ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN (ESMP) PALU SUB-PROJECT: LANDFILLS
Sulawesi – Lombok Programme for Earthquake and Tsunami Infrastructure Reconstruction Assistance - PETRA

UNDP Jakarta
May 2020
Table of Contents

1 INTRODUCTION ......................................................................................................................................4

2 MITIGATION AND MONITORING.............................................................................................................6
  2.1 ANTICIPATED ADVERSE SOCIAL AND ENVIRONMENTAL IMPACTS ..................................................6
  2.2 OCCUPATIONAL HEALTH AND SAFETY (OHS) ...............................................................................7
  2.3 GROUNDWATER ..................................................................................................................................8
  2.4 AIR QUALITY ......................................................................................................................................10
  2.5 NOISE AND VIBRATION ..................................................................................................................11
  2.6 TRAFFIC MANAGEMENT ................................................................................................................12
  2.7 WASTE MANAGEMENT ..................................................................................................................13
  2.8 MONITORING SOCIAL IMPACTS .......................................................................................................14

3 CAPACITY DEVELOPMENT AND TRAINING ............................................................................................16

4 STAKEHOLDER ENGAGEMENT ...............................................................................................................17
  4.1 THREE-PHASED APPROACH ..........................................................................................................17
  4.2 METHOD TO INFORM AND INVOLVE AFFECTED PEOPLE IN THE ASSESSMENT PROCESS .......20
  4.3 ADDRESSING STAKEHOLDER CONCERNS AND GRIEVANCES ....................................................23

5 IMPLEMENTATION ACTION PLAN AND COSTS ..................................................................................26
  5.1 IMPLEMENTATION SCHEDULE .......................................................................................................26
  5.2 ESM COSTS ......................................................................................................................................26

ANNEXURE I: TOR FOR PROJECT-LEVEL GRIEVANCE REDRESS MECHANISM ....................................28
## Glossary of Terms and Abbreviations

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AMDAL</strong></td>
<td>Analisis Mengenai Dampak Lingkungan – a study of the significant impacts of a planned Business and / or Activity on the environment required for the decision making process regarding the conduct of a Business and / or Activity; it consists of KA-AMDAL, ANDAL (ESIA), and RKL-RPL (ESMPs)</td>
</tr>
<tr>
<td><strong>ANDAL</strong></td>
<td>Analisis Dampak Lingkungan – Environmental and social impact assessment</td>
</tr>
<tr>
<td><strong>AWP</strong></td>
<td>Annual Work Plan</td>
</tr>
<tr>
<td><strong>CO UNDP</strong></td>
<td>UNDP Country Office</td>
</tr>
<tr>
<td><strong>DED</strong></td>
<td>Detail Engineering Design</td>
</tr>
<tr>
<td><strong>DLH</strong></td>
<td>Dinas Lingkungan Hidup – Local Government Environmental Agency</td>
</tr>
<tr>
<td><strong>EDSCP</strong></td>
<td>Erosion, Drainage and Sediment Control Plan</td>
</tr>
<tr>
<td><strong>ESDD</strong></td>
<td>Environmental and Social Due Diligence</td>
</tr>
<tr>
<td><strong>ESIA</strong></td>
<td>Environmental and Social Impact Assessment</td>
</tr>
<tr>
<td><strong>ESMF</strong></td>
<td>Environmental and Social Management Framework</td>
</tr>
<tr>
<td><strong>ESMP</strong></td>
<td>Environmental and Social Management Plan</td>
</tr>
<tr>
<td><strong>GBVH</strong></td>
<td>Gender Based Violence and Harassment</td>
</tr>
<tr>
<td><strong>GRM</strong></td>
<td>Grievance Redress Mechanism</td>
</tr>
<tr>
<td><strong>ILO</strong></td>
<td>International Labour Organization</td>
</tr>
<tr>
<td><strong>KA</strong>-<strong>ANDAL</strong></td>
<td>Kerangka Acuan – ANDAL (Terms of Reference of ESIA)</td>
</tr>
<tr>
<td><strong>OAI</strong></td>
<td>UNDP's Office of Audit and Investigations</td>
</tr>
<tr>
<td><strong>PAC</strong></td>
<td>Project Advisory Committee</td>
</tr>
<tr>
<td><strong>PIP</strong></td>
<td>Project Implementation Plan</td>
</tr>
<tr>
<td><strong>PMU</strong></td>
<td>Project Management Unit</td>
</tr>
<tr>
<td><strong>PPE</strong></td>
<td>Personal Protective Equipment</td>
</tr>
<tr>
<td><strong>PSC</strong></td>
<td>Project Supervision Consultant</td>
</tr>
<tr>
<td><strong>PUSKESMAS</strong></td>
<td>Local Health Centre</td>
</tr>
<tr>
<td><strong>QPR</strong></td>
<td>Quarterly Project Report</td>
</tr>
<tr>
<td><strong>RENAKSI</strong></td>
<td>Rencana Aksi Rehabilitasi dan Rekonstruksi - Rehabilitation and Reconstruction Action Plan</td>
</tr>
<tr>
<td><strong>RKL</strong></td>
<td>Rencana Pengelolaan Lingkungan – Environmental Management Plan</td>
</tr>
<tr>
<td><strong>RPL</strong></td>
<td>Rencana Pemantauan Lingkungan – Environmental Monitoring Plan</td>
</tr>
<tr>
<td><strong>SA</strong></td>
<td>Social Assessment</td>
</tr>
<tr>
<td><strong>SES</strong></td>
<td>Social and Environmental Standards</td>
</tr>
<tr>
<td><strong>SESA</strong></td>
<td>Strategic Environmental and Social Assessment</td>
</tr>
<tr>
<td><strong>SESP</strong></td>
<td>Social and Environmental Screening Procedure</td>
</tr>
<tr>
<td><strong>SIA</strong></td>
<td>Social Impact Assessment</td>
</tr>
<tr>
<td><strong>SRM</strong></td>
<td>Stakeholder Response Mechanism</td>
</tr>
<tr>
<td><strong>TPA</strong></td>
<td>Tempat Pemrosesan Akhir - Final Solid Waste Processing Facility</td>
</tr>
<tr>
<td><strong>UKL-UPL</strong></td>
<td>Upaya Pengelolaan dan Pemantauan Lingkungan – Environmental Management and Monitoring Effort.</td>
</tr>
</tbody>
</table>
1 Introduction

The following document is based on the Environmental and Social Management Framework document which was prepared and approved by the PAC in April 2019. A number of elements of the ESMF feed directly into the ESMP. Please refer to the UNDP SES Guidance Note on Assessment and Management for additional information. The ESMP, when approved by the PAC, will be included in its entirety in the bidding documents for the construction of two landfills in Palu and Donggala. The project has been screened against UNDP’s Social and Environmental Standards (SES) utilizing the UNDP Social and Environmental Screening Procedure (SESP) and deemed a Moderate Risk project. Similarly, under the KfW Sustainability Guidelines, the Project is rated as Category B.

