and Design</b>				
<b>All Interventions</b>				
<u>Environmental sensitive areas</u> <ul style="list-style-type: none"> <li>No subprojects are located within or adjacent to the sensitive areas as described in the environmental criteria for sub-project selection described in this document.</li> </ul>	<ul style="list-style-type: none"> <li>Environmental screening criteria included in the environmental assessment and review framework will eliminate any neighborhood infrastructure located in environmentally sensitive areas.</li> </ul>	Community advisors, BKM/CIO	Environmental assessment checklists	project costs
<b>Road and Bridges</b>				
<u>Soil erosion</u> <ul style="list-style-type: none"> <li>Rehabilitation could cause soil erosion</li> </ul>	<ul style="list-style-type: none"> <li>All road cuttings and embankment fills will incorporate soil and slope stabilization measures, vegetation on the shoulders and adequate drainage provisions; construction and major earthworks during the rainy season will be avoided.</li> </ul>	Community advisors, BKM	Approved design of road works in vulnerable areas	Measures will be included as project-financed civil works
<u>Construction Materials</u> <ul style="list-style-type: none"> <li>Excavation cause erosion and siltation in streams mined for gravel; damage aquatic ecosystems</li> </ul>	<ul style="list-style-type: none"> <li>Construction materials will be procured from local shops</li> <li>Permission from the district government (environment) is required to excavate sand from streams.</li> </ul>	Community advisors, BKM, city/district government (environment)	Approved drawings and budget	Project costs
<b>Drainage/Flood Control</b>				
<u>Construction Materials</u> Excavation cause erosion and siltation in streams mined for gravel; damage aquatic ecosystems	<ul style="list-style-type: none"> <li>Construction materials will be procured from local shops</li> <li>Permission from the district government (environment) is required to excavate sand from streams.</li> </ul>	Community advisors, BKM, city/district government (environment)	Approved drawings and budget	Project costs

Anticipated Impacts	Proposed Mitigation Measure	Responsible Entity	Monitorable Output	Funding Source
<b>Water Supply and Sanitation</b>				
<u>Water source quality</u> <ul style="list-style-type: none"> <li>Contamination of drinking water sources due to inadequate or inappropriate location</li> </ul>	<ul style="list-style-type: none"> <li>Screen area for flood free</li> <li>Conduct aquifer quality sampling prior to commencement of drilling</li> <li>For a deep well, obtain permit from district government (environment) prior to commencement of drilling</li> <li>Locate sanitation facilities with adequate distance (at least 10 m.) to wells</li> </ul>	CIO, Community advisors, city/district government (health), city/district government (environment)	Approved drawings, Environmental screening checklist, Permit from district government	Project costs
<b>New Site Development (Housing sites)</b>				
<u>Construction Materials</u> Excavation cause erosion and siltation in streams mined for gravel; damage aquatic ecosystems	<ul style="list-style-type: none"> <li>Construction materials will be procured from local shops</li> <li>Permission from the district government (environment) is required to excavate sand from streams.</li> </ul>	Contractors, city/district government (environment)	Approved drawings and budget	Project costs
<b>Street Lighting</b>				
Improper installment of electricity poles may create danger to residents	Consult the national electricity company (PLN) during the design and installment of the system Request frequent control by the PLN on the lighting system	CIO, community advisors, city/ district government	Approved drawings and budget	Project costs
<b>During Construction (all interventions)</b>				
<u>Dust and noise</u> <ul style="list-style-type: none"> <li>Temporary dust and noise hazards</li> </ul>	<ul style="list-style-type: none"> <li>regularly water down road surfaces and provide covers to trucks and on loose materials,</li> <li>reinstate vegetative cover on all bare surfaces upon completion,</li> <li>maintain construction equipment in good condition, and</li> <li>limit night time work.</li> </ul>	BKM/CIO, Community advisors, city/district consultants	Quarterly project progress reports by CPMU, Reports of ADB review missions	Project costs

