

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

Module 8 – Typical environmental and social risks for the water supply sector

Introduction

The purpose of Module 8 is to provide a summary of typical environmental and social risks that may need to be assessed for a Project within the water supply 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.

Water supply sector

- The abstraction of water from surface or groundwater bodies, leading to the reduced availability of water and reduced water quality.
- The abstraction of water leading to conflicts between different people or groups, associated with who has the 'rights' to the water and whom may be eligible for compensation and other benefits from the Project.
- The inappropriate storage of liquid and gaseous hazardous substances, leading to worker exposure, or soil and groundwater contamination. Of particular concern is the way in which gas chlorination systems, or ozone disinfection systems, are maintained as these types of substance can represent a significant risk to the workforce and the safety of nearby communities.
- Inadequate water treatment and lack of regular maintenance on wastewater treatment infrastructure, leading to poor water quality.
- The generation of air emissions to the atmosphere (including ozone if this is being used for disinfection), leading to a deterioration in local and regional air quality, as well as contributing towards global climate change.
- The generation of odour leading to a nuisance amongst local communities.
- The potential for water leaks or a loss of pressure to occur, resulting in the integrity of the system to provide safe, clean water to consumers to be compromised.
- The alteration of terrestrial habitat from the clearance of land to provide a right of way for the installation of water pipelines. This is particularly important to consider if the right of way passes through forested areas which could alter terrestrial habitat, bird, and bat species, and increase the risk of forest fire.
- Impacts to biodiversity from land clearance activities leading to habitat loss, degradation, fragmentation, and species displacement.
- 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.