Outputs which will be achieved through implementation of the **Design & Construction Supervision Landfills in Central Sulawesi** as follow:

- Design and construction of Kawatuna Landfill in Palu City which includes activities:
  
  A. Landfill Environmental Protection
     1. Landfill basic layer (slope directed to certain point, 40 cm gravel layer, GCL, sand layer)
     2. Drainage / perimeter dike (designed 700 m length)
     3. Local drainage (include with drainage / embankments)
     4. Leachate collector
        - Zone 2 rehabilitation (4,500 m²)
        - Zone 3 leachate pipe design
     5. Leachate tank (before the leachate enters the leachate treatment plant)
     6. Reconstruction of leachate treatment plant (2,000 m²)
     7. Gas ventilation (12 units)
     8. Buffer green line/zone
  
  B. Main Facilities
     1. Main operating roads (include with operating roads in the area)
     2. Operating road in area (1,100 m length)
     3. Weighbridge Designed (area 50 m²)
     4. Registration room (include with weighbridge)
     5. Landfill Zone
        - Tidying, providing cover and closing of zone 2 (12,000 m²)
        - Design new zone
  
  C. Infrastructure
     1. Gate - fence (1,250 m length)
     2. Proposed gate design
     3. Design Landfill Office (area 128 m²)
     4. Design workshop and equipment (area 96 m²)
5. Toilet facilities (include with office buildings)
6. Electrical Mechanical and electrical
7. Design room (area 24 m2)
8. Special recycle area (area 200 m2)

- Design and construction of Kabonga Landfill in Donggala District which includes activities:
  
  A. Landfill Environmental Protection
     1. Landfill basic layer (slope directed to certain point, 40 cm gravel layer, GCL, sand layer)
     2. Drainage / perimeter dike (designed 350 m length)
     3. Local drainage (include with drainage / embankments)
     4. Leachate collector
        - Rehabilitation existing zone (3,500 m2)
        - New zone leachate pipe design
     5. Leachate tank (before the leachate enters the leachate treatment plant)
     6. Gas ventilation (8 units in new zone)
     7. Buffer green line/zone
  
  B. Main Facilities
     1. Unloading & maneuver zone
     2. Main operating roads (include with operating roads in the area)
     3. Operating road in area (400 m length)
     4. Registration room (include with weighbridge)
     5. Landfill Zone
        - Tidying, providing cover and closing of zone 2 (3,600 m2)
        - Design new zone
  
  C. Infrastructure
     1. Gate - fence (700 m length)
     2. Proposed gate design
     3. Electrical Mechanical
     4. Special recycle area (area 200 m2)

Those activities will have impact to the environment, biodiversity and people live nearby and make living from landfill presence. The identified impact which addressed during ESMF development are as follow:
- Occupational Health and Safety
- Groundwater
2 Mitigation and Monitoring

2.1 Anticipated Adverse Social and Environmental Impacts

The SESP for the Palu and Donggala Subproject works has identified the environmental and social risks listed in the following table. The table also includes broad provisions for dealing with the identified risks.

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Community Health, Safety and Working Conditions</td>
<td></td>
</tr>
<tr>
<td>3.7 Does the Project pose potential risks and vulnerabilities related to occupational health and safety due to physical, chemical, biological, and radiological hazards during Project construction, operation, or decommissioning?</td>
<td>Plans for OHS, air quality, noise and vibration, traffic management and waste management required to minimise impacts during Project construction.</td>
</tr>
<tr>
<td>3.8 Does the Project involve support for employment or livelihoods that may fail to comply with national and international labour standards (i.e. principles and standards of ILO fundamental conventions)?</td>
<td>OHS plan includes reference to principles and standards of ILO fundamental conventions.</td>
</tr>
<tr>
<td>7. Pollution Prevention and Resource Recovery</td>
<td></td>
</tr>
<tr>
<td>7.1 Would the Project potentially result in the release of pollutants to the environment due to routine or non-routine circumstances with the potential for adverse local, regional, and/or transboundary impacts?</td>
<td>Rehabilitation of existing zone would be designed carefully to minimize release of odor and methane deposited on old waste piles and impact on groundwater.</td>
</tr>
<tr>
<td>7.2 Would the proposed Project potentially result in the generation of waste (both hazardous and non-hazardous)?</td>
<td>Waste management plan is required with special attention to management of asbestos waste. Hazardous waste management plan also required for PUSKESMAS and PUSTU operation.</td>
</tr>
</tbody>
</table>

The above assessment indicates that the Construction Contract must provide for implementation of the following plans:

- Occupational Health and Safety
- Groundwater
- Air Quality
- Noise and Vibration
- Traffic Management
2.2 Occupational Health and Safety (OHS)

**Background**

The Project Manager shall develop and implement an OHS Management System as a vehicle for managing the OHS hazards and risks and as an instrument for continual i.e. stepwise progressive improvement in UNDP’s management of OHS. Safety and Health in Construction Convention, 1988 (No.167) of International Labour Organisation (ILO) is the key convention concerning safety and health in construction. In August 2015, Indonesia ratified ILO’s Promotional Framework for Occupational Safety and Health Convention, 2006 (No. 187). The convention defines activities under construction and specifies preventive and protective provisions to be in place for the construction sites. In addition, UNDP’s SES includes provisions related to community health, safety and working conditions (Standard 3), including the need to respect and promote workers’ rights and that project workers have safe and healthy working conditions to prevent accidents, injuries, and diseases.

Clearly defined roles and responsibilities of key personnel along with authority and availability of resources are essential for planning and managing the OHS elements under the framework. As part of the OHS framework for action, the Project Manager shall establish, implement and maintain procedures for identifying and accessing the legal and other OH&S requirements that are applicable to it. The OHS framework should include labour standards that promote gender equality and minimise gendered harm, as outlined in ILO’s ABC of Workers; Rights and gender equality, 2nd Ed, 2007.

This ESMP’s includes occupational health and safety measures including safety of workers and other persons, noise, maintenance of equipment, prevention of spread of diseases, debris, cleanliness, ease of movement, any GBVH, social disputes and general appearance of the subproject including tree planting, etc.

**Performance Criteria**

The following performance criteria are set for the project:

1. Establishment of an OHS organisation with clear roles, responsibilities, authority and resources.
2. Identification and monitoring of compliance for key regulations.
3. Presence and implementation of procedures on hazards identification and risk assessment.
4. Establishment and implementation of Contractors OHS Management Plans.

**Monitoring**

Monitoring and evaluation are an integral part of OHS management. Systematic monitoring and evaluation require attention to different aspects at all stages of implementation and includes proactive and reactive monitoring. Proactive monitoring involves assessing presence of key elements of systems, procedures and protocols for controls in place.
The Project Manager shall establish, implement and maintain procedures to monitor and measure OH&S performance on a regular basis. These procedures shall provide for both qualitative and quantitative measures, proactive and reactive measures of performance. The Project Manager shall establish, implement and maintain procedures to record, investigate and analyse incidents. The Project Manager shall also establish, implement and maintain procedures which define requirements for identifying and correcting nonconformities, including GBVH, and taking actions to mitigate their OH&S consequences.

Indicators serve a key role to monitor the OHS performance of the implementing organizations. The indicators shall include qualitative indicators as well as quantitative ones. The Project Manager shall develop appropriate lists of indicators based on particular activities.

**Reporting**

The Project Manager shall ensure that internal audits of the OHS management system are conducted at planned intervals to determine whether the OHS management system conforms to planned arrangements for OHS management; has been properly implemented and is maintained; and is effective in meeting the organization’s policy and objectives.

The results of incident investigations, incidents of nonconformity with the OHS management system, corrective action and preventive action shall be documented and maintained. Monthly reports on OHS are to be provided to UNDP, KfW and Bappenas.

<table>
<thead>
<tr>
<th>Table 2: Occupational Health and Safety Management Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Issue</strong></td>
</tr>
<tr>
<td>OHS1: Health and safety issue of the construction workers</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

2.3 **Groundwater**

**Background**

Project specific groundwater studies have not been undertaken.

**Performance Criteria**

The following performance criteria are set for the project:

1. no significant decrease in the quality and quantity of groundwater as a result of construction and operational activities in proximity to the projects;

2. effective implementation of site-specific EDSCPs and other measures to protect groundwater.

By following the management measures set out in the ESMF the project will not have a significant impact on water quality across the broader area.

**Monitoring**

Refer to the Table below for the monitoring requirements for groundwater.
Ongoing monitoring should form part of the operation of the boreholes.

**Reporting**

During the project groundwater quality should be assessed initially and then at least every two months. Initial assessment should cover a wide range of parameters (e.g. depth to water, pH, DO, conductivity, nitrates, phosphates, faecal coliforms, heavy metals, turbidity, hydrocarbons) to provide a baseline and to confirm suitability for intended use. Subsequent monitoring parameters will be determined on need.

All water quality monitoring results and/or incidents will be tabulated and reported as outlined in the ESMF. The WHO must be notified immediately in the event of any suspected instances of material or serious environmental harm, or if a determined level with respect to water quality is exceeded.

