

School Education Quality Assurance Program

ENVIRONMENTAL MANAGEMENT FOR CONSTRUCTION ACTIVITIES

1. Background

School Education Quality Assurance Program (SEQAP) aims at improving Primary Education Quality in Vietnam by building FDS for the entire Vietnam's Primary Education System, increasing and effectively utilizing the time at school, innovating the curriculum and building capacity for teaching and managing staff to fulfill the task requirements. This program will contribute to enhance the student's performance, create equal learning opportunity for different groups of students from different social and economic backgrounds between rural and urban and among ethnic groups.

There are 4 major components in this program in order to achieve proposed objectives:

- Improved Policy Framework for Transition to FDS;
- Improved Human Resources for Transition to FDS;
- Improved Physical and Other Recurrent Resources for Transition to FDS;
- Program Management.

SEQAP will be implemented in about 32 provinces in Vietnam (top priorities are given to disadvantaged areas and ethnic minorities). Concerning school infrastructure improvement, SEQAP will finance construction of primary school classrooms (including student classrooms, teacher and multi-functional rooms as needed) and, if needed, toilets, within existing premises.

SEQAP builds on existing practices of the on-going PEDC project, where a standardized classroom and sanitary toilet construction design is in line with policy guidance of MoET. The Education Equipment, Facilities and Toys Department of the MoET is responsible for setting construction standards of educational facilities and monitoring implementation activities. Classroom design will include appropriate ventilation, lighting, toilet facilities and ramps for disabled students, as appropriate.

The assessment of PEDC confirmed that these types of construction activities only have temporary environmental impacts. They are normally limited to the construction phase. The impacts included dust and generation of construction waste which can be mitigated through good construction practices, including proper housekeeping measures, proper storage and disposal of excavated earth materials, and pollution control. Civil work contracts and procedures to address these temporary environmental impacts will be adopted for this program.

2. Construction Management Guidelines

2.1. Legal requirement

The design and construction of the planned facilities under the SEQAP should comply with the existing set of regulations and standards of the Government of Vietnam as listed below:

- Government Decree No. 209/2004/ND-CP dated 16/12/2004 on management of civil

- construction quality;
- Decision No. 22/2006/QĐ-BTNMT dated 18/012/2006 of the Minister of Ministry of Environment and Natural Resources on compulsory application of Vietnamese Environmental Standards (TCVN 5937:2005; TCVN 5938:2005; TCVN 5939:2005; TCVN 5940:2005; and TCVN 5945:2005);
- Decision No. 23/2006-QĐ-BTNMT dated 26/11/2006 of the Minister of Ministry of Environment and Natural Resources on the publication of hazardous waste list;
- Circular No. 12/2006/TT-BTNMT of Ministry of Environment and Natural Resources on guidance on the conditions and the procedures for application preparation, registration, license granting to practice and the issuance of the code for hazardous waste management.

2.2. Construction Management Plan (CMP)

Construction Management Plans (CMP) are necessary to ensure construction, demolition and excavation sites (often referred to as “building sites”) do not adversely affect health, safety, amenity, traffic or the environment in the surrounding area.

Any upgrade/renovation of a building creates some environmental impacts, which can be minimized through good construction management practices. CMP includes some guidelines on how these impacts can be mitigated or reduced.

- Generation of dust is common in a construction site. In order to reduce dust emissions, periodic watering should be done. In addition, temporary fencing should be provided along the boundary so that the emissions do not affect the immediate neighbours.
- Noise pollution due to operation of different types of equipment and machinery during construction activities may disturb the surrounding premises, including residential dwellings, schools, hospitals etc. Construction should be carried out only during the daytime and as per permitted timings. If there is an educational institution in the neighbourhood, proper temporary noise barriers should be erected to reduce construction-related noise impacts.
- Labour camps on site should be as per Vietnamese construction norms. Clean and well-maintained toilets should be made available at the construction site.
- If there is any eco-sensitive habitat in the vicinity of the construction site, care should be taken to ensure that there are no adverse impacts on the habitat. Any existing streams and drains within, and adjacent to the site should be kept safe and free from any debris and any excavated materials arising from the works.
- Construction waste generated should be properly stored on site and disposed by filling low-lying areas after obtaining the required national and local permissions.
- Liquid spills of lubricant, fuel and oil within the site should be attended at the earliest in order to minimize land & groundwater contamination.
- Temporary fencing around the project site should be provided to regulate the entry and exit of material, personnel and equipment.
- Construction workers, managers and visitors to the site should use personnel protective equipment such as helmets, gloves, safety boots and goggles.
- Waste water generated from wash-pits, wheel washing, equipment cleaning, etc can be a source of water pollution if the drainage system is ineffective. Additionally sanitary waste generated by the temporary construction workers can pollute the surface/under-

ground water. There is the added risk of mosquito breeding, if water around the construction site is allowed to stagnate. Temporary drainage works should be constructed and maintained.

Approved CMPs are a contract between PMUs and building companies (Contractors) addressing the temporary site management issues that are relevant during building activity. The PMU and the Contractor must identify the specific requirements for each site to ensure that the work is undertaken in a safe and effective manner.

2.3. Requirements on environmental safety and hygiene

1. Detecting and disarming hidden bombs and landmines :

In the areas where there may be hidden bombs and landmines, the Contractor is required to contact concerned agencies in order to conduct the work of detecting and disarming at the construction site(s), the way leading to the school from the village/hamlet. These areas as well as the neighborhood of the village/hamlet shall be checked and disarmed with an extension of 100 meters in the back of the residential space. The extent of detection and disarming from the village/hamlet to the school varies between 10 and 20 meters. Warning signs are needed at dangerous places.

Once the work of detection and disarming is finished, the Contractor shall send a formal letter to the Provincial People's Committee certifying the detection and disarming work.

2. Utilizing and destroying materials containing asbestos

Materials containing asbestos have been prohibited to be used in construction due to its harmful effect to human health.

In the previous construction works, fibro cement roof plates and iron sheets were widely used. The work of unroofing and destroying these old sheets should not be done by hand. It is necessary that these sheets not be broken and reused for other construction sites.

3. Handling wastes and materials discharged from the work

The water source should not be affected with and materials discovered from the work. Also, pollutants must not be discharged into water sources.

Dirt and other materials discharged from the work should be removed to ensure the environmental safety if they have bad effect on the area. The Contractor shall carry out this activity under supervision.

4. Protecting cultural and historic heritages

In order to help avoid potentially bad effect on cultural and historic heritages, the Contractor is responsible for protecting ancient antiquities and cultural and historic heritages discovered at the construction site by setting up fences around them.

In the case where cultural and historic objects which are removable or unremovable or bones/skeleton within the coverage of the work, the Contractor shall conduct necessary protective measures and notify the work supervisor and concerned agencies of the province.

If the objects discovered may be damaged due to the continuation of construction, construction shall be postponed for the purpose of protecting objects mentioned above.

5. Providing safe water to workmen

Water shall be provided at the construction site by the Contractor to workmen with at least 4 liters per day per person.

Temporary latrines shall be set up by the Contractor for workmen if there is no latrines at the construction site. The latrines should be roofed with septic tanks and be cleaned. The site supervisor shall check up on this. The latrines shall be located 30 meters away from water wells or sources.