EM&A Manual

8 LAND CONTAMINATION

8.1 Introduction

8.1.1 Based on the findings of the review of potential environmental issues associated with land contamination in **Section 9** of the EIA report, it was concluded that there was no potential land contamination within the assessment area. However, an indirect concern is arose from a petrol filling station located 2m beyond the boundary of the Tuen Mun Road (TMR) Town Centre Section (the assessment area), which is suspected to be a potential source of contamination to the assessment area. Prior to the commencement of the construction phase, a baseline study in the form of a preliminary land contamination survey shall be prepared and implemented at the immediate down gradient to where the contamination is suspected.

8.2 Land Contamination Assessment

- 8.2.1 3 boreholes have been proposed at the immediate down gradient location from the petrol filling station within the boundary of the assessment area. The preliminary land contamination survey would include sampling and analysis of soil / groundwater to assess the baseline condition of the soil and groundwater within the assessment area and the potential fuel migration (if any) due to the presence of a nearby petrol filling station. The information obtained from the preliminary survey would be used to determine if a detailed site investigation is required and possible remediation options would be recommended after the SI results are obtained.
- 8.2.2 As a general measures, the following environmental and safety precautionary measures should be implemented and reviewed during the construction of elevated roads, in order to minimize the potential health impact on the site workers:

Mitigation Measures

- The use of bulk earth-moving excavator equipment would minimise construction workers' potential contact with the contaminated materials;
- Exposure to any contaminated materials can be minimised by the wearing of appropriate clothing and personal protective equipment such as gloves (when interacting directly with suspected contaminated material), providing adequate hygiene and washing facilities and preventing smoking and eating during such activities;
- Stockpiling of contaminated soil should be avoided as far as possible. If this cannot be
 avoided, the stockpile of contaminated materials should be segregated from the
 uncontaminated ones. Moreover, the contaminated materials should be properly covered
 with waterproof material (e.g. tarpaulin sheet) to avoid leaching of contaminants,
 especially during rainy season.
- Vehicles containing any excavated materials should be suitably covered to limit potential dust emissions or contaminated wastewater run-off, and truck bodies and tailgates should be sealed to prevent any leakage during transport or during wet conditions;
- Only licensed waste haulers should be used to collect and transport any contaminated material to an appropriate disposal site and procedures should be developed to ensure that illegal disposal of waste does not occur;
- Necessary waste disposal permits should be obtained, as required, from the appropriate authorities, in accordance with the Waste Disposal Ordinance (Cap 354), Waste Disposal (Chemical Waste) (General) Regulation (Cap 35), as required;
- Records of the quantities of wastes generated and disposed of should be maintained;
 Adequate washing facilities should be provided on site; and
- In accordance with good construction practice, silt traps should be used to reduce the impact to drainage caused by suspended solids arising from disturbed ground, or any construction materials such as cement and gravel. Groundwater should be disposed of in accordance with the Water Pollution Control Ordinance (Cap 358).