**Groundwater Management Measures**

<table>
<thead>
<tr>
<th>Issue</th>
<th>Control activity (and source)</th>
<th>Action timing</th>
<th>Responsibility</th>
<th>Monitoring &amp; reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>GW1: Increase of gross pollutants, hydrocarbons, metals and other chemical pollutants into the groundwater and/or surface water environment.</td>
<td>GW1.1 Conduct regular surface and groundwater quality monitoring in location where the groundwater is likely to be impacted, including assessing the changes to groundwater quality.</td>
<td>Construction and operation phases</td>
<td>Project manager</td>
<td>Two monthly or as directed by UNDP.</td>
</tr>
<tr>
<td></td>
<td>GW1.2: Prevent contaminated surface water from entering aquifers via boreholes and wells - protect from runoff and flooding and keep surrounds clean.</td>
<td>All phases</td>
<td>All personnel</td>
<td>On-going</td>
</tr>
<tr>
<td></td>
<td>GW1.3: Designated areas for storage of fuels, oils, chemicals or other hazardous liquids should have compacted impermeable bases and be surrounded by a bund to contain any spillage. Refuelling to be undertaken in areas away from water systems.</td>
<td>Entire construction and operation phase</td>
<td>All personnel</td>
<td>On-going</td>
</tr>
<tr>
<td></td>
<td>GW1.4: Check all vehicles, equipment and material storage areas daily for possible fuel, oil and chemical leaks. Undertake refuelling at designated places away from water systems.</td>
<td>All phases</td>
<td>All personnel</td>
<td>Daily and maintain records</td>
</tr>
<tr>
<td></td>
<td>GW 1.5: Minimise the use of herbicides, pesticides and other chemicals and use only biodegradable herbicides that have minimal impact on water quality and fauna. Use only as per directions.</td>
<td>All phases</td>
<td>All personnel</td>
<td>Monthly reporting to UNDP</td>
</tr>
</tbody>
</table>
2.4 Air Quality

**Background**

All construction activities have the potential to cause air quality nuisance.

The project areas are predominantly village or rural in character. Existing air quality reflects those environments, with dust being the main air quality nuisance.

Workers involved in construction and operation activities should be familiar with methods minimising the impacts of deleterious air quality and alternative construction procedures as contained in Indonesian Government legislation or good international industry practice.

**Performance Criteria**

The following performance criteria are set for the construction of the projects:

1. Release of dust/particle matter must not cause an environmental nuisance;
2. Undertake measures at all times to assist in minimising the air quality impacts associated with construction and operation activities; and
3. Corrective action to respond to complaints and/or grievances is to occur within 48 hours.

**Monitoring**

A standardized air monitoring program has been developed for the projects (see Table below). The program is subject to review and update at least every two months from the date of issue. Importantly:

1. The requirement for dust suppression will be visually observed by site personnel daily and by UNDP staff when undertaking routine site inspections; and
2. Vehicles and machinery emissions – visual monitoring and measured when deemed excessive.

**Reporting**

All air quality monitoring results and/or incidents will be tabulated and reported as outlined in the ESMF. The UNDP must be notified immediately in the event of any suspected instances of material or serious environmental harm, or if a determined level with respect to air quality is exceeded.

### Table 3: Air Quality Management Measures

<table>
<thead>
<tr>
<th>Issue</th>
<th>Control activity (and source)</th>
<th>Action timing</th>
<th>Responsibility</th>
<th>Monitoring &amp; reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>AQ1: Increase in dust levels at sensitive receptors.</td>
<td>AQ1.1 Implement effective dust management measures in all areas during design, construction and operation.</td>
<td>Pre and during construction</td>
<td>All personnel</td>
<td>Daily and maintain records</td>
</tr>
<tr>
<td></td>
<td>AQ1.2: Source sufficient water of a suitable quality for dust suppression activities complying with any water restrictions.</td>
<td>During construction</td>
<td>Project manager</td>
<td>Daily and maintain records</td>
</tr>
</tbody>
</table>
2.5 Noise and Vibration

Background

All construction and operation activities have the potential to cause noise nuisance. Vibration disturbance to nearby residents is likely to be caused through the use of vibrating equipment. Blasting is not required to be undertaken as part of this project. The use of machinery or introduction of noise generating facilities could have an adverse effect on the environment and residents if not appropriately managed. Contractors involved in construction activities should be familiar with methods of controlling noisy machines and alternative construction procedures as contained within good international industry practice. The detail, typical equipment sound power levels, provides advice on project supervision and gives guidance noise reduction. Potential noise sources during construction may include:

1. Heavy construction machinery;
2. Power tools and compressors;
3. Delivery vehicles.

Performance Criteria

The following performance criteria are set for the construction of the projects:

1. Noise from construction and operational activities must not cause an environmental nuisance at any noise sensitive place;
2. Undertake measures at all times to assist in minimizing the noise associated with construction activities;
3. No damage to off-site property caused by vibration from construction and operation activities; and
4. Corrective action to respond to complaints and/or grievances is to occur within 48 hours.

Monitoring

A standardized noise monitoring program is to be developed for the projects. Importantly, the site supervisor will:

1. Ensure equipment and machinery is regularly maintained and appropriately operated; and
2. Carry out potentially noisy construction activities during ‘daytime’ hours only.

Reporting

All noise monitoring results and/or incidents will be tabulated and reported as outlined in the ESMF. The UNDP must be notified immediately in the event of any suspected instances of material or serious environmental harm, or if a determined level with respect to noise is exceeded.
Table 4: Noise and Vibration Management Measures

<table>
<thead>
<tr>
<th>Issue</th>
<th>Control activity (and source)</th>
<th>Action timing</th>
<th>Responsibility</th>
<th>Monitoring &amp; reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>N1: Increased noise levels</td>
<td>N1.1 Select plant and equipment and specific design work practices to ensure that noise emissions are minimized during construction and operation.</td>
<td>Pre and during construction</td>
<td>Contractor</td>
<td>Maintain records</td>
</tr>
<tr>
<td></td>
<td>N1.2: Specific noise reduction devices such as silencers and mufflers shall be installed as appropriate to site plant and equipment.</td>
<td>Pre and during construction</td>
<td>Contractor</td>
<td>Maintain records</td>
</tr>
<tr>
<td></td>
<td>N1.3 Consultation with nearby residents in advance of construction if noise generating construction activities are to be carried out.</td>
<td>Construction phase</td>
<td>All personnel</td>
<td>Daily and maintain records</td>
</tr>
<tr>
<td></td>
<td>N1.4 All incidents, complaints and non-compliances related to noise shall be reported in accordance with the site incident reporting procedures and summarized in the register.</td>
<td>Construction phase</td>
<td>Project manager</td>
<td>Maintain records</td>
</tr>
<tr>
<td>N2. Vibration due to construction</td>
<td>N2.1 Identify properties and structures that will be sensitive to vibration impacts resulting from construction and operation of the project.</td>
<td>Pre and during construction</td>
<td>Contractor</td>
<td>Maintain records</td>
</tr>
<tr>
<td></td>
<td>N2.2 Design to give due regard to temporary and permanent mitigation measures for noise and vibration from construction and operational vibration impacts.</td>
<td>Pre-construction</td>
<td>Contractor</td>
<td>Maintain records</td>
</tr>
<tr>
<td></td>
<td>N1.4 All incidents, complaints and non-compliances related to vibration shall be reported in accordance with the site incident reporting procedures and summarized in the register.</td>
<td>Construction phase</td>
<td>Project manager</td>
<td>Maintain records</td>
</tr>
</tbody>
</table>

2.6 Traffic Management

**Background**

Traffic safety should be promoted by all project personnel during displacement to and from the workplace, and during operation of project equipment on private or public roads. Prevention and control of traffic related injuries and fatalities should include the adoption of safety measures that are protective of project workers and of road users, including those who are most vulnerable to road traffic accidents. This should include safe pathways around the site for people living with disability (PLWD), including those who are mobility-impaired, vision-impaired, and hearing-impaired.

**Performance Criteria**

The following performance criteria are set for the project:

1. Zero traffic accidents occur due to project construction works;
2. Disruption to local traffic is minimised through limiting use of local roads during peak or other sensitive times; and
3. No complaints received regarding construction traffic.
Reporting
The UNDP as implementing agency must be notified immediately in the event of any traffic accidents, any failure of contractors to implement or operate agreed traffic controls, and complaints regarding construction traffic.

