



**LAO PEOPLE'S DEMOCRATIC REPUBLIC**

**PEACE INDEPENDENCE DEMOCRACY UNITY PROSPERITY**

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Ministry of Health

Department of Planning and International Cooperation

**Health Governance and Nutrition Development Project**  
Additional Financing

# **Environmental Code of Practices (ECOP)**

**Revised**

**June 9, 2017**

Lao PDR Health Governance and Nutrition Development Project  
 Additional Financing  
**Environmental Code of Practices (ECOP)**

The Additional Financing will not finance input based civil work, minor or major renovation of health facilities. The Environmental Code of Practices (ECOP) has been developed for minor impact and small-scale civil works interventions, such as renovation/rehabilitation of health centers which may be financed under Component 2 by the World Bank. The ECOP aims to ensure compliance with national laws and World Bank OP 4.01 environmental safeguard policy and provides guidance to the planning and implementation of the mitigation measures to be carried out by the contractor during the civil works activities. It sets out standard practices and procedures for managing the potential negative impacts on local environment and rural communities of all civil works to be carried out. The ECOP will be included as a separate annex in all bidding and contract documents. The Contractor will be made aware of and commit to this obligation and know that cost for implementation of the proposed measures is part of the construction cost. The ECOP also suggests simple measures to prevent impacts on the environment and people hygiene from latrine installation/operation, which will be solely done by villagers.

General Environmental Codes of Practice

1. Environmental Codes of Practice applicable to most rehabilitation/small-scale rehabilitation/construction activities

Issue	Environmental Prevention/Mitigation Measure
Noise during construction	(a) Plan activities in consultation with communities so that noisiest activities are undertaken during periods that will result in least disturbance; (b) noise levels should be maintained within the national permissible limits/standards and limited to restricted times agreed to in the permit; (c) Use noise-control methods such as fences, barriers or deflectors (such as muffling devices for combustion engines) (d) minimize transportation of construction materials through community areas during regular working time; (e) Maintain a buffer zone (such as open spaces, row of trees or vegetated areas) between the project site and residential areas to lessen the impact of noise to the living quarters
Soil Erosion	(a) (b) implement suitable design (e.g., establish appropriate erosion and sediment control measures) (b) use mulch, grasses or compacted soil to stabilize exposed areas (c) cover with topsoil and re-vegetate (plant grass, fast-growing plants/bushes/trees) construction areas once work is completed
Air Quality	(a) minimize dust from exposed work sites by applying water on the ground regularly (b) do not burn site clearance debris (trees, undergrowth) or construction waste materials

	(c) keep stockpile of aggregate materials covered to avoid suspension or dispersal of fine soil particles during windy days or disturbance from stray animals
Water quality	(a) activities should not affect the availability of water for drinking and hygienic purposes (b) no construction materials, solid wastes, toxic or hazardous materials should be poured or thrown into water bodies for dilution or disposal (c) the flow of natural waters should not be obstructed or diverted to another direction, which may lead to drying up of river beds or flooding of settlements
Solid and hazardous waste	(a) collect and transport construction waste to appropriately designated/hazardous waste controlled dump sites (b) maintain waste (including soil for foundations) at least 300 meters from rivers, streams, lakes and wetlands (c) use secured area for refueling and transfer of other toxic fluids distant from settlement area and ideally on a hard/non-porous surface (d) train workers on correct transfer and handling of fuels and other substances and require the use of gloves, boots, aprons, eyewear and other protective equipment for protection in handling highly hazardous materials (e) collect and properly dispose of small maintenance materials such as oily rags, oil filters, used oil, etc.
Workers Health and safety	(a) provide personal protective gear for workers as necessary (gloves, dust masks, hard hats, boots, goggles) (b) keep worksite clean and free of debris on daily basis (c) keep corrosive fluids and other toxic materials in properly sealed containers for collection and disposal in properly secured areas (d) Ensure adequate toilet facilities for workers from outside of the community (e) Rope off construction area and secure materials stockpiles/ storage areas from the public and display warning signs. Do not allow children to play in construction areas (f) Fill in all earth borrow-pits once construction is completed to avoid standing water, water-borne diseases and possible drowning (g) Each construction sub-project to have a basic first-aid kit with bandages, antibiotic cream, etc.
Other	(a) No cutting of trees or destruction of vegetation other than on construction site (b) No hunting, fishing, capture of wildlife or collection of plants (c) No use of unapproved toxic materials including lead-based paints, un-bonded asbestos, etc. (d) No disturbance of cultural or historic sites

General	<p>(a) Maximize natural light and ventilation systems; minimize artificial light needs; use large windows for bright and well lit rooms</p> <p>(b) Provide adequate area for treatment, waiting area and patient’s hall, etc.) rooms, all of which should be well ventilated</p> <p>(c) Include facilities for proper disposal of health and biological wastes (syringes, blood, etc.)</p>
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2. Environmental Codes of Practice for Latrines installation

Issues	Environmental Measures
Latrine Location	<ul style="list-style-type: none"> <li>- Should be located more than 30 meters of an existing water supply wells or surface water body, unless a lack of available site area.</li> </ul>
	<ul style="list-style-type: none"> <li>- Located Downstream from water resources wherever possible</li> </ul>
	<ul style="list-style-type: none"> <li>- Should be located in a place where its odor cannot reach the house or the kitchen.</li> </ul>
	<ul style="list-style-type: none"> <li>- The latrine pits should be at least two meters above water table, particularly where groundwater is used for drinking. The site should be well drained and above flood level.</li> </ul>
	<ul style="list-style-type: none"> <li>- Should not be built upstream of a well, particularly in areas of fissured rocks such as limestones, since feace pollution may be carried directly to a well through cracks and joints in the rocks to a well.</li> </ul>
Latrine Installation/ Operation	<ul style="list-style-type: none"> <li>- Earth up soil/pave concrete around sub-foundation to avoid stagnant water accumulating around the latrine.</li> </ul>
	<ul style="list-style-type: none"> <li>- Keep the latrine floor clean by cleaning with water regularly.</li> </ul>
	<ul style="list-style-type: none"> <li>- Provide hand washing facilities (water, soap) near the latrine at all time.</li> </ul>