

EBRD COVID-19 Resilience Framework - Environmental and Social Assessment Training Programme

Module 9 – Typical environmental and social risks for the wastewater collection and treatment sector

Introduction

The purpose of Module 9 is to provide a summary of typical environmental and social risks that may need to be assessed for a Project within the wastewater collection and treatment sector. It should be noted that these are just examples of potential risks and the consultants will need to use their professional judgement and knowledge of the sector to identify specific risks on each given Project.

Wastewater collection and treatment sector

- The generation of liquid effluent waste (such as filter backwash, brine streams and effluent generated by flushing water lines) and solid waste (such as used filtration membranes, settled suspended solids, sludge and chemicals). These types of waste may contain suspended solids and organics from the raw water, high levels of dissolved solids, high or low pH, heavy metals, and a high biological oxygen demand and chemical oxygen demand, and chlorine.
- The discharge of treated water containing pathogens and other substances, leading to impacts on aquatic receptors and potentially human health from intake within the food chain, or from human's contact with water for bathing, cooking or drinking.
- The generation of odours to the atmosphere, leading to a deterioration in local air quality as well as generating a nuisance to nearby communities.
- The potential for workers to be exposed to faecal sludge during the handling of domestic and industrial wastewater discharges, from repairing leaks or overflows during maintenance, and other activities.
- Increased health and safety risk to the workforce from the need to enter confined spaces and the storage and handling of chemicals, such as chlorine.
- Increased risk to community health and safety arising from the transportation of hazardous loads (including collected faecal material) using large vehicles on the public road network.