<table>
<thead>
<tr>
<th>Issue</th>
<th>Control activity (and source)</th>
<th>Action timing</th>
<th>Responsibility</th>
<th>Monitoring &amp; reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>TM1: Disruption due to Project vehicular traffic.</td>
<td>TM1.1: Consultation with the local communities concerning measures to minimise adverse environmental and social impacts due to project traffic.</td>
<td>Pre and during construction phase</td>
<td>Project manager</td>
<td>Maintain records</td>
</tr>
<tr>
<td></td>
<td>TM1.2: Ensure project vehicles are properly serviced and maintained especially with regard to noise and engine emissions.</td>
<td>Construction phase</td>
<td>Project manager</td>
<td>Maintain records</td>
</tr>
</tbody>
</table>

2.7 Waste Management

Background
As the implementing agency, the UNDP advocate good waste management practice. The preferred waste management hierarchy and principles for achieving good waste management is as follows:

1. Waste avoidance (avoid using unnecessary material on the projects);
2. Waste re-use (re-use material and reduce disposing);
3. Waste recycling (recycle material such as cans, bottles, etc.); and
4. Waste disposal (all putrescible and/or contaminated waste to be dumped at approved landfills).

Performance Criteria
The following performance criteria are set for the project:

1. Waste generation is minimised through the implementation of the waste hierarchy (avoidance, reduce, reuse, recycle);
2. No litter will be observed within the project area or surrounds as a result of activities by site personnel;
3. No complaints received regarding waste generation and management; and
4. Waste oils will be collected and disposed or recycled off-site.

Reporting
The UNDP as implementing agency must be notified immediately in the event of any suspected instances of material or serious environmental harm, or if a determined level with respect to waste is exceeded.
### Table 6: Waste Management Measures

<table>
<thead>
<tr>
<th>Issue</th>
<th>Control activity (and source)</th>
<th>Action timing</th>
<th>Responsibility</th>
<th>Monitoring &amp; reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>WM1: Production of waste and excessive use of resources</td>
<td>WM1.1: Preference shall be given to materials that can be used to construct the project that would reduce the direct and indirect waste generated.</td>
<td>Pre and during construction</td>
<td>Contractor</td>
<td>Maintain records</td>
</tr>
<tr>
<td></td>
<td>WM1.2: Daily waste management practices shall be carried out.</td>
<td>Pre-construction</td>
<td>Contractor</td>
<td>Maintain records</td>
</tr>
<tr>
<td></td>
<td>WM1.3: The use of construction materials shall be optimised and where possible a recycling policy adopted.</td>
<td>Entire construction and operation phase</td>
<td>Contractor</td>
<td>Maintain records</td>
</tr>
<tr>
<td></td>
<td>WM1.4: Separate waste streams shall be maintained i.e. general domestic waste, construction and contaminated waste. Specific areas on site shall be designated for the temporary management of the various waste streams.</td>
<td>During construction</td>
<td>Contractor</td>
<td>Daily and maintain records</td>
</tr>
<tr>
<td></td>
<td>WM1.5: Any contaminated waste shall be disposed of at an approved facility.</td>
<td>During construction</td>
<td>Contractor</td>
<td>Maintain records</td>
</tr>
<tr>
<td></td>
<td>WM1.6: Fuel and lubricant leakages from vehicles and plant shall be immediately rectified.</td>
<td>Entire construction and operation phase</td>
<td>Contractor</td>
<td>Maintain records</td>
</tr>
<tr>
<td></td>
<td>WM1.7: Disposal of waste shall be carried out in accordance with the Government of Indonesia requirements.</td>
<td>During construction</td>
<td>Contractor</td>
<td>Maintain records</td>
</tr>
</tbody>
</table>

**Asbestos Waste Collection Transfer and Disposal**

Special attention is required to collection and disposal of asbestos waste. This has been identified at the following sites: SMKN Tanjung and PUSTU Telaga Wareng, Rangsot, Gangga and Selengen.

Additional input to be provided by the Asbestos Waste Management Specialist.

### 2.8 Monitoring Social Impacts

**Background**

The project has been designed with the assistance of stakeholders and aims to provide benefits to the broader community. Notwithstanding, as with any project that involves construction, GBVH is a risk, community dissatisfaction can occur, and conflicts may arise. It is important that inappropriate behaviour and potential areas of tension are recognised early, and appropriate actions taken to avoid or minimise conflict.

The project and its sub-projects do not require involuntary resettlement or acquisition of land although they may impact on land during construction activities which will be temporary in nature.

**Performance Criteria**

The following performance criteria are set for the project:
1. The community has been consulted and project elements have been designed with their informed consultation and participation throughout the project in accordance with project Stakeholder Engagement Plan;
2. All stakeholders are appropriately represented, including women, PLWD, the elderly and other disadvantaged or marginalized groups;
3. Avoid adverse impacts to local community during construction and operations and where not possible, minimise, restore or compensate for these impacts;
4. Cultural heritage is not adversely impacted;
5. Community health and safety is protected, and overall well-being benefits derived from the project;
6. Gender-sensitive complaint and grievance mechanisms are put in place and proactively managed; and
7. Long-term social benefits are achieved for all

Local stakeholders and community members have a key role to play in the implementation and monitoring of the project.

Consultation with stakeholders will continue. This will help ensure that stakeholders continue to be aware of the project, its progress and any changes in the project. It will also assist in identifying any issues as they arise.

UNDP will be responsible for advisory support and extensions services to local beneficiaries along with being responsible for distributing material inputs and providing technical training and backstopping in the implementation of programme activities.

**Reporting**

Records of all consultations are to be kept and reported on monthly basis. Any reports of GBV'H must be recorded and reporting within a week of the complaint.

The UNDP must be notified in the event of any individual or community complaint or dissatisfaction and ensure the Grievance Redress Mechanism is complied with.

*Table 7: Social Impact Management Measures*

<table>
<thead>
<tr>
<th>Issue</th>
<th>Control activity (and source)</th>
<th>Action timing</th>
<th>Responsibility</th>
<th>Monitoring &amp; reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1: Negative perception and/or social tension related to the change of land use or GBV'H incident</td>
<td>D1.1: Carry out community consultation on the purpose and benefits of making changes to land use.</td>
<td>Pre-construction</td>
<td>Project manager</td>
<td>Maintain records</td>
</tr>
<tr>
<td></td>
<td>D1.2: Get community buy-in on any change of land use.</td>
<td>Pre-construction</td>
<td>Project manager</td>
<td>Maintain records</td>
</tr>
<tr>
<td></td>
<td>D1.3: Ensure compliance with gender-sensitive Grievance Redress Mechanism process.</td>
<td>Entire construction and operation phase</td>
<td>Project manager</td>
<td>Maintain records</td>
</tr>
<tr>
<td>D2: Public nuisance caused by construction/operation activities (e.g. noise, dust etc)</td>
<td>D2.1: Carry out community consultation prior to undertaking activities.</td>
<td>Pre-construction</td>
<td>Project manager</td>
<td>Maintain records</td>
</tr>
</tbody>
</table>
### 3 Capacity Development and Training

To support timely and effective implementation of social and environmental project components and mitigation measures, the ESMP draws on the environmental and social assessment of the existence, role, and capability of responsible parties on site or at the agency and ministry level.

![Figure 1: Institutional Arrangements for Implementation of ESMP](image)

The broad responsibilities of the various parties include:

**Project Advisory Committee:** The Committee will provide strategic guidance to PETRA and facilitate due coordination to ensure PETRA’s investment priorities (investment plan) contribute to the Reconstruction Master Plan in the most effective way. The second tier of PETRA’s governance system will address project implementation, assurance (or quality control) and oversight dimensions. The PAC will receive, process and act on, where necessary, the ESM reports provided by the PM. The PAC will oversee the implementation and management of the GRM. The PAC will ensure adequate funding for the implementation of the ESMP.