Anticipated Impacts	Proposed Mitigation Measure	Responsible Entity	Monitorable Output	Funding Source
<u>Soil and Land</u> <ul style="list-style-type: none"> <li>• Damage to agricultural land, river banks, public spaces, and other nearby areas by disposal of excavated spoil, liquid and solid wastes.</li> </ul>	<ul style="list-style-type: none"> <li>• compacting and protecting exposed soil,</li> <li>• replanting areas where the vegetation has been damaged,</li> <li>• disposal of excess earthfill material in designated areas,</li> <li>• appropriately collecting and disposing of solid and liquid wastes.</li> </ul>	BKM/CIO, Community advisors, city/district consultants	Quarterly project progress reports by CPMU, Reports of ADB review missions	Project costs
<u>Surface and groundwater</u> <ul style="list-style-type: none"> <li>• Water contamination due to excavation, disposal of wastes</li> </ul>	<ul style="list-style-type: none"> <li>• obtaining approval from responsible authority for removal of any sand, gravel, and rock materials from river beds;</li> <li>• disposal of solid and liquid wastes;</li> <li>• provision of proper sanitation in work camps, ensuring that no untreated effluents reach surface or groundwater.</li> </ul>	BKM/CIO, Community advisors, city/district consultants	Quarterly project progress reports by CPMU, Reports of ADB review missions	Project costs
<u>Health and safety</u> <ul style="list-style-type: none"> <li>• Safety hazard to workers, locals and traffic</li> </ul>	<ul style="list-style-type: none"> <li>• install barrier fencing around construction site,</li> <li>• control access of unauthorized persons to site, and</li> <li>• provide first aid and safety training to workers and drivers.</li> </ul>	BKM/CIO, Community advisors, city/district consultants	Quarterly project progress reports by CPMU, Reports of ADB review missions	Project costs
<b>During Operation</b>				
<b>Road</b>				
<u>Air quality and noise</u> <ul style="list-style-type: none"> <li>• Increase dust, emission, and noise due to increased volume of traffic as a result of improved road condition</li> </ul>	<ul style="list-style-type: none"> <li>• No specific measures are proposed because the increase in emission, dust, and noise is not expected to be significant.</li> </ul>	N/A	N/A	N/A

Anticipated Impacts	Proposed Mitigation Measure	Responsible Entity	Monitorable Output	Funding Source
<b>Water Supply</b>				
<u>Drinking Water contamination</u> <ul style="list-style-type: none"> <li>Contamination of drinking water due to in adequate maintenance and</li> </ul>	<ul style="list-style-type: none"> <li>Conduct inspection and water quality monitoring</li> <li>Inspect periodically to assure drainage conditions around water point do not cause sanitary problem</li> </ul>	BKM/CIOs, Department of Health	Monitoring reports	Project cost.
Potential depletion of ground water resources	<ul style="list-style-type: none"> <li>Locate new wells at least 100 meter from existing wells.</li> <li>Limit the extraction capacity.</li> </ul>	BKM/CIOs, Community advisors, LCO	Monitoring reports Project environmental monitoring system (to be developed, part of the project information management system)	Project costs
The increase in water supply use will increase waste water discharge.	Improve the sanitation/drainage network to accommodate an increased water discharge (in most cities in Indonesia, the drains are also used to collect waste water from houses).	BKM/CIOs, Community advisors, LCO	Monitoring reports (Project environmental monitoring system)	Project costs
<b>Sanitation Facilities</b>				
Ground water infiltration	Toilets are to be connected to septic tanks or sewerage system in areas where groundwater table is considered deep (more than 8 meters).	BKM/CIOs, Community advisors, LCO	Monitoring reports (Project environmental monitoring system)	Project costs
Risk of flooding during rainy season	Site drainage included as part of the design to capture and drain any overtopping during rainy season.	BKM/CIOs, Community advisors, LCO	Monitoring reports (Project environmental monitoring system)	Project costs
Odor nuisance to houses (due to improper maintenance)	Training for facility operators; user fees are to be collected to pay for the operation and maintenance.	BKM/CIOs, Community advisors, LCO	Monitoring reports (Project environmental monitoring system)	Project costs, user charges