**Project Manager:** The PMU will be led by a Project Manager (PM) based in Central Sulawesi; a (smaller) sub-field office in Lombok will be under the responsibility of a Field Coordinator (who will report to the Project Manager). The PM will be responsible for the day to day management of the project and implementation of activities in line with guidance provided by the CO. He will also undertake field visits to Lombok to oversee and support project implementation there. The PM will be assisted by (a) project operation and technical personnel (including engineers and
community mobilizers), (b) specialized consultants to be hired for specific tasks. The PM will have primary responsibility in the implementation of activities related to stakeholder management and monitoring social impacts. He will monitor and report any complaints received under the GRM and in the event of any individual or community complaint or dissatisfaction he will ensure the GRM is complied with. He will bear overall responsibility to see that the various plans for impact minimization are properly implemented. The PM will prepare weekly, monthly and semi-annual reports on ESM for the PAC.

**Environmental Advisor:** The EA will make periodic visits to the sites to audit the ESMP implementation and assist the PM in the preparation of periodical ESM reports.

**Site Supervisor:** The site supervisor will be responsible for daily inspections (e.g. environmental inspections, Occupational Health & Safety) of the construction site. The UNDP will cross check these inspections by undertaking regular audits. The site supervisor will prepare daily ESM reports for the PM.

**Contractor:** The Contractor will be responsible for the day-to-day compliance of the ESMP at the specific project site. He will maintain and keep all administrative and social and environmental records which would include a log of complaints and incidents together with records of any measures taken to mitigate the cause of the complaints or incidents. Particular attention is drawn to the need for preparation of an OHS Management Plan, implementation of induction and periodic training on safety and provision of PPE for all associated with site activities.

4 Stakeholder Engagement

4.1 Three-phased Approach

The construction and operation of landfills in Palu and Donggala includes at least three phases: 1) pre-construction phase; 2) construction phase; and 3) operational phase (OP). In each of these phases, there are a number of stakeholders that will be associated with the landfill, based on their respective interests. The following is the explanation.

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Interest and engagement to the project</th>
</tr>
</thead>
</table>
| The scavengers who have been working in the landfill area | • In Palu (TPA Kawatuna): scavengers depend on earning a living from the recyclables collected in the landfill. In the pre-construction phase they must be informed of the landfill rehabilitation plan and be prepared in the fact that they will not be able to work inside the landfill during the construction phase, as well as the possibility of being unable to work there forever (after the landfill has been rehabilitated).  
• In Donggala (TPA Kabonga): scavengers are workers of the landfill who are paid by the Environmental Agency. So the garbage scavenging activity for them is just an additional activity. In the pre-construction phase they must be informed about the landfill rehabilitation plan and their job descriptions during the construction phase and the OP phase. |
<p>| Grazier who have been grazing their livestock in the landfill area | In Palu: grazier really need organic waste in the landfill because in the dry season the Kawatuna location tends to be dry making it difficult to get grass / animal feed free from nature. In the pre-construction phase they must be informed of the landfill rehabilitation plan and be prepared in the fact that they may no longer pasture their livestock in the landfill area, both in the construction phase and in the OP phase. |</p>
<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Interest and engagement to the project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grazier in Donggala</td>
<td>In Donggala: grazier do not really need organic waste in the landfill because even in the dry season the area around the landfill remains green so that it is easy for them to get free animal feed from nature. In the pre-construction phase they must be informed of the landfill rehabilitation plan and be prepared in the fact that they may no longer pasture their livestock in the landfill area, both in the construction phase and in the OP phase.</td>
</tr>
<tr>
<td>Resident living around landfills</td>
<td>There is a potential for disturbance to the community in the construction phase and in the OP phase. However, so far they have become accustomed to and have accepted the existence of landfill in their environment. In the pre-construction phase they must be informed about the landfill rehabilitation plan and be invited to discuss the potential negative impacts during the construction phase and the OP phase, as well as their mitigation efforts.</td>
</tr>
</tbody>
</table>
| Squatter living around the temporary landfill (during the construction phase) | In Palu: the Kawatuna landfill is still possible to continue to receive municipal solid waste as long as the landfill is being rehabilitated so that there may be no need for a temporary replacement / landfill site.  
In Donggala: during the construction period, waste that is usually disposed of at the landfill will be diverted to another location that serves as a temporary landfill. In the pre-construction phase, residents around the temporary landfill site must be informed about this plan, its potential negative impacts, and mitigation efforts. |
| Citizens whose settlements are traversed by haulage trucks (from TPS to TPA) | In Palu and Donggala: there is potential for interference from haulage trucks passing by and leaving the TPA. However, so far they have been accustomed to and accepted the existence of garbage trucks passing by and passing through their residential areas. In the pre-construction phase they must be informed about the landfill rehabilitation plan and be given the opportunity to provide input on what they have felt so far and their hopes for the future regarding the traffic of the garbage trucks.  
Specifically in Donggala there is a possibility of changing the haulage truck lane from the TPS to the temporary landfill site. In the pre-construction phase they need to be informed about the planned changes to the garbage truck lane, the potential negative impacts, and mitigation efforts. |
| Local and national mass media (press)                                    | In Palu and Donggala: mass media crews have an interest as community representatives to obtain and disseminate information about landfill and waste management in general. In the pre-construction phase they must be informed about the landfill rehabilitation plan, potential negative impacts, efforts to mitigate negative impacts, as well as other messages relating to waste management in general. |
| Other concerned community members in the city / district                 | In Palu and Donggala: city / district residents in general have an interest because up to now they have been transported to the landfill. In the pre-construction phase they must be informed of the landfill rehabilitation plan as well as information about the potential disruption to the transportation of waste from the landfill to the landfill (or temporary landfill) during the construction phase. |
### Table 9: Stakeholder in Construction Phase

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Interest and engagement to the project</th>
</tr>
</thead>
<tbody>
<tr>
<td>The scavengers who have been working in the landfill area</td>
<td>In Palu and in Donggala: during the construction phase they must be prevented from entering the landfill area for their own safety and smooth construction. They also have interests as potential labor candidates for construction activities.</td>
</tr>
<tr>
<td>Grazier who have been grazing their livestock in the landfill area</td>
<td>In Palu and Donggala: during the construction phase they must be prevented from grazing their cattle into the landfill area for their own safety, the safety of their livestock and the smooth construction. Specifically in Palu: farmers need to be supplied with organic waste that has been sorted from traditional markets, as agreed.</td>
</tr>
<tr>
<td>Resident living around landfills</td>
<td>In Palu and Donggala: despite mitigation efforts, there is still the potential for negative impacts from the rehabilitation of the landfill to the local residents. In this phase channels must be available for complaints and suggestions from residents around the landfill. Nearby residents also have an interest as potential labor candidates for construction activities.</td>
</tr>
<tr>
<td>Squatter living around the temporary landfill (during the construction phase)</td>
<td>In Donggala: despite mitigation efforts, there is still the potential for negative impacts from the disposal of waste to temporary landfill sites. In this phase channels should be available for complaints and suggestions from local residents.</td>
</tr>
<tr>
<td>Citizens whose settlements are traversed by haulage trucks (from TPS to TPA)</td>
<td>In Palu and Donggala: even though they are accustomed to garbage truck traffic, there is still a potential for new negative impacts from this activity. In this phase channels must be available for complaints and suggestions from these residents.</td>
</tr>
<tr>
<td>Local and national mass media (press)</td>
<td>In Palu and Donggala: in all phases, the mass media crew has an interest as community representatives to obtain and disseminate information about the landfill. In the construction phase they must be informed of the progress of the rehabilitation of the landfill, the negative impacts that occur (even though there have been mitigation efforts), and efforts to deal with these negative impacts. The press must also be given the opportunity to channel complaints and suggestions from the community to project implementers, then be given information about the efforts that have been made to respond to complaints and suggestions.</td>
</tr>
<tr>
<td>Other concerned community members in the city / district</td>
<td>In Palu and Donggala: in the construction phase they must be informed of the progress of the rehabilitation of the landfill, the negative impacts that occur (although there have been mitigation efforts), and efforts to deal with these negative impacts. In this phase channels must be available for complaints and suggestions from citizens.</td>
</tr>
</tbody>
</table>

### Table 10: Stakeholder in Operation Phase

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Interest and engagement to the project</th>
</tr>
</thead>
<tbody>
<tr>
<td>The scavengers who have been working in the landfill area</td>
<td>• In Palu: in the OP phase, there are two options that can be made available to scavengers. Option 1: they are no longer allowed to collect waste in the landfill area so they need to be directed to collect waste in the locations of TPS or TPS 3R. Option 2: they may re-collect waste inside the landfill area, but specifically only in the MRF (material recovery facility).</td>
</tr>
</tbody>
</table>
Stakeholder | Interest and engagement to the project
---|---
 | recovery facility building. Whatever the options are given, they need to be given regular guidance so that they can work with attention to health and personal safety, while helping to reduce the volume of waste sent to / piled up at the landfill.
- In Donggala: in the OP phase they return to work as before, namely as landfill management workers, as well as scavengers / waste sorters in the landfill. What is important for them in the OP phase is how to work while still paying attention to their health and safety.

Grazier who have been grazing their livestock in the landfill area | • In Palu: during the OP phase, farmers must continue to be supplied with organic waste that has been sorted from market waste so that they no longer feed their cattle into the landfill area.
• In Donggala: during the OP phase, efforts must be made to prevent (fencing) so that cattle no longer enter the landfill area.

Resident living around landfills | In Palu and Donggala: even though there have been mitigation efforts, there is still the potential for negative impacts from the OP TPA activities on the local residents. In this phase, channels must be available for complaints and suggestions from residents around the landfill site.

Squatter living around the temporary landfill (during the construction phase) | In Palu and Donggala: in all phases, the mass media crew has an interest as community representatives to obtain and disseminate information about the landfill and about waste management in general. In the OP phase, they must be informed about the operation of the landfill, the negative impacts that occur (although there are mitigation efforts), efforts to deal with these negative impacts, and municipal / municipal waste management activities in general. The press must also be given the opportunity to channel complaints and suggestions from the public to the management of the landfill, then be given information about the efforts that have been made to respond to the complaints and suggestions.

Local and national mass media (press) | In Palu and Donggala: in all phases, the mass media crew has an interest as community representatives to obtain and disseminate information about the landfill and about waste management in general. In the OP phase, they must be informed about the operation of the landfill, the negative impacts that occur (although there are mitigation efforts), efforts to deal with these negative impacts, and municipal / municipal waste management activities in general. The press must also be given the opportunity to channel complaints and suggestions from the public to the management of the landfill, then be given information about the efforts that have been made to respond to the complaints and suggestions.

4.2 Method to inform and involve affected people in the assessment process

For each stakeholder and in each phase, the method of engagement / communication applied is not always the same. The following is the explanation.

Table 11: Method to inform and involve affected people in Pre-Construction Phase

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Methods of involvement/informed</th>
<th>Implementer/Person In Charge</th>
</tr>
</thead>
</table>
| The scavengers who have been working in the landfill area | • Consultation/FGD for scavengers  
• Announcements at local sub-district and village offices  
• Public consultation in the context of AMDAL | City / District environmental Agency |
<p>| Grazer who have been grazing their livestock in the landfill area | • Consultation/FGD for graziers | City / District environmental Agency |</p>
<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Methods of involvement/informed</th>
<th>Implementer/Person In Charge</th>
</tr>
</thead>
</table>
| Resident living around landfills                                          | • Consultation/FGD for local resident  
• Announcements at local newspaper  
• Announcements at local sub-district and village offices  
• Public consultation in the context of AMDAL                         | City / District Environmental Agency            |
| Squatter living around the temporary landfill (during the construction phase in Donggala) | • Consultation/FGD for squatters  
• Announcements at local newspaper  
• Announcements at local sub-district and village offices  
• Public consultation in the context of AMDAL                         | City / District Environmental Agency            |
| Citizens whose settlements are traversed by haulage trucks (from TPS to TPA) | • Announcements at local newspaper  
• Public consultation in the context of AMDAL                                                      | City / District Environmental Agency            |
| Local and national mass media (press)                                     | • Press release  
• Press conference  
• Press tour ke lokasi TPA  
• Public consultation in the context of AMDAL                                                      | City / District Environmental Agency            |
| Other concerned community members in the city / district                  | • Announcements at local newspaper  
• Public consultation in the context of AMDAL  
• Another form of socialization using local media                                                      | City / District Environmental Agency            |

Table 12: Method to inform and involve affected people in Construction Phase

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Methods of involvement/informed</th>
<th>Implementer/Person In Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>The scavengers who have been working in the landfill area</td>
<td>Provision of alternative locations for waste scavenging activities (for example to TPS / TPS 3R)</td>
<td>Pity / District Environmental Agency</td>
</tr>
<tr>
<td></td>
<td>Announcement of job opportunities for construction activities</td>
<td>Contractor’s</td>
</tr>
<tr>
<td>Stakeholder</td>
<td>Methods of involvement/informed</td>
<td>Implementer/Person In Charge</td>
</tr>
<tr>
<td>----------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------</td>
</tr>
<tr>
<td>The scavengers who have been working in the landfill area</td>
<td>Provision of alternative locations for waste scavenging activities (for example to TPS / TPS 3R)</td>
<td>City / District Environmental Agency</td>
</tr>
<tr>
<td></td>
<td>Routine guidance for scavenger groups</td>
<td>Head of sub-district and local village head</td>
</tr>
</tbody>
</table>

**Table 13: Method to inform and involve affected people in Operation Phase**

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Methods of involvement/informed</th>
<th>Implementer/Person In Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>The scavengers who have been working in the landfill area</td>
<td>Provision of alternative locations for waste scavenging activities (for example to TPS / TPS 3R)</td>
<td>City / District Environmental Agency</td>
</tr>
<tr>
<td></td>
<td>Routine guidance for scavenger groups</td>
<td>Head of sub-district and local village head</td>
</tr>
</tbody>
</table>
### Stakeholder

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Methods of involvement/informed</th>
<th>Implementer/Person In Charge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grazer who have been grazing their livestock in the landfill area</td>
<td>• In Palu: providing a replacement location for livestock grazing and supply of organic waste for animal feed</td>
<td>• City / District Cooperative and Small Medium Enterprises Agency</td>
</tr>
<tr>
<td></td>
<td>• In Palu and Donggala: routine training for farmers</td>
<td>• Head of sub-district and local village head</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Related Agency for livestock farming</td>
</tr>
<tr>
<td>Resident living around landfills and Citizens whose settlements are traversed by haulage trucks (from TPS to TPA)</td>
<td>• Community Complaints Unit</td>
<td>City / District Environmental Agency</td>
</tr>
<tr>
<td>Local and national mass media (press)</td>
<td>• Press release</td>
<td>• City / District Environmental Agency</td>
</tr>
<tr>
<td></td>
<td>• Press conference</td>
<td>• Contractor</td>
</tr>
<tr>
<td></td>
<td>• Press tour to landfill location</td>
<td></td>
</tr>
<tr>
<td>Other concerned community members in the city / district</td>
<td>• Announcements in local newspapers</td>
<td>City / District Environmental Agency</td>
</tr>
<tr>
<td></td>
<td>• Other forms of socialization by utilizing local mass media</td>
<td></td>
</tr>
</tbody>
</table>

#### 4.3 Addressing stakeholder concerns and grievances

The grievance redress mechanism (GRM) is a channel that can be utilized by various stakeholders, especially community members, to submit complaints and suggestions to the activity manager / TPA manager. Based on the activity implementation phase, there are two types of GRM, the implementation of which is not entirely the same. GRM in the construction phase involves contractors because in that phase they exist, whereas in the pre-construction and OP phases, the contractor does not exist. The following is a flow chart with the description.
It can be seen from the flow chart above that the GRM in the pre-construction phase and the OP phase consists of 6 stages as follows:

- **Stage 1:** Residents submit complaints orally to UPM Officers (Community Complaints Unit). If the UPM Officer can immediately give a satisfactory response, the complaint case is deemed completed on the same day.

  If residents submit complaints in writing through the media (direct letters, open letters in the mass media, complaint boxes, etc.), the UPM Officer must provide a response no later than 3 working days after the complaint is received, either by telephone, a response letter in the mass media, or other media. If the response is satisfactory, then the complaint case is considered complete.