Anticipated Impacts	Proposed Mitigation Measure	Responsible Entity	Monitorable Output	Funding Source
<b>Drainage/Flood Control</b>				
Potential for increase in flooding areas adjacent to project neighborhoods due to additional run off	Integrated planning to ensure that the capacity of the bigger drainage system (primary network) is sufficient.	BKM/CIOs, Community advisors, LCO	Monitoring reports (Project environmental monitoring system)	Project costs
Disposal of garbage to drains may cause flooding, mosquito breeding, and damage health.	CIOs are to ensure the regular clean-up of drains. Operation and maintenance will be included in the community action plan.	BKM/CIOs, Community advisors, LCO	Monitoring reports (Project environmental monitoring system)	Project costs, user charges
<b>Solid Waste Management</b>				
Additional local solid waste collection within the project neighborhoods will require the cleanliness agency ( <i>Dinas Kebersihan</i> ) to dispose additional solid waste, which may put further pressure to the agency throughout the city.	Additional budget and staff to be provided by the city/district to anticipate the workload increase.	City administration, LCO	Monitoring reports (Project environmental monitoring system)	Government budgets, user charges
Odor from solid waste temporary disposal site	Frequent collection by the <i>dinas kebersihan</i> . Designs are to include measures to control odor and vermin. Ensure that drains are available for leachate catchment.	BKM/CIOs, City administration, LCO	Monitoring reports (Project environmental monitoring system)	Project costs, user charges
Continued poor solid waste management may block drainage channels, road and pathway and creating health hazard	Enforcement of operation and maintenance arrangements that have been agreed in the community action plan. Organize weekly or monthly activities ( <i>kerja bakti/gotong royong</i> ) to clean up drainage channels.	BKM/CIOs, City administration, LCO	Monitoring reports (Project environmental monitoring system)	Project costs, user charges
<b>New Site Development</b>				
Within the site locations, anticipated impacts will be similar to impacts under each infrastructure component (roads, solid waste etc.)	The detailed potential impacts and mitigation measures of NSD will be prepared in the initial environmental examination (IEE). IEE will be part of the NSD proposal.	LCO, city administration, NSD contractors	NSD proposal, project monitoring system	Project costs

## SCREENING CHECKLIST

**NAME OF DISTRICT/SUB-DISTRICT/NEIGHBORHOOD:**

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<b>WATER SUPPLY</b>
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SCREENING QUESTIONS	Yes	No	REMARKS
<b>A. PROJECT SITE</b>			
IS THE PROJECT AREA	<input type="checkbox"/>	<input type="checkbox"/>	
▪ DENSELY POPULATED?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ HEAVY WITH DEVELOPMENT ACTIVITIES?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ ADJACENT TO OR WITHIN ANY ENVIRONMENTALLY SENSITIVE AREAS?			
• CULTURAL HERITAGE SITE	<input type="checkbox"/>	<input type="checkbox"/>	
• PROTECTED AREA	<input type="checkbox"/>	<input type="checkbox"/>	
• WETLAND	<input type="checkbox"/>	<input type="checkbox"/>	
• MANGROVE	<input type="checkbox"/>	<input type="checkbox"/>	
• ESTUARINE	<input type="checkbox"/>	<input type="checkbox"/>	
• BUFFER ZONE OF PROTECTED AREA	<input type="checkbox"/>	<input type="checkbox"/>	
• SPECIAL AREA FOR PROTECTING BIODIVERSITY	<input type="checkbox"/>	<input type="checkbox"/>	
• BAY	<input type="checkbox"/>	<input type="checkbox"/>	
<b>B. POTENTIAL ENVIRONMENTAL IMPACTS</b>			
Will the Project cause...			
▪ pollution of raw water supply from upstream wastewater discharge from communities, industries, agriculture, and soil erosion runoff?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ impairment of historical/cultural monuments/areas and loss/damage to these sites?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ hazard of land subsidence caused by excessive ground water pumping?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ social conflicts arising from displacement of communities ?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ conflicts in abstraction of raw water for water supply with other beneficial water uses for surface and ground waters?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ unsatisfactory raw water supply (e.g. excessive pathogens or mineral constituents)?	<input type="checkbox"/>	<input type="checkbox"/>	