  The deadline for completing complaints in Phase 1 is 3 working days.

- **Stage 2:** If the response from the UPM Officer does not satisfy the complainant or the UPM Officer is unable to provide a response that is appropriate to the level of authority, then the complaint must be directly forwarded to the Section Head / TPA Head on the same day.

  If the Section Head / Head of the TPA can provide a satisfactory response, both directly and through the media, then the complaint case is considered complete.

  The deadline for completing complaints in Phase 2 is 3 working days.

- **Stage 3:** If the response of the Section Head / Head of the TPA cannot satisfy the complainant or the Section Head / Head of the TPA is unable to provide a response in accordance with the level of authority, then the complaint must be directly forwarded to the Head of Division above it on the same day.

  If the Head of Sector can provide a satisfying response, both directly and through the media, then the complaint case is considered finished.

  The deadline for completing complaints in Phase 3 is 3 working days.
• Stage 4: If the response from the Field Head cannot satisfy the complainant or the Field Head is unable to provide a response that is in accordance with his level of authority, then the complaint must be directly forwarded to the Head of Service above it on the same day.

If the Head of Service can provide a satisfying response, both directly and through the media, then the complaint case is considered finished.

The deadline for completing complaints in Stage 4 is 3 working days.

• Stage 5: If the response from the Head of Service cannot satisfy the complainant or the Head of Service is unable to provide a response in accordance with his level of authority, then the complaint must be directly forwarded to the Regent / Mayor on the same day.

If the Regent / Mayor can provide a satisfactory response, both directly and through the media, then the complaint case is deemed resolved.

The deadline for completing complaints in Stage 5 is 3 working days.

• Stage 6: If the response from the Regent / Mayor cannot satisfy the complainant, the complainant can bring the complaint case to legal channels. If the complaint case has reached legal channels, then the next process will follow the applicable legal procedures (time limit cannot be determined).

Thus it can be concluded that a complaint case must be resolved by the District / City Government (as the owner and manager of the TPA) no later than 15 working days. If not, then the complainant can bring the complaint case to legal channels.

Figure 3: GRM in the Construction Phase

It can be seen in the flowchart diagram above that the mechanism for handling complaints in the construction phase is not much different from the mechanism in the pre construction phase and OP phase. The different is:

• In the construction phase, UPM officers are staff from the contractor.
• Cases that cannot be handled by UPM Officers will be forwarded to the Site Manager who is also part of the contractor.

• Cases that cannot be resolved by Site Manager will be forwarded to the Project Manager who is part of UNDP (because the contractor is contracted directly by UNDP).

• Cases that cannot be resolved by the UNDP Project Manager (especially cases related to the authority of the Regional Government) will be forwarded to the District / City Working Group.

• Cases that cannot be resolved by the District / City Working Group will be forwarded to the Regent / Mayor.

• Furthermore, if the case cannot be resolved by the Regent / Mayor, the complainant can bring the case to legal action, as is the mechanism in the pre-construction and OP phases.

• Similar to the mechanism in the pre-construction phase and the OP phase, a complaint case must be resolved no later than 15 working days. If not, then the complainant can bring the complaint case to legal channels.

5 Implementation Action Plan and Costs

5.1 Implementation Schedule

A broad schedule for implementation of ESMP activities is shown in the following figure.

<table>
<thead>
<tr>
<th>Description</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
<th>Aug</th>
<th>Sep</th>
<th>Oct</th>
<th>Nov</th>
<th>Dec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Stakeholder Engagement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 OHS plan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 OHS training</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 OHS implementation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Air quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Noise and vibration</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Traffic management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Waste management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 Monthly ESM reports to PAC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 Semi-Annual ESM reports</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: To be updated after signing the construction contract.

5.2 ESM Costs

The bid documents for the project will include in the Bills of Quantity the following items which will be priced by the bidders and costs included in the subsequent contracts.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Establishment and implementation of Contractors OHS Management Plan in accordance with ILO’s Promotional Framework for Occupational Safety and Health Convention, 2006 (No. 187).</td>
</tr>
<tr>
<td>2</td>
<td>Conduct of safety induction training before work start and at regular intervals during the construction of the works.</td>
</tr>
<tr>
<td>3</td>
<td>Provision of PPE for all personnel associated with the construction of the works.</td>
</tr>
<tr>
<td>Item</td>
<td>Description</td>
</tr>
<tr>
<td>------</td>
<td>-------------</td>
</tr>
<tr>
<td>4</td>
<td>Conduct regular surface and groundwater quality monitoring in location where the groundwater is likely to be impacted, including assessing the changes to groundwater quality. Prevent contaminated surface water from entering aquifers via boreholes and wells - protect from runoff and flooding and keep surrounds clean.</td>
</tr>
<tr>
<td>5</td>
<td>Implementation of effective dust management measures in all areas during construction, including sourcing sufficient water of a suitable quality for dust suppression activities complying with any water restrictions.</td>
</tr>
<tr>
<td>6</td>
<td>Implementation of effective noise and vibration minimization measures in all areas during construction, including consultation with the local community and, where necessary, provision of special equipment and modification of daily work schedules to minimize impacts.</td>
</tr>
<tr>
<td>7</td>
<td>Implementation of effective traffic management including consultation with the local communities concerning measures to minimise adverse environmental and social impacts due to project traffic.</td>
</tr>
<tr>
<td>8</td>
<td>Implementation of an effective waste management plan including waste minimization, separation of domestic and construction waste, avoidance of excessive use of resources and disposal of waste in accordance with the GoI requirements.</td>
</tr>
</tbody>
</table>
Annexure I: ToR for Project-level Grievance Redress Mechanism

I. Mandate

The mandate of the GRM will be to:

i. Receive and address any concerns, complaints, notices of emerging conflicts, or grievances (collectively “Grievance”) alleging actual or potential harm to affected person(s) (the “Claimant(s)”) arising from Project;

ii. Assist in resolution of Grievances between and among Project Stakeholders; as well as the various government ministries, agencies and commissions, CSOs and NGOs, and other natural resource users (collectively, the “Stakeholders”);

iii. Conduct itself at all times in a flexible, collaborative, and transparent manner aimed at problem solving and consensus building.

II. Functions

The functions of the GRM will be to:

i. Receive, Log and Track all Grievances received;

ii. Provide regular status updates on Grievances to Claimants, Policy Board (PB) members and other relevant Stakeholders, as applicable;

iii. Engage the PB members, Government institutions and other relevant Stakeholders in Grievance resolution;

iv. Process and propose solutions and ways forward related to specific Grievances within a period not to exceed sixty (60) days from receipt of the Grievance;

v. Grievances relating to GBVH will offer flexibility in how the incident is reported, be confidential and fast tracked, to avoid escalation of the complaint.

vi. Identify growing trends in Grievances and recommend possible measures to avoid the same;

vii. Receive and service requests for, and suggest the use of, mediation or facilitation;

viii. Elaborate bi-annual reports, make said reports available to the public, and more generally work to maximize the disclosure of its work (including its reports, findings and outcomes);

ix. Ensure increased awareness, accessibility, predictability, transparency, legitimacy, and credibility of the GRM process;

x. Collaborate with Partner Institutions and other NGOs, CSOs and other entities to conduct outreach initiatives to increase awareness using traditional and innovative media among Stakeholders as to the existence of the GRM and how its services can be accessed;

xi. Ensure continuing education of PB members and their respective institutions about the relevant laws and policies that they will need to be aware of to participate in the development of effective resolutions to Grievances likely to come before the GRM;

xii. Monitor follow up to Grievance resolutions, as appropriate.

III. Composition
The GRM will be composed of UNDP as the Secretariat and either:

a. A standing GRM Sub-Committee made up of UNDP, KfW and Bappenas members; and/or
b. Ad hoc GRM Task Teams in response to specific requests for grievance

The GRM Sub-Committee will be balanced in composition (government and non-government), will include at least one representative for women, and should not include any PB members with a direct interest or role in the grievance/dispute.

IV. UNDP as Implementing Partner

In its role as GRM Secretariat, UNDP will perform the following core functions:

- Publicize the existence of the GRM and the procedure for using it;
- Receive and log requests for dispute resolution;
- Acknowledge receipt to the requestor;
- Determine eligibility;
- Forward eligible requests to the PB for review and action, and
- Track and document efforts at grievance/dispute resolution and their outcomes.

V. Project Board

The Project Board would perform the following core functions: GRM Sub-Committee and/or GRM Task Team will:

- Take direct action to resolve the grievance/dispute (e.g. bring the relevant parties together to discuss and resolve the issue themselves with oversight by the PB);
- Request further information to clarify the issue, and share that information with all relevant parties, or ensure that a government agency represented on the PB took an appropriate administrative action to deal with a complaint;
- Refer the grievance/dispute to independent mediation, while maintaining oversight; or
- Determine that the request was outside the scope and mandate of the PB and refer it elsewhere (e.g. Ministry of Justice and Police or to the courts).

VI. Communicating a Grievance

(i) Who can Submit a Grievance?

A Grievance can be sent by any individual or group of individuals that believes it has been or will be harmed by the Project.

If a Grievance is to be lodged by a different individual or organization on behalf of those said to be affected, the Claimant must identify the individual and/or people on behalf of who the Grievance is submitted and provide written confirmation by the individual and/or people represented that they are giving the Claimant the authority to present the Grievance on their behalf. The GRM will take reasonable steps to verify this authority.

(ii) How is the Grievance Communicated?
The GRM shall maintain a flexible approach with respect to receiving Grievances in light of cultural norms that prevent or discourage women from lodging complaints and other known local constraints with respect to communications and access to resources for some Stakeholders. A Grievance can be transmitted to the GRM by any means available (i.e. by email, letter, phone call, meeting, verbally, WhatsApp, SMS, etc.). The contact information is the following:

[UNDP to add address, phone number, fax, etc.]

To facilitate communications with and between the GRM and potential Claimants, the GRM will receive support from the PB members’ institutions, women’s organisations, and relevant local government units.

(iii) What information should be included in a Grievance?

The Grievance should include the following information:

a. The name of the individual or individuals making the Complaint (the “Claimant”);  
b. A means for contacting the Claimant (email, phone, address, other);  
c. If the submission is on behalf of those alleging a potential or actual harm, the identity of those on whose behalf the Grievance is made, and written confirmation by those represented of the Claimant’s authority to lodge the Grievance on their behalf;  
d. The description of the potential or actual harm;  
e. Claimant’s statement of the risk of harm or actual harm (description of the risk/harm and those affected, names of the individual(s) or institutions responsible for the risk/harm, the location(s) and date(s) of harmful activity);  
f. What has been done by Claimant thus far to resolve the matter;  
g. Whether the Claimant wishes that their identity is kept confidential; and  
h. The specific help requested from the GRM.

VII. Logging, Acknowledgment, and Tracking

All Grievances and reports of conflict will be received, assigned a tracking number, acknowledged to Claimant, recorded electronically, and subject to periodic updates to the Claimant as well as the office file.

Within one (1) week from the receipt of a Grievance, the GRM will send a written acknowledgment to Claimant of the Grievance received with the assigned tracking number.1

Each Grievance file will contain, at a minimum:

- The date of the request as received;  
- The date the written acknowledgment was sent (and oral acknowledgment if also done);  
- The dates and nature of all other communications or meetings with the Claimant and other relevant Stakeholders;  
- Any requests, offers of, or engagements of a Mediator or Facilitator;

1 Oral acknowledgments can be used for expediency (and also recorded) but it must be followed by a written acknowledgment.
• The date and records related to the proposed solution/way forward;
• The acceptance or objections of the Claimant (or other Stakeholders);
• The proposed next steps if objections arose;
• The alternative solution if renewed dialogues were pursued;
• Notes regarding implementation; and
• Any conclusions and recommendations arising from monitoring and follow up.

VIII. Maintaining Communication and Status Updates

Files for each Grievance will be available for review by the Claimant and other Stakeholders involved in the Grievance, or their designated representative(s). Appropriate steps will be taken to maintain the confidentiality of the Claimant if previously requested or the incident involves GBVH.

The GRM will provide periodic updates to the Claimant regarding the status and current actions to resolve the Grievance. Not including the acknowledgment of receipt of the Grievance, such updates will occur within reasonable intervals (not greater than every thirty (30) days). For GBVH-related grievances will be subject to a fast tracked process.

IX. Investigation and Consensus Building

Within one (1) week of receiving a Grievance, UNDP will notify the PB and any other relevant institutions of the receipt of the Grievance.

The PB will identify a specific team of individuals drawn from the PB and/or their respective institutions to develop a response to the Grievance. The names of these individuals will be made available to the Claimant.

The designated PB members [hereafter called Task Team] will promptly engage the Claimant and any other relevant Stakeholders deemed appropriate, to gather all necessary information regarding the Grievance.

Through the PB members, the GRM will have the authority to request from relevant Government institutions any information (documents or otherwise) relevant to resolving the Grievance and avoiding future Grievances of the same nature.

As necessary, the Task Team will convene one or more meetings with relevant individuals and institutions in [national capital], or elsewhere in [name of country] as needed.

The objective of all investigative activities is to develop a thorough understanding of the issues and concerns raised in the Grievance and facilitate consensus around a proposed solution and way forward.

The PB members will procure the cooperation of their respective staff with the investigation.

At any point during the investigation, the Task Team may determine that an onsite field investigation is necessary to properly understand the Grievance and develop an effective proposed solution and way forward.

X. Seeking Advisory Opinion and/or Technical Assistance
At any point after receiving a Grievance and through to implementation of the proposed solution and way forward, the Task Team may seek the technical assistance and/or an advisory opinion from any entity or individual in [country] or internationally which may reasonably be believed to be of assistance. Advisory Opinion with cultural expertise will be sought in the case of GBVH grievances due to the sensitive and complex aspects of such incidents.

XI. Making Proposed Actions and Solutions Public and Overseeing Implementation

The Task Team will communicate to the Claimant one or more proposed actions or resolutions and clearly articulate the reasons and basis for proposed way forward.

If the Claimant does not accept the resolution, the Task Team will engage with the Claimant to provide alternative options.

If the Claimant accepts the proposed solution and way forward, the GRM will continue to monitor the implementation directly and through the receipt of communications from the Claimant and other relevant parties. As necessary, the GRM may solicit information from the relevant parties and initiate renewed dialogue where appropriate.

XII. Monitoring and Evaluation

Bi-annually, the GRM will make available to the public, a report describing the work of the GRM, listing the number and nature of the Grievances received and processed in the past six months, a date and description of the Grievances received, resolutions, referrals and ongoing efforts at resolution, and status of implementation of ongoing resolutions. The level of detail provided with regard to any individual Grievance will depend on the sensitivity of the issues and Stakeholder concerns about confidentiality, while providing appropriate transparency about the activities of the GRM. The report will also highlight key trends in emerging conflicts, Grievances, and dispute resolution, and make recommendations regarding:

- Measures that can be taken by the Government to avoid future harms and Grievances; and
- Improvements to the GRM that would enhance its effectiveness, accessibility, predictability, transparency, legitimacy, credibility, and capacity.

XIII. Mediation

For the option of independent mediation, mediators on the roster/panel should have at least the following qualifications:

- Professional experience and expertise in impartial mediation;
- Knowledge of disaster recovery in Indonesia and the region, including an understanding of indigenous and tribal culture and practices;
- Indonesian and local language proficiency;
- Availability in principle for assignments of up to 20 days; and
- Willingness to declare all relationships and interests that may affect their ability to act as impartial mediators in particular cases.

If mediation succeeded in resolving the dispute or grievance, the outcome would be documented by the UNDP and reviewed by the Task Team. If it were unsuccessful, stakeholders would have the option to return to the Task Team for assistance.
XIV. Without Prejudice

The existence and use of this GRM is without prejudice to any existing rights under any other complaint mechanisms that an individual or group of individuals may otherwise have access to under national or international law or the rules and regulations of other institutions, agencies or commissions.