SCREENING QUESTIONS	Yes	No	REMARKS
▪ delivery of unsafe water to distribution system?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ inadequate protection of intake works or wells, leading to pollution of water supply?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ over pumping of ground water, leading to salinization and ground subsidence?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ excessive algal growth in storage reservoir?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ increase in production of sewage beyond capabilities of community facilities?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ inadequate disposal of sludge from water treatment plants?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ inadequate buffer zone around pumping and treatment plants to alleviate noise and other possible nuisances and protect facilities?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ impairments associated with transmission lines and access roads?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ health hazards arising from inadequate design of facilities for receiving, storing, and handling of chlorine and other hazardous chemicals.	<input type="checkbox"/>	<input type="checkbox"/>	
▪ health and safety hazards to workers from the management of chlorine used for disinfection and other contaminants?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ dislocation or involuntary resettlement of people	<input type="checkbox"/>	<input type="checkbox"/>	
▪ social conflicts between construction workers from other areas and community workers?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ noise and dust from construction activities?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ increased road traffic due to interference of construction activities?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ continuing soil erosion/silt runoff from construction operations?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ delivery of unsafe water due to poor O&M treatment processes (especially mud accumulations in filters) and inadequate chlorination due to lack of adequate monitoring of chlorine residuals in distribution systems?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ delivery of water to distribution system, which is corrosive due to inadequate attention to feeding of corrective chemicals?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ accidental leakage of chlorine gas?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ excessive abstraction of water affecting downstream water users?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ competing uses of water?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ increased sewage flow due to increased water supply	<input type="checkbox"/>	<input type="checkbox"/>	
▪ increased volume of sillage (wastewater from cooking and washing) and sludge from wastewater treatment plant	<input type="checkbox"/>	<input type="checkbox"/>	

**SANITATION FACILITIES**

SCREENING QUESTIONS	Yes	No	REMARKS
<b>B. PROJECT SITE</b>			
IS THE PROJECT AREA:			
▪ DENSELY POPULATED?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ HEAVY WITH DEVELOPMENT ACTIVITIES?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ ADJACENT TO OR WITHIN ANY ENVIRONMENTALLY SENSITIVE AREAS?	<input type="checkbox"/>	<input type="checkbox"/>	
• CULTURAL HERITAGE SITE	<input type="checkbox"/>	<input type="checkbox"/>	
• PROTECTED AREA	<input type="checkbox"/>	<input type="checkbox"/>	
• WETLAND	<input type="checkbox"/>	<input type="checkbox"/>	
• MANGROVE	<input type="checkbox"/>	<input type="checkbox"/>	
• ESTUARINE	<input type="checkbox"/>	<input type="checkbox"/>	
• BUFFER ZONE OF PROTECTED AREA	<input type="checkbox"/>	<input type="checkbox"/>	
• SPECIAL AREA FOR PROTECTING BIODIVERSITY	<input type="checkbox"/>	<input type="checkbox"/>	
• BAY	<input type="checkbox"/>	<input type="checkbox"/>	
<b>A. POTENTIAL ENVIRONMENTAL IMPACTS</b>			
WILL THE PROJECT CAUSE...			
▪ impairment of historical/cultural monuments/areas and loss/damage to these sites?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ interference with other utilities and blocking of access to buildings; nuisance to neighboring areas due to noise, smell, and influx of insects, rodents, etc.?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ dislocation or involuntary resettlement of people	<input type="checkbox"/>	<input type="checkbox"/>	
▪ impairment of downstream water quality due to inadequate sewage treatment or release of untreated sewage?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ overflows and flooding of neighboring properties with raw sewage?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ environmental pollution due to inadequate sludge disposal or industrial waste discharges illegally disposed in sewers?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ noise and vibration due to blasting and other civil works?	<input type="checkbox"/>	<input type="checkbox"/>	



SCREENING QUESTIONS	Yes	No	REMARKS
▪ discharge of hazardous materials into sewers, resulting in damage to sewer system and danger to workers?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ inadequate buffer zone around pumping and treatment plants to alleviate noise and other possible nuisances, and protect facilities?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ social conflicts between construction workers from other areas and community workers?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ road blocking and temporary flooding due to land excavation during the rainy season?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ noise and dust from construction activities?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ traffic disturbances due to construction material transport and wastes?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ temporary silt runoff due to construction?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ hazards to public health due to overflow flooding, and groundwater pollution due to failure of sewerage system?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ deterioration of water quality due to inadequate sludge disposal or direct discharge of untreated sewage water?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ contamination of surface and ground waters due to sludge disposal on land?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ health and safety hazards to workers from toxic gases and hazardous materials which maybe contained in sewage flow and exposure to pathogens in sewage and sludge?	<input type="checkbox"/>	<input type="checkbox"/>	

NEIGHBORHOOD ROADS

SCREENING QUESTIONS	Yes	No	REMARKS
<b>A. PROJECT SITE</b>			
IS THE PROJECT AREA ADJACENT TO OR WITHIN ANY OF THE FOLLOWING ENVIRONMENTALLY SENSITIVE AREAS?			
▪ CULTURAL HERITAGE SITE	<input type="checkbox"/>	<input type="checkbox"/>	
▪ PROTECTED AREA	<input type="checkbox"/>	<input type="checkbox"/>	
▪ WETLAND	<input type="checkbox"/>	<input type="checkbox"/>	
▪ MANGROVE	<input type="checkbox"/>	<input type="checkbox"/>	
▪ ESTUARINE	<input type="checkbox"/>	<input type="checkbox"/>	
▪ BUFFER ZONE OF PROTECTED AREA	<input type="checkbox"/>	<input type="checkbox"/>	
▪ SPECIAL AREA FOR PROTECTING BIODIVERSITY	<input type="checkbox"/>	<input type="checkbox"/>	
<b>B. POTENTIAL ENVIRONMENTAL IMPACTS</b>			
WILL THE PROJECT CAUSE...			
▪ encroachment on historical/cultural areas; disfiguration of landscape by road embankments, cuts, fills, and quarries?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ encroachment on precious ecology (e.g. sensitive or protected areas)?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ alteration of surface water hydrology of waterways crossed by roads, resulting in increased sediment in streams affected by increased soil erosion at construction site?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ deterioration of surface water quality due to silt runoff and sanitary wastes from worker-based camps and chemicals used in construction?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ increased local air pollution due to rock crushing, cutting and filling works, and chemicals from asphalt processing?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ noise and vibration due to blasting and other civil works?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ dislocation or involuntary resettlement of people			
▪ other social concerns relating to inconveniences in living conditions in the project areas that may trigger cases of upper respiratory problems and stress?	<input type="checkbox"/>	<input type="checkbox"/>	

SCREENING QUESTIONS	Yes	No	REMARKS
<ul style="list-style-type: none"> <li>▪ hazardous driving conditions where construction interferes with pre-existing roads?</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	
<ul style="list-style-type: none"> <li>▪ poor sanitation and solid waste disposal in construction camps and work sites, and possible transmission of communicable diseases from workers to local populations?</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	
<ul style="list-style-type: none"> <li>▪ creation of temporary breeding habitats for mosquito vectors of disease?</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	
<ul style="list-style-type: none"> <li>▪ dislocation and compulsory resettlement of people living in right-of-way?</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	
<ul style="list-style-type: none"> <li>▪ accident risks associated with increased vehicular traffic, leading to accidental spills of toxic materials and loss of life?</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	
<ul style="list-style-type: none"> <li>▪ increased noise and air pollution resulting from traffic volume?</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	
<ul style="list-style-type: none"> <li>▪ increased risk of water pollution from oil, grease and fuel spills, and other materials from vehicles using the road?</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	

**FLOOD CONTROL/DRAINAGE**

SCREENING QUESTIONS	Yes	No	REMARKS
<b>A. PROJECT SITE</b>			
IS THE PROJECT AREA ADJACENT TO OR WITHIN ANY OF THE FOLLOWING ENVIRONMENTALLY SENSITIVE AREAS?			
▪ PROTECTED AREA	<input type="checkbox"/>	<input type="checkbox"/>	
▪ WETLAND	<input type="checkbox"/>	<input type="checkbox"/>	
▪ MANGROVE	<input type="checkbox"/>	<input type="checkbox"/>	
▪ ESTUARINE	<input type="checkbox"/>	<input type="checkbox"/>	
▪ BUFFER ZONE OF PROTECTED AREA	<input type="checkbox"/>	<input type="checkbox"/>	
▪ SPECIAL AREA FOR PROTECTING BIODIVERSITY	<input type="checkbox"/>	<input type="checkbox"/>	
<b>B. POTENTIAL ENVIRONMENTAL IMPACTS</b>			
WILL THE PROJECT CAUSE...			
▪ loss of precious ecological values (e.g. result of encroachment into forests/swamplands or historical/cultural buildings/areas, disruption of hydrology of natural waterways, regional flooding, and drainage hazards)?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ conflicts in water supply rights and related social conflicts?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ impediments to movements of people and animals?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ potential ecological problems due to increased soil erosion and siltation, leading to decreased stream capacity?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ Insufficient drainage leading to salinity intrusion?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ over pumping of groundwater, leading to salinization and ground subsidence?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ impairment of downstream water quality and therefore, impairment of downstream beneficial uses of water?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ dislocation or involuntary resettlement of people?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ potential social conflicts arising from land tenure and land use issues?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ soil erosion before compaction and lining of canals?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ noise from construction equipment?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ dust?	<input type="checkbox"/>	<input type="checkbox"/>	

SCREENING QUESTIONS	Yes	No	REMARKS
▪ labor-related social problems especially if workers from different areas are hired?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ waterlogging and soil salinization due to inadequate drainage and farm management?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ leaching of soil nutrients and changes in soil characteristics due to excessive application of irrigation water?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ reduction of downstream water supply during peak seasons?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ soil pollution, polluted farm runoff and groundwater, and public health risks due to excessive application of fertilizers and pesticides?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ soil erosion (furrow, surface)?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ scouring of canals?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ logging of canals by sediments?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ clogging of canals by weeds?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ seawater intrusion into downstream freshwater systems?	<input type="checkbox"/>	<input type="checkbox"/>	
▪ introduction of increase in incidence of waterborne or water related diseases?	<input type="checkbox"/>	<input type="checkbox"/>	

**(English Version)**  
**Minister of Environment's Regulation No. 16 Year 2012 on the Guidelines for the Preparation of Environmental Documents.**

Statement of Readiness to Manage and Monitor Environment (SPPL)

I/We, the undersign:

Name(s):.....

Designation:.....

Address:.....

Phone No.: .....

Acting as the person(s) who is (are) in charge for the environmental management of the following project/activity:

Name of project/activity:.....

Location/address of the project/activity site: .....

Type/nature of project/activity: .....

Size/capacity of services: .....

Expected environmental impacts:

1. ....

2. ....

3. ....

The following measures are planned to mitigate the impact and meet the requirement of the environmental management and monitoring:

1. ....

2. ....

3. ....

We confirm that we are committed and ready to implement all the measures as described above. We will comply to the requirements imposed by the related authority. We understand that we are subject to the inspection and supervision of the government environmental agency or other assigned agency.

(city/location, date)

Stamp (Rp6,000)

Signature and printed name(s)

Number of registration/acceptance by the city/district environmental agency	
Date	
Name and Signature	

(Bahasa Indonesia version)

Peraturan Menteri Negara Lingkungan Hidup Nomor 16 Tahun 2012 Tentang Pedoman  
Penyusunan Dokumen Lingkungan

SURAT PERNYATAAN KESANGGUPAN PENGELOLAAN DAN PEMANTAUAN LINGKUNGAN HIDUP  
(SPPL)

Kami yang bertanda tangan di bawah ini:

Nama : .....  
Jabatan : .....  
Alamat : .....  
Nomor telepon : .....

Selaku penanggung jawab atas pengelolaan lingkungan dari:

Nama kegiatan : .....  
Alamat kegiatan : .....  
Jenis kegiatan : .....  
Kapasitas Pelayanan: .....

dengan dampak lingkungan yang terjadi berupa:

1. ....
2. ....
3. ....

merencanakan untuk melakukan pengelolaan dan pemantauan dampak lingkungan di atas melalui:

1. ....
2. ....
3. ....

Pada prinsipnya bersedia untuk dengan sungguh-sungguh melaksanakan seluruh pengelolaan dan pemantauan dampak lingkungan sebagaimana tersebut di atas, dan bersedia untuk diawasi oleh instansi yang berwenang.

.....  
Yang menyatakan,

Materai 6000

\_\_\_\_\_   
nama

Nomor penerimaan oleh Badan Lingkungan Hidup Kab/Kota .....	
Tanggal	
Penerima	

## TERMS OF REFERENCE FOR CONSULTANTS

### A. Introduction

1. These outline terms of reference for consultants describe the main tasks of the national environmental safeguard consultants required to assist the Executing Agency (EA), implementing agencies (IAs) and other local government units in preparing for and implementing the environmental assessment processes. The consultants will work closely with the government and other consultants to ensure that environmental requirements will be met during village infrastructure proposal selection, identification and implementation. They will be based in the Project Management Unit (CPMU) and each of the district Local Coordinating Office (LCO), and will be required to report to the consultant team leader.

### B. Scope of Services

#### 1. Safeguards Specialist at the National Level

2. The specialist will have appropriate tertiary qualifications in the areas of environmental management/science and will have more than 10 years experience working in the fields for internationally funded development projects. The sectoral knowledge as well as monitoring and project evaluation experiences will be an advantage to the specialist. Specific tasks include the following:

- (i) Review all project related documents including the Initial Environmental Examination (IEE), Environmental Assessment and Review Framework (EARF), relevant existing guidelines (including environmental assessment checklists) being implemented under CDD applying projects and selected urban/neighborhood infrastructure contracts for roads, water supply, irrigation, sanitation and others;
- (ii) Review the monitoring and evaluation guidelines developed under the national program and work with evaluation specialists to ensure appropriate and adequate environmental indicators will be included in the Monitoring and Evaluation (M&E) Framework;
- (iii) Work with the city/district environmental specialists to ensure that adequate environmental indicators will be developed in the detailed monitoring plans and overall project evaluation indicators to ensure that adequate data will be collected;
- (iv) Review the existing relevant implementation guidelines to identify any areas that need improvement for better environmental management and develop specific recommendations;
- (v) Work with the city/district safeguards specialists to develop appropriate training programs and materials; and
- (vi) Assist the CPMU to review environmental monitoring reports and prepare a consolidated reports to be included in the project quarterly progress reports.



## 2. Safeguards Specialist at the City/District Level

3. The specialist will have appropriate tertiary qualifications in the areas of environmental management, engineering and/or science and will have more than 10 years experience working in the fields for internationally funded development projects. The sectoral knowledge and experiences will be an advantage to the specialist. Specific tasks include the following:

- (i) Review all project related documents including the IEE, EARF, relevant existing guidelines (including environmental screening checklists) being implemented under CDD applying projects and selected urban neighborhood infrastructure contracts for roads, water supply, irrigation, sanitation and others;
- (ii) In coordination with community advisors visit selected neighborhoods receiving project supports and discuss with community implementation organizations to assess environmental screening processes and environmental impacts associated with the completed neighborhood infrastructure;
- (iii) Discuss with city/district departments of environment and identify any additional environmental regulatory requirements, specific environmental issues and need for training for city/district government staff;
- (iv) Work with the community advisors to adjust any environmental assessment questions to reflect location specific environmental conditions and develop a standardized detailed monitoring schedules and inspection formats;
- (v) Work with the national safeguards specialists to develop environmental safeguards and awareness building activities;
- (vi) Provide training to community advisors on the environmental screening (the use of checklist system);
- (vii) In collaboration with community advisors carry out environmental screening in selected neighborhoods to be included in the NUAP;
- (viii) Supervise the implementation of the environmental screening carried out by CIO and community advisors;
- (ix) Assist LCO to prepare Environmental Management Effort (*Upaya Pengelolaan Lingkungan* [UKL]) and Environmental Monitoring Effort (*Upaya Pemantauan Lingkungan* [UPL]), in cases where IEE is required;
- (x) Assist LCOs in obtaining approval on the UKL/UPLs by the district government in charge of environment;
- (xi) Prepare environmental monitoring reports;
- (xii) Provide technical inputs to district engineers and community advisors in the environmental assessment and technical proposal formulation processes to ensure that adequate environmental considerations and site specific mitigation measures in the design of interventions and operation and maintenance;

- (xiii) Work with other relevant consultants to include environmental safeguards and awareness aspects in the capacity building and awareness building activities;
- (xiv) Collaborate with district departments of environment and provide timely inputs to communities to mitigate any unintended negative